On Language Editing of Research Articles Translated from Lithuanian to English

Ramunė Kasperavičienė, Jurgita Motiejūnienė

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Abstract. The major language editor’s role is to enhance the quality of a particular text by correcting language errors and adapting the text according to some formal guidelines. The language editing of a translated text is complicated since many texts, including medical research articles, are translated by non-professional translators, which often results in a low-quality translation forcing the language editor to work hard in order to provide a proper quality to the text. In addition, texts are often translated by writers themselves leaving language editors in a more challenging situation since manuscripts contain abundance of language errors, including those in grammatical and syntactical structures, choice of lexical items, and terminology.

The present study analyses a number of medical research articles translated from Lithuanian to English and presented for the publication in an international scientific magazine. The major attention is on the corrections made by a language editor. The most common language mistakes are identified. An assumption is made that the most frequent mistakes will be related to grammar (article usage, number agreement, tenses, word order, prepositions, etc.); however, more corrections are made by a language editor, namely those related to the formal features of the text. The study shows that not all the corrections made by a language editor demonstrate the quality of a text.

Key words: language editing, corrections, errors, text quality, research articles.

Introduction

Language editing does not seem to be an arduous activity as it encompasses the efforts to make texts, including research articles, compliant with a set of rules or formal guidelines followed. However, language editors occasionally do perspire over research papers as a number of them are written either by authors, who are not necessarily language professionals, or translated by inexperienced translators, whose texts are sometimes not of the most perfect quality. Thus, instead of making texts agree with formal requirements, language editors end up focusing on language errors, such as mistakes in grammatical and syntactical structures, choice of lexical items, punctuation, etc. Although language editing does involve a certain degree of subjectivity, grammar rules and recommendations for the language of a scientific research article are to be followed. Thus, with the dynamic nature of language in mind, language editors usually attempt not to interfere too much and only correct most obvious language errors that cannot be left untreated.

Thus, the object of the particular study is the corrections made in the process of language editing of medical research articles translated from Lithuanian to English by researchers themselves.

The aim is to analyse and discuss corrections in the research articles made through the process of language editing in order to determine whether they signal the language quality of a translated text.

The objectives:

- to provide an analysis of error frequencies across research articles;
- to discuss the errors reducing the language quality of a text.

In total, 70 medical research articles, which were submitted to a scientific magazine during 2011–2013, were overviewed. The magazine is an international peer-reviewed scientific journal published monthly. It publishes original research articles contributing to current knowledge in biomedicine. The magazine uses language editors’ service to improve the quality of the language of the submitted articles. Due to confidentiality reasons, no authors of the analysed research articles are disclosed in the present paper. The analysed research articles are coded as Article 1, Article 2, Article 3, etc. The usual length of a research article submitted to the above mentioned scientific magazine is approximately 10 to 15 translation pages, considering 1700 characters without spaces as one translation page.

A general overview of the research articles analysed demonstrated certain trends in error making. Therefore, 10 research articles were analysed in detail. The corrections made by a language editor in the texts of the analysed research articles were identified, classified and calculated. The descriptive analysis was used to discuss the corrections and to consider those which signal whether the text translation is of a poor quality and which result from the formal requirements for language; the paper is also aimed at explaining some reasons for the appearance of errors in research articles translated from Lithuanian to English. No other similar published studies have been found to address the editing of medical research articles, or any other scientific texts, translated from Lithuanian to English. However, some international research studies assessing the effects of technical editing, involving
processes such as proofreading and editing to conform to the house style, have been performed by Wager and Middleton, who came to a conclusion that “technical editing used by biomedical journals does improve papers” (2008). Therefore, the novelty of the present research lies in its source material, i.e., medical research articles, and its aim, i.e., analysis of correction made in the process of language editing.

**Theoretical Background**

Articles submitted to a scientific magazine should be prepared so that they conform to the formal requirements followed by the magazine and to the general “rules and the conventions of the academic discipline” (Soles, 2010, p.8). Formal requirements are usually known as a house style, i.e., certain guidelines for language that a scientific magazine follows (Lindsay, 2011, p. 11). Conventions of the academic discipline are related to the subject for which the article is produced and to the academic register on the whole. In many of its genres, the academic register requires objective, clear and concise style. It is obvious that scientific language is objective, unemotional, clear and authoritative (Halliday, 2004, p. 181, 200), thus, imposing certain grammatical and syntactical structures as well as lexical choices to be made. The scientific research article stands out among other academic genres with typical linguistic features, such as complex noun phrases, frequent use of active voice, specific use of tenses, etc. (Biber, Conrad, 2009, pp. 126–130). Thus, the quality of a research article is also demonstrated through grammar, syntax and vocabulary. However, certain research articles translated from Lithuanian to English seem to possess language-related inaccuracies and errors, namely grammatical, lexical, punctuation, etc., making the language editing process essential.

Researchers, translators and language editors are of the opinion that each translated document has to be edited and revised after translation has been done, possibly by another person, a language editor (Mironov, 2012; Vuorinen, 2011; Wright et al., 2008, p. 115). Editing undoubtedly helps assure translation quality (Dickins et al., 2002, p. 223, Hervey et al., 2000, p. 158). Rowe goes further to say that poor translation quality may result from a lack of adequate editing (Rowe, 2008, p. 103). Thus, language editing, being an important component of the publication of research articles among other editorial processes, is to improve “readability and quality of articles” (Wager and Middleton, 2002). Therefore, many scientific journals publishing articles in different areas use the advantages of language editors in order “to improve the overall quality of the language in the article” (Adams, 2011). The major roles of language editors are well defined by Daniel Rosario:

- Improve grammar, spelling, and punctuation;
- Enhance vocabulary and sentence structure to convey the author’s meaning more clearly;
- Ensure that the style and format is appropriate for an academic journal (Rosario, 2011).

However, at this point, it is also important not to confuse the terms editing and proofreading. The concepts are sometimes considered as overlapping. Editing involves “verifying the translation’s completeness, consistency, grammatical accuracy” (Arango-Keeth and Koby, 2003, p. 124). Proofreading is the final stage before publication. It involves the final corrections in grammar, spelling, punctuation, etc., ideally done from “an end-user perspective” (Esselink, 2000, p. 317). As Pilotti et al. put it,

> [p]roofreading (i.e., reading text for the purpose of detecting and correcting typographical errors) is viewed as a component of the activity of revising text and thus is a necessary (albeit not sufficient) procedural step for enhancing the quality of a written product (Pilotti et al., 2012).

Although proofreading is as crucial as editing, for the purposes of this particular research, no distinction was made between the editing and proofreading procedures and the errors were identified through the process of both.

What concerns the language problems identified in the analysed research articles, it is assumed that these are among the most common errors made by the writers of English as a foreign language, i.e. faulty agreement, double constructions, misuse of punctuation, poor or faulty word choice, etc. (Taylor, 2008; Richardson, 2013, pp. 17–18). These errors appear in many different types of written texts, including scientific writing. According to Wallwork, typical grammar mistakes made in research papers include misuse of articles, misuse of tenses, incorrect word order, misleading punctuation, etc. (2011, pp. 89–107). The most common errors of English made by Lithuanian learners are related to prepositions, word order, agreement, relative pronouns, etc. (Janulevičienė, Kavaliuskiene, 2000, pp. 146–150). It is expected that the research articles analysed contain the grammar issues that are hard to master for Lithuanians.

On the other hand, an assumption is made that not all the corrections made by a language editor directly demonstrate the quality of translation or the foreign language skills of the author. Many inaccuracies actually appear due to the formal guidelines that a scientific magazine follows. These guidelines are sometimes restricted to the variant of English used, i.e. British or American. It is a simple preference, and not at all a mistake, of the author or the translator to use a different variant of English than that followed by a magazine, which in research articles is displayed through spelling and punctuation in most cases. The magazine, the articles of which were analysed in this particular paper, follows the American Medical Association Manual of Style, a guide for authors and editors, which “is essential to produce a manuscript that is well organized, clear, readable, and authoritative” (Iverson et al., 2007, p. v). A good translator should ideally take into consideration those formal requirements and use the needed variant, which in the present case is American English. Inconsistency in the use or interchangeable use of both, the British and the American, variants results in awkwardness and might be considered a mistake. Thus, the language-related corrections made in the analysed research
articles are also considered and discussed from the point of view of whether they signal the language quality of a text. It is assumed that grammar and vocabulary issues show deterioration in the quality of a text or its translation and corrections related to the formal requirements do not.

**Corrections Made in Research Articles Translated from Lithuanian to English**

A number of corrections were made through the process of language editing in the 10 research articles analysed. These were related to the following:

- grammar (articles, tenses, number agreement, word order, prepositions, and other);
- vocabulary (incorrectly chosen words and nonexistent words);
- linkers (no linker used and incorrect linker);
- spelling (British vs. American variant);
- punctuation (separation of non-identifying relative clauses, after linkers starting a sentence, after modifiers at the beginning of a sentence, transferred Lithuanian punctuation, etc.);
- clarity (reformulation of sentences or parts of sentences for clarity);
- style (personal style used);
- typing errors;
- other (missing word in the title).

It was determined that there were 178.8 corrections per article. The smallest number of the corrections was 88 and the biggest 302 per article.

**Analysis of Grammatical Errors**

The most common errors identified in the research articles were grammatical.

![Figure 2. Distribution of the Grammatical Errors Identified in the Analysed Research Articles](image)

Among them, more than three-fourths were the errors in the use of articles. In many cases, the errors made included no article used where the definite article was needed. In the examples below, particular items or facts are discussed; they have been introduced earlier in the text or are specified in the sentence itself and, therefore, require the definite article.

1. *Aim is to obtain data on ... → The aim of the study was to obtain data on ...*  
2. *... to explore correlations between the variables ... → ... to explore the correlations between the variables ...*

Other common errors in the use of articles were those where no article was used and an indefinite article was necessary. Example 3 demonstrates the case where a singular countable noun *level* is used without any article.

3. *... only antibodies in very low level were found ... → ... only a very low level of antibodies was found ...*

In rarer cases, the indefinite article was needed instead of the definite article used. In Examples 4 and 5, the items *syndrome* and *problem* are mentioned for the first time in the text and, thus, most probably require an indefinite article, e.g.

4. *This is the classical syndrome of ... → This is a classical syndrome ...*
5. *Overtreatment is the urgent problem ... → Overtreatment is an urgent problem.*

The least frequent errors in the use of articles were those where the definite article was used instead of the zero article needed. For example, as illustrated below, the definite article could be used if the sentence described a particular case related to a particular patient; however, no article should be used with names of diseases when

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1. Here and further, the star* indicates the wrong version of a sentence, in which the specific illustrative item is underlined. Other possibly existing errors in the given examples are not discussed, nor are they underlined.
2. The examples provided were shortened due to confidentiality reasons.
speaking in general, e.g.

6. *The lymphocytic pleocytosis is very typical ... → The lymphocytic pleocytosis is very typical ...*

The frequency of the errors in the use of articles is not at all surprising in the texts translated from Lithuanian into English. The Lithuanian language does not possess articles and, therefore, they are hard to master for the Lithuanians.

Another common type of the grammatical errors was tense-related problems. There are rather strict guidelines as to the use of tenses in research articles. In the discussion of the performed and discussed medical study or analysis, the past tenses should be used (Example 7); meanwhile, the discussion of related studies performed by other authors or their results usually involves present tenses (Example 8). Thus, the most common errors in tenses were those where the present tense was used instead of the needed past tense, e.g.

7. *Our study has revealed that ... → Our study revealed that ...*

Slightly less often, there were past tenses used instead of the present tenses needed, e.g.

8. *... to our knowledge, there was no research performed ... → to our knowledge, there has been no research performed ...*

There were a few purely grammatical errors in the use of tenses identified where the context required the past tense because of the specific dates given (Example 9) or because of the sequence of tenses (Example 10); the translator or the author used the present perfect tense, e.g.

9. *... the prevalence of anomalies has decreased between 2000 and 2010 → ... the prevalence of anomalies decreased between 2000 and 2010.*

10. *The ... study showed that the procedure is ... → A ... study showed that the procedure was ...*

Such errors, as illustrated in the examples above, most probably reduce the language quality of a text.

Among the grammatical errors, there were also errors in number agreement, e.g.

11. *... this finding indicate ... → ... this finding indicates ...*

12. *... anomalies was 5 times greater ... → ... anomalies were 5 times greater ...*

13. *... anomalies from the Birth Register has not been ... → ... anomalies from the Birth Register have not been ...*

Some errors in number agreement might appear due to carelessness of the translator; however, this results in a poor quality of a text and, thus, is unacceptable. On the other hand, they should be spotted in the process of proofreading, which is also the translator’s or the author’s responsibility.

Errors in prepositions were extremely frequent. There were approximately 9 errors per article in the use of prepositions. Many verbs and adjectives require a certain preposition be used; however, the following example illustrates that prepositions most probably are an obvious English grammar-related issue for the Lithuanians. The noun confidence requires a preposition in; instead, the preposition of was used. Consider:

14. *... lost confidence of doctors ... → ... lost confidence in doctors ...*

Word order mistakes were not as common as other grammatical errors; however, they were sporadically present in many articles, e.g.

15. *... impairment also can be triggered ... → ... impairment can also be triggered ...*

The grammatical errors classified as other in this particular paper included the infrequent errors in the use of passive voice (Example 16), adjectives and adverbs, gerund and infinitive, e.g.

16. *One perioperative death reported due ... → One perioperative death was reported due ...*

The analysis of the grammatical errors found in the research articles allows stating that the errors in the use of articles, tenses, number agreement, and word order are those which demonstrate a reduced quality of a text.

**Analysis of Lexical Errors**

From the point of view of text quality, errors in lexical items are also important. Incorrectly chosen lexical items indicate that the person producing the text might not possibly be aware of the proper register used in scientific articles. The lexical errors identified in the analysed research articles were distinguished into the following subgroups: 1) incorrectly chosen content word and 2) non-existent word.

The errors of incorrectly chosen content words were infrequent; yet, they were identified with greater than chance frequency, e.g.

17. *... the target of this study ... → ... the aim of this study ...*

The example given above manifests that the text producer is possibly not very well aware of the register or of the innermost meaning of the chosen lexical item since the given word target seems to be inappropriately used in the context given.

What so more, the use of non-existent words was strange, e.g.

18. *Investigatives perform tasks ... → Subjects perform tasks ...*

19. *... armle units are sliding. → ... handle units are sliding.*

Example 19 is extremely interesting. The article is about the muscles of the legs and the arms. In Lithuanian, there is only one word ranka to refer to both an arm and a hand. It is probable that the author spotted the translator’s mistake where he or she had used the word hand instead of the needed arm and automatically changed hand into arm in all the possible cases in the text using the find-and-replace tool; the text producer was most probably unaware that the same combination of letters was present somewhere else in the text. However, it is also possible that the author would have noticed this particular non-existent word if he or she did proofreading.

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Analysis of Other Errors

As discussed above, many linguists agree that sentence structure, completeness of thought and most probably coherence of a text contribute to the overall quality, which often deteriorates due to the incorrect use of linkers and clarity issues.

The appropriate use of linkers is of great importance. In the articles analysed, the incorrect use of linkers was among the most persistent problems. There were a number of mistakes of no linkers used, thus, diminishing the coherence of a text and, in cases, even resulting in a grammatical error. In the example below, two independent clauses are joined with only a comma, which results in a classical mistake, i.e. a comma splice. In such cases, either a semicolon or a comma and a linker should be used.

20. *No antibodies were found, only specific antibodies in serum were detected. → No antibodies were found and only specific antibodies in the serum were detected.

Another common mistake was an unnecessary linker used. In the example below, a linker of contrast is unnecessarily duplicated, e.g.

21. *Although PCR has a low sensitivity, but may be useful ... → Although PCR has a low sensitivity, it may be useful ...

Reformulation of sentences or sentence parts due to clarity was the third most common issue among the language problems identified in the analysed research articles. On the average, there were about 14 clarity errors per article, e.g.

22. *... previously proposed diabetes cure definition ... → ... previously proposed definition of diabetes cure ...

23. *... type 2 diabetes partial or complete remission ... → ... partial or complete remission of type 2 diabetes ...

Certain errors classified in the present paper as reformulation for clarity possibly appeared due to the typological differences between Lithuanian and English. English is an analytical language, where grammatical relationships are mainly expressed by the word order and by “independent syntactic form elements (e.g. prepositions)” (Bussmann, 1996, p. 267). Meanwhile, Lithuanian is a synthetic language, where grammatical relationships are expressed morphologically, i.e., by changing the internal structure of the words through inflections (Denham and Lobeck, 2010, p. 185). Therefore, it is occasionally not easy for the Lithuanians to master English-like constructions and the way of grammatical thinking, which may result in awkward, long and grammatically incorrect sequences of words, expressed in Lithuanian by the possessive case. Examples 22 and 23 are perfect illustrations of the Lithuanian word order, resulting in literal translation in English, which does not add to both the grammatical accuracy and semantic meaning of the sentences.

Errors in style, which were in sporadic numbers found in 7 of the analysed articles and missing in 3, might also reduce the quality of language in a text. According to some linguists, the appropriate scientific style is the impersonal style (Sharma, 2004, p. 75). However, the personal style, mostly expressed by the use of personal pronouns, was rather frequent in the analysed research articles, e.g.

24. *... patients go through numerous investigations as we see in this case. → ... patients go through numerous investigations (5), as in this case.

This is most probably due to the fact that researchers want to put emphasis on certain ideas or facts found or discovered by them rather than by other researchers, whose ideas they also discuss in the same research paper. However, some language editors do not consider the personal style as a crucial mistake and ignore it if it is not used repeatedly.

Analysis of Corrections which do not Demonstrate Language Quality of a Text

For the purposes of this particular research, it was considered that certain corrections made by a language editor in the research articles analysed did not signal that the language of a text was of a poor quality (see Figure 3). These were the related to spelling, punctuation, typing, etc. Spelling is one of the most evident indicators of the variant of English used. Thus, there were approximately 11 spelling-related issues per article with 2 as the fewest number of instances and 27 as the biggest. The examples of the words spelled in the British variant were analyse (AmE analyze), analyser (AmE analyzer), programme (AmE program), millimetres (AmE millimeters), etc. Although spelling inaccuracies were not considered as signalling the language quality of a text, it is true that translators or authors themselves should mind the requirements for article submission, and in turn for the language in a text, as they are presented on a website of the magazine. A careful highly-qualified translator will always consider such requirements and will follow them.

Another language-related issue which does not always demonstrate that the text is of a low quality is punctuation. Punctuation of English is rather flexible although clear punctuation rules do exist. However, even the most authoritative linguists allow themselves to use punctuation marks scarcely. On the other hand, incorrectly punctuated sentences might lead to misunderstanding and ambiguity, not to speak of consistency in the text. The most common punctuation mistakes included those related to the separation of relative non-identifying clauses by commas, e.g.

25. *There are new techniques which are becoming more and more popular in the treatment of ... → There are new techniques which are becoming more and more popular, in the treatment of ...

26. *Stents require more contrast which could contribute to higher rates of ... → Stents require more contrast, which could contribute to higher rates of ...

This punctuation rule seems to be often ignored by translators or text producers and it is an extremely difficult case for language editors as they often have to be aware of the facts discussed and decide whether the information given in a relative clause is essential or non-essential, i.e. whether a clause is identifying or non-identifying.
Other rather frequent punctuation errors were missing commas after transitions starting a sentence (Example 28) or after modifiers at the beginning of a sentence (Example 29), e.g.

27. *Thus a controversy concerning ... → Thus a controversy concerning ...
28. *In literature the reported incidence varies ... → In literature the reported incidence varies ...

Another extraordinary case of punctuation, which shows carelessness or poor knowledge of the language of the translator or the author, was observed in the analysed research articles. Consider the following example:

29. *Hypophysis is a small endocrine gland ... → Hypophysis is a small endocrine gland ...

Example 29 illustrates a case of the transferred Lithuanian punctuation into an English sentence, which is absolutely unacceptable and is a major mistake, contributing to an overall poor quality of a text and, in some cases, even to the ambiguity of meaning.

Typing errors were rare, yet present in the analysed research articles.

30. *... tendency to increase in accompanied ... → ... tendency to increase in accompanied ...

Since there were approximately 3 typing errors per article on the average, it might be assumed that no proofreading procedure was performed by the text producer as such errors can be easily spotted.

Corrections classified as other were related to missing capitalisation, writing of numbers, dates, etc., which all add to the refined character of the final product – the text. For example, since the scientific magazine follows the American English variant, all the numbers should be written as in American English, which was not always the case in the analysed articles: either the British variant was given or the numbers were written as in Lithuanian, e.g.

31. *100,000 → 100 000

The same applies for dates. The house style requires dates to be written in a specific American way, e.g.

32. *On 3rd of March ... → On March 3, ...

Thus, it can be concluded that, although certain errors do not really signal quality of a text, consistency in following the house style should also be the aim of the translator or the author.

Conclusions

From the analysis of the language-related issues found in the medical research articles, certain conclusions might be drawn:

- Errors in grammar are most common among other errors.
- Errors in the use of articles are most frequent among grammatical errors.
- Errors in grammar, vocabulary, linkers and style signal that translation is not of the best quality.
- Spelling and punctuation issues, with certain exceptions, do not signal a low quality of language, but rather carelessness of the translator or the author.

The major drawback to this particular research is the absence of the information about the translators of the articles analysed. It is possible that the research articles were not translated by professional translators, but were written by the authors themselves, in which case the text might not be a translation. On the other hand, a controversy about who is a better translator – a language professional with certain knowledge in the area or a specific field specialist with good language skills – is still pending.

However, this does not affect the results concerning the errors found through the process of language editing of the texts either translated from Lithuanian to English by the translator or by the author or written by the author. Either way, the language of the texts was produced by non-native speakers of English.

References

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Moksliinių straipsnių, išverštų iš lietuvių kalbos į anglų kalbą, redagavimas

Santrauka

Kalbos redaktoriaus užduotis – išsaugoti kalbos klaidas ir adaptuoti tekstą pagal tam tikras formaliausių reikalavimus, kurių laikosi mokslo žurnalas. Verstų mokslinių straipsnių redagavimas dažnai sudėtingas, kadangi nemažai tekstų verčiami neprofesionalių vertėjų, todėl tekstų kokybė nevisada pa-tinkama, o kalbos redaktorius tenka įvesti daug pastangų, kad tekstas būtų ištaisyti kalbos klaidas ir adaptuoti tekstą pagal tam tikrus formaliuosius reikalavimus, kuriuos autoriai pateikti puikios kokybės tekstą.

Šiame straipsnyje analizuojami medicinos tyrimų moksliiniai straipsniai, išversti iš lietuvių kalbos į anglų kalbą ir patekinti spausdinti tarptautiniame mokslo žurnale. Tiriame įvairios kalbos klaidos, kurios padaro vertėjai arba patys autoriai. Tyrimo parodė, kad dažniausiai pasitaikančios klaidos yra gramatinių, skaičių derinimo, laiškų vartojimo, žodžių tvarkos sakinyje, prielinkinių arba kalbos stilistikos klaidos. Straiptynėje taip pat aptariamos klaidos, kurias atskleidžia vertėjas įvairių skirtumų.

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### APPENDIX

#### Table 1. All Corrections in Analysed Research Articles

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<th>Article 3</th>
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#### Table 2. Grammatical Errors Identified in Analysed Research Articles

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