

Writing a Scientific Paper in English – Challenges and Common Errors

Redactarea unui articol științific în limba engleză - provocări și erori frecvente

Cosmin Moldovan*

Department of Histology, University of Medicine and Pharmacy Târgu Mureș, Romania

Abstract

Scientific and medical papers written in English are a sine qua non condition for national and international recognition. Therefore, the results and conclusions that the authors want to present should be written using a concise, clear and error-free language, in order to increase the accessibility and ease of understanding. A number of resources are available for the writers to produce high quality output; however, the topic concerning specialized Romanian-to-English translations is rather poorly covered.

This short review encompasses an attempt to summarize the most common errors that may appear during translation, as well as to present several outlines aimed at obtaining higher quality texts.

Keywords: errors, guidelines, English language

Rezumat

Articolele științifice și medicale scrise în limba engleză sunt o condiție necesară pentru recunoașterea pe plan național și internațional. Prin urmare, rezultatele și concluziile pe care autorii doresc să le comunice trebuie formulate într-un limbaj concis, clar și fără erori, pentru a îmbunătăți înțelegerea și accesibilitatea. Există mai multe surse de informare la dispoziția autorilor, pe care aceștia le pot utiliza în acest scop. Cu toate acestea, traducerile specializate din limba română în engleză beneficiază de resurse mai restrânse.

Articolul de față își propune să fie o scurtă trecere în revistă a celor mai frecvente erori care apar în cursul traducerii, precum și să prezinte câteva principii generale al căror scop final este elaborarea de articole de calitate.

Cuvinte cheie: erori, principii, engleză

The number of scientific papers written in English and submitted for publishing has increased steadily over the last few years. This phenomenon has multiple reasons, among which we can outline the advent of scientific re-

search and the need for producing and publishing widely available research results in order to ensure internationally available funding. Unfortunately, sometimes these papers are not written in what could be defined as “proper English”,

***Contact details:** Gheorghe Marinescu 38, Târgu Mureș, Romania
Telephone: +40265215551/191; E-mail: cosmin.moldovan@gmail.com

and this is the area of interest the following general observations are focused on.

As far as correctly writing and editing scientific content are concerned, there are many guidelines available for the authors to follow, starting with, but not limited to, the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication" issued by the International Committee of Medical Journal Editors (<http://www.icmje.org/>). Carefully following the instructions provided within these guidelines should result in a properly written paper. Nevertheless, there is one somewhat overlooked but crucial aspect for authors who are not native English speakers, that is, proper translation and adaptation techniques. We would like to discuss several problems that usually arise within a very specific area: articles translated from Romanian into English.

When submitting a paper for publishing, authors should always bear in mind the editorial process their work must undergo. One of the first steps in this process is the analysis of proper English usage, which is especially important in journals with international reviewer boards. Without this analysis, articles run the risk of not being accepted regardless of the scientific content, due to difficulties that appear in understanding the text *per se*. This would be a rather embarrassing situation for the authors, especially when the paper is well prepared content-wise and results are valuable. Moreover, the rejection of a manuscript may generate long delays before re-submission and eventual publishing, and might sometimes have the unfortunate outcome of losing result priority in an increasingly competitive environment. On the other hand, manuscripts that are accepted for publishing but are returned for minor adjustments of the language used have a much shorter editorial life cycle and, as such, can be published faster. We will discuss herein several commonly encountered problems in Romanian-to-English translations of scientific texts and several guidelines on how to avoid them.

One of the most frequent errors is the tendency to closely mimic Romanian phrasing when translating into English. This may result in rather forced constructions, which are difficult to follow and understand by non-Romanian speaking readers. Phrases such as "also there are evidences about [...]", "as shown in table 1 there are different dietary sources of [...]", or "there is today the opinion that [...]" are awkward and drastically lower the general quality of a medical paper.

Another point that should be made is extremely specific and may seem trivial at first, but it is of the utmost importance: the decimal mark. In Romanian, this mark is written as "," (comma), whereas in the majority of the English speaking world, it is the character "." (point, full stop, dot). Conversely, the digit group separator, also called "the thousands separator", is "." in Romanian and "," in English. For the most part, authors and translators tend to overlook this fact when writing numeric results, and thus risk generating confusion among readers. For example, "3,76%" is correct in Romanian, but not in English, where it should read "3.76%"; "twenty thousand patients" should be written "20,000 patients" in English, as opposed to "20.000 patients" in Romanian. It is worth noting, however, that 4-digit numbers (from 1000 to 9999) do not require a digit group separator.

Stylistic uniformity should also be of concern when editing a scientific paper. British (United Kingdom – UK) and American (United States – US) spelling are sometimes different, and once authors choose to use one of the two, they must pay attention to following their choice through the entire article. The most common differences between the two variants of English spelling usually concern verb suffixes ("-ise" or "-yse" in British English, vs, "-ize" or "-yze" in American English). Thus, the correct British spelling would be "analyse" or "characterise", whereas the same verbs would be spelled "analyze" and "characterize" when using American spelling. There are, of course,

special situations which this rule does not apply to, but further developing this subject exceeds the aim of this paper. Other notable differences are the drop of the letter “u” in most word terminations in American English (“colour” vs. “color”), the letter reversal in words such as “metre” (UK)/“meter” (US), the drop of “a” in certain medical terms originating in Latin, (“haemorrhage” vs. “hemorrhage”) and the list could go on. While failing to strictly follow one spelling or the other does not have a significant impact on text comprehension, it is nevertheless an indication of the care taken during writing and editing the paper.

A general guideline that is not always taken into consideration is the use of verb tenses throughout the text. When reporting results, authors should use verbs in the past tense (e.g. “In our study, 25 (54.3%) cases showed chromosomal abnormalities”), whereas discussions referring to previous results published within other papers or studies should employ the present tense (“Hochhaus et al. conclude that it is often difficult to obtain well spread metaphases [...]”). Herein, we must also stress that the repeated use of the gerund within the confines of the same phrase is to be avoided, since the succession of different verbs ending in “-ing” may be confusing. Also, even though the use of passive voice is allowed in scientific texts, it must be employed with care, avoiding constructions of the “analysis was done with a microscope with fluorescence on a set of 500 nuclei” type.

A special point must be made for the so-called “false friends”. These are words that are usually spelled in an almost identical or similar manner in both Romanian and English, but have different meanings. The most widely spread error in this respect is the use of the English term “eventually” (“in the end”, “at an unspecified time”) when translating the Romanian “eventual” (“possible”, “possibly”), but the number of occurrences is much higher.

Other common errors encountered in poorly translated texts are incorrect use of ad-

verbs instead of adjectives and improper formulation of adjectival phrases that include numbers (most commonly when describing a “52 years old patient” or a “patient aged 52 years” instead of the correct “52-year-old patient” and “patient aged 52”, respectively). We can also include in this category overly long phrases, sometimes extending to a whole paragraph, which are obviously difficult to understand properly, and the usage of incorrect prepositional verbs. Last, but by all means not least, some papers are plagued with orthographic errors, an unfortunate state of events that denotes lack of proper care in editing the text and leads us to our next point.

Since virtually all texts are written using text processors, we believe that several simple precautions taken during editing should help avoid some of the technical errors that might otherwise occur. Before starting, authors or translators should set the language of their text to either American or British English. If the text processor has a “thesaurus”, “dictionary” or “autocorrect” function, setting the correct language should help eliminating misspelled words or incorrectly placed punctuation marks. However, using these functions raises a few caveats. The “autocorrect” function will tend to replace words that are unknown to the program’s dictionary with what it thinks to be correct as they are typed, sometimes yielding unwanted results. It would be recommended to turn off text autocorrecting and to replace it with a final, thorough proofing. Usually text processors underline words or phrases that seem incorrect, attracting attention and allowing for an easy correction. Nevertheless, when editing medical texts, the chance of using words that do not appear within the program’s dictionary is significant, and repeatedly correcting by hand the same words tends to become tedious. As such, it would be a good idea to add those special words to the dictionary, but only after a rigorous spelling check. Of course, the text should be read with great care even if it does not contain any words or phrases marked as incorrect, because some spelling errors might result in words that are correct

from the software's point of view, but that are not the words the author wished to use.

Authors who do not have a good grasp of the English language often have their texts translated by professionals. This usually results in properly written papers, but sometimes the translators may encounter terms they are not familiar with and try to bypass them by using extra-medical approximations. More often than not, although the language used is correct, this results in rather awkward phrases that might render comprehension difficult. Since the author-translator relationship is usually unidirectional, the latter frequently assumes that everything comprised in the text must be translated "as is", and tries to accomplish the task even when encountering unfamiliar phrases or words. One of the ways to circumvent this situation is to maintain a close collaboration between author and translator, with supplemental information requests whenever an unknown or unclear term or phrase is encountered. We believe that it is in the author's best interest that the information contained in his or her work is conveyed clearly and unequivocally, and thus a correct translation should imply constant supervision of the end result.

It is not the intention of the guidelines

presented here to address the whole spectrum of problems and errors that appear when translating scientific and medical texts – this endeavor could easily result in entire books on the matter. We merely attempted to pinpoint the main sources of possible misunderstandings and to underline the fact that improper use of the English language may distract readers from the actual scientific results presented or, even worse, might prevent the paper from being published in major medical journals. Without the pretension of being exhaustive, we tried to provide authors with a starting point in developing their skills in writing medical and scientific papers in English.

Recommended bibliography

1. Goodman NW, Edwards MB. Medical Writing. A Prescription for Clarity, 3rd Edition, ISBN: 9780521858571, Cambridge University Press, 2006
2. Matthews JR, Matthews RW. Successful Scientific Writing. A Step-by-Step Guide for the Biological and Medical Sciences, 3rd Edition, ISBN: 9780521699273, Cambridge University Press, 2007
3. Rogers SM. Mastering Scientific and Medical Writing. A Self-help Guide, ISBN: 9783540345077, Springer 2007
4. Stuart MC. The Complete Guide to Medical Writing, First Edition, ISBN 9780853696674, Pharmaceutical Press, 2007
5. Taylor RB. Clinician's Guide to Medical Writing, Edition 1, ISBN: 9780387222493, Springer, 2004