Corpus linguistic tools and terminology translation tasks

Fausto Luna¹, César Aguilar²

¹Doctorado en Investigación Educativa, Universidad Veracruzana, Mexico

²Instituto de Investigaciones en Educación, Universidad Veracruzana, Mexico

https://doi.org/10.36505/ExLing-2022/13/0031/000573

Abstract

Despite the progress that have been made regarding the use of corpus linguistics (CL by proposals developed by well-known authors (Aijmer, 2009; Reppen, 2010, Granger, 1998), in the Hispanic sphere there are few cases that make it, e.g. in Spain Alcina & Gamero (2002), and in Chile, Parodi (2010) to mention some. On the other hand, except for the case of the Universidad Autónoma de Baja California, in Mexico corpus linguistics are not used as an electronic resource for learning English, particularly in Language Teaching or Translation. Thus, we show here a working method applied to a translation course for undergraduate students of English Language at the Universidad Veracruzana (Mexico). We consider the use of Sketch Engine and One Click term extractor, in order to assess what kind of impact (positive, negative or null) such tools might have when used to solve translation tasks in a set of engineering and medicine texts.

Keywords: corpus linguistics, translation, terminology, teaching, language.

Introduction

The CL is a research topic that has been gaining relevance in the most recent years in relation to its usage in language teaching. Therefore, it might be highlighted that Granger has been one of its main exponents and the Pioneer in the research field focusing on the usage of CL for foreign languages teaching. In this regard, the corpus has been distinguished as a useful tool for teaching foreign languages, in this particular case of the English teaching. Notwithstanding, this methodology, as it is defined by McEnery et al (1996), might not be limited to be exclusively employed for teaching English in a general way, but also in the translation field. This, with the aim to teach and clarify specialized lexicon, which is denominated by Cabré (2011) as terminology.

In this sense, a methodology, a strategy or a tool have not been implemented for students and professors' performance regarding teaching as well as acquiring and managing with terminology adequately in English so as to translate specialized texts. Additionally, the hypothesis of this paper states that the use of CL turns out to be a useful tool for translation students in order to have a better understanding of terminology in English and enhancing their

ExLing 2022 Paris: Proceedings of 13th International Conference of Experimental Linguistics, 17-19 October 2022, Paris, France

translation performances. Notwithstanding, it also exists the possibility of a contra hypothesis which might argue that the CL might not have any type of effect on the students' work when developing their translations.

Furthermore, it is valuable to highlight that this paper shows the quantitative data gathered by means of a questionnaire and two units of analysis in a preliminary study by means of a pilot translation whose main aim is to analyse if the use of digital tools such as SketchEngine to create a CL and the extractor of terms OneClick — through the translating processes of two abstracts from specialized areas — impacts on the students' translation performance.

Research methodology

This exploratory and empirical research work is based on a quantitative method. This means that the main characteristics that stand out in this paper relies on statistics as well as graphs, the verification of the hypothesis, delimitation of approaches and measurement of phenomena. Also, this type of approach follows a deductive, sequential, and probative procedure, as well as the objective analysis of a reality. Moreover, the data collection technique employed in this research is a digital questionnaire designed in Google Forms which consists of 21 open-ended questions.

Additionally, a couple of units of analysis were necessary to gather the valuable information regarding the impact of the implementation of corpus linguistics as a tool for managing with terminology when translating.

The participants considered in this research study are 19 translation students from different semesters (sixth, eighth, and ninth) enrolled in the class *Taller de Traducción* corresponding to the sixth period of the B.A. Lengua Inglesa at the Languages School of the Universidad Veracruzana during the period February-July, 2022. The population contemplated for this study is constituted by 13 women and 6 men who are in a range of ages between 18-23. Similarly, it is worth mentioning that the informants have an upper-intermediate level of English (B2) since some of them have already concluded the class of *Inglés Avanzado* and some others are currently taking it.

Results

This last section is devoted to discuss the main results regarding the impact that the implementation of corpus linguistics had in the students' translation performance.

Firstly, this work discusses about the number of accurate, incorrect and omitted terms in the informants' translation performance of the pilot translation. The graphs in figure 1 show that the average of accurate terms translated from the medicine abstract is 15.0 out of 17 terms from the text having 88.2% of accuracy; the average of incorrect terms translated is 1.4 out of 17 with the 8.2%; and the average of omitted terms is 0.5 out of 17 with the 2.9%. Further, the results also show the average of accurate terms translated

from the engineering abstract which is 13 out of 15 terms with the 88.6% of accuracy; the average of incorrect terms translated is 0 out of 15 with the 0%; and the average of omitted terms is 1.7 out of 15 with the 11.3%.

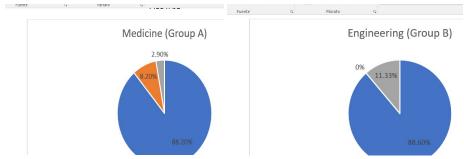


Figure 1. Graphs of the pilot translation.

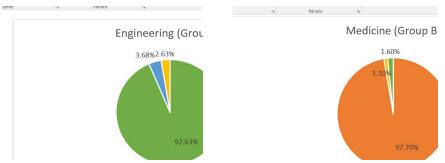


Figure 2. Graphs of the evaluation.

Secondly, so as to identify if there was an incidence after the implementation of Sketch-Engine and One-click as supportive digital tools for translating as well as some exercises for terminology acquisition, it was important to test students' performance with a translation performance evaluation. In order to allow informants to experience different areas, the informants who carried out the translation of the medicine abstract in the pilot, worked on translating the engineering text in the evaluation. And the informants who worked with the engineering text in the pilot, worked on medicine in the evaluation.

This unit of analysis figures out the number of accurate, incorrect and omitted terms in the informants' translation performance of the evaluation. The graphs in figure 2 show that the average of accurate terms translated from the engineering abstract is 17.6 out of 19 terms having 92.6% of accuracy; the average of incorrect terms translated is 0.7 out of 19 with the 3.6%; and the average of omitted terms is 0.5 out of 19 with the 2.6%. Moreover, the results also show the average of accurate terms translated from the medicine abstract

shows an average of 17.6 out of 18 terms with the 97.7%; the average of incorrect terms translated is 0.2 out of 18 with the 1.1%; and the average of omitted terms is 0.3 out of 18 with the 1.6%.

Conclusion

So as to conclude, it is possible to notice a slight improvement on the students' translation performance. Based on the results, the informants' performance of the group A show an improvement with the 4.4% regarding the accurate translated terms from the pilot (88.2%) to the evaluation (92.6%); a decrease in incorrect translated terms with the 4.6% from the pilot (8.2%) to the evaluation (3.6%); and the omitted terms decrease 0.3% from the pilot (2.9%) to the evaluation (2.6%). With respect to the participants who belong to group B, the results show an improvement with the 9.1% regarding the accurate translated terms from the pilot (88.6%) to the evaluation (97.7%); surprisingly, there was a negative but slight increase in the incorrect translated terms with the 1.1% from the pilot (0%) to the evaluation (1.1%); and the omitted terms decrease 9.7% from the pilot (11.3%) to the evaluation (1.6%).

References

Aijmer, K. 2009. Corpora and Language Teaching, Amsterdam/Philadelphia, John Benjamins.

Alcina, A., Gamero, S. 2002. La traducción científico-técnica y la terminología en la sociedad de la información, Castelló de la Plana, Spain, Publicacions de la Universitat Jaume I.

Cabré, M.T. 2011. La Terminología, una disciplina en evolución: pasado, presente y algunos elementos de futuro. Universitat Pompeu Fabra, España.

Granger, S. 1998. Learner English on Computer, London, UK, Longman.

McEnery, T., Wilson, A. 1996. Corpus Linguistics an Introduction. Edinburgh University Press. Edinburgh, Second Edition.

Parodi, G. 2010. Academic and Professional Discourse Genres in Spanish, Amsterdam/Philadelphia, John Benjamins.

Reppen, R. 2010. Using Corpora in the Language Classroom, Cambridge, UK, Cambridge University Press.