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Michela Marroni

La tragedia di una traduttrice: *Eleanor Marx e il fantasma di Emma Bovary*

> Her life is idle, useless. And this strong woman feels there *must* be some place in the world; there *must* be something to do – and she dreams. Life is so unreal to her that she marries Bovary thinking she loves him.
> – Eleanor Marx[1]

1. Nel 1967 la pubblicazione di *The Life of Eleanor Marx 1855-1898* di Chushichi Tsuzuki[2] gettò non poca luce su una delle più importanti figure femminili sia del socialismo tardo-vittoriano sia della storia della traduzione in lingua inglese. Il sottotitolo della biografia, "A Socialist Tragedy", si riferisce al suicidio di Eleanor Marx, avvenuto a soli quarantatré anni come esito di una serie di delusioni sentimentali e familiari – suicidio che non esclude, almeno come concausa, un processo di forte immedesimazione con l'eroina del romanzo flaubertiano *Madame Bovary* (1856), di cui aveva curato la prima versione inglese nel 1886. Figlia minore di Karl Marx, precoce e acuta sia

[1] Eleanor Marx Aveling, "Introduction", Gustave Flaubert, *Madame Bovary: Provincial Manners*, London, Vizetelly & Co., 1886, p. xx. Corsivi nel testo.

[2] Chushichi Tsuzuki, *The Life of Eleanor Marx 1855-1898: A Socialist Tragedy*, Oxford, Oxford University Press/Clarendon Press, 1967. Qui vanno segnalate due biografie intorno alle quali, al momento della pubblicazione, si è acceso un ricco dibattito. La prima è quella di Yvonne Kapp, *Eleanor Marx: A Biography* (London and New York, Verso, 2018), apparsa dapprima in due parti (1973, 1976) presso la casa editrice inglese Lawrence & Wishart; la seconda è di Rachel Holmes, *Eleanor Marx: A Life* (London and New York, Bloomsbury, 2015), la cui prima edizione è del 2014.

Franca Daniele

Translation of Medical Terms by an Online Translator

Introduction

Medical and scientific knowledge has been growing rapidly, resulting in the creation of new concepts that are expressed using a specific register. Medical Language can be defined as a variation of the standard language, characterized by a particular lexicon and syntax, and by being both technical and formal. In terms of mode, Medical Language can be either written or oral based on its use. Most of the medical information is written in English, which has become the Lingua Franca internationally utilized for medical and scientific reports, so replacing Latin and Greek. Mostly, Medical Language has a communicative function, and it may be classified based on the target the language is addressed to. Indeed, many varieties can be distinguished: language of medical education (textbooks), language of medical occupation (academic journals), language of medical journalism (popular medicine), doctor/patient language, and medical technical language (manuals)[1]. Medical Language is commonly referred to as Medical English, which has actually been named in many different ways: English for Occupational Purposes (EOP), English for Academic Purposes (EAP), English for Special/Specific Purposes (ESP).

Two demands have developed: the need to read and understand medical and scientific literature in English. Many times the aid of a professional translator is inevitable, since many medical professionals are not English native speakers. In this setting, both professionals and specialists working in the

[1] Lankamp R.E. *A Study on the Effect of Terminology on L2 Reading Comprehension*, Amsterdam, Rodopi, 1989.

medical field, and linguists and translators are all involved. Unfortunately, most translations are performed by native speakers who translate into their mother language, who are not medical professionals, and their knowledge of the specific issues is lacked. Therefore, translations are often confused and confounding, and sometimes clearly wrong[2].

Most translation researchers concur that translations should be done by speakers who are native in the target language (TL) into which they are translating[3], while concomitantly fully mastering the source language (SL) they are translating. In addition, translators who possess these skills and wonder into medical translations should also have a good knowledge of the language of medicine and of the themes reported[4]. Unfortunately, translators equipped with all three competences are rare, and medical professionals devoted to the art of translation are even rarer[5]. So, a combined effort by both professionals and translators seems to represent a good agreement between medical knowledge and language mastering[6]. One of the principal pitfalls for translators is that Medical English presents a peculiar lexicon and an extremely rich terminology used in particular language conventions and norms[7]. Indeed, these latter features of Medical English are the most widely studied aspects[8]. The World Health Organization has reported that thousands of new terms are created each year

[2] Neubert A. "Competence in language". In *Languages and Translation*: Benjamins Translation Library, 2000.

[3] Hatim B. and Mason I. *The Translator as Communicator*, Routledge, London, 2005.

[4] Robinson D. *Becoming a Translator – An Introduction to the Theory and Practice of Translation*, Routledge, London, 2012.

[5] O'Neill M. *Who makes a better medical translator: the medically knowledgeable linguist or the linguistically knowledgeable medical professional? A physician's perspective* Translation and medicine, John Benjamins Edition, 1989.

[6] Jakobson R. On Linguistic Aspects of Translation, Harvard University Press, Cambridge, Massachusetts 1959.

[7] Halliday M.A.K. "*Some grammatical problems in scientific English*". Review of Applied Linguistics. Supplement Series, 1989.

[8] Snow C.E. and Uccelli P. "*The challenge of academic language*", The Cambridge Handbook of Literacy, Cambridge, 2009.

partly due to new discoveries, to reclassification of the names of viruses, bacteria, molecules, etc.

A bulk of literature has been published that specifically addresses translating terminology using a number of different methods[9]. Moreover, much effort has been devoted to attempting to substitute human translators with machines that can translate different types of texts[10]. Furthermore, scientists such as engineers and mathematicians are still working on assembling machines specifically devoted to medical translations[11].

In order to address some of these issues I tested a tool that is easy to use, free and always available online: the Reverso translator, with the aim to test its usefulness and effectiveness in translating technical terms in medical abstracts.

Materials and Methods

To better investigate into these themes, 45 abstracts were evaluated. The abstracts were downloaded directly from the Pubmed database, and were randomly selected using search terms that allowed to include many subjects in the fields of medicine and surgery. The search terms were: Alzheimer's Disease, Breast Cancer, Cardiac Disease, Cervical Cancer, Colon-Rectal Cancer, Diabetes, Kidney Disease, Liver Diseases and Low Back Pain. The first five abstracts were downloaded for each search term. The only criterion for inclusion was that abstracts were to be in English, and written by English language users (the authors of the abstracts were all from English-speaking countries), in the attempt to avoid language mistakes in the original abstracts. The translations from English into Italian were carried out using a free online translator.

[9] Ellender C. "*Free Online Translators: A Comparative Assessment of www.worldlingo.com, www.freetranslation.com, and www.translate.google.com*", Translation Journal XVI, 2012.

[10] Somers H. *Machine Translation: History, Development, and Limitations,* The Oxford Handbook of Translation Studies, Edited by Kirsten Malmkjær and Kevin Windle, Oxford, 2012.

[11] Guzmán, F., Joty, S., Màrquez, L., & Nakov, P. "*Machine translation evaluation with neural networks*", Computer Speech & Language, XLV, 180-200, 2017. https://doi.org/10.1016/j.csl.2016.12.005.

All abstracts were translated from English into Italian using the free online Reverso translator. All translations were processed directly by the author of the present study. All English abstracts were analyzed using Text analyzer, which is an online text analysis tool for detailed text statistics. Texts can be selected and brought into the Text analyzer writing directly, copying and pasting, or taking the texts from the website. The options that are provided by the analyzer are: (1) number of characters including spaces; (2) number of characters without spaces; (3) number of words; (4) lexical density; (5) number of sentences; (6) number of syllables. For the purposes of the present study only the words with more than three characters were considered for each abstract. The total number of words was assessed using the Word 2010 automatic word count; while the number of technical terms was counted by the author of the present study, in each abstract. In each translated abstract: (1) the number of technical term translation errors and (2) the percentage of technical term translation errors were calculated. Furthermore, (3) the relations between the number of technical terms and the number of errors, and (4) the relation between the number of words with more than 3 characters and the number of technical terms were analyzed. In sum, 45 abstracts were analyzed in terms of four main features: the total number of words, the number of words with more than three characters and the number of technical terms. The 45 translated abstracts were evaluated for counting the number of errors in the translation of technical terms. All calculations were performed using Windows Excel. All analyses regard linear trends.

Results

In the 45 original abstracts analyzed, the mean total number of words was 233, going from a minimum of 153 words to a maximum of 312 words. The mean number of words with more than 3 characters was 148, going from a minimum of 72 to a maximum of 213. The percentage of words with more than 3 characters was 62%. Twenty-two percent (22%) of the words with more than 3 characters were technical terms. The mean number of technical terms was 32, going from a minimum of 27

to a maximum of 38. The mean number of technical terms translation error was 11, going from a minimum of 9 to a maximum of 13. Thirty-five percent (35%) of the technical terms was translated wrong.

Furthermore, as the number of words with more than 3 characters grew, so did the number of technical terms. However, the growth of the technical terms was lower than the growth of the number of words. Indeed, the number of words with more than 3 characters increased by 196%, while the number of technical terms by 40%. A direct correlation can be seen between these two items.

Moreover, the number of technical terms went from a minimum of 27 to a maximum of 38, increasing by 41%, and the number of errors went from a minimum of 9 to a maximum of 13, increasing by 44%. A direct correlation existed between technical terms and errors. The increase in technical errors and in the percentage of errors was stable.

Discussion and Conclusions

Recent translation studies have developed numerous theories on the processes involved with translation. Indeed, the choice between a literal translation and a free translation still remains to be undertaken at each translation approach. A free translation corresponds to Newmark's communicative-poetic translation[12]. This type of translation remains faithful to the original source text (ST) while simultaneously conveying its meaning in a way that the reader can understand. A communicative-poetic translation implicates 'rewriting' of the ST because the main aim of the translator is not to transfer the meaning but rather the tone, the mood and the sensations intended to be stimulated by the original author[13]. In order for the translator to reach this objective, a specific style must be necessarily respected[14]. Conversely, a literal translation is

[12] Newmark P. *About Translation*, Clevedon, Multilingual Matters, 1991.

[13] Taylor C. *Language to Language*, Cambridge University Press, Cambridge, 1998.

[14] Newmark P. *Approaches to Translation*, Pergamon, Oxford, 1981.

more bound to the ST because differently from the communicative-poetic translation, its main focus is on the faithfulness of the meaning it brings into the target text (TT). A literal translation corresponds to Newmark's technical translation, and it yields an almost perfect word-to-word overlapping and adherence. As a consequence of their technical nature, medical translations fall into this latter category, although no unique position exists[15]. Taylor believes that translations need to be accomplished consistently with the original scheme of the ST. On the contrary, Bassnett discusses that a translation is simply the expression of the concepts in ST into the TT[16].

The present study analyzed the number and the percentage of translation errors involving technical terms, in an attempt to assess the performance of the free online Reverso translator in translating medical abstracts. In the original abstracts, the percentage of words with more than 3 characters was 62%. The number and percentage of words with more than 3 characters were evaluated because in this way all the function words (i.e. articles, prepositions, etc.) were excluded from the analysis. Almost one-fourth of the terms were technical terms (22%) confirming that medical language is richer in terms than in function words. Another datum that must be pointed out is that technical terms grew with increasing of the words with more than 3 characters, even though the technical terms increased less than the number of the words with more than 3 characters. This phenomenon may be explained because the technical terms used in a single abstract are repeated many times. This is an intrinsic nature of medical language, where each concept or element is described with only one term. For example, a stroke may be described only with the term stroke; no synonyms exist. On the contrary, a direct correlation seemed to be evidenced between the number of technical terms and the errors. Indeed, the increase in both these items was stable. Finally, it is noteworthy that the mean percentage of technical terms

[15] Daniele F. *"Translating Scientific Papers"*, *Traduttologia* Volume II, 114-132, Eds. Tracce, Pescara, 1999.

[16] Bassnett S. *Translation Studies*, Routledge, London, 2013.

translated wrong was 35%. This is an expected datum meaning that machine translators are poor translators of medical terms in the sample used. It must be pointed out that the texts analyzed in the present study are highly academic, technical texts, which are per se more difficult to understand and thus translate. The performance of the online Reverso translator seems to be poorly effective because of the intrinsic characteristics of medical language used in the sample of texts analyzed in the present paper.

A quantitative assessment was carried out on the execution of Reverso translator in translating technical terms in highly specialized texts such as medical abstracts. Medical Language is difficult to translate because of its many intrinsic peculiarities. Indeed, the present analysis shows that although a mechanical, machine translation should be able to yield correct translation of terms, since it may be assumed that such a machine operates a word-to-word translation, this is not so for medical technical terms. In the present analysis, the mistakes were as high as 35%. This figure seems to indicate that translation of abstracts by Reverso translator are not fully reliable. Doctors and medical professionals need to work with highly correct translations because of the importance of the medical communications.

In conclusion, the findings of the present analysis indicate a bad performance of Reverso translator in translating technical terms in the sample of medical abstracts that were used. However, a good translation involves many aspects that go way over the correct translation of technical terms. This analysis quantitatively evaluated a specific aspect of medical translation and further studies are needed to better highlight the still controversial issues surrounding medical translations.