Using Parallel Corpora for Translation Activities in L2 Medical English Undergraduate Teaching, with Specific Reference to Italian Sports Sciences Courses

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Abstract

English is the international language of science and, as such, it is also the international language of medicine. L2 English undergraduates do not generally have particular difficulties in translating from English into their mother tongue; by contrast, they do not perform very well when asked to translate into English. The aim of this report is to show the results of a study obtained by using parallel corpora in scientific English classes in the Italian sports sciences study course of the University of Palermo. The students were provided with a corpus of English texts taken from a well-known medical text with pedagogical purposes, and their corresponding Italian translations, which were carried out by medical doctors. The students were asked to compare the two languages and were guided to identify major differences in lexical choices, syntactical structures, textual features, and units of meaning. They were then invited to translate relevant parts of texts from English into Italian mainly on the basis of what they remembered of the Italian version, and afterwards they were asked to perform back-translation activities into English following the same procedure. They gradually became familiar with the discourse patterns of medical English and medical Italian, and showed a better control in the correct use of scientific vocabulary. Most importantly, they developed awareness of the fact that specialized translation is an activity that demands rigorous compliance with the rules and conventions of a given linguacultural domain.

Keywords: Parallel corpora, medical English, translation, Italian undergraduates' needs

Introduction

The aim of this report is to highlight the importance that parallel corpora-based translation can have in developing medical language competence, in both English and Italian, as for L2 English undergraduates, with particular focus on Italian sports sciences students. As a matter of fact, the work was prompted by the author's research and teaching activities in

scientific English in the study course in sports sciences at the University of Palermo, Italy.

As in most scientific curricula, the teaching activity in Italian sports sciences courses is characterized by frequent consultation of specialized literature in English. The majority of the dissertations discussed by sports sciences students at the end of both the three-year and the master's study courses belong to the bio-medical field. As a consequence, the dissertations are widely based upon the study and thorough analysis of scientific English material. Moreover, starting from the 2016-2017 academic year, an ever-increasing number of triennial courses of Italian Universities (e.g. Bologna, Forlì, Milan, Palermo, Venice) have abolished the traditional written dissertation in the three-year courses and have introduced a final exam – assessed in thirtieths – within a project of simplification of bureaucratic procedures in first-cycle degree curricula. As for the sports sciences course, the University of Palermo was one of the first to join the project. The final exam – as set up by the study course board – consists in the presentation and discussion of a scientific English text among those recommended during classes for an in-depth analysis of the topics treated throughout the course. The texts are translated into Italian by the students themselves and discussed in their language (optionally in English), and the presentations are enriched with personal reflections and analytical comments. Five sessions of degree final exams have taken place so far in the sports sciences course in Palermo starting from the 2019 summer session, and the number of candidates was 30 per session on average. It was observed that more than one third of all students did not show correct use of medical Italian, both in terms of terminological accuracy and of adequate stylistic forms. Their presentations proved rather 'unnatural' because of too literal translations that did not take into account the peculiarities of medical discourse in the Italian language.

Methods and Results:

Before going into the core of the work, it seems important to specify what kind of professional a sports sciences student is exactly expected to become, and, as a consequence, what specialized linguistic competence s/he needs to acquire. The main goal of sports sciences courses is to educate learners to become kinesiologists and sports rehabilitation experts. This entails that the curriculum of these courses is mostly based upon acquisition of knowledge related to the anatomy, physiology and mechanics of human movement, as well as upon knowledge of disorders affecting the musculoskeletal system, and corresponding treatments. Therefore, students are required to reach a good command of both medical English if they want to become members of the international community in their specific domain, and, of medical Italian too, when communicating in professional contexts with their

compatriots. In this respect, translation both from and into English plays an important role in developing L2 English undergraduates' specialized language competence. However, studies on the role of translation in medical English undergraduate instruction for L2 learners have shown that L1 to L2 translation exercises prove too demanding and provide little benefit (Micic, 2008). The reason is quite obvious. Students do not have particular difficulties in translating from English into their mother tongue; by contrast, they do not perform very well when asked to translate into English because their production is inevitably affected by their native language structures. Therefore, the question arises whether it is possible to conciliate the need for correct and adequate translation with a not too arduous but effective activity. Parallel corpora can be useful tools. They provide learners with first-hand comparison between different discourse styles and aesthetic conventions and they can be used for classroom translation activities, including back-translation.

Starting from the end of September 2019, the students were provided with a corpus of English texts taken from *The Netter Collection of Medical Illustrations*, one of the most important and authoritative medical texts ever published and reference tool for generations of medical learners worldwide. Some of the most significant parts of Volume 8 (in particular, Subvolume Part I and Subvolume Part III), devoted to the musculoskeletal system, were used, together with their corresponding Italian translations. The peculiarity of the latter is the fact that they were carried out by medical translators and not by professional translators; therefore, they stand out for terminological accuracy, content precision, and adherence to the lexical, syntactical and stylistic conventions of Italian medical discourse. Students were invited to read relevant parts of both source texts and corresponding target texts. Then, they were guided to find out any similarities and differences between source and target texts as further support to the activity. Afterwards, they were asked not to read the Italian versions any longer and to perform the translation of the chosen parts of text from English into Italian on the basis of what they remembered of the translated texts. Later, they were asked to perform back-translation into English following the same procedure as the previous one. The kind of translation activities the students performed was different from the traditional one, in that before translating into L1 and later back into L2, the students had preliminarily familiarized with both source and target texts; in other words, they already knew both the original texts and the translated versions – and this also offered the advantage to facilitate their work. By contrast, if one considers, for example, the typical back-translation, which is generally carried out to assess the quality of a translated text, the translator does not know the original text because s/he would be affected by it. In the translation activity that was carried out in the study course in sports sciences

in Palermo, the students were provided with both source and target texts since the beginning so that they *could be affected* by them and be exposed to learn the most appropriate equivalences between the two languages from the start.

With constant work performed both in classroom (about 45 minutes each class twice a week) and at home (1 hour and a half 3 times a week), the activity proved effective as the students gradually produced better quality translations whenever they were required to render any scientific English piece of writing into their language, and, vice versa, into English. They learnt to translate in compliance with the discourse patterns of both languages.

Before carrying out the translations from and into L2, the students were guided to compare source and target texts to find out some important aspects at the lexical and syntactical levels. Comparison between source and target languages showed a higher degree of syntactical conciseness in the English language, and therefore shorter sentences, and a higher amount of content words as compared with their Italian translations. Conversely, the Italian translations revealed more complex and articulated structures, longer sentences, the use of extra, often unnecessary, phrasal elements, mainly due to stylistic reasons, and a greater quantity of grammar words. From a terminological point of view, comparison of source and target languages displayed differences in the use of some terms as for their belonging either to common language or to specialised lexicon. In some cases, where the English texts used words and expressions taken from general communication, the Italian translations employed terms belonging to the specialised lexicon as equivalents. Moreover, lexical repetition was constantly searched for in the source texts, whereas the Italian translations showed a preference for expressive variety. The following extracts may serve as illustrating examples:

Ankle sprains occur frequently in sports activities as well as in daily activities. In addition, a previously sprained ankle is at significant risk for reinjury. Ankle sprains usually occur in persons less than 35 years of age, most commonly in teenagers 15 to 19 years of age (The Netter Collection of Medical Illustrations, Rehabilitation after Sports Injury, Vol. 8, Part III, Sec. IV, p. 207)

Le distorsioni della tibio-tarsica sono un evento di riscontro assai frequente sia nelle attività sportive sia in quelle della vita quotidiana. La caviglia che ha già subito un insulto di tipo distorsivo inoltre è più esposta a nuovi traumi. Questo tipo di lesione colpisce prevalentemente soggetti di età inferiore a 35 anni: si tratta per lo più di giovani fra i 15 e i 19 anni (Atlante di Anatomia, Fisiopatologia e Clinica, Riabilitazione dopo lesioni traumatiche da attività sportiva, Vol. 8, Part III, Sez. IV, p. 207)

What immediately stands out in the source text is the lexical repetition of "ankle sprains", which is repeated twice in the same form ("ankle sprains"), and with the variation "sprained ankle" in the second occurrence. By contrast, in the Italian translation lexical repetition it was completely avoided. Three different locutions were used to refer to the ankle sprain: 1) the name of the joint affected by the injury ("le distorsioni della tibio-tarsica"/tibio-tarsal sprains), 2) a periphrasis including a relative clause ("la caviglia che ha già

subito un insulto di tipo distorsivo"/the ankle that has undergone a damage to a joint), and 3) a sentence where to refer to the ankle sprain a partial definition of it is employed ("questo tipo di lesione"/this type of injury).

Some of the classes of scientific English at the study course in sports sciences at the University of Palermo is devoted to the translation activities that have been dealt with here, and the first students who used parallel corpora began the activities at the end of 2019. These students will take their degree starting from the next summer season. They are expected to produce better quality translations and, more in general, show improved communicative competence in both medical Italian, and medical English for those who will choose to discuss their dissertations in the foreign language.

At present, the students are gradually becoming familiar with the peculiar discourse patterns of medical communication in English and Italian, and they show a better control in the correct use of scientific vocabulary in both languages. Most importantly, they are developing awareness of the fact that translation is an activity that demands compliance with the rules and conventions of a given linguacultural domain.

Conclusion

Translation should be considered as an integral part of L2 medical English undergraduate teaching. Though mainly aiming at developing writing proficiency with the consequent need to be integrated with other types of 'more active' activities such as reading and speaking, translation can be a very useful and effective tool to acquire adequate specialised linguistic competence in one's own native language, and in English as an international lingua franca of scientific communication. It is strongly recommended as an in-classroom activity as it can offer an important thorough contribution to the development and reinforcement of all communicative skills.

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