CHALLENGES FACED BY MEDICAL TRANSLATORS

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Abstract

Translation problems arise both from differences between language systems and from conceptual differences, since not all languages have terms to refer to different notions. Apart from this, medical language is a variety of language appropriate to different occasions and situations of use: it serves for the doctor-patient communication, it covers the area of communication from specialist to specialist and it also addresses the general public in the form of popular magazine articles. Since translators may be unfamiliar with the concepts of scientific texts, they can easily misconstrue the syntax thus making the TT senseless. This paper aims to investigate some problems that medical translators face and to offer solutions for successful translations.

Keywords: medical language, translation, terminology, linguistics

Introduction

English has become the *lingua franca* of scientific writing in general and of medical writing in particular. This is due to the fact that the recent technological expansion in the developed countries has brought about new fields, areas of technology, along with the terminology associated with them. Medicine is no exception, developed countries constantly investing large sums of money into research, hence the unprecedented advancement and progress in the field of health sciences.

For a great number of researchers and doctors who write biomedical articles, English may not be the mother tongue. Consequently, to have their articles published in renowned, high impact factor journals, medical researchers turn to translators. Nevertheless, translators are not professionals in health sciences and rely on different strategies and solutions in dealing with the problems they encounter. Problems are of various types but they can be categorised into terminological, linguistic and extralinguistic.

1. Terminological problems

The language of medicine is in constant change and development. New terms are added, other ones become redundant. Hence, there are numerous difficulties translators have to face when translating medical texts.

The terminology of clinical disciplines poses a great challenge to any translator. Terms relating to pathological anatomy abound in medical literature, in diagnoses or names of diseases. It is indubitable that Greek and Latin represent the basis of medical terminology in English. However, as linguistic units will sometimes not suffice to describe current advances in sciences, terminology may "use modern derivatives of old Greek and Latin words" (McMorrow 1998:21) in "both microscopic and macroscopic terms" (Fischbach 1993:94).

While the doctors in the Middle Ages relied on Latin in the doctor to doctor communication, today's health care professionals use English. If originally medical language derived from classical Greek and Latin roots, the reality today has shifted to compositions of words borrowed from ordinary English. This could be the case of terms like *screening*,

bypass, *stent*, *pacemaker*, and so on. The influence of English is so powerful that many languages simply borrow the terms in their English form instead of searching for correspondents or finding local variants. Since many such terms describe new realities, importing the word seems to be the best choice in covering the lexical gap.

Medical terminology is difficult for several reasons. First of all, it is a jargon to facilitate professional communication. Secondly, it is in a continuous growth due to new additions, whether new terminology is based on Latin/ Greek or not. Thirdly, synonymic terms function simultaneously with probably minor shades of different meanings. Fourthly, there is a lack of standardisation in most languages. This is the case of both English [1, 2, 3, 4] and Romanian. There have been attempts in standardising medical English in recent years, such as the Unified Medical Language System [5] or SNOMED [6]. Having access to such databases greatly facilitates not only the work of a translator but also the work of the professional in medicine.

Standardisation of medical terminology is of great help also in the doctor-patient communication. More and more professionals in the field of medicine recognise the need for standardised terminology in all subfields of medical science, from laboratory medicine [3] to orthopaedics [2, 4].

Unfortunately, to date, a search on the PUBMED [7] database does not retrieve any articles on the topic of standardisation of Romanian medical terminology. This might be due to the fact that most Romanian medical journals are currently published in English. Such a database would undoubtedly aid both in the production and in the translation of medical research articles.

2. Linguistic problems

There are two levels of grammatical problems in translation: morphology and syntax. If morphology examines aspects as compounding, inflexion, derivation, etc, syntax will regard the arrangement and relationship of words in sentences. The syntactic structure of a language imposes different boundaries on the way messages are organised in that particular language, which results in various difficulties in translations. Choices in a language are of two types: grammatical and lexical. Regarding translation, the most important difference between these two options is that while lexical choices are somewhat optional, grammatical ones are compulsory. Another difference is the fact that, unlike lexical structures, grammatical structures are more rigid, resisting change. New words, terms, concepts are much easier to be introduced into a language than to alter any of its grammar structures or systems, which would require an extended period of time. Synchronically, changes in the grammar systems of languages are practically invisible, while lexical changes can be recorded.

It is such differences in the grammar systems of the source language and the target language which impose alterations in the content of information during translation. Such alterations can be done either by adding the necessary information or by removing the parts which would be irrelevant in the target language text. Baker points out that "a translation which repeatedly indicates information that is normally left unspecified in the target language is bound to sound unnatural" (Baker 1992:87).

Another difference across linguistic systems is that of tense. Authors of Romanian medical research articles frequently use the past tense. Since such temporal structures are not

necessarily linked to time markers in Romanian, translators may run into difficulties in choosing the English past or the present perfect. In the Introduction section of a biomedical paper, for example, reference might be made to the work of other authors, which, in English, should make use of the present perfect.

Passive voice may also pose problems in the translation, due to differences in languages and the availability of such structures in the TL. Scientific articles that make use of passive constructions will preferably use the form without the agent. This is problematic in cases in which the target language does not have a corresponding transitive verb which could render a similar structure. While English opts for the passive in order to "give the impression of objectivity" (ibid.:103), a Romanian biomedical article prefers the use of a reflexive construction (e.g. se observă, se înregistrează, etc).

A translation that renders a passive construction from the source language with an active one in the target language or vice-versa can seriously affect the focus of the original message, the linear arrangement of semantic elements, as well as the amount of information that is included in the clause. Consequently, a translator has to analyse the possibility of such changes and to opt for the preference of the target language regarding the use of voice and the stylistic value it conveys in that particular language. One of the most significant aspects is "the function(s) of the passive and similar structures in each language. [...] It is always the function of a category rather than the form it takes that is of paramount importance in translation" (ibid.:109).

As Newmark notes "the medical translator has much more freedom with grammar than with lexis" (1979:1406). In order for a translated biomedical article to be accurate and to rise to the standards of the target language, the translator has to match the frequency of features of the source language text (terminology, compounds, syntax, word order) to equal frequency of the corresponding feature in the target language text (ibid.). Since medical English has a sober, moderate and conservative style, the translator has to determine both the degree of formality and the technicality of the target language text. (ibid.).

Newmark also notes that components of a text depend on three types of context:
-       linguistic, since words in isolation may have different meanings than in combinations;
-       situational, to connect to the extra-linguistic reality;
-       cultural, because words may have different meanings in different languages
In the case of scientific texts, in general, and biomedical articles in particular, the translator has to adhere to the norms that govern such types of texts in the target language. The English biomedical article has a fixed structure, it is divided into sections: Introduction, Material and Method, Results, Discussion, consequently a translation into English has to be edited according to the IMRAD structure. Here, "TL grammar will certainly demand grammatical transpositions, but the imperative priorities are to respect the structural and intellectual integrity of the ST message and to observe the TL conventions for formulating such messages" (Hervey and Higgins 2002:104). This is because such texts are rigid and have strict rules and norms of composition imposed by the nature of the topic, on the one hand, and by guidelines for editing them, on the other.

3. Extralinguistic problems

Any translation "domesticates foreign texts, inscribing them with linguistic and cultural values that are intelligible to specific domestic constituencies" (Venuti 1998:67). The process starts with the decision to translate a foreign text, continues with the development of the translation and ends with the publication and dissemination of the translated text. While translations of biomedical articles are beneficial because they significantly contribute towards the widespreadedness of scientific knowledge, translations of literature may be a threat to cultural identity by "constructing representations of foreign cultures" (ibid.).

The complexity of the translation of medical articles is also determined by other extralinguistic aspects. A translator may also be faced with strict deadlines, stress, the variety of topics, lack of experience, insufficient extralinguistic knowledge of the subject matter, the constraint of space (a limited number of pages or a maximum number of words), etc.

Inferential strategies are extensively used in the understanding of a source text, here again, extralinguistic knowledge plays a key role (Kim 2006:284). Apart from the mastery of translation methodology, extralinguistic knowledge has to be accompanied by linguistic competence, which in the case of the translation of specialised texts might seemingly play a minor role, which means that a professional in the field of medicine might perform a better translation than a translator who lacks scientific knowledge in the field (ibid.:285). Thus the quality of the translation product is highly influenced by extralinguistic knowledge.

As a result, culture specific items, words, concepts may have to be explained in order that the reader does not fail to understand the text. The omission of culture-bound elements in a translation might result in the production of a standardised, general text. Such stylistic deterioration plays too little a role in the case of scientific texts, however.

Extralinguistic culture-bound problems in the translation of medical research articles may derive from differences between Romanian and English in the following areas: social conditions (groups, subcultures, living conditions, working conditions) and lifestyle (sedentary way of life, housing conditions, food, leisure activities). All these aspects can be part of the doctor-patient interview and can play an important role in diagnosing the condition of the patient as well as establishing its aetiology. The treatment of such problems highly depends on the translator's competence of extralinguistic knowledge in the two cultures.

Other cultural elements in the translation of medical texts pertain to names of medicines, procedures and protocols (for example resection protocols in surgery or staging methods in pathology), names of instruments, measurement units, questions relating to patient history, the availability of therapeutic methods (kinesiotherapy, hydrotherapy). While all these culture specific problems are context dependant, their methods of translation cannot be generalised.

Conclusion

If in the past medicine did not progress at the same speed as it does today, medical translation was a fairly uncomplicated task because the basic physiological and anatomical terminology was largely similar across the world (Pilegaard 1997:161). The situation has changed with the advent of technological and scientific advances that the 20th century witnessed. This unprecedented desire for discovery is unlikely to come to an end soon since

more and more professionals become involved in scientific research to which significant amounts of funds are allotted.

Before proceeding to the process of translation, the translator has to decide on the purpose of the source text as well as the purpose of the target text. This establishing of the genre of the text at hand imposes the selection of the proper strategies (Hervey and Higgins 2002:57). Text types belonging to the same genre can differ greatly from the research article to the case report (Pilegaard 1997:169).

An advantage in technical, legal, medical, scientific or financial translation is that the translator can know in advance what genre most source texts belong to (Hervey and Higgins 2002:58). Empirical genres will deal with the real world, texts will be informative and will take an objective stance, while language is expected to be unambiguous (ibid.) factual and objective.

The question arises as to whether it should be the translator who corrects inaccuracies of the source text. Poorly written source texts can lead the translator on the wrong path not to mention that ungrammatical constructions are not to be included in the target text. While it is not the translator's task to correct mistakes in the source text, ambiguities or obscurities should be removed so that the final product maintains factual accuracy (O'Neill 1998, Hervey and Higgins 2002).

On the other hand, as Gouadec (2007:193) emphasises "mediocre translation is a sign of lack of concern and professionalism on the part of the person disseminating it, even though that person may be in no way responsible for the quality of the translation itself"

References

Baker, Mona, *In Other Words. A Coursebook on Translation*, London and New York: Routledge, (1992)

Gouadec, Daniel, *Translation as a Profession*, Amsterdam/ Philadelphia: John Benjamins Publishing Company (2007)

Hervey, Sándor and Ian Higgins, *Thinking French Translation. Second Edition*, London/ New York: Routledge (2002)

Kim, Ryonhee, *Use of Extralinguistic Knowledge in Translation* in Meta: journal des traducteurs/ Meta: Translators' Journal, vol. 51, no. 2, 2006, p. 284-303

Newmark, Peter, *A layman's view of medical translation*, British Medical Journal, Vol. 2, No. 6202, Dec. 1 1979, BMJ Publishing Group

O'Neill, Marla, *Who Makes a Better Medical Translator: The Medically Knowledgeable Linguist or the Linguistically Knowledgeable Medical Professional? A Physician's Perspective* in *Translation and Medicine, Volume X*, Amsterdam/ Philadelphia: John Benjamins Publishing Company, Fischbach, Henry (ed.), (1998)

Pilegaard, Morten, *Translation of Medical Research Articles* in Text Typology and Translation, Anna Trosborg (ed), Amsterdam/ Philadelphia: John Benjamins Publishing Company (1997)

Venuti, Lawrence, *The Scandals of Translation. Towards an Ethics of Difference*, London/ New York: Routledge (1998)

Fischbach, Henry, *Translation, the Great Pollinator of Science: A Brief Flashback On Medical Translation* in *Scientific and Technical Translation*, Amsterdam/ Philadelphia:

John Benjamins Publishing Company, Wright, Sue Ellen, Wright, Leland D. Jr. (ed.) (1993)

McMorrow, Leon, *Breaking the Greco-Roman Mold in Medical Writing: The Many Languages of 20th Century Medicine* in *Translation and Medicine, Volume X*, Amsterdam/ Philadelphia: John Benjamins Publishing Company, Fischbach, Henry (ed.) (1998)

[1] Costarelli, L. et al, Intraductal Proliferative Lesions of the Breast Terminology and BiologyMatter: Premalignant Lesions or Preinvasive Cancer?, in International Journal of Surgical Oncology, Volume 2012, Article ID 501904, available online at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3357964/?tool=pmcentrez, viewed March 31 2012

[2] Bagley, C. H. M. et al, Patients' misunderstanding of common orthopaedic terminology: the need for clarity in Ann R Coll Surg Engl 2011; 93: 401–404, available online at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3365461/?tool=pmcentrez, viewed March 31 2012

[3] Lee, Kap No et al, Standardization of Terminology in Laboratory Medicine II, in Journal of Korean Medical Science 2008; 23(4): 711-713, available online at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2526413/?tool=pmcentrez, viewed March 31 2012

[4] van Dijk, C. N. et al, Terminology for Achilles tendon related disorders in Knee Surgery, Sports Traumatology, Arthroscopy, (2011) 19:835–841, available online at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3076576/?tool=pmcentrez, viewed March 31 2012

[5] http://www.nlm.nih.gov/research/umls/

[6] http://www.ihtsdo.org/snomed-ct/

[7] http://www.ncbi.nlm.nih.gov/pmc/