Technical Terms and Processes: A Case for Transliteration

Grami Mohammad A. Grami[1*] and Hamza Alshenqeeti[2]

[1]*King Abdulaziz University, Saudi Arabia.*
[2]*Taibah University, Saudi Arabia.*

Authors' contributions

This work was carried out in collaboration between both authors. Both authors contributed equally including tasks of preliminary readings, data collection, discussion, editing, revisions and corrections. Both authors approved the final manuscript.

Short Research Article

ABSTRACT

This literature review article looks into the practice of finding literal translations in the target language for each and every technical term and process in the source language, even if the equivalents are not intelligible to the readers. This practice is evident in many translated textbooks in highly technical majors including IT, engineering and medicine. The paper suggests a hybrid model of translation by employing transliteration (Arabicisation) as well as traditional translation. In other words, known terms and processes should be treated as proper nouns rather than lexical items and subsequently referring to the entities as sounds rather than meanings. This process makes a translated text easier to comprehend, keeps the intended meaning as accurate as possible and saves translators time finding awkward and pointless equivalents in the target language.

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*Corresponding author: E-mail: ggrami@kau.edu.sa;

1. INTRODUCTION

There has been a significant effort, facilitated and funded by governmental and educational agencies in Saudi Arabia, to translate as many books and articles, especially from English, into Arabic. The focus has been largely on technical and medical texts, but also on legal, social, educational and economic resources.

We argue that any attempt to make knowledge more available to potential readers should be appreciated. However, we argue against the commonly-held practice of simply finding equivalents for each and every word in a source language, especially when the suggested translations are in themselves vague or obscure to the readers. Some literal translations are so vague to the point where they defy the reason for translating in the first place. This can happen because either the process/term is relatively recent such that no acceptable equivalents have yet been found, or that the term/process has been already transliterated into Arabic, making finding an equivalent rather redundant.

According to Li [1], transliteration simply means transferring the 'sound' from one language into another. In other words, the sounds of these terms and processes are simply written in the Arabic alphabet to correspond as closely as possible to its original pronunciation in the source language.

2. STATEMENT OF PROBLEM

There have been many ill-judged attempts to translate words such as Windows (the operating system), mouse (the device), file dump (the process) literally into Arabic. These attempts are at best pointless and inconsistent, and in worse cases misleading and confusing. For instance, other words such as Apple (the computer firm), Firefox (the internet browser), and Android (the operating system) are not translated, which makes one ask why translating the former words but not the latter, and what is the premise of translating these words when they have become entities in their own right, similar to other proper nouns.

3. DISCUSSION

3.1 Translation

In order to understand the scope of this article, we shall briefly look into the concepts of translation and transliteration. Crystal [2] defines translation as the process where "…the meaning and expression in one language (source) is tuned with the meaning of another (target), whether the medium is spoken, written or signed." Torop (2002) similarly describes translation as the process of converting expressed ideas from one language into another. In other words, the focus here is on lexis (meaning) rather than pronunciation.

Chang, Chau & Holroyd (1999) believe that finding equivalents fall into two broad categories: semantic and content. The former category includes translating words or ideas when the meaning is similar or identical in both languages after translation, while the latter refers to the extent to which a construct holds similar meanings and relevance in two different languages.

3.2 Transliteration and Arabicisation

Transliteration on the other hand is the process of representing words from one language in another language using the alphabet or writing system of the latter [3]. It can be described in technical terms as "…phonetic borrowing of the English term via transliteration into Arabic sounds and characters" as Awang and Salman [4] explain. Unlike translation, transliteration does not attempt to find an equivalent that has the same meaning in the target language, but rather does it phonetically. Transliteration simply involves writing the sounds of the word in the source language using the alphabetic characters of the target language. This practice is understandably very common when it comes to translating proper names (John, Ali, Mary ... etc.) and in the case of nouns (New York, Halloween, August) [5,6,7,1].

According to Awang and Salman [4], Arabicisation is called for when there is a lack of translational equivalence or equivalent effect in Arabic. Among other techniques, words of origin may therefore be phonetically borrowed, which makes Arabicisation a form of transliteration.

Regmi, et al. [8] acknowledge that transliteration is helpful when exact equivalence or exact meaning might not exist in the target language. Kashani, et al. [7] also point out that personal names, locations, organizations and borrowed words are the most frequent candidates for transliteration. Newmark [9] also believes that, in addition to proper nouns, the following should be considered for transliteration: historic institutional

terms, international institutional terms, national institutional terms, and cultural terms.

Proper nouns, according to Abdolmaleki [10], should be treated like entries in encyclopaedias rather than ones in dictionaries, because they have no meanings or connotations. However, Abdolmaleki disagrees with the idea that proper nouns are untranslatable, but suggests that rather they should be accompanied by definitions and explanations.

However, as Stalls and Knight [5] rightly observe, transliteration into Arabic can be challenging due to the fact that Arabic spelling, like that of many Semitic languages, is predominantly consonantal. The absence of short vowels in Arabic spelling can cause errors in pronunciation. They (ibid) also notice that B and P, as well as F and V, are not distinguished in Arabic spelling due to absence of V and P sounds in Arabic. One should therefore treat B and F with caution in Arabic transliteration.

Table 1. Examples of translated and transliterated words (Source language English, target language Arabic)

Translated words	Transliterated words
Windows نوافذ	Apple ابل
Mouse فأرة	Firefox فايرفوكس
File dump فايل دمب	Android اندرويد

3.3 Dealing with Technical Terms in Translation

The two concepts of translation and transliteration as explained above draw us to the issue of dealing with certain known and common terms in many different disciplines. Researchers such as Awang and Salman [4], Al-Asal and Smadi [11] and Hassan [12], acknowledge the fact that many technical and scientific terms particularly from English, have no natural or standard equivalents in Arabic. This is a very important fact that translators should keep in mind when making decisions about what and how to translate terminologies.

Many studies have been carried out to look into how to deal with technical terms when translating into Arabic. Awang and Salman [4] explain in detail the approaches used when dealing with technical terms, especially those of English origin, and they admit that Arabicisation, which is basically a form of transliteration as noted above, is a valid technique that received credence from

the Arabic Language Academy, a prominent authority when it comes to translation. Other techniques mentioned by Al-Asal and Smadi [11] include derivation, assimilation, analogy, compounding, coinage and metaphor.

We are particularly interested in the translation versus the transliteration of technical and scientific terms into Arabic. As mentioned earlier, attempts to date are best described as inconsistent. Awang and Salman's [4] study mentions quite a few examples of Arabicisation, and they put translation versus transliteration almost equally. Even more confusing is when an English term that consists of more than one word such as 'transfer protocol' or 'nitric acid' is both translated and transliterated into Arabic. There does not seem to be a rule governing which part of the word is translated and which one is borrowed, which further adds to the confusion. Other words such as motherboard are usually transliterated, while words like 'node' and 'polygon' are usually literally translated.

The current article argues that unless there is a known equivalent Arabic word that has an identical or near identical meaning and is known to experts in the field, literal translation should be discouraged or even avoided. As in the example of 'node' above, the literal translation is simply pointless and confusing. We also believe that attempts to find exact translations of words already common in a field of study takes a lot of time and effort, not only from translators' perspective, but potential readers as well. These resources should be better invested in other academic endeavours instead.

4. CONCLUSION AND RECOMMENDA-TION

Translation in essence is tasked with making knowledge in a foreign language more accessible to readers of a different language by removing linguistic barriers standing in the way of comprehension. Any deviation from this goal is not only pointless but defying the very reason for translation in the first place. This is a very important point that should be adhered to, and one that explains why translation in certain contexts can actually be counterproductive.

A much better approach when attempting to translate foreign texts into Arabic, especially in technology, computer science, law, and medicine, where special terms and processes are present, is to translate sentences but

transliterate technical terms and processes within these sentences. Such a hybrid approach should serve the purpose of translation much better, and not confuse potential readers with obscure Arabic equivalents that themselves need explaining. Transliteration should also help build up a repertoire of terms and concepts that experts in a specific field can be expected to share.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Li CWC. Foreign names into native tongues: How to transfer sound between languages—transliteration, phonological translation, nativization and implications for translation theory. Target. International Journal of Translation Studies. 2007;19(1): 45-68.
2. Crystal D. The Cambridge encyclopedia of language. Cambridge, UK: Cambridge University Press; 1991.
3. Arbabi M, Fischthal SM, Cheng VC, Bart E. Algorithms for Arabic name transliteration. IBM Journal of Research and Development. 1994;38:2.
4. Awang R, Salman G. Translation and Arabicization methods of English scientific and technical terms into Arabic. AWEJ for Translation & Literary Studies. 2017;1(2): 92-106.
5. Stalls BG, Knight K. Translating names and technical terms in Arabic text. In Proceedings of the Workshop on Computational Approaches to Semitic Languages Association for Computational Linguistics. 1998;34-41.
6. Wehmeier S, McIntosh C, Turnbull J, Ashby M. Oxford advanced learner's dictionary of current English. Oxford: Oxford University Press; 2005.
7. Kashani MM, Popowich F, Sarkar A. Automatic transliteration of proper nouns from Arabic to English. In Proceedings of the Second Workshop on Computational Approaches to Arabic Script-based Languages. 2007;275-282.
8. Regmi K, Naidoo J, Pilkington P. Understanding the processes of translation and transliteration in qualitative research. International Journal of Qualitative Methods. 2010;9(1):16-26.
9. Newmark P. A textbook of translation, London: Prentice Hall; 1988.
10. Abdolmaleki SD. Proper names in translation: An explanatory attempt. The Social Sciences. 2012;7(6):832-837.
11. Al-Asal MS, Smadi OM. Arabicization and Arabic expanding techniques used in science lectures in two Arab Universities. Asian Perspectives in the Arts and Humanities. 2012;2(1):15-38.
12. Hassan SS. Translating technical terms into Arabic: Microsoft terminology collection (English-Arabic) as an example. Translation & Interpreting. 2017;9(2):67-86.