IT terminology and translation: Cultural, lexicographic and linguistic problems

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Abstract

The research tackles the computer linguistic terminology used wrongly or vaguely by Arab computer users in academic institutions and by English Arabic translators. To serve the purpose of this research, we inserted and/or contextualized a number of computer linguistic terms in texts or contexts. The terms were heavily used in word processors or statistical packages. Five translators were requested to translate those texts. Simultaneously, we reviewed the computer books taught in two Arab countries which are Jordan and the UAE because these countries have witnessed good educational developments. After filtering out the translators' products from English into Arabic and after investigating the computer terminologies, we found that many computer terms are problematic. We classified the types of problematic vocabulary items and then tabulated them under four categories. Those were the vague, inaccurate, unchangeable and statistical ones. We also found that those problematic words were difficult to translate because of the Arabic culture or the inefficiency of English Arabic Bilingual dictionaries. The research ends up with a number of research and practical recommendations.

Introduction

This research deals with the cultural and linguistic problems faced by the Arab students studying translation in particular and the Arab translators in the field of modern IT texts translated from English into Arabic in general. Due to the relative wealth of the Middle East countries, computers are ubiquitous there and are used in all aspects of life through the medium of English though the first language in the Middle East in particular and the Arab world in general is Arabic; the mother tongue of 23 Arab countries, and the religious language of dozens of Islamic countries like Iran, Pakistan, Turkey, etc. It is worth mentioning that most of the Arabs who use computers started to mix Arabic with English. Therefore, in one sentence, Arabic and English words are used. The blend of Arabic and English poses problems for translators. Because of this blend, we will deal with two problems. The first problem is associated with bilingual dictionaries in terms of their meanings and connotations. The other type is those problems which are related to the Arab culture. At this stage, we need to know that the Arab World in general, and Jordan and the UAE in particular are big

importers of western technology processed through the medium of English. Simultaneously, the first language used in the Arab World is Arabic, while English is used either as a second or a foreign language. Whether English is a foreign or a second language is not a big issue because English is still the language of science and technology in the Arab world and even worldwide.

Literature Remarks

Today, Arabic is one of the official languages of the United Nations and, at the same time, the English Language is not restricted to the English People anymore. Swales argues that:

> We can now see Arab professional communities (in both public and private sectors) as prime users of English as the main language of wider international communication, and nowhere more obviously in the Arab and Japanese businessmen conducting their business through the medium of English (1984: 11).

On top of that Swales (ibid.) maintains that the Arab World is a large consumer of science and technology due to the richness of the geographical area of the Arab World. Of course, computer technology is an essential part of science and technology needed everywhere due to globalization as the whole world has become a small village.

Modern computer technology and international technological information transfer have become a basic demand of life in both developed and developing countries and in all academic and non-academic aspects of life: in schools, universities, home, companies, etc. It is because of these new circumstances that a translator, beginner or advanced, needs to be highly educated and qualified to cope with these conditions (Redwi 1999). Whether the translator accept it or not, he will find himself working with information technology including translating instructional manuals or booklets written in English, translating computer technical terms or even translating for big companies through the internet. For example, all computer packages, devices and machines manuals are usually printed and/or published in English. The issue of translation in the field of computer is really very serious because the concept of computer use is relatively new. Simultaneously, translation itself is a new concept which means that no record of computer terms has been well-developed. Bassnett states that:

> In the late 1970s a new academic discipline was born: Translation Studies. We could not read literature in translation, it was argued, without asking ourselves if linguistics and cultural phenomena really were "translatable" and exploring in some depth the concept of "equivalence" (2004:1).

The Arabic language is one of the most difficult languages in the translation of technical material, and so for several reasons like the weakness of finding equivalents in Arabic for the English computer terms on top the extremely limited number of translators. Another reason is the lack of Arabic translation references related to the field of computer (Khuwaileh 1998). Khuwaileh argues that there are no computer packages or research that deal with linguistic checking for achieving accuracy which is another source of difficulty for Arab translators. Finally, all these conditions have made translation from English into Arabic shaky because it does not follow a sound theory to apply when it comes to translation, particularly the connotations of each term in question. Dickins addresses this issue:

> The major conceptual problems…are the differentiation in practical analysis of different kinds of connotative meaning, and, in certain cases, the distinction between connotative meaning and denotative meaning (2004:51).

Although big computer companies are many in the Arab World, browsing and navigating in the internet reveal that these companies use only English when they tackle information technology or announcements which in turn regrettably give the impression that these companies are not capable of expressing themselves in Arabic or not capable of even announcing in Arabic. Renner (1998) in his article *Beyond Borders* argues that Arabic is not coping with new linguistic developments necessary for processing computer advancement and creating electronic computer repertoire of technical and semi-technical vocabulary. It follows from these circumstances that Arabic has become imbalanced when it comes to technical texts rendered from modern languages like English into Arabic. Consequently, rendering technical texts from English into Arabic will become extremely difficult because doing so requires not only cultural similarities between the source language and the target language, but also the two languages must be equally served in terms of technical vocabulary and structures. In short, this argument reveals that English is a technically served language, but Arabic is not (Khuwaileh 2000: 97-100). Arabic is not served very well by good dictionaries like English. In other words, Arabic dictionaries are not renewed on the one hand, and limited in number on the other hand. Consequently, Arab translators do not sometime find Arabic equivalents for the English terms they translate from English into Arabic.

Methodology

Our research has been supported and fuelled with two types of data. First, browsing through the problematic computer words, we picked 25 difficult computer words which have no equivalents in Arabic. The common and heavily used computer terminologies were contextualized and given to five translators to translate from English into Arabic. The translators' translated versions were quoted, investigated and analyzed in terms of their semantic meanings or connotations. Second, in order to gather more information on the translation of computer vocabulary, we reviewed the series of computer books published in Arabic and taught in the schools and universities of Jordan and the UAE. Then we investigated the quality of translation proposed by the Ministries of Education in Jordan and the UAE. The heavily used words were categorized under four types of problematic words, namely:

1. Vague expressions.
2. Inadequate IT nominative units
3. Terms which have not been changed and simultaneously used in the Arabic language exactly as they are in English (similarity of pronunciation).
4. Expressions relating to the knowledge of inferential statistics.

Those four categories were tabulated including what the five translators used, what the school and university books suggested for the computer terminologies and what we think of the meaning of each term as we will see below.

Discussion

As mentioned above, the four problematic vocabulary types are the focus of this research. These four types will guide our discussion, one after the other. The **vague expressions** and

terminologies will be our first category to discuss. Browsing in English Arabic bilingual dictionaries, we notice that these dictionaries propose some vague equivalents in Arabic for certain new English computer terminologies. For example, as shown in the table below (item 1), the words "calculate" and "compute" are translated in dictionaries as having similar or identical meanings which is "to count", while the exact meaning of the word "compute " is: "calculate using the computer". Obviously, the five translators followed the dictionary suggested meaning in Arabic. However, the exact meaning of the word "calculate" is "to calculate using other means" like the use of fingers or numbers or any other tools. For example elementary school teachers use apples or pencils to teach pupils how to calculate. These examples clarify the ambiguous interpretation of these words as proposed by English Arabic Dictionaries like the most important bilingual dictionary called *AL-Mawrid*. The theory of ambiguous dictionary meanings can be applied to the given meanings of the words "management" and "administration" as shown below (item 2). We all know that these words are different words in English, but their meanings given in the same dictionary mentioned above are the same.

Area	**No.**	**Computer English Terms**	**User's Arabic Terms**	**Dictionary Meaning**	**Suggested Practical M.**
Ambiguity	1	Calculate Compute	يحسب يحسب	يحسب أو يعد بالأرقام	يحسب إما بالحاسوب أيدويا أو بالآلة الحاسبة
	2	Management Administration	إدارة	إدارة	تدبير +إدارة رعاية أو إدارة تنفيذية
	3	Blind copy	عمياء	أعمى ضرير كفيف. بدون منافذ أو فتحات	نسخة سرية(ملحقة) أو مخفية
	4	Preview	نظرة سابقة أو مطالعة أولية	عرض خاص أو رؤيا مقدمة	معاينة (من أجل التصحيح أو الاستمرار)
Inadequate IT Nominative Units	5	Web	شبكة أو موقع	شبكة،نسيج خيوط أو نسيج عنكبوت أو النسيج ألعنكبوتي	الشبكة المعلوماتية
	6	Internet	النت أو الإنترنت	الشبكة البينية	شبكة المعلومات الدولية
	7	SILICON CHIPS	تشبسات السيلكون	قطعة أو رقاقة أو شظية	رقائق السيلكون
	8	Effects	تأثيرات	أثر أو نتيجة تأثير، يؤثر	مؤثرات
	9	Drop down menu	القائمة المنسدلة	القائمة المسدلة	القائمة المتدرجة أو المنحدرة

	10	Auto content Wizard	معالج المحتوى الأوتوماتيكي	ساحر	معالج المحتوى الذاتي / التلقائي
Similarity of pronunciation	11	Template	تيمبليت	قالب أو صفيحة أو طبعة	قالب أو شعار أو طلب
	12	Browsers	براوزرز	الماشية التي ترعى العشب ومجازا يتصفح	يتجول أو يتصفح أو يبحر في الشبكة العنكبوتية
	13	Icons	أيكونات أو أيقونة	تمثال أو صورة دينية أو أيقونة	شيفرة أو رمز
	14	Junk mail	البريد غير الضروري	عديم القيمة أو نفاية	بريد غير لازم أو غيرمطلوب
الخيارات	15	Mouse	الفأرة أو المؤشرة	الفأرة أو الفأر	مؤشر الشاشة أو مؤشر الخيارات
	16	Windows	الوندوز	نظام التشغيل أو الشبابيك	شباك الشاشة
	17	PowerPoint	ا لبور بوينت	السوكة الكهربائية (socket)	البرنامج القوي لعرض ربا المعلومات
	18	Laptop	لاب توب	الكمبيوتر المحمول	حاسوب الحضن
	19	Server	السيرفر	؟؟؟؟؟؟	مكان تخزين البريد الإلكتروني
	20	Scanner	السكانر	آلة المسح في الطب	الناسخ الضوئي سكانر
	21	Hypermedia	الهايبر ميديا	وسائل الإعلام العالية الجودة	نظام جمع الصوت و و النص و الصورة معا في آن واحد
	22	Home page	الصفحة الرئيسية	؟؟؟؟؟؟؟؟	صفحة بداية الموقع
	23	Tipex Corrector	كوريكتر أو مزيل	؟؟؟؟؟؟؟	حبر طمس أو حبر مسح
	24	Key board	الكي بورد	لوحة المفاتيح	لوحة المفاتيح
Statistical Field	25	Standard Deviation	الانحراف المعياري	الانحراف المعياري	الانحراف المقياسي
	26	Significant Correlation Coefficient	معامل ارتباط هام	معامل ارتباط هام	معامل الارتباط ذو الدلالة الإحصائية
	27	Critical value	القيمة الحرجة	القيمة الحرجة	القيمة الإحصائية الضابطة أو المؤشرة
	28	Regression Analysis	التحليل الانحساري	التحليل الانحساري أو ألنكوصي	التحليل الارتدادي أو العكسي

We also looked up the word "Idarah" in the *Oxford English Arabic dictionary* which also cites the word "Idarah" (management) for both words: "management" and "administration". Here again the five translators followed the dictionary meaning. Nevertheless, the semantic connotation of the word "management" includes an element of perhaps saving or exerting effort to achieve something. While this is the case of the word "management", the story is different in the case of the word: "administration" because it includes an element of an executive process. For example, the administrator is usually over what he wants to achieve, but to manage something could mean to try to do something which might be a failure of a success. For example, the sentence "The exam was difficult, but we managed to answer some of the questions" proves what we believe.

The computer term "blind copy" (item 3 of the same table) is translated into Arabic by the two dictionaries mentioned above as "blind" or "something which has no holes". Here again, what has been suggested by the dictionaries is not helpful because these two meanings are far from the computer connotation of that expression. All computer or definitely e-mail users use this expression to mean in actual computer life "a secret copy of a certain e-mail" because the e-mail receiver does not know whether another copy of the same e-mail was sent to somebody else or not. This gives this expression a meaning spectrum of secrecy. Due to the limitation of space, it would be enough to say that what has been mentioned above is also applicable on the word "preview" (item 4) which means "view or show beforehand". However, all the translators used in the Arabic word "brevyou" as Arabic does not have the English consonant /p/, therefore, /b/ in Arabic replaces both /p/ in English.

The second category of computer terminologies which seem to pose problems in translation is **the inadequate IT nominative units** which are many and even countless because the development and advancement in computer fields are very fast. Considering item 9 of the table, the term "drop down menu" was inadequately translated as first, "Al-ga'mah alnaselah" and the back translation is: "the down list" and other translators (3 out of 5) translated it into Arabic as "Al-ga'mah almunhaderah" and the back translation is: "descent menu". School and university textbooks translated it as "Alga'mah Al-munsadelah". The source of inaccuracy is the meaning of the word "down". We propose an accurate translation as "the gradual list" because our translation implies that there is a list of items and the computer user might choose x, y or z. The lack of accuracy becomes very evident when we consider the translation of the word "auto content wizard" which was translated as "saher alnas" (back translation: text magician). Here again, the lack of accuracy is easily noticeable when we consider the word "magician" in this context. Although one entry of the word "wizard" in the dictionary is "magician", the intended meaning has nothing to do with magic. We suggest the word: "mu'alej" back translation: (processor). The lack of precision also applies on the words: "silicon chips" and "effect" (items 7 & 8) where their generated translations were inaccurate.

The third source of computer translation problems is the **similarity of pronunciation** in both English and Arabic. Our survey showed that all the translators used in Arabic texts the same pronunciation used in English. The number of these words is very big as the table above shows. Taking into account items 11-24 as a case in point, we can safely assume that the lack of Arabic equivalents for the new computer English terminology is the driving force behind the source of this problem. For example, the words "template" (used in Arabic as: temblate), "browsers" (Arabic: browzer), "icon" (aygonah), "mouse" (mous), "window" (windows), "PowerPoint" (bwerboyant), "labtop" (laptop), "server" (serfer: Arabic has no /v/), "scanner" (skanar), etc. are all English words which have no equivalents in Arabic due to three reasons.

First, the Arab world is a large importer and consumer of computer devices and new packages due to the rapid development witnessed in the Arab word. Jordan and the UAE, where the data for this research were obtained are two of these countries. Second, Arabic Academies responsible for finding new equivalents are not as active as they might be. These academies do not cope with the new terminologies invading Arab computer markets. Third, some of the computer terminologies are culturally bound to the extent that Arab translators or users have no idea about certain English words used in the field of computer. For example, the word "icon" is a purely Christian English word which has religious and, therefore, cultural connotation not understood in the Arab Muslim world.

The final category of computer terminologies relates to **the computer package SPSS** (Statistical Package for Social Sciences) which is heavily used in academic institutions for research purposes. The package can generate a group of descriptive statistical words like the mean, average, numbers, percentages, etc. and, simultaneously, it can generate another group of **inferential statistical words** like: correlation coefficient, t-test, regression analysis, etc. The latter group is the one which poses problems in translation. For example, the school and university textbooks taught in the UAE and Jordan included translations which were not appropriate. The inferential expression "significant correlation coefficient" (item 26 of the same table) was translated as "mu'amil irtibat ham" back translation "an important correlation coefficient". The problematic word here is the word "ham" (back translation: important) as this word is very general because readers might ask: Why is it an important correlation coefficient? Thus, translating "significant" as: "al-dalalah al-'has'ya" (back translation: strong statistical indication) would be more revealing as this translation is not general and, at the same time, it covers all the spectrums of the meanings of the word: "significant".

Considering the expression: "critical value" (item 27) of the statistical group, the five translators as well as the academic books translated it as: "Algymah alharejah" (back translation: the sensitive value). Here again, the translation of "critical" in English as "sensitive" in Arabic is problematic because "sensitive" in this context is general. We propose "thabitah" back translation (controlling) in Arabic for the English word: "critical" because the componential analysis of "control" implies that:

*there is something which is a standard
*the standard is used for measuring purposes
*the standard is fixed and unchangeable, etc.
*the standard can control or reveal the levels of changes

Conclusion

The purpose of this research paper was to investigate in general whether modern computer terminologies generated in English and used in Arabic were translated properly or not on the basis of textbooks used by academic institutions in Jordan and the UAE and by translators. This study shows clearly the failure of school and university textbooks, translators and dictionaries, to find all the equivalents in Arabic necessary for modern computer terminologies generated in English. This becomes evident when we know that the translators of Jordan and the UAE use vague and inaccurate expressions. On top of that, the formal textbooks which are used the academic institutions of Jordan and the UAE include inappropriate translations as we stated above. Due to the individual differences among Arab translators and academic books authors, the difference and contrast in proposing equivalents

in Arabic can be apparently noticed, ranging from using the same English word in Arabic to proposing strange and perhaps inaccurate equivalents.

The problem of not finding Arabic equivalents for modern computer terminologies indicates that Arabic academies in Cairo, Amman and Damascus are not performing their roles properly and at the right time. In addition, Bilingual Arabic dictionaries are not helpful because they are limited in numbers on the one hand, and not updated on the other hand because when they are updated, they add literal translations for the new terms, and simultaneously some of them are updated only in terms of the date of publication. That is to say, nothing new is added to them except that the date of publication is changed for selling and financial purposes.

Finally, we strongly believe in involving the private sectors in finding equivalents for the bombarding English terminologies because the public sector like in the case of Arabic academies is slow and not efficient. Moreover, companies are the firms which import computer devices and accessories. Therefore, these companies should be encouraged to propose Arabic equivalents for the English terminologies.

References

Ba'albaki, M. (2005): *Al-Mawrid English Arabic Dictionary*. Beirut: Dar El-ilm Lil-Malayen.
Bassnett, S. (2004): *Translation Studies*. London: Routledge.
Dickins, J. et al. (2004): *Thinking Arabic Translation*. London: Routledge.
Khuwaileh, A. (2000): Vocabulary in LSP: A case study of phrases and collocations. *Babel: International of Translation*, 46(2): 97-11.
Khuwaileh, A. (1998): The semantic economy of wording in English and Arabic. *Perspective: Studies in Translatology*, 6(1): 61-70.
Linder, D. (1999): Translating Abbreviations from Technical Texts into English. *The American Translators Association Chronicle*, 9: 53-59.
Redawi, R. (1999): Mafhoom Al-Tarjamah Al-Yawm (The Concept of Translation Today). Damascus: Damascus University.
Renner, C. (1998): Learning to surf the net in the EFL classroom. *ELT News & Views. Supplement,* 5(1): 11-15.
Sager, J. C. (1996): *A Practical Course in Terminology Processing*. Amsterdam: John Benjamins.
Swales, J. (1984): *English for Specific Purposes in the Arab World*. University of Austin in Birmingham: the Language Studies Unit.

Websites :

http://www.translationdirectory.com/article146.htm *(retrieved 10/2/09)*
http://www.translationdirectory.com/article591.htm *(retrieved 10/2/09)*

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