

DIFFICULTIES ENCOUNTERED BY JORDANIAN TRANSLATORS WHEN TRANSLATING MEDICAL TEXTS FROM ENGLISH INTO ARABIC

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ABSTRACT

This study aims to investigate the difficulties that translators face in translating medical texts. The study is based on translating (1) text that varies in difficulty. The sample of the study consisted of (20) participants: (10) M.A. students majoring in English from the Middle East University (MEU), Amman, Jordan, and another (10) translators who work in translation offices in Amman. To achieve the above mentioned goals, the study also conducted interviews with students and translators to identify the difficulties they have encountered. Results of the test were analysed; qualitatively and quantitatively. The study raised the following question: What are the difficulties that Jordanian translators encounter while translating medical texts from English into Arabic? Results revealed that some of the difficulties that the participants faced were related to language difficulties such as; lexical choice, syntax, semantics and usage. It also found that the participants resorted to literal Google translation because they lack knowledge in translation methods, lack of enough practice, lack of cultural and scientific terminology, lack of linguistic and stylistic knowledge in the source and target languages and lack of background knowledge in the technical fields, along with inability to find the equivalence in the target language, inability to adopt a successful translation and suitable translation strategy.

Keywords: Difficulties, Translation, Medical, Technical, Texts English / Arabic.

INTRODUCTION

Generally, translation is not an easy job. Recently, technology has invaded all aspects of life and sciences. Its expansion in the world meant that technical information needed to be translated into other languages. Technical translation is a translation of terminology i.e. engineering, medicine, economics, psychology, agriculture and law.

Since technical materials are written in English, this made it enjoy a great significance in the twentieth century as it is now the language of a wide range of inventions. Due to technological developments, a lot of difficulties have emerged in translating technical texts and expressions from English into Arabic. Such an issue indicates that any researcher in the field should highly consider such difficulties and work for solutions to make any technical translation acceptable.

Nowadays, Arabic is one of the official languages of the United Nations. The Arab world is a large consumer of science and technology. So, science and technology are needed everywhere because of globalization in which the whole world has become a small village. Although Arabic is one of oldest languages of the world, it suffers a lot for not being technically served. This can be one of the main reasons that delay the translation process of many terms related to computer in particular and to various types of technology in general. (Hazza,2013).

Technical translation is concerned with rendering meaning of source texts into target texts for communication between two languages. It needs an expertise who is conversant with difficulties that might be outlined in the following: difficulties with words, sentences, and terminology. As for the difficulty with words, the most obvious and serious ones are caused by words. Source translation words might be simply misunderstood, as it sometimes results in catastrophic translations. Alternatively, the meaning of the source translation words might be understood by the translator, but he/she fails to select an appropriate target language equivalent.

Statement of the Problem

Technical translation involves foreign concepts and expressions that may not be available in Arabic, as English and Arabic stem from different origins, Germanic and Semitic. Consequently, different situations may create problems to Arab translators. Technical errors and inaccuracies may cause troubles to the manufacturer, nerve distress for the client, and may cause serious accidents. Therefore, it is worthy to investigate this issue and to probe its implications. In this study, the researchers will shed light on the difficulties that Jordanian translators might encounter in the process of translation.

Objective and Question of the Study

This study aims to investigate the difficulties that Jordanian graduate students and translators face while translating medical texts from English into Arabic. It will answer the following question: What are the difficulties that Jordanian graduate students and translators encounter when translating medical texts from English into Arabic?

Significance of the Study

Although there are many studies conducted on technical translation worldwide, to the best knowledge of the researchers, there are scanty studies that deal with medical and technical translation in Jordan. This study may fill a gap in the literature related to technical translation. It may also be a benefit to translators, teachers and students of translation along with any scholars interested in the field of translation studies. Errors committed by translators of technical texts may lead to property damage, financial loss, injury or even loss of life; e.g.: mistranslations of medical texts or user's manuals for heavy machinery, etc.

Limitations of the Study

The findings of this study may not be generalized to all kinds of translation in Jordan. It is only limited to the technical type of translation that includes medical texts. Results of this study are also restricted to the instruments and samples used in this investigation.

REVIEW OF LITERATURE

Literature related to definitions of technical translation and difficulties encountered

Ghazala (1995) defines technical translation as "the translation of scientific terms of all kinds: medical, physical, chemical, mathematical, mechanical, technological, biological, agricultural, computer, internet and other terms of various branches of science. (p. 156). He adds "it is the transmission of English technical terms into Arabic. The 80-85% are rendered by means of translating them into Arabic equivalents that are a part of Arabic language lexicon. (p.161).

Newmark (1988) distinguishes the technical translation from other forms of translation. For him, technical translation is primarily distinguished for its terminology which does not include emotive language, connotations, sound effects, and metaphors. This makes technical

texts look simpler to be rendered; however, the reality is that it is not, because some new words appear in technical translation might be ambiguous, and difficult to have their equivalence, in the language to which it is translated.

Anvarovna (2017b) considers technical translation as the most complicated type of translation, for what is needed, not only linguistic but also technical knowledge as well. It is the translation of texts of technical subjects, in particular, documents of different specializations, all kinds of reference literature, dictionaries, products, conformity certificates, operating instructions, engineering plans, scientific and technical articles, business contracts, and other commercial technical proposals. He also believes that in order to understand technical texts correctly, knowing the subject and related terminology is very important for the translator of the technical and scientific texts. This aims to produce accurate and simple translated texts that preserve the features of the author's style. A specialist translator working with scientific and technical texts should understand not only the meaning of the translated words, but also take into consideration all the differences of their applications. Usually, all documents of a scientific and technical nature have the main features. He adds that a translator of technical and scientific texts and expressions may encounter significant difficulties while translating scientific works i.e., if the word has several meanings, and if the translator lacks proficiency in technical terminology and linguistic ability. Another difficulty that might arise is the presence of abbreviations in the text which sometimes are not clear even to technical specialists. These abbreviations can be a barrier to qualitative translations. Technical translation is always free of emotional and imaginary language. Therefore, neutral language must be adopted in scientific style.

Inani (1998) points out that translation problems are divided into three basic types: a) individual word problems, b) individual sentence problems, c) problems related to sequences of two or more sentences or by the text as a whole. He asserts that these problems can be overcome by the concept of translation equivalence suggested by theorists of translation.

Abdellatif (2016) mentions that technical translators face problems such as providing the Arab readers with wrong inaccurate translations, because the terms used are not borrowed to cope up with the English texts. She adds that the most problematic obstacles are related to terminology, abbreviations and acronyms which are common in English technical texts for example (GP, 4G, SIM, MicroSD). Furthermore, the translators may suffer from being able to offer acceptable translations because they did not find the equivalent in Arabic. She assures that knowledge and experience of the translator in the technical field are highly required.

Ghazala (1995) maintains that "a translation problem can be posed by grammar, words, style and/or sounds. Thus, we have grammatical, lexical, stylistic and phonological problems". (p.18). He also adds that "the Arabicization of technical translation and scientific terms pose considerable problems, some of which are still unsolved in the translation of many technical terms. Different methods of Arabicization are suggested to tackle these problems (i.e. transference, naturalization, translation and coinage).

Farghal and Shunnaq (1992) define technical translation as "technical materials normally cover specialized literature emanating from different disciplines such as sciences, e.g. chemistry, physics, industries and medicine" p. 203.

Dweik (2014) identifies the difficulties that many translators may face in translating technical terms such as linguistic and non- linguistic ones. The linguistic problems include lexical, syntactic and semantic. Where the non- linguistic may include lack of knowledge, lack of lexical reservoir, absence of unified dictionaries and specialized glossaries. In addition, they

might be unfamiliar with the equivalence in the target language or abbreviations used for example in the field of finance, medicine, economics, law and agriculture, etc. (p. 265)

Newmark (1988) stated that “the chief difficulties in translating are lexical, not grammatical ones, i.e. word collocations and fixed phrases and idioms.” (p.32). He divides difficulties into two categories: a) you do not understand them: b) you find them hard to translate. He believes that “if you cannot understand a word, it may be because all possible meanings are not known to you, or because its meaning is determined by its unusual collocation or are referenced elsewhere in the text.” (p.33).

Another difficulty the translators may encounter is terminology problems when dealing with technical and scientific translation of documents. These difficulties include identifying a term, understanding a term, finding the right equivalence, dealing with the absence of an adequate equivalence, solving denominative variations and overcoming mis-transcriptions.

Dweik (2014) affirms that the challenges that novice translators may face in translating contracts are caused by lack of knowledge, lack of legal background and equivalence, in addition to lack of competence related to English language terms and style.

Literature related to empirical studies related to difficulties of medical translation

Awawdeh (1990) conducted a study that aimed to identify the main difficulties translators may encounter when translating technical and scientific texts from English into Arabic. He analysed 26 translated texts from English into Arabic, using different disciplines and compared Arabic and European technical writing features. The study came up with broad categories of difficulties such as syntactic, lexical, cultural, metaphoric, morphological and cohesive problems. Moreover, he suggested a number of methods to deal with these difficulties, such as emphasizing the translator’s competency and standardizing scientific terminology on the national and regional levels.

Gauton and De Schryver (2003) investigated the problem of lack of terminology in most fields of specialties as being the essential problems translators face when translating into African languages. They conducted a study to compare and analyse many strategies done by African translators for the most proper equivalent. A- ten - parallel text, in all the eleven South African official languages were studied with a combined size of 348,467 running words, with an average of 32,200 words per language. The study came up with a good correlation between the terms, in spite of the difference between languages. In addition, it observed several strategies of translation, one of which was the retention of loanwords translation with English spelling, which reflected the phonological system of the borrowing language. Moreover, new scientific and technical terms were formed and their phonological structure was adapted and accommodated by the borrowing language.

Suwais (2008) investigated the problems and strategies used in translating technical terms and texts. She used a questionnaire distributed at Yarmouk University. The questionnaire consisted of 67 (IT) terms to fourth year (IT) and (MA) translation students. The findings have come up with the mistranslation of terms by participants or failure to provide any translation. The researcher found that paraphrasing, transliteration, loan translation and borrowing were the most prevalent.

Abdellatif (2016) aimed to examine the difficulties and problems involved in translating thirty cell phone terms from English into Arabic. She also attempted to find out the strategies that have been employed by the participants in translating such cell phone terms. She used a questionnaire which was distributed to the engineering and MA translation students, at An-Najah National University. The researcher found out that the students were not qualified enough in this technical field and should have good background knowledge about

telecommunication technology. Moreover, 49% of the translations were unacceptable and lack accuracy. Although, cell phone terms selected from different websites related to cell phone jargon, many of these terms are used in our daily life.

METHODOLOGY

Sample of the study

The sample of the current study consisted of (10) M.A students majoring in English language studying at the Middle East University (MEU) Amman, Jordan, and (10) translators working in translation bureaus in Jordan (males and females). The sample of the study was selected purposively to make the investigation convenient. The demographic background of the participants included social data such as: gender, age, occupation, nationality, academic level, and linguistic background as presented in table (1) below:

Table 1. Demographic data related to the participants

Age	No.
22-27	4
28-33	7
34 and above	9
Gender	
Female	13
Male	7
Nationality	
Jordanian	18
Others	2
Employment Status	
Nil	5
Employed	7
Students	8
Number of years working as a translator	
Non	8
0-5	6
More than 5	6
Number of years spent in learning English	
0-5	6
6-10	8
11 and above	6
Number of years spent in English -speaking countries	
Non	11
0-5	6
More than 5	3
Academic Qualifications	
B.A	5
M.A	13
PHD	2
Specialization	
Literature	4
Translation	6
Linguistics	3
Others	7

INSTRUMENT OF THE STUDY

The researchers used a translation test and semi-structured interview questions designed to gather information for analysis. The study adopted a combined approach: qualitative and quantitative designs.

The translation test

The researchers conducted a test for M.A students studying at MEU and translators working in translation offices in Amman, Jordan in order to investigate the various problems they encounter while translating a medical text such as the following:

Failure of Atherosclerotic Lesions

1. Failure of atherosclerotic plaques can lead to potentially life threatening clinical events such as myocardial infarction (MI), stroke, or transient ischemic attack (TIA).
2. The most frequently described plaque failure mechanism is tensile rupture of the fibrous cap.
3. However, often during angioplasty another plaque failure mechanism occurs in which the atherosclerotic plaque separates from the internal elastic lamina (IEL).

The test was validated before it was distributed to the sample. Copies of the test were handed in personally, to the subjects. The participants were given enough time to translate the required material and were allowed to use available dictionaries, books or other resources.

Dr.Ahmad Hassouna, a cardiologist in Isra' Hospital, Amman-Jordan, suggested the following model answers:

- 1 يؤدي فشل الترسبات العصيدية في جدار الشريان إلى حالات سريرية تهدد الحياة مثل إحتشاء عضلة القلب أو الجلطات الدماغية العابرة.
- 2 إن من أهم مضاعفات العصيدة الدهنية والترسبات هو تقرح الغطاء الليفي.
- 3 ويمكن من خلال عملية فتح الشريان أن تحصل آلية لإنخلاع الترسب الدهني وانفصال هذا الترسب عن الطبقة المرنة الداخلية للشريان.

RESULTS OF THE STUDY

Results presented in Table (2) below show the type of difficulties the translators faced during the translation process. The text was divided into three sentences that varied in length. The translation of each sentence was checked in terms of accuracy of language and content, structure and vocabulary. The erroneous translations were analysed and commented on. The researchers took into consideration that model translation was provided by an expert specialized in medicine namely cardiology.

Table 2. Translators' performance in the test

Test	Accurate Answer		Acceptable Answer		Wrong Answer	
	Freq.	10%	Freq.	15%	Freq.	75%
Medical text	2		3		15	

* Freq. out of 20

ANALYSIS OF RESULTS

As shown in Table (2), 75% of the respondents were unable to translate the medical text due to their lack of knowledge in this field. It also indicates while the percentage of the correct answers was only (10%), the percentage of accepted answers was (15%).

1. The answer is considered accurate if it is semantically and grammatically correct such as below:
 - Failure of atherosclerotic plaques can lead to potentially life threatening clinical events such as myocardial infarction (MI), stroke, or transient ischemic attack (TIA).
يؤدي فشل الترسبات العصيدية في الشريان إلى حالات سريرية تهدد الحياة مثل إحتشاء عضلة القلب أو الجلطات الدماغية العابرة.
2. The answer is considered acceptable if it is semantically correct but grammatically wrong, as follows:
 - The most frequently described plaque failure mechanism is tensile rupture of the fibrous cap.
من الممكن أن يؤدي فشل صفائح تصلب الشرايين إلى أعراض سريرية تهدد الحياة مثل إحتشاء عضلة القلب أو الجلطات الدماغية أو نقص التروية العابرة.
3. The answer is considered wrong if it is semantically and structurally incorrect such as:
 - However, often during angioplasty another plaque failure mechanism occurs in which the atherosclerotic plaque separates from the internal elastic lamina (IEL).
- يمكن ان يؤدي الفشل في الصفيحة اللويحية التعضدية الشريانية الى نتائج سريرية
 - يمكن ان يؤدي فشل لويحات التصلب الكلوي الى احداث سريرية تهدد الحياة

These answers are considered wrong due to the following reasons:

- a- Semantically wrong because of misunderstanding the text.
- b- Lexically wrong due to lack of knowledge in this field.
- c- Grammatically wrong due to the structural differences between English and Arabic.
- d- If it translated by Google wrongly or by using the deletion strategy.

The incorrect translations, committed by the students and translators, might be caused by the following factors:

- a- Wrong lexical choice such as translating “*Atherosclerotic*” into “صفائح عصيدية”.
- b- Literal translation such as translating “*Clinical events*” into “أحداث سريرية”.
- c- Missing information or incomplete translation such as translating “*Plaque failure mechanism*” into “آلية تقلص الشرايين وانسدادها”.
- d- Wrong Google translation or mistranslation such as translating “*Tensile rupture*” into “فشل الكلى”.

Types of Translation Difficulties

Translation difficulties are categorized according to their types supported by examples from the respondents.

Table (3) below describes the type of difficulties encountered in translating the medical text. Translation difficulties are categorized according to their types supported by examples from the respondents. For clarity, the text was divided into three sentences.

As shown in Table (3) below, there were common difficulties in the three sentences such as language difficulties, literal translation, mistranslation and googling, lack of editing, deletion, repetition (style), and terminology. Translators were as bad as M.A. students in this regard. In fact, we can argue that these types of difficulties stem from the lack of knowledge of medical texts which will often lead to Google translate.

Table 3. Types of difficulties encountered in the medical text

Sentence No.	Type of mistake	Example
1.	English structure (SVO) syntax	فشل علاج أوبنة تصلب الشرايين يمكن أن يؤدي (X4)
	Keeping word class syntax	Potentially = ممكن
	Literal translation. Translation method	(X6)clinical events سريرية = يمكن أن يقود = can lead = السكتة الدماغية = stroke = clinical events شريية =
	Typo/ Spelling mistakes. Lack of editing.	
	Mistranslation	tensile rupture = فشل الكلى Transient ischemic attack = هجوم فقر الدم العابر atherosclerotic plaque = مناعات تصلب الشرايين tensile rupture = فشل رئوي
2.	Lack Subject. syntax	ومع ذلك يحدث غالباً (فشل آخر) أثناء الية تقلص والشرايين وانسدادها التي تتفصل...
	Uncertainty	أمراض أو أعراض = Plaques
	Keeping source word	(x4) Plaque = البلاك (x3) Clinical = كلينكية
	Googling	فشل لويحات تصلب الشرايين يمكن أن يؤدي الى الحياة المحتملة تهدد الأحداث السريرية
	Vague translation. semantic	النوبة الإقفارية العابرة = Transient ischemic attack
	Googling	ويوصف بالأكثر هو تمزق الغطاء الليفي
	Nonsense Googling	في معظم الأحيان هو موضح البلاك فشل الية الشد تمزق ليفية كاب
	Word order. Translation method.	إن الية فشل الصفيفة الأكثر شيوعاً تم وصفها الية فشل اللوحة الأكثر شيوعاً هي تمزق ...
	Mistranslation	tensile rupture of the fibrous cap = تمزق الشد الليفي The most frequently described plaque failure = الية فشل الترسبات الموصفة تكراراً
3.	Non-idiomatic translation	Plaque failure mechanism = آلية فشل كارثية Angioplasty = رأب الأوعية
	Lack of familiarity with SL	مع ذلك، غالباً ما يحدث ذلك
	Googling	غالباً ما يحصل أثناء القسطرة آلية أخرى للفشل اللويحي، حيث ينفصل تصلب الشرايين عن الصفيفة المرنة الداخلية وجود الية أخرى لفشل البلاك تتفصل فيها اللوحة المصلبة للشرايين...
	Vague translation. semantic	(x3) atherosclerotic plaque = الصفائح العصيدية
	Incomplete translation. Deletion.	فان تصلب الشرايين يحدث داخل الصفائح الداخلية المرنة
	No translation. Deletion.	3

As shown in Table (3), there were common difficulties in the three sentences such as language difficulties, literal translation, mistranslation and googling, lack of editing, deletion, repetition (style), and terminology. Translators were as bad as M.A. students in this regard. In fact, we can argue that these types of difficulties stem from the lack of knowledge of medical texts which will often lead to Google translate.

On the other hand, each sentence has some peculiar structural difficulties, due to its structure in most cases. In sentence (1) for instance, keeping the English (SVO) structure was repeated 4 times. In sentence (2), students kept a source word 'plaque' four times, and 'clinical', which in fact is also used in many Arabic translations three times. Others were uncertain about the translation of 'plaque' and so they gave more than one translation. Non-idiomatic and vague translation appeared several times especially in sentence (3).

DISCUSSION AND CONCLUSION

After examining the translations of the medical text, the difficulties encountered are manifested in the following: lexical difficulties; linguistic difficulties such as: syntax, semantics; difficulties related to method of translations such as: Googling; a literal translation; out of context translation; and choosing the wrong strategy.

Such findings agree with the study of Newmark, (1988) who stated that "the chief difficulties in translation are lexical i.e. word collocations and fixed phrases and idioms" (p.32). He believes that "if you cannot understand a word, it may be because all possible meanings are not known to you" (p.33).

The result goes hand to hand with Abdullatif, (2016) who stressed that the problems lied in abbreviations and lack of equivalent terms. Finally, it agrees with Dweik, (2014, p.265) who assured that the problems mainly lie in equivalence and lack of specialized terminologies.

The linguistic difficulties go side by side with Ghazala (1995, p. 18) who mentioned that the problems of translators were mainly syntactic; with Dweik, (2014, p. 265) who also affirmed that the problems were mainly syntactic. The causes behind these difficulties that translators encounter resulted from weak linguistic skills which, from the researcher's opinion, caused by lack of: knowledge, reading comprehension and lack of grammatical skills.

The current findings go parallel with the results of those of Anvarovna, (2017) who found that the problems were related to abbreviations and acronyms: Such terms might not be comprehended by the translator; as in Dweik, (2014, p. 265) who assured that one of the major problems that encounter translators was of the semantic type, which considered miss translation and semantically wrong.

In the researchers' point of view, the reasons behind such difficulty are due to lack of experience in the scientific field and lack of terminology in the medical field. It also agrees with Inani (1998, p.5) who asserted that the problem was in lack of equivalency in words.

The main reasons for the semantic difficulties are related to literal Google translation problems, the participants resorted to Google translation in the medical text. Google translation is prevailing in the participants' answers. The researchers' findings are also in line with Dweik, (2014) who assured that Google translation with cosmetic change (literal) was one of the problems that the translators encountered. It also agrees with Farghal and Shunnaq (1992) who asserted that Google translation was one of the problems that the translators encountered.

CONCLUSION

The data indicated that the participants, whether M.A students or even translators, encountered problems related to language difficulties such as; lexical choice, syntax, and semantics and usage. It also found that the participants resorted to literal Google translation because they lack knowledge in translation methods, lack of enough practice and lack of cultural and scientific terminology. Moreover, the difficulties stem from lack of linguistic and stylistic knowledge in the source and target languages, lack of background knowledge in the technical fields and lack of cultural and medical terminology which result in incorrect and improper translations along with inability to find the equivalence in the target language and inability to adopt a successful translation and suitable translation strategy.

This study also revealed the following factors stand behind such difficulties:

1. lack of awareness in the characteristics of source language,
2. lack of knowledge in the medical and technical fields,
3. lack of dictionaries related to technology and medicine.

REFERENCES

- [1]. Abdellatif, Saja. (2016). *Problems of translating English cell phone jargon into Arabic*. (Unpublished master's thesis). An-Najah National University, Palestine.
- [2]. Anvarovna, Albina. (2017b). Comparing the structure of scientific articles in the Tatar and English language, *Journal of History, Culture and Art Research*, 6(4):665-672.
- [3]. Awawdeh, Abdullah. (1990). *Major problems in scientific-technical translation from English into Arabic*. (Unpublished Master's Thesis). Yarmouk University, Jordan
- [4]. Dweik, Bader. (2014). *Studies in applied translation*. ASSS: Amman, Jordan.
- [5]. Farghal, Mohammad, and Shunnaq, Abdulla. (1992). Major problems in legal translation. *Babel*, 38(4): 203-210.
- [6]. Gauton, Taljard & De Schryver, G. (2003). Towards strategies for translating terminology into all South African languages: A corpus-based approach. *Proceedings of TAMA*. Pretoria: (SF) 2 Press.
- [7]. Ghazala, Hasan (1995). *Translation as problems and solutions: A course-book for university students and trainee translators*. Valetta Malta: Elga publication
- [8]. Hazza, Ghassan. (2013). *Problems Jordanian translators face and strategies they use in translating computer terms from English into Arabic*. (Unpublished Master's Thesis). Middle East University, Jordan
- [9]. Inani, Adil. (1998). *Translation from English Into Arabic*. A practical intermediate course. The Egyptian Office for the Distribution of Publications (EDP).
- [10]. [10] Newmark, Peter. (1988). *A textbook of translation*. London: Prentice Hall International. LTD.
- [11]. Suwais, Dina (2005). *Some problems of translating English information technology terms into Arabic*. (Unpublished Master's Thesis). Yarmouk University: Jordan.
- [12]. [Thorndike Dictionary (2010). English-English-Arabic dictionary. Lebanon: Librairie du Liban.