Cultural barriers and new technologies of translation: Using Omega T in translating idioms

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Abstract

Technologies of translation have known an impressive interest of translators and researchers. The world seems very small due to the latest advancement of technology. This development raised the need for translation to overcome language barriers. English, for instance, is considered as the language of international communication. This state of affairs increases the demands for translation from and into English. In order to respond to the huge number of translation demands, many translators choose to employ machine translation and computer aided translation tools. These technologies have undoubtedly contributed in delivering good and fast translation. However, some problems have been seen concerning the quality of translation. One of the main disadvantages of translation technologies is rendering effective meaning in cultural contexts. This paper aims to spotlight on the major problems of translating cultural aspects using technologies of translation. It tries to investigate the case of translating idioms from English into Arabic using translation memory tools, precisely Omega T as an assisting tool. Therefore, an experiment was designed at the department of English to examine the students' performance. The findings revealed that the use of Omega T plays a significant role in enhancing the quality of students' translation of idioms.

Keywords: culture- idioms- machine translation- Omega T- translation memory

Introduction

Translation is a wide field that opens the door to universal communication. As an activity, it is complex and hard that requires many skills and a broad knowledge of the source and the target language. With globalization, translation demands have notably increased that good and fast translation is more needed. Technology, therefore, has offered a variety of translation tools to assist translators, giving birth to a new field in translation called 'translation technology'. With many tools, translation technology has helped translators to speed up the process the process of translation. They can get, for instance, instant outputs using machine translation. However, as far as the quality of translation is concerned, many problems have raised such as cultural issues. Translation technologies seem to be less effective in translating cultural aspects of different languages. This study attempts to highlight the major problems translators encounter in translating idioms from English into Arabic. Moreover, it intends to examine the efficiency of translation memory tools in translation and the possibility of improving students' translation performance using them.

1. Technologies of Translation

In the last decade, the field of translation has known many updates due to technology. The latter has offered many tools to assist translators. This has somehow raised competition in the translation market, which resulted in an array of translation technologies. Nevertheless, this makes translators confused about what to choose and why in order to keep up with the continuous development of the world of translation and to be capable of satisfying their clients' needs.

1.1. Definition of Translation Technology

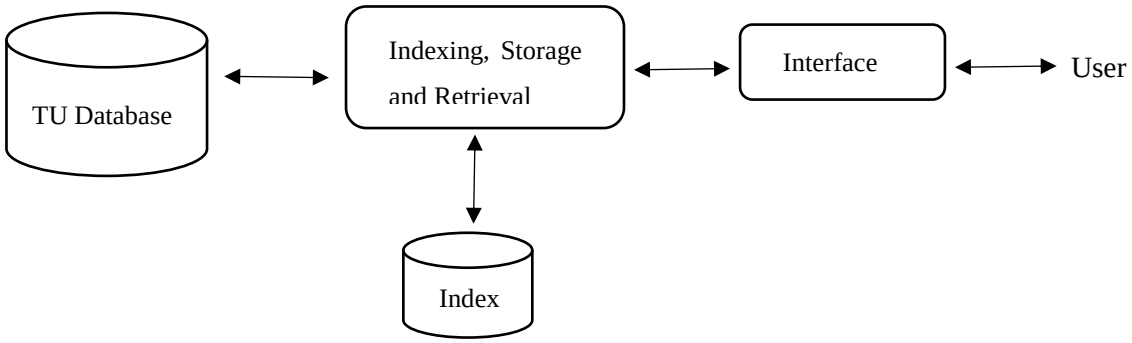
Translation technology is a field of interdisciplinary combining translation and computer sciences (Alcina, 2008). Flanagan, in her turn, believes that translation technology concerns mainly the technological tools produced in order to help translators translate easily and effectively (Flanagan, 2009). In other terms, it is the same translation process but using several software and devices such as computers, websites, mobile applications, online dictionaries, etc.

The two most commonly used translation technologies are machine translation (MT) and translation memory (TM). The first provides translators with instant and automatic translation without human involvement, whereas the second is computer assistant translation tool system that is designed to recycle previous translation involving human translation. As an attempt to compare MT and TM, Bowker believes that the first tries to replace translators while the second aims to assist them (Bowker2002).

1.2. Translation Memory

This study focuses on the use of translation memory in translation. TM is defined as "programs that create databases of source text (ST) and target text (TT) segments in such a way that the paired segments can be re-used" (Gil & Pym, 2006, p. 8). In other terms, TMs are basically created in order to store translated segments in a memory database and recycle them in new translation projects.

Figure 1 : Structure of a TM System

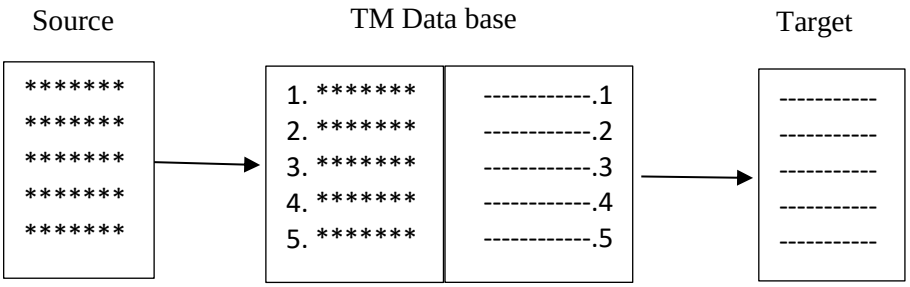


Source: (Trujillo, 1999, p. 69)

The concept of TM is simple. It is based on storing translation units in a memory database as the translator works through a translation project. The stored translation units appear whenever there are similarities in the new segment to be translated. It can be exact match or a fuzzy match depending on the degree of similarity between the new segment and the stored one (Gordon, 1996). The suggested translation unit can be accepted, especially in case of exact match, modified, or rejected by the translator (Trujillo, 1999). This shows that TM only assists translators and the translation outputs are always human

unlike MT, whose outputs are automatic. The following is a simplified diagram to illustrate the concept of TM process.

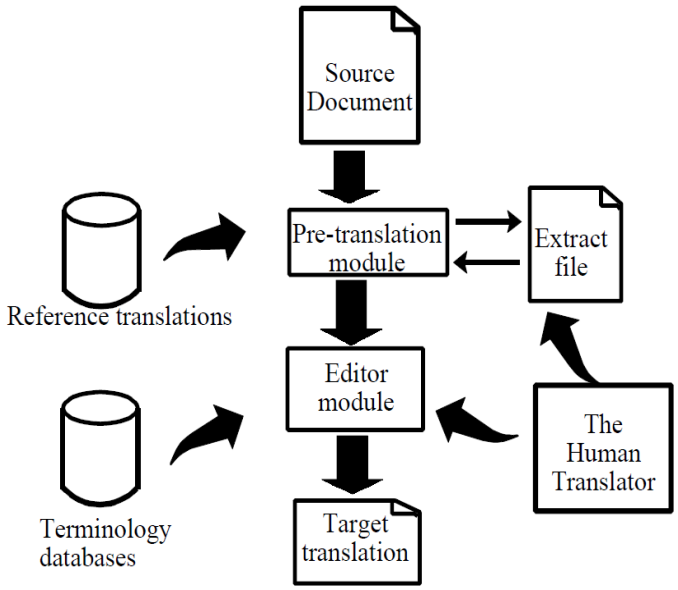
Figure 2 : Basic TM Process



Source: (Webb, 1998, p. 7)

The process of TM has four main stages: import and segmentation, alignment and indexing, matching and retrieval, and finally translation and post-editing (Dennett , 1995; Webb, 1998). Figure 3 shows the steps of the translation process on TM tools starting from the source document till the target document.

Figure 3 : Translation Process Using TM



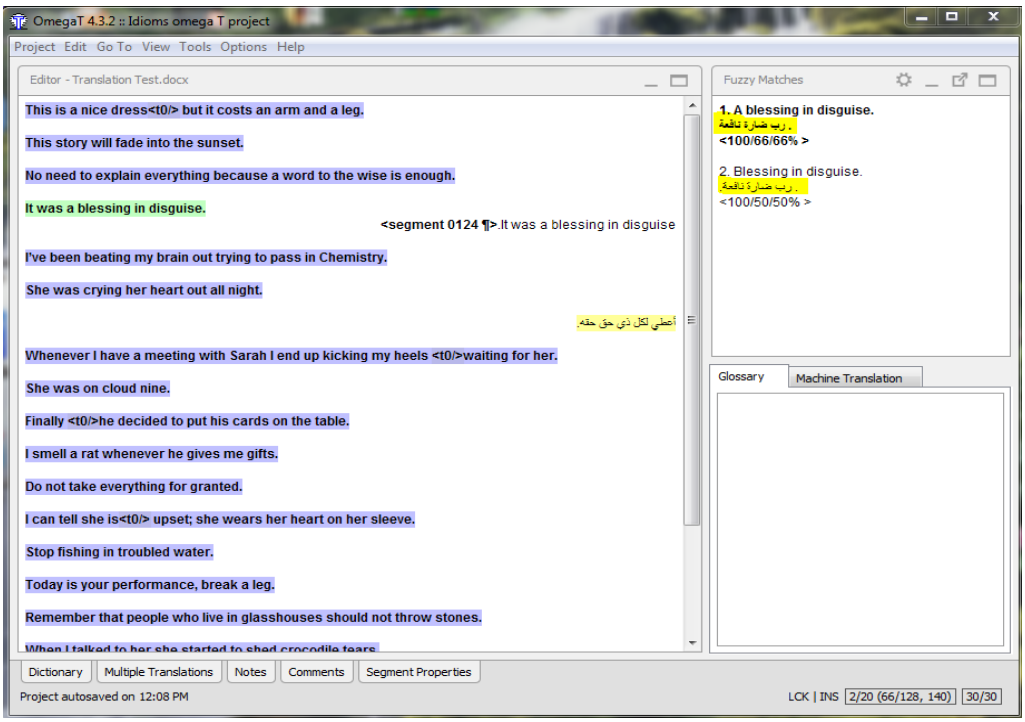
Source: (Dennett , 1995, p. 20)

1.3. Omega T

Omega T, according to Wasala (2007), is a free and open computer-assisted translation tool written in Java and realised under General Licence Public (GNU). It has many features including TM database, glossary, dictionary, segmentation and alignment tools, and integrated MT systems namely Google Translate, Belazar and Apertium (Smolej, 2013; Wasala, 2007).

Moreover, Omega T can support many languages and different files. It also allows translators to work on a large amount of translation projects (ibid). Figure 4 shows Omega T interface including the translation space (translated and untranslated segments), fuzzy matches section with the percentage of similarity and other utilities such as glossary, machine translation, dictionary, comments, etc. It should be noted that exact matches are inserted automatically. Yet, translators can change the suggested translation unit if they wish to do any modifications based on the context or any other features.

Figure 4 :Screenshot of Omega T


OmegaT 4.3.2 :: Idioms omega T project
Project Edit Go To View Tools Options Help
Editor - Translation Test.docx
This is a nice dress<t0/> but it costs an arm and a leg.
This story will fade into the sunset.
No need to explain everything because a word to the wise is enough.
It was a blessing in disguise.
<segment 0124 ¶>It was a blessing in disguise
I've been beating my brain out trying to pass in Chemistry.
She was crying her heart out all night.
أعطي لكل ذي حق حقه.
Whenever I have a meeting with Sarah I end up kicking my heels <t0/>waiting for her.
She was on cloud nine.
Finally <t0/>he decided to put his cards on the table.
I smell a rat whenever he gives me gifts.
Do not take everything for granted.
I can tell she is<t0/> upset; she wears her heart on her sleeve.
Stop fishing in troubled water.
Today is your performance, break a leg.
Remember that people who live in glasshouses should not throw stones.
Fuzzy Matches
1. A blessing in disguise.
رب ضارة نافعة .
<100/66/66% >
2. Blessing in disguise.
رب ضارة نافعة .
<100/50/50% >
Glossary
Machine Translation
Dictionary
Multiple Translations
Notes
Comments
Segment Properties
Project autosaved on 12:08 PM
LCK | INS
2/20 (66/128, 140)
30/30

1.4. Advantages and Disadvantages of TM

TM systems have many advantages that support translators, especially speed and consistency. With TM assistance, translators can provide translations in a short time and accept more translation projects from their clients. This helps them work more on the quality of translation. In the same vein, Arnold (2003) clearly states "many freelance translators and agencies increase their translation speed through the purchase and use of Translation Memory (TM) software" (p. 31). Consistency is another advantage of TM, especially in translating works with high degree of repetitions. In this situation, only some modifications and adaptations are needed. TM systems show a considerable effectiveness in technical translation, the case of translating manuals, which is characterized by a high degree of repetition and the use of direct, clear and simple language (Chelghoum, 2016). This shows that TM tools are not threatening translators' job or replacing them. On the contrary, these tools are supportive regarding speed, consistency, memory database, and the translation quality, which is totally human. Nevertheless, TM has also some disadvantages and limitations that should be considered.

Building a memory database takes time and efforts. Translators need to work on many projects until they start getting the TM systems assistance (Mikuličková, 2010). As translation in TM tools is purely human, errors stored in the memory database will always be retrieved (Canim, 2010). Segmentation, which is one of the features of TM software, can be a problem for translators sometimes. Since the source text is divided into segments, this prevents translators from working on the text as a whole resulting in problems with the context (Dennett , 1995). TMs are essentially designed to assist translators and improve the quality of translation, yet context and cultural issues are unavoidable. Costs represent a problem for translators too since many of them are not free. TM database construction and translators' trainings to be capable of using the software efficiently takes time and efforts. These are some of the most common problems encountered by translators who use TMs.

2. Translating Idioms

Idioms represent one of the cultural aspects that disturb many translators and foreign language learners. This study is concerned with difficulties and problems in translating idioms from English into Arabic.

2.1. Definition of Idioms

By definition, an idiom is a form of language which consists of a group of words that its meaning cannot be easily understood from the meaning of its constituents (Bahumaid, 2010). Idioms are used in various contexts in speaking and writing, which makes understanding them a necessity. "They are the substance of any language and the most problematic part to handle with" (Abdulaziz Assaf Al-assaf, 2016, p. 8). In the Cambridge Dictionary, for instance, an idiom is defined as "a group of words used together with a meaning that you cannot guess" (Cambridge Dictionary, 2022).

In brief, the main features of idioms include that they are hard to understand and metaphorical, which should not be taken literally. Their syntactic form is usually fixed, i.e. they are used the way they are, except in some situations where grammatical changes are needed such as conjugating verbs or adding pronouns or different grammatical elements to be used in a meaningful sentence. Idioms are also informal and cultural aspects (Ghazala, 2003).

2.2. Difficulties in Translating Idioms

To translate idioms, translators need first to understand the meaning of the idiom in the source language and to know the context on which it is used properly. Then, they should find the right equivalent in the target language, which is in itself a hard task. In doing so, translators need to have a degree of proficiency in the source and the target language. Oualif (2017) for instance, stresses the importance of cultural knowledge in the interpretation of idioms. In this context, he rightly puts, "Only by having a solid foundation of the culture of the target language, the translator can catch the implied meaning" (Oualif, 2017, pp. 25-26).

There fore, the main problem encountered by translators when they translate idioms and idiomatic expressions is cultural. In other terms, the ability to recognise and understand the right meaning of the idiom, and convey its meaning into the target language is a challenge to many translators.

Another problem is related to the absence of equivalents of the idiom in the target language. This forces translators to use several translation strategies to solve this problem such as partial equivalence, paraphrasing, and translating

by omission (Oualif, 2017). Some examples are displayed in the following table.

Table 1 :Examples of Strategies of Translating Idioms

Translation Strategy	Idioms (SL)	Idioms (TL)
Total Equivalence	To give green light. Calm before the storm.	يعطي الضوء الأخضر الهدوء قبل العاصفة
Partial Equivalence	Through thick and thin. Like father, like son	في السراء و الضراء هذا الطفل من ذاك الأسد
Paraphrasing	To let the cat out of the bag. On cloud nine.	يفشي السر يشعر بسعادة

Translating cultural aspects using technologies of translation is still bothering many translators and software developers. This concerns also translating idioms. Nonetheless, the current study intends to examine the possibility of rendering TMs efficient regarding translating idioms.

Experimental Study

The major concern of this research paper is to evaluate the effectiveness of using TMs in translating idioms. To reach this end, an experiment was conducted with EFL learners who were requested to translate idioms from English into Arabic.

2.3. Participants

The selected population for this experiment is second year BA students of English language at the University Frères Mentouri Constantine 1. A sample of 20 students was randomly selected to participate in the study. Due to the complexity of the study and the time constraints, the number of the participants is small compared to the whole population. The selected sample was subdivided into two groups: control and experimental groups.

2.4. Method and Material

Concerning the control group, the participants were asked to translate 20 sentences from English into Arabic without any kind of assistance. In other

words, the participants were not allowed to use dictionaries, machine translation, or any other translation tool. Concerning the experimental group, the participants were asked to translate the same sentences using Omega T (TM). Access to machine translation and dictionaries was allowed.

In this experiment, Omega T was used by the participants to do the translation test. Since memory building takes time, the researcher enriched Omega T's memory database with 100 English idioms with their translation into Arabic. The participants, consequently, used the researcher's personal computer to do the test. It is worth mentioning that the software was fully explained to the participants who tried to use it on other projects before the translation test in order to avoid problems of unfamiliarity and gain time.

3. Discussion of the Results

In this section, the participants' results in the translation test are displayed.

3.1. The Participants' Marks in the Translation Test

It is worthy to note that the translation test consists of 20 sentences and each sentence is marked 1 point. In the following table, the students' marks on the test are presented.

Table 2:The Participants' Marks in the Test

Student Code	Control Group	Student Code	Experimental Group
C 1	13	E1	19
C 2	10	E2	20
C3	09	E3	20
C4	06	E4	17
C5	8,5	E5	18
C6	09	E6	19
C7	06	E7	16
C8	08	E8	17
C9	08	E9	16
C10	11	E10	19

A glance at Table 2 shows that the participants in the experimental group performed way better than the participants in the control group. The performance of the formers is explained by the use of an assistance tool of

translation (Omega T) with enriched memory database including the idioms given in the test. The participants needed to only focus on translating the remaining part of the sentences. Besides, since any kind of assistance was allowed, they were capable of translating the sentences easily. This shows that cultural issues related to translating idioms, phrasal verbs, collocations, proverb, etc. can be overcome by enriching TM systems.

The participants' results in the control group, on the other hand, can be explained by their unfamiliarity with the suggested idioms. Moreover, they were asked to translate only sentences from English into Arabic, in which the context sometimes was not quite clear for them. This complicated the translation task for them that they found themselves trying to render the meaning literally most of time.

3.2. The Participants' Performance in the Translation Test

The participants' provided translations are closely analysed regarding the quality of translation in this section. The greatest majority of the students in the experimental group provided correct translation. They were able to get the meaning since the translated segments of the idioms were suggested by Omega T as they worked on the test. Very few of them struggled to translate the remaining part of the sentence.

The analysis of the control group students' translations revealed that many of them were unable to guess the meaning of the idiom and provided incorrect translation. In other terms, the quality of translation was very weak in the majority of the sentences. The following table indicates some of their incorrect translation.

Table 3: Students' Translation (Control Group)

Segment	*Correct Translation*	*Students' Translation*
No need to explain everything because a word to the wise is enough.	لا داعي لتفسير كل شيء فاللبيب بالإشارة يفهم	لا يجب شرح كل شيء لأن كلمة الحكماء تكفي.
It was a blessing in disguise.	رب ضارة نافعة	كانت نعمة متخفية
I smell a rat whenever he gives me gifts.	ينتابني الشك في نزاهته كلما قدم لي الهدايا	كلما أعطاني هدايا أشم رائحة فأر فيها
Somebody must have let the cat out of the bag.	لابد أن أحدهم أفشى السر	من المؤكد أن شخصا ما قام بترك القطة تخرج من الحقيبة

It is quite noticeable in Table 3 that the participants were unfamiliar with the English idioms and tried each time to provide a word-for-word translation of the sentences. A closer look at the students' answers reveals that they translated all the sentences and were able to translate some of them correctly because they know the used idiom for it is popular or they studied it before in other subjects like oral expression. Examples of these idioms include 'it costs an arm and a leg', 'fishing in troubled water', 'birds of a feather flock together', etc. For the remaining sentences, they either provided acceptable or incorrect translation.

Compared to the control group, the participants in the experimental group also translated all the given sentences. The close interpretation of their answers shows that they either provided correct or acceptable translation. The mistakes they had are related to the words' choice and the grammatical structure of sentences in Arabic. Nevertheless, their overall performance is significantly great because they had a lot of assistance from the software. This makes the process of translation easier and faster, with certainly a good quality of outputs.

In short, students struggle in translating idioms because of their limited knowledge of the target culture and little training in translation. However, their translation can be considerably enhanced with translation technologies. Hence,

improving the students' cultural knowledge and raising their exposure to the target language on the one hand, and teach them different strategies of translation and how to use translation technologies like MT and TM systems on the other hand may be the key to successful translation.

4. Recommendations

Many studies have shown that translation technologies are ineffective faced to context and cultural aspects. TM systems, for example, have many drawbacks regards this point. Besides, the memory database building, as previously mentioned, is time-consuming. Nonetheless, this study shows that TMs, particularly Omega T, can be enhanced. Therefore, it is recommended to furnish these tools with glossaries, terminology, and different expressions before putting them in the market. This allows translators to have a primary database to be improved the more they work.

It is worthy to mention that one of the features of TM systems is that translation units are human and not machine productions. Yet, this study recommends improving the memory database with terminology and expressions from dictionaries and works that are human productions. That is to say that a technology like Omega T can be improved to overcome problems of memory building and cultural barriers.

Based on the obtained results, the current study recommends teaching students of foreign language and translation more cultural aspects like idioms, proverbs, cultural behaviours and beliefs, traditions, etc. to understand more the target language and to be able to translate effectively. Technologies of translation should also be included in the syllabus of translation. Learners need to know more about these tools and get enough training in order to be able to use them properly in the future, especially if they intend to build a carrier as professional translators.

5. Conclusion

Translation is an art and not just a process. In its essence, translation conveys the meaning of the source language into the target language, but it also conveys culture, beliefs, lifestyles, notions, traditions and many other features. Thanks to translation, the world seems more connected and closer. However, the world is changing and becoming more digitalised. This increases the popularity of translation technology around the globe. Unfortunately, despite

the benefits it has, it is not given its due importance, especially in higher education. Many people believe that translating technology is a threat to translators as it is designed to replace them. This research paper reveals that translation technology is a blessing. It is basically designed for the sake of supporting translators. This field is being updated only to support translators. Thus, translators, in their turn, should keep up with the development of the field to be effective translators providing fast and good translation.

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Conflict of Interest

The authors declare that they have no conflict of interest

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