# Kasdi Merbah Ouargla University

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## **Department of English Language and Literature**



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Prepared by: -Hammou BAHADDI

## **Title**

# Investigating the Role of Translation Programs in Translating Technical Texts.

(Electronic Device Manual).

**Comparative Study: REVERSO and GLOSBE Websites** 

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Chairman: Ms. Leila YAHIAOUI, University of Ouargla Supervisor: Mrs. Dalila MESLOUB, University of Ouargla Examiner: Dr. Mohamed KOUDDED, University of Ouargla

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## **Dedication**

I dedicate this work to my MOTHER and FATHER, the symbol of love, patience and care, also to my Wife, and to my Daughters WIAM and RAHMA, as well as, my sisters,

whom I wish the best.

Another dedication to all my friends especially Rostom CHEKHAR and Daoud HOUACHE.

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## List of abbreviations

**TM**: Translation Memory.

**MT:** Machine Translation.

LAN: Local Area Network.

ALPAC: Automatic Language Processing Advisory Committee.

**IBM:** International Business Machines.

**SEO**: Search Engine Optimization.

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#### **Abstract**

In a more advancing world of technology, it is generally agreed that translation is not to be marginalized or put outside new digital materials such as computers and data processors, although translation deals with language that may be considered something flexible and complicated that may seem to be hard to mechanize or systemize in a blind and autonomous software and computers, but still huge efforts has been done during the last decades to render translation more adequate and precise as well as accessible to the users, anywhere, via services offered by websites in a form of a machine translation or what is referred to as MT. The research deals with the problem of using such kind of websites and proceeds on investigating its effectiveness on one of the highly standardized texts which are technical texts including manuals, considering these to be a delicate texts. Thus, the following research begins by dealing with the characteristics of these texts and the main criteria that ought to be respected when translating them because if one of them is ignored during the process of translation, it may result in a damaged target text that receivers will find it hard to grasp and understand, also distinguishing machine translation from the translation websites on which the research focuses on, however, the research dedicates a portion concerning the machine translation software as having many similarities with the websites in terms of function, and lastly the practical part of the research attempts to translate some of highly technical texts which is in this case manual of an Electronic device by two well-known websites REVERSO and GLOSBE, in order to draw a comparison between the two in terms of their effectiveness in translating this kind of texts.

**Key Words**: Electronic device, GLOSBE, Machine translation, REVERSO, and Technical texts.

### Introduction

This research aims at investigating the role of translation websites in translating of standardized texts and highlighting their effectiveness in the translation of technical texts and particularly Electronic Equipment manuals.

## The methodology of research

The first chapter is an introduction to technical writing all the surrounding characters of this particular type in which we attempted to set a descriptive analysis of technical writing as well as the means involved in their translation considering it a special type of translation, this chapter base its claims on previous reliable sources and references that dealt with the same problem in addition to some personal observation that does not contradict the previously mentioned sources.

The second chapter is a continuance to the first chapter in which we dealt with the second part of the research problem which is translating using machine translation and translation programs by a comparison between the two in descriptive way, thus we can say that the first and the second chapter are the theoretical frame work of this research

In the last chapter we attempted to set practical frame work by comparing between two translation programs GLOSBE and REVERSO in order to analyze the data provided by the test that carried out and come up with a conclusion as to the effectiveness of using these translation programs in the translation of technical texts

At last the methodological structure of this research went from a theoretical back up based on previously published works on the subject to end by drawing a result from test carried out by us, and from that result another whole research may arise.

#### Statement of the Problem

In attempting to investigate this research it is necessary to answer the following question:

✓ Is it necessary to integrate the translation websites into the work of the translators?

- ✓ How the translation websites can contribute to the translation of standardized texts?
- ✓ To what extent the translation websites can draw an effective translation of the technical texts?

## **Hypothesis**

In an attempt to answer the questions raised by this study, it is hypothesized that:

- Translation websites can give the correct translation.
- The integration of translation websites in the process of translating technical texts will help the translation effectiveness of technical manuals.

## **Structure of the Study**

The present study consists of three main chapters.

Chapter one is divided into four parts, the first part deals with the characteristics of Technical texts, the second parts tackles the technical writing; the third part focuses on the Characteristics of the technical terminology, and the last one is dealing with the difficulties of translating technical texts.

Chapter two is divided into three parts, starting by a definition of machine translation and its characteristics, and then the translation websites and the benefits from them; at the end I shall define the target user of translation Websites.

Chapter three will be a practical one devoted to translate sentences containing Technical terminologies in REVERSO and GLOSBE programs, in case of Comparative study between translations of both programs, the first patterns was a two sentences taken from a manual of an Electronic device in order to translate in terms of terminology; the second patterns containing three sentences than translate them in terms of clarity and descriptiveness; the third patterns was a Three sentences taken as samples in order to translate in terms of correctness and accuracy, and finally the fourth patterns containing two sentences translated in terms of format, in an attempt to prove the effectiveness of translation programs in translating the technical texts.

# Chapter one

**Translation of technical texts** 

#### 1. Definition of technical texts

The term 'technical texts' refers to different documents with product-related data and information that are used and stored for different purposes. "Different purposes" such as: product definition and specification, design, manufacturing, quality assurance, product liability, product presentation, functions and interfaces intended, safe and correct use, service and repair of a product as well as its safe disposal.

This wider view, in which all documents that are generated during the product life cycle are viewed as part of the technical texts is certainly justified. However, the aim is to make available the technical know-how and product history for subsequent users of the information, whether being engineers or operators, or public prosecutors specializing in product liability. Within the framework of these texts two types of texts are distinguished:

"User instructions" or "user manual": The first type is about using the product, because "manual" is usually associated with a "book", "user manual" is the book, in which the usage is described. The publication medium is specified. On the other hand, the term "user instructions" is media independent.

Operating instructions / operating manual: the second type is generally about the operation. This is more general than just using something; it starts with transport and storing, then followed by installation and commissioning up to using the product, continues with cleaning, service and repair and ends up with dismantling and disposal. A document describing operating should therefore be correspondingly comprehensive not forgetting the safety information.

## 2. Technical writing

Technical writing is a form of writing that is extensively used to prepare manuals, description of new electronic products, instructions on how to operate a particular machine, etc, in a fact technical writing shares many characteristics with the scientific style of writing given the fact that they both deal with subjects of high precisions, which makes their style following criteria that are proper to science, thus the writer is often asked to create a documentation for a technology. The documentation must clearly explain how to install and use that technology, this is primarily the mission of language to convey the meaning successfully, and in order for the translator to translate any given manuals he should be aware of the characteristics of the technical writing which are as follow:

## 2.1. Clarity

It is essential that the technical writer understands the reader's background and needs. Making the documentation too technical can confuse the reader. The document is meaningless if the intended audience does not understand what the writer wants to communicate. Writers who are well aware of their audiences are in a position to give a solution to their problems. The style of technical writing demands simplicity of language and clarity of expression, this can be done by avoiding unnecessary words that may put the readers in a difficult situation to understand, this does not mean the omission of important terminologies but words that are added to polish the style or tend to add a poetic aspect to the document.

Therefore the written document must be clear and concise so that the text becomes easier to grasp and understand.

## 2.2. Descriptiveness

Electronic products such as digital cameras or Video Camera Record and various other products often come with manuals that give instructions of how to operate them. As the customers may come from a non-technical background, it is compulsory to make sure that the manual is not difficult to understand. Certain key concepts to operate the product must be explained as easily as possible for the targeted readers. If you use pure jargon, the customer will possibly never know what is intended by using such jargon, therefore Explaining the product in layman's terms is absolutely necessary. Good technical writing conveys ideas in the most effective manner. A well-written technical document always contains answers to anticipated problems in the product or application. This aspect of technical writing is commonly seen in articles that are related to troubleshooting a particular software or product.

## 2.3. Accuracy

Accuracy is an important characteristic of any technical document. A slight mistake can have grave consequences. For instance, if someimportant features has been forgotten to be mentioned relating to a new mobile phone, the customers may think that there is nothing special in that phone and will not prefer to buy it. Effective communication requires quality content and language that is accurate and readable. Technical writing does not mean that you translate information unquestioningly. In this profession, one must know for whom the document is being written and whether any kind of ambiguities. The intended meaning will not be communicated to the reader if the document has ambiguous sentences. The reader is sure to get annoyed, if your document is full of misspellings and incorrect constructions of

sentences. Hence, apart from providing correct technical information, the data in the document should be grammatically correct.

#### 2.4. Format

The way the data is presented in the technical document is also very important from the user's point of view. For instance, supposedly if complex technical data are explained in the most simple manner, yet it won't hold the attention of the user if it is presented as one big paragraph, the technical data in a manual are usually divided into sub heads. If it is an instruction manual, instead of sub heading they are presented in bulleted format. However, if the sequence of instructions holds priority, Key points pertaining to precautions or warnings may be emphasized using bullets. A document presented in a well-organized manner is very easy to read and the important data that the user is looking for is available at the first moment. To make data easily accessible, it is given technical specification of any product in a tabular form. Also the descriptive technical data are complemented with a graphic image of the product in focus. This is visually appealing and will definitely attract the attention of the most casual viewer.

For technical articles to be effective, it is essential to implement the afore mentioned characteristics of technical writing. If followed in a technical manual, the users will definitely appreciate technical manuals and find them easy to both read and use the product.

## 3. Characteristics of the technical terminology

Terminologists agreed that the best definition of technical terminology is the conceptual word or expression whether a single concept or a compound one, whose meaning has been stabilized in use, as well as being a narrow and precise expression in its specialized significance and utmost clearness, having its equivalent in other languages, and being most of the time present in the context of the field of specialty in which it is to be used.

## 3.1. Single or compound word

Terminology generally comes as a single word or a group of combined words; it never comes in stretches of words in the form of a phrase that tends to define the concept, because terminology should not express all the characteristics of the concept; it is enough to indicate the overall characteristics and the main one, an example for the usage of single word can be the word "Office" which is a terminology used in the field of computer science, directs the attention to its constituents parts Word, Excel, PowerPoint. Though the name of the previous terminology does not express the function of each item but only the place in which those mentioned tools are used, which is in the real world the office, in that manner the term

"Office" takes its place inside the field of computer sciences regardless of its real meaning outside it, while its origins vanishes by the time and the excessive usage of it, in addition to the single words, there existed another category of terminology which is compound words this latter comes usually as a result of interdisciplinary field in science examples of which are biochemistry, Neurolinguistics and many others.

## 3.2. In the form of abbreviations

One of the main aspect that should be found in any terminology is its ability to convey the meaning of the concept being coined as such in a quick and fast manner, thus we find that many terminologies are constructed as abbreviations so that the letters as a whole convey the meaning of the concept without the need to return to the dissection of the letters constituting the word to understand the meaning it holds separately, sometimes even some abbreviations are used as words because of the over prevalence of use. A very good example of that can be the word Laser which stands in reality for Light Amplification by Stimulated Emission of Radiation. These abbreviations according to BoubakriFraji are called "The Conceptual Abstract" (Boubakri, 2012)

#### 3.3. Clear and accurate

Clearness and accurateness are distinguishing features of the scientific terminology, that the determined obvious sense guarantees the terminology's place inside the specialty. The terminology's clearness depends on the clearness of the concept itself, in which the scientific terminology's sense cannot stand alone but within the context of an integral theory in which it can be referred to as a complementary element of the whole theory, thus the terminology in its development undergoes the development of the specialty in which it is used.

## 4. The difficulties of translating technical texts

## 4.1. The translation of abbreviations

The use of abbreviation is common in technical writing basically for two reasons: the first is that it makes the writing more smooth and easy to follow, as it does not require the reader to repeat the same term in many occasions especially if it is a long one, and secondly it makes use of the widely known terms to be shortened in a form of an abbreviation so that it can be used most commonly by the readers of the manuals without the need to break each item to perceive the whole meaning such as the term LAN is translated to

As a result of the scientific progress in all fields; and the subdivision of its specialties a huge amount of compound scientific terminologies are created, the number of words constituting the terminologies may exceed five words held to be a unique scientific terminology. Regarding the difficulty of using such kind of terminologies specialists tend to abbreviate them in order to facilitate its usage. The translations of those abbreviations are always an issue, most notably from a foreign language into Arabic, because Arabic is not acquainted with that form of the so called abbreviations though they are utilized in many situations including computer science. It is problematic to t f an appropriate way of rendering them in Arabic, because there seems to be an inappropriate way in which abbreviations are translated as they are, which means each word is translated and then taken the initials to form the equivalence in Arabic, it may seems the right way, however, the problem of the terminological chaos in the Arab world complicates the situation even further, in which the only variation in translating one word inside the terminology will surely change the abbreviation as a whole, thus it is suggested that the abbreviations should be translated in a manner in which the compound English terminology is to be written entirely beside which the translated Arabic terminology is placed, in addition, writing the abbreviated translation in Arabic letters instead of putting it in its foreign form (Elhilali, 1982).

## 4.2. The passive form

In all the technical documents it is unnecessary to use "I" "we" "you". instead these documents use all the time the unknown subject through using the passive voice instead of the active one, but Arabic always prefers the active voice over the passive voice, as it gives great importance to the subject, while in a manual it not important to designate the subject since the importance relies mainly on the machine or the product concerned

Another difficulty is that translation typically produces texts that is longer than the original one while the texts expansion influences page counts and page breaks it has a drastic impact on illustrations if an illustration has its texts incorporated into the artwork translating that texts may alter the relationship between texts and illustration

Economy is the name of the game when it comes to technical writing, technical writing should be concise and clear never wordy and flowery as in many literary texts, this makes the translation of technical writing as discipline follows a strict procedures where no place is allowed for personal interpretations aiming at achieving the effectiveness of technical writing the translation should respect the criteria of precision.

## 5. Conclusion:

The technical text is one of the main types of scientific texts, because it has special features that make its translation follow strict rules, therefore this chapter introduces all the surrounding features of this type and the techniques involved in translating them, as well as highlighting its nature which will be suitable for translation via translation websites which will be discussed further in the following chapters.

# **Chapter Two:**

**Machine Translation & Translation Websites** 

## 1. Machine Translation

#### 1.1. Introduction

Translation has always been performed by bilinguals equipped with all the requirements of both languages source and target, but the technological advances the world is witnessing in all fields of activity, relying mainly on computers and communication materials have affected translation in a positive way. The old translator in his typewriting machine is replaced with a computer user translator who uses now a wide range of tools improved to give more accurate translations, and the main reason that pushed technological innovation in the field of translation is time, which has become a valuable currency nowadays, that was reduced heavily by the new materials commonly called Translation Websites (Programs). The following chapter will examine in detail these new innovated materials, focusing on the benefits they provide among which Investigating the role of translation programs in translating a standardized texts and highlighting a technical texts practically a manuals of Electronic Equipment's.

It is confused that translation can never be computerized, otherwise it will be a blind translation relying on machine that processes language in an automated manner, while in a fact language is an active and capricious living thing never to be treated automatically, in the following we will attempt to solve the argument raised so far by distinguishing the Machine way of translation and the assisted one.

#### 1.2. Machine Translation

Machine Translation is among the technological tools used in translation, and The reason of commencing the distinction by Machine translation is purely evolutionary, because the communication worldwide has been promoted by the web and internet services, but to reach full connectivity the web has the language barrier to break through(Ignacio,2009), which leads to the first attempt of computerized translation in the form of machine translation fully automatic, it was firstly defined in the words of Warren weaver as he said "When I look at an article in Russian, I say: This is really written in English, but it has been coded in some strange symbols. I will now proceed to decode."(looke& booth 1995, p18).the long way through which machine translation went can be traced back to the early attempt of Georgetown Automatic Translation Project that begun in 1952 and in use between 1964-1979(Antti,2003), although the project lead to many failures ,but it has paved the way to coming developments until the recently known and most used software Google Translate, that in its latest versions, you can set your browser to the latter to produce a page in your language if it is inserted among the 29 pairs languages now supported by its Machine Translation by

clicking on only one button, as well as when consulting an article in the Microsoft Knowledge Base, the page offers you a machine translated version.

#### 1.2.1. Characteristics of Machine Translation

One of the most known advantages of machine translation, is that it offers an instantaneous translation that no other software of translation can offer, which is widely used by any internet user to reach the information being sought in his mother tongue instantaneously, this fact contributes to the quick understanding of people's comments, an obvious example would be its use by trip advisers in tourism agencies to know people's comments on the services offered as well as for confidential reasons such as private Emails that can only be seen by the receiver. There is a strong reemergence of Machine Translation in some domains in response to Translation Memory's inability to cope with the ever increasing translating needs(Ignacio,2009), that are accelerating every day that renders the possibility of translating them very hard, as a result of today's digital high flow of information.

The popularity of Machine Translation stems from the fact of being free for any user, though that there are also some other tools from the opposite category (Computer Assisted Translation) that are also free, but people cling to machine translation when translating materials that does not need more accurate translation to deduce the meaning, Machine translation offers them a translation of their document freely with no cost at all.

Probably the major reason lay people use Machine Translation is because of its easiness of use, in the case of Google Translate the person is only obliged to paste the document intended to be translated and adjust the target language, by a single click on the button translate, the person obtains a mechanical translated text to the target language.

## 1.2.2. Shortcomings of Machine Translation

The machine translation has many drawbacks, first of which is due primarily to its blind automated way of dealing with something as flexible as language, which makes the quality of its translation not good enough to be taken as an exact translation of the source text, because language works on many levels syntactic level, interpretative level and locale usage level (Antti, 2003).

The non-exactness of the translation that the machine produces, makes correction an inescapable matter which can be considered as a bad outcome of using machine in translating, where a huge load of work is assigned to the translator in order to post edit it (opt, 2003), and in worst cases the text is sometimes highly damaged that the post editor find it hard to repair and erase its ambiguity that the machine introduced to the target text, this may cost most valuably the time of the user.

#### 1.3. Machine Translation Now

Machine translation has become the new face of translation, thanks to the breakthrough that happened in the field of technology, thus, it is worthwhile to step back briefly and understand its origins. The first building stone set the foundation for a larger system was in the late 1830s by Charles Babbage, who put forth the idea for an analytical machine which among other functions would be capable of storing dictionaries, and during the 20th century, the theory of Warren Weaver1 was put into practice by IBM in 1954 managing to produce an intelligible translation of 60 sentences from Russian into English using 6 grammar rules and 250 dictionary entries, unfortunately, this triumphal attempt was eclipsed by ALPAC report which in 1966 noted "...we do not have a useful machine translation and there is no immediate or predictable prospect of a useful machine translation "(Alex,p1) after this pronouncement, funding for machine translation began to decrease drastically

After a decade of absence, machine translation reemerged due to several factors among which the increased amount of data to be translated that caused new translation needs to arise, thanks to the constant need of user generated content, in other words, the user is no longer required to acquire many languages to obtain his desired information, as well as there is an enormous amount of data constantly pouring in in an unprecedented speed which also been lost behind language barriers.

There is also the need to get to the global markets faster and cheaper, both of these features favor automated translation solutions, because having a human translator using human capacities and time to translate catalogues, manuals and accounting information will be extremely expensive and time consuming operation, "although available for decades machine translation is now a viable, game changing opportunity for competitive advantage by allowing organizations to provide dynamic translation processes " (ibid p 3)

A machine translation can either match sequences of sentences together to form its equivalences which is commonly called statistical machine translation or generalize new forms of translations based on previously similar translated sentences, this is also called example based machine translation, since the availability of this type of multilingual resources has grown by orders of magnitude during the last decades, this method has become a feasible approach to providing adaptable, robust and self-learned translation software.

Machine translation can be seen by many to a better choice for translators and users who want their needs to be met instantaneously; however, there is a particular content that is better suited for machine translation as many examples may show its inefficiency such as the translation of les enfants et les femmes enceintes as pregnant women and children and also the translation of the spirit is willing but the flesh is weak into Russian and then translated back as the whisky is strong but the meat is rotten(Newmark, 2006), showing that there is

boundaries to machine translation that is hard to get over, because unlike human translators, machine translation cannot understand the surrounding context in which the text is placed and to be translated, as we know that English has almost one million words, most technical communication requires only 1% or about 10000 words and examples thus content can run from broader worlds with subjective meaning to tighter controlled writing as in function manuals and manufacturing industry, the reason why the former is not entirely suited for machine translation is because they employ freer figure of speech (similes and metaphor...)which is difficult for engines to disambiguate, conversely, content that is repetitive more restricted is a good candidate to machine translation, frequently, these kind of texts are machine translated without subsequent post editing, although sometimes texts such as manuals are required a human intervention.

### 2. The Translation Websites

The translation websites is a new tool to translation, offered firstly by the advent of internet self-surfing in search for various information from deferent resources, which necessitates the need to translate these information when being emanating from foreign sources, thus it is compulsory for the user to look for an easy way to translation without contacting a professional translator, the translation websites are based on saving translated segments together with the source text, the combination of both are treated as a Translation Unit (TU), this option allows constant access to the segment which includes the terminology to check the translation, thus terms that are used in a previously translated segment is suggested when countering the same matching with a new translation, despite the fact that translation websites may seem to be an efficient tool of translation independent from other translation software, but it is basically related to a translation memory being enriched by the users themselves, this combination between TM and translation websites become much more effective and the benefits are much greater, because if left unmanaged the translation become inconsistent leading to translations that contains word for word translation and an uncountable number of mismatches, this lack means that the translation cannot be re used later.

The user is a regular checker, reviewer and corrector of his preferred translation websites' content so that it can be re used much effectively, updating the TM means correcting any mistake as well as inserting new terminologies or replacing old translated terminologies with other unified terminologies, this act will eliminate the possibility of error's spread, thus the translation will surely respect the context of the source text as well as eliminating the errors. The network connectivity has affected the translation; in that it is no longer centered on translators alone, as the TM database has changed into network based system, where the translated texts are not locally managed but centralized by language service providers, besides

the use of section within localization projects where independent players such as quality assurance checkers and client reviewers implement extensive changes to the translated texts through data sharing of common resources (Ignacio,2009), this is considered a great benefit, because the connectivity with the web offers interchangeability between translators across the Arab world and a sort of reaching to enrich the Arabic language in these websites, in order to render translation into Arabic more adequate in terms of exchanging their experiences and gathering their efforts to serve Arabic, by creating a unified Translation Memory in each domain, also another advantage is that translator through the web can gain access to glossaries put by reliable translation organization and use them in their works, as an example of these glossaries the unified Arabic glossary of computer terminology, emanating from the Arab Organization of Administrative Sciences in 1981, which was a unified reference to many researches and glossaries appearing later in the Arab world, this is to show that translation websites are the new face of translation a tool allows both users and translators to benefit from each other.

#### 2.1. The Benefits of Translation Websites

Translation websites can be regarded as the new tool of machine translation whose main objective is to provide an easy access to their desired translated texts in an instantaneous way. 70% of the world doesn't speak English while 57% of websites have their content in just one language leaving a huge audience who are not directly targeted. Every year billions of dollars of revenue are left on the table as potential opportunities go untapped. More than 50% of queries on Google are submitted in languages other than English!

Localization and translation allow businesses to become more globally accessible. Having a multilingual website has many benefits for your company, it breaks down barriers, increases revenue, builds credibility.

Multilingual websites treat foreign audiences with equal importance. This creates a familiar less alien environment and leads to increased conversions. The wider market also creates a more diverse clientele for your business.

When a company has their website available in various languages it increases their credibility. Companies who have translated their websites have an edge over those who haven't. It shows that from the very first interaction the customers needs are met. Similarly if the language is used correctly, it creates a familiarity for the user making it easier to understand than machine translation tools like Google Translate. This gives the impression of a customer centric company.

A major benefit of website translation and localization is an increase in Search Engine ranking. Translated websites can often face much lower levels of competition when ranked in a different language.

The majority of websites are provided in English; by having yours available in other languages your chances of being found by international users are higher. A multilingual website will appear as a higher ranked result to foreign keyword searches on search engines, thus driving additional traffic to the website. Translated content also helps your source language (SEO) Search Engine Optimization as it doesn't count as duplicated content and contributes to site ranking.

Localization and translation are investments with returns. They improve ease of access, customer numbers, brand identity. Having a multilingual website builds a multilingual audience that's the difference between being global and truly global.1

## 3. The target user of translation Websites (programs)

Here are some types of users who might someday need a translation programs. You will probably recognize yourself in one of these descriptions

- ✓ You are Arabic-speaking, you do not speak foreign languages and you would like to understand internet sites, newspapers, or other documents written in those languages, or you wish to send emails or letters in another language
- ✓ You speak Arabic or French, you do not speak English but you have to communicate with English-speaking people.
- ✓ You master two languages and you have to translate a lot of texts (as a translator, or a bilingual secretary) and you wish to speed up the translation process: with the use of the software, you may gain up to 40% productivity.
- ✓ You work in the English subsidiary of a German, French or Spanish company, you need to understand all documents within the company: manuals, reports, brochures, internal notes.
- ✓ You work in an international institution in an English speaking country (embassies, representations of the UNICEF...) or, the other way around, in a French delegation abroad.

And more generally, you have to communicate once in a while in a foreign language or to do some research (students, academics, journalists, researchers...)

<sup>&</sup>lt;sup>1</sup> http://www.reverbeo.com/website-translation-benefits/

## 4. Conclusion

In this chapter we attempted to set a definition of machine translation, considering it the first step towards computerizing translation, then drawing a comparison between machine translation and translation websites highlighting the significant features of each one in order to clear the wide picture about websites translation which has always been subject to confusion, as well as concentrating about the data base they provide in a form of translation memory.

# **Chapter Three:**

Comparative Study between GLOSBE and REVERSO in Translating a Digital Satellite Receiver User's Manual

#### 1. Introduction

This chapter will deal practically with the use of translation programs in translating the Technical Texts such as User's Manual, and investigating the role of these programs in an attempt to find an applicable solution that would contribute an advantage of rapid translation. The Translation through computerizing translation will be the principal focus of this chapter, relying on GLOSBE Program as a translation website, testing its ability to achieve the desired results by its TM which includes the glossary functionality as a part of it because it deals with individual words in this case the technical terminology and producing by the end many proposed translations with a technical terminologies, in other hand we will use REVERSO Program which is a translation website that can be used as another tool of translation in order to make a comparative study between the two translation programs.

#### 2. Data

The data is the collection of ten examples containing terminologies related to technical texts, which will be translated into Arabic using the GLOSBE program, which is containing a Translation Memories of Technical terminology (Corpus), and REVERSO Program which is a translation website, both of these programs will be tested by translating Ten sentences keeping the same terminologies.

#### 2.1. The Website GLOSBE:

GLOSBE is the online dictionary covering all major languages; Well, there is a big community of people creating dictionaries in GLOSBE and a big community of people using GLOSBE and these people really make GLOSBE. There is also a contribution of people who creates the GLOSBE software:

GLOSBE appeared first on the web in mid-2011. It was created to be the best multilingual dictionary possible. And from that time it is in continuous development. It has added translation memories to show you examples of translated sentences; it has added pronunciation, images and much more.

The data that provide on GLOSBE comes from both open source and free databases that they have found on the web and from users contributions. The translation memories come mostly from published free parallel corpora. As our interface displays author attribution next to each data presented you can easily find out what are the sources of the data it displays.

The engine of GLOSBE is developed by two programmers, it's located in Poland.

GLOSBE is multilingual, which means, that it supports ALL languages. Any language, that has ISO693-3 code already is in GLOSBE. In case of any other language you wish to build dictionary for: just let them know, they will add it. In summary there are around 7.000 languages in GLOSBE. As they offer a draft for creating any bi-dictionary this gives almost 50.000.000 bilingual dictionaries in GLOSBE.

## 2.2. The Website REVERSO:

REVERSO-Softissimo designs, publishes and integrates language technologies for large corporations, institutions, education and the consumer market.

The company works with a team of experts based in France, Russia, China, Germany, the US and the UK.

REVERSO-Softissimo combines high-level consulting and project management with standard productivity tools (electronic dictionaries, instant translation software, professional solutions for corporate translation management).

All the tools can be tailored thanks to integration and customization services (linguistic customization, engineering solutions, and implementation support).

- ✓ 200+ translation combinations supported.
- ✓ 200+ large corporations rely on REVERSO to help bridge language gaps.
- ✓ 5 Million+ users in corporate environment already use REVERSO on a daily basis.
- ✓ 4 Million+ words in 20 comprehensive bilingual or monolingual dictionaries.
- ✓ 100 Million+ translations are performed each month using REVERSO tools.

This online translator provides translations for words, short texts, phrases and idioms in French, Spanish, Italian, German, Russian, Portuguese, Hebrew, English and Japanese.

### Translation tools include:

- ✓ Translation memory such as Across, Trados, SDL, Dej, as well as instant translation systems and machine translation like REVERSO, Systran.
- ✓ Online dictionaries are from Collins, Merriam-Webster, Larousse, Oxford and Langenscheidt.

## 3. Methodology

This research aims at testing the hypothesis that Translation websites can give the correct translation and the integration of translation websites in the process of translating technical texts will help the translation effectiveness of technical manuals, this via translating Ten English sentences containing a technical terminologies retrieved from Electronic Device

manual's using REVERSO which is a free Translation software, and GLOSBE which is an instantaneous translation program, that is containing TMs will be tested by translating the ten sentences of manual containing the same terminologies as the first sentences used as an input, including comments and analysis during the process of testing, this to illustrate the capability of Translation Programs in this case REVERSO and GLOSBE, in enabling translators to use such programs and avoid confusion, using test method to come up with a comparative result showing the possibility of using these programs in the process of translating technical texts and having the correct translation.

## 4. Analysis of the data

After collecting Ten sentences containing technical terminologies as an input, herein the analysis of the corpus comes as a collection of snapshots taken from the REVERSO and GLOSBE software within which both source and target language are shown, in this case English into Arabic, highlighting the terminologies inside the sentences and within the suggested translation from the TM of these Programs, then we will make a comparison between the two translation in terms of: terminology, clarity, accuracy, and format.

#### 4.1. Pattern 01

#### 1) Cleaning:

Plug out **the receiver** from the wall outlet before cleaning. Clean **the receiver** by a soft cloth or mild solution of washing-up liquid.



**Figure 1.1:** Translation example 01 by REVERSO program

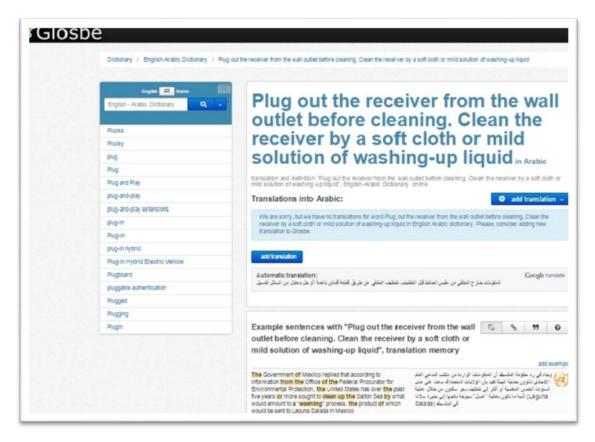


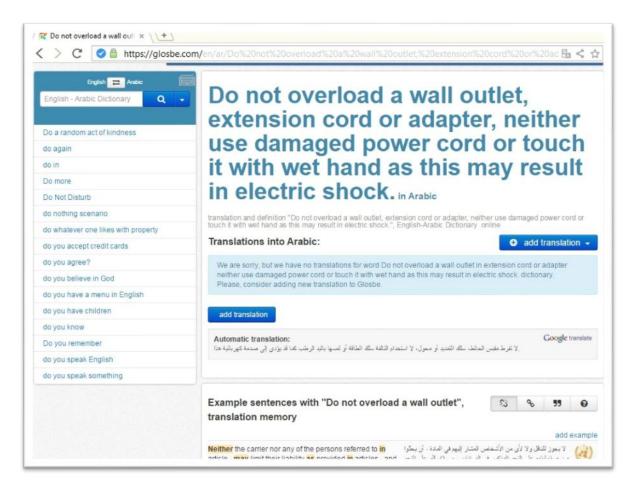
Figure 1.1: Translation example 01 by GLOSBE program

#### 2) Overload:

Do not overload a wall outlet, **extension cord** or adapter, neither use damaged power cord or touch it with wet hand as this may result in electric shock.



**Figure 1.2:** Translation example 02 by REVERSO program



**Figure 1.2:** Translation example 02 by GLOSBE program



**Table 01:** Terminology Translation

The word **Receiver** was translated differently between REVERSO and GLOSBE, since the word being translated is considered a term, we notice that REVERSO have succeeded in finding the adequate equivalence in Arabic which is جهاز الاستقبال, according to The Oxford

English – Arabic Dictionary which is considered as reference of translation, with the electronic database <a href="http://www.almaany.com/">http://www.almaany.com/</a>, while GLOSBE tended to translate it as a word not a term المتلقى.

The term **Extension cord** is translated in GLOSBE as سنك التمديد which is word for word translation for extension and cord, in the other hand REVERSO again succeeded to find the nearest equivalence to the term translating it as

### 4.2. Pattern 02

1)- Press RED button to enter move mode.



**Figure 2.1:** Translation example 01 by REVERSO program

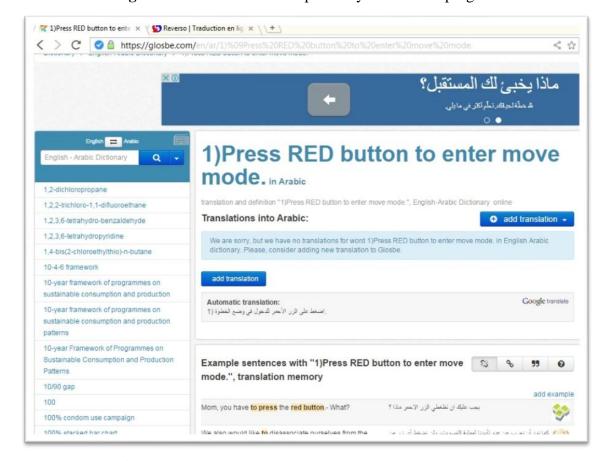
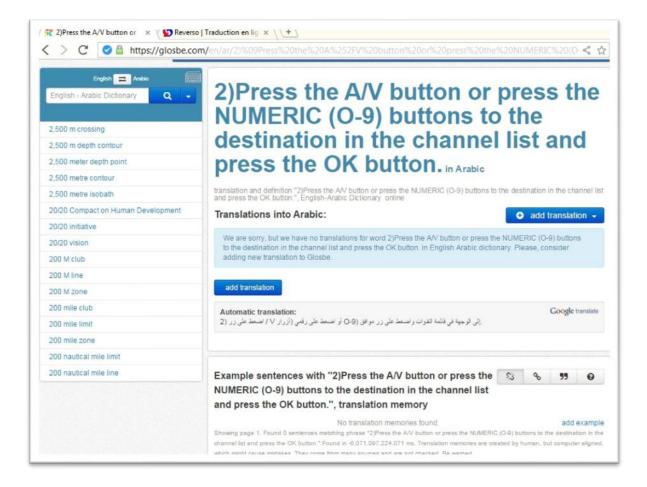


Figure 2.1: Translation example 01 by GLOSBE program

2)- Press the A/V button or press the NUMERIC (O-9) buttons to the destination in the channel list and press the OK button.



Figure 2.2: Translation example 02 by REVERSO program



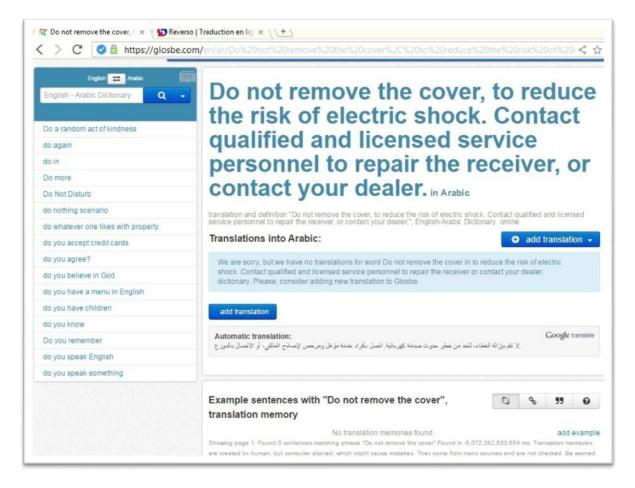
**Figure 2.2:** Translation example 02 by GLOSBE program

#### 3)- Uncover:

Do not remove the cover, to reduce the risk of electric shock. Contact qualified and licensed service personnel to repair the receiver, or contact your dealer.



Figure 2.3: Translation example 03 by REVERSO program



**Figure 2.3:** Translation example 03 by GLOSBE program

Glosbe	Reverso
اضغط على الزر الأحمر للدخول في وضع الخطوة	اضغط الزر الاحمر لدخول وضع التحرك
اضغط على زر / V أو اضغط على رقمي (O-9)	اضغط على زر A/V او اضغط على زرى (س-9)
أزرار إلى الوجهة في قائمة القنوات واضغط على	الى الوجهة في قائمة القنوات، اضغط على زر موافق
زر موافق.	
	كشف :
كشف:	لا تقم بإزالة الغطاء، للحد من خطر حدوث صدمة
لا تقم باز الة الغطاء لتقليل خطر حدوث صدمة	كهربائية اتصل بأفراد خدمة مؤهل ومرخص
كهربية. الاتصال المؤهلين موظفى الخدمة	لإصلاح <b>جهاز الاستقبال</b> أو الاتصال بالموزع.
المرخص لاصلاح المتلقي، او اتصل بالوكيل	
المعتمد.	

**Table 02:** Translation in terms of clarity and descriptiveness

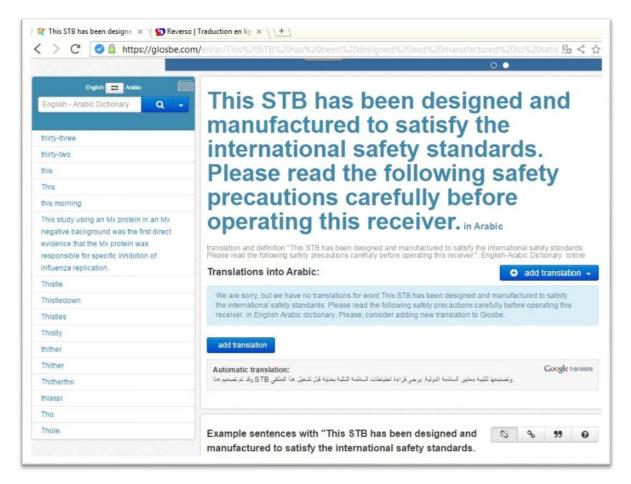
One of the principle characters of technical writing is clarity and descriptiveness, thus the manual should take into consideration the two elements, but from time to time some of these elements happen to be lost during the translation process, in order to know whether these latter were lost or not, one must read the translation as an original text, so that he can understand the meaning they convey without his own interpretation, using website translation may as well alter the meaning rendering it uneasy to understand, but judging from the above examples which are retrieved from a manual translated by both REVERSO and GLOSBE, we can say that though some terms lost a portion of their clarity and descriptiveness, for instance move mode which is translated by GLOSBE as وضع الخطوة while in a fact move mode is meant as virtual movement between choices in the menu, not physical one, this undermined a bit the clarity of the word, in the other hand REVERSO translated the message clearly as possible, for instance move mode is translated into وضع التعرف which clearly understood as movement between choices in a menu, according to The Oxford English – Arabic Dictionary which is considered as reference of translation

#### 4.3. Pattern 03

1) - This STB has been designed and manufactured to satisfy the international safety standards. Please read the following safety precautions carefully before operating this receiver.



**Figure 3.1:** Translation example 01 by REVERSO program

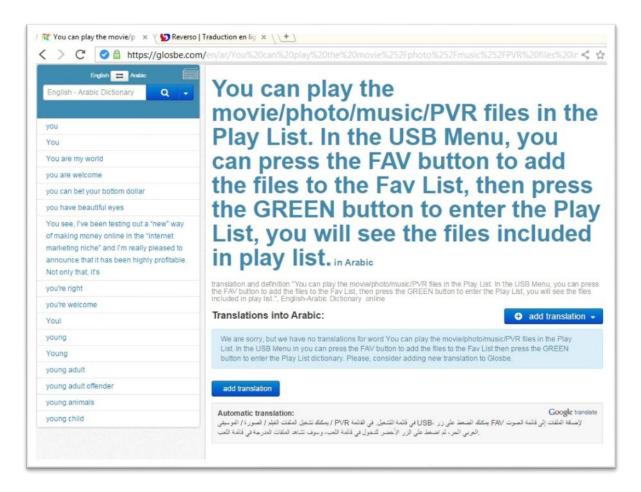


**Figure 3.1:** Translation example 01 by GLOSBE program

2) - You can play the movie/photo/music/PVR files in the Play List. In the USB Menu, you can press the FAV button to add the files to the Fav List, then press the GREEN button to enter the Play List, you will see the files included in play list.



Figure 3.2: Translation example 02 by REVERSO program

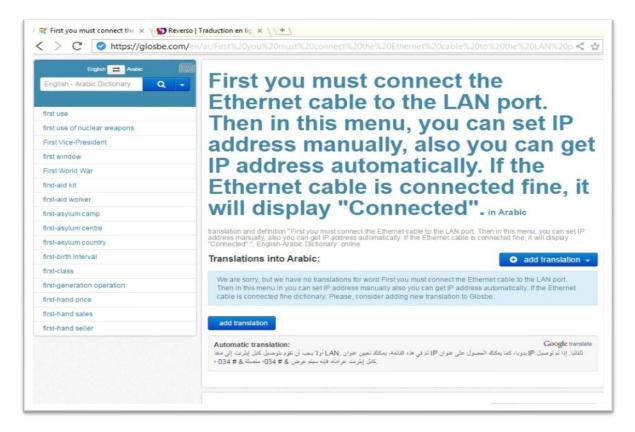


**Figure 3.2:** Translation example 02 by GLOSBE program

3) - First you must connect the Ethernet cable to the LAN port. Then in this menu, you can set IP address manually, also you can get IP address automatically. If the Ethernet cable is connected fine, it will display "Connected".



Figure 3.3: Translation example 03 by REVERSO program



**Figure 3.3:** Translation example 03 by GLOSBE program

GLOSBE	REVERSO
<ol> <li>يرجى قراءة احتياطات السلامة التالية بعناية قبل</li> </ol>	1. لقد تم تصميم هذا STB وتصنيعه لتلبية المعايير
تشغيل هذا المتلقي وقد تم تصميم هذا الستيب و	الدولية للسلامة. يرجى قراءة التالى احتياطات
تصنيعها لتلبية معايير السلامة الدولية	السلامة بعناية قبل تشغيل هذا المستقبل.
2. يمكنك تشغيل الملفات الفيلم / الصورة / الموسيقي	<ol> <li>يمكنك تشغيل الافلام والصور وملفات</li> </ol>
PVR /في قائمة التشغيل.	الموسيقي . PVR/في قائمة التشغيل.
في القائمة USB ، يمكنك الضغط على زر FAV	في قائمة USB، فيمكنك الضغط على زر مفضل

لإضافة الملفات إلى قائمة الصوت العربي الحر، ثم اضغط على الزر الأخضر للدخول في قائمة اللعب، وسوف تشاهد الملفات المدرجة في قائمة اللعب.

3. او لا يجب توصيل كبل الشبكة بمنفذ LAN. ثم في هذه القائمة، يمكنك تعيين عنوان IP يدويا، كما يمكنك الحصول على عنوان IP تلقائيا. اذا كان كبل الشبكة توصيل فسيعرض الراقي "متصلة".

لاضافة الملفات الى قائمة مفضل، ثم اضغط على الزر الاخضر للدخول الى قائمة التشغيل، فسترى الملفات المدرجة فى قائمة التشغيل.

3. أو لا يجب أن تقوم بتوصيل كابل إيثرنت إلى منفذ شبكة .ثم في هذه القائمة، يمكنك تعيين عنوان IP يدويا، كما يمكنك الحصول على عنوان IP تلقائيا .إذا تم توصيل كابل إيثرنت ، فإنه سيتم عرض متصل

Table 03: Translation in terms of correctness and accuracy

Another main element in technical writing is correctness and accuracy, because the text is a set of do and not to do rules, failing to deliver an accurate message will lead the user to misread the rule and consequently cause damage to the device, thus translating a manual require an accurate translated text in order to be correct, in the above mentioned examples we note that both websites succeeded to come up with an almost accurate translation such as the first example, a part from some cases where they tend to stick more on word for word this will make the user قائمة اللعب this will make the user المنافيل look for that list when it does not exist, while in fact it has to be translated as which is what REVERSO managed to do, according to The Oxford English - Arabic Dictionary which is considered as reference of translation also GLOSBE added some unknown words that were not mentioned in the original such as الصوت العربي الحر and الراقي and this also damages the correctness of the message when there is some integrating elements that has no relationship with the text, the user is to read the text as an original one. We finally conclude that the two websites succeeded to translate the technical text accurately and with minimum mistakes, the reason is due to the nature of the text as it is built in portions each one bears a separate complete meaning as well as due to their in stored memory.

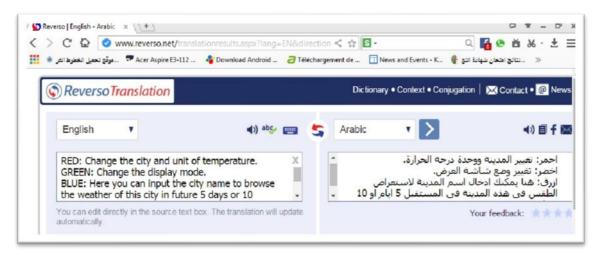
#### 4.4. Pattern 04

1)- Menu->Expansion ->Network Apps ->Weather

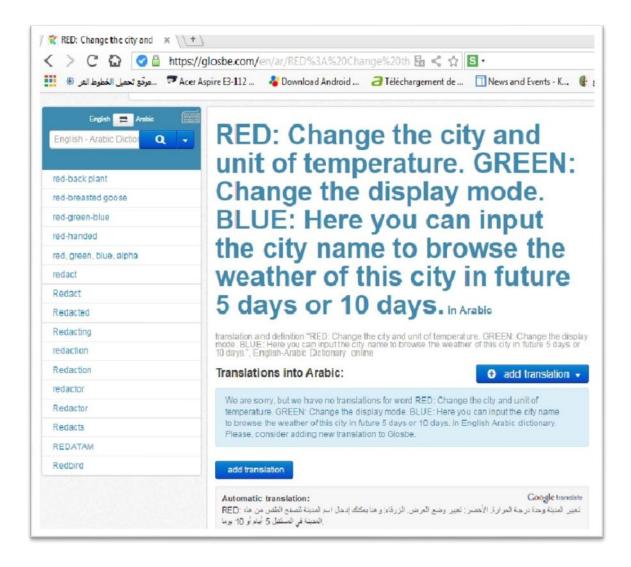
RED: Change the city and unit of temperature.

GREEN: Change the display mode.

BLUE: Here you can input the city name to browse the weather of this city in future 5 days or 10 days.



**Figure 4.1:** Translation example 01 by REVERSO program

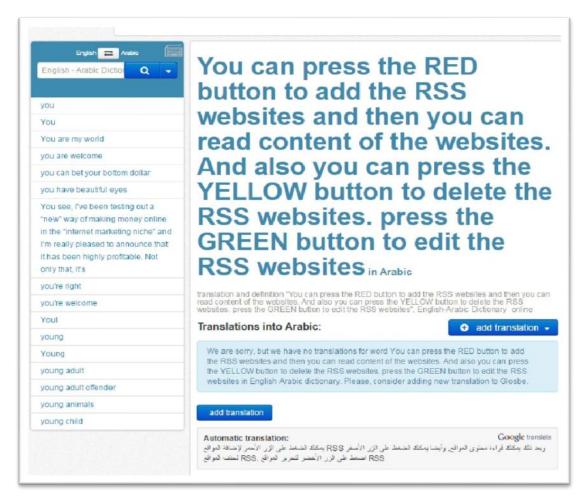


**Figure 4.1:** Translation example 01 by GLOSBE program

2)- You can press the RED button to add the RSS websites and then you can read content of the websites. And also you can press the YELLOW button to delete the RSS websites. press the GREEN button to edit the RSS websites



**Figure 4.2:** Translation example 02 by REVERSO program



**Figure 4.2:** Translation example 02 by GLOSBE program

GLOSBE	REVERSO
01) قائمة > توسيع > تطبيقات الشبكة > الطقس	01) قائمة > توسيع > تطبيقات الشبكة > الطقس
الأحمر : تغيير المدينة وحدة درجة الحرارة	احمر: تغيير المدينة ووحدة درجة الحرارة.
.الأخضر: تغيير وضع العرض	اخضر: تغيير وضع شاشة العرض.
الزرقاء: وهنا يمكنك إدخال اسم المدينة لتصفح الطقس من	ازرق: هنا يمكنك ادخال اسم المدينة الستعراض الطقس في
هذه المدينة في المستقبل 5 أيام أو 10 يوما	هذه المدينة في المستقبل 5 ايام او 10 يوما.
02) يمكنك الضغط على الزر الأحمر لإضافة المواقع	02) يمكنك الضغط على الزر الاحمر اضافة مواقع ويب لـ
RSSوبعد ذلك يمكنك قراءة محتوى المواقع .وأيضا يمكنك	RSS ثم يمكنك قراءة محتوى ويب. كما يمكنك الضغط على
الضغط على الزر الأصفر لحذف المواقع .RSS اضغط	الزر الاصفر حذف المواقع RSS اضغط الزر الاخضر
على الزر الأخضر لتحرير المواقع RSS .	تحرير مواقع RSS

**Table 04:** Translation in terms of format

It is generally agreed that the format of the text including the grammar play an important role in perceiving and understanding the translated text, and since that the translation is carried out by a machine \_ though there is no purely machine translation\_ the order of words are crucial to the effectiveness of translation, in that both websites firstly segment the text into full units, and after that they take each segment and translate it alone then match the units so that it results in an organized text, in the other hand the nature of the text also helps this operation in that technical text is a combination of separate units each one designs an operation to be carried by the user, in the above example we can notice this "Menu->Expansion ->Network **Apps** -> Weather serves instead of a phrases telling to move between options, this helps enormously the machine whose translation is as follows الشبكة > الطقس > توسيع > تطبيقات الشبكة > الطقس as simply as it is. In the first and the second example both GLOSBE and REVERSO succeeded in translating without too much mistakes in terms of grammar and textual format, لاستعراض الطقس في هذه المدينة في المستقبل 5 ايام او 10 يوما. except from the following Which has been translated as the order of words of the original text, "To browse weather of this city in future 5 days or 10 days" while instead it has to be translated as follows: . لاستعراض طقس المدينة 10ايام او 05ايام في المستقبل

We can conclude finally that in terms of textual format the text in many portions remained intact, leading us to say that technical text is in most cases fit to website translation.

## 5. Conclusion:

The practical chapter of this research is a comparative study between two translation websites REVERSO and GLOSBE, through which we attempted to investigate the effectiveness of each one in the translation of technical text, in our case Electronic Device Manual, and as a whole to demonstrate that these websites can be a reliable tool of translating this kind of texts taken into consideration their nature.

#### General conclusion

Technical texts are among the main types of scientific texts, whose characteristics focuses on 04 points, clarity, accuracy, descriptiveness and format, identifying these features help the translator to produce a target text that respects the criteria that are ought to be present in any text of this genre, thus given the nature of technical texts, one should distinguish between different types of texts among which the manual which was chosen as a case study, and further more giving special attention to the terminology which is considered the source of technical text, dividing them into various characteristics, which are as follows, single or compound, in the form of abbreviation, clear and accurate, also the problem of translating the abbreviations, and providing some practical solution concerning their translation.

The use of technology in the process of translation to help translators to elevate the quality of translations and integrate the computers in their work, become a necessity, because through them various objectives can be realized, not to mention connectivity through internet, that are considered now indispensable but here the research proceeds to define that not any technology but the most reliable software such as translation websites, the research also set a clear definition and distinguishing characteristics between machine translation and website translation, as well as showing the new development of machine translation now, as it distances more and more from pure machine to integrate human intervention in translating different texts most significantly technical texts, website translation is among the new tool providing instant translation with the integrated data base constantly developing by both the users and the official translators.

In the practical part of this research, we attempted to bring all the previous theoretical frame work into practice, in which we studied the effectiveness of translating an electronic equipment manual by of two main translation website REVERSO and GLOSBE, by comparing between the two in terms of various criteria that ought to be respected when translating the manual, we concluded that REVERSO succeeded more than once in coming up with a translation, that respects in part or in whole the criteria above mentioned and that technical text in our case manual can be the best candidate for website translation, however, the translation website being tested cannot stand or function alone, they always need a human intervention in order to reviewing its translation and to increase their data base or translation memory. So finally we will have a machine translation assisted by human in order to achieve an accurate translation.

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## ملخص الدراسة

تعتبر التكنولوجيا معيار تقدم الأمم والحضارات. حيث تشكل المعنى الحقيقي للتطور و التي يمكن من خلالها القيام بمهام أكبر في وقت أسرع وبدقة عالية، لذا فإن ترجمة النصوص التقنية تشكل تحديا كبيرا مما جعل الكثير من المترجمين و اللغويين يولون اهمية بالغة لها.

يتناول هذا البحث ثلاثة فصول:

الفصل الأول تطرقنا فيه إلى الخصائص التي تجعل النص التقني متميزا عند محاولة ترجمته من اللغة الإنجليزية إلى اللغة العربية ومن أبرز هذه الخصائص مايلي:

أولا: يتميز النص التقني بالوضوح والأسلوب المباشر حيث أنه يمكن اللجوء للوصف اذا استوجب ذلك، وغالبا ما يتسم بأسلوب الأمر، وهو بعيد كل البعد عن الجمالية والأسلوب الأدبي المنمق.

**ثانيا:** المصطلح التقني دقيق فهو نتاج للابتكارات التكنولوجية التي تجعله وثيق الصلة بالمجتمع الذي أقره. فهو متغير باستمرار مما يجعل ترجمته إلى اللغة العربية لا تلم بكل خصائصه.

ثالثا: الشكل في النص التقني منظم بطريقة محكمة حيث تكون بتقسيمه إلى وحدات معنوية، فكل وحدة تشكل نقطة فرعية تسهل للقارئ استيعاب الخطوات بشكل أفضل.

من جانب آخر تطرقنا الى خصائص المصطلحات التقنية والتي تتميز بـ:

- ✓ كونها مفردة وترمز إلى عدة معاني، فمثلا المصطلح Office تعني مكتب في اللغة العامة، أما في
   مجال الإعلام الآلي فهي تعني مجموعة برامج لمعالجة النصوص و الجداول و غيرها.
  - ✓ أو كونها مركبة فمثلا كلمة Neurolinguistics و التي تعني علم اللغة العصبية.

## لذا فإن من أهم صعوبات ترجمة النصوص التقنية نجد:

- ✓ ترجمة الاختصارات مثال: LAN التي تعني الشبكة المحلية. إذن نجد ترجمة الاختصارات التقنية
   تشكل عقبة لأن اللغة العربية نادرا ما تستعمل الاختصارات في التعبير.
- ✓ استعمال صيغة المبني للمجهول في اللغة الإنجليزية في حين أن اللغة العربية تميل غالبا إلى
   استعمال المبني للمعلوم. و هذا ما يشكل صعوبة في ترجمة مثل هذه النصوص التقنية.

لذا يمكن القول أن النص التقني له سمات خاصة تميزه عن باقي النصوص مما يجعل ترجمته تخضع لقواعد محددة

أما عن الفصل الثاني فقد تناولنا فيه بسطة موجزة عن الترجمة الآلية حيث تعتبر التّرجمة الآليّة فرع من فروع الصّناعات اللّغويّة الحاسوبيّة وهي تتجسّد في ترجمة نصوص أو جمل أو ألفاظ من لغة إلى لغة أخرى بوساطة

برمجيات حاسوبيّة. وتصنّف الترجمة الآليّة إلى ثلاثة أصناف حسب نسبة التدخّل البشريّ في العمليّة. فإمّا أن تكون:

- آليّة مباشرة (Machine Translation [MT])
- بشريّة بمساعدة الحاسوب. (Machine-Aided Human Translation [MAHT]) وتسمّى أيضا ترجمة آليّة تفاعليّة (Interactive Machine Translation [IMT])
  - آليّة بمساعدة بشريّة (Machine-Aided Translation [MAT])

لكن لاتزال أنظمة الترجمة الآلية بعيدة عن الجودة الكلية المحققة بواسطة المترجمين البشر، خصوصاً فيما يتعلق بدقة نتائج النصوص المتخصصة.

تتميز الترجمة الآلية بخصائص تتمثل في:

- ✓ سهولة التعامل مع النص الأصلي و ترجمته، و ذلك بنسخ النص مباشرة و لصقه في موضعه المحدد للترجمة ثم الحصول على الترجمة مباشرة. على عكس الترجمة البشرية التي تتطلب وقتا طويلا.
  - ✓ كونها ترجمة مجانية و غير مكلفة، كما أنها متوفرة في كل وقت.

وجدنا أيضا أن الترجمة الآلية لا تخلو من نقائص، إذ أن نوعية الترجمة المقدمة لا تكون دائما جيدة وصحيحة نظرا للأسباب الآتية:

- 1. قلة المفردات المطلوبة مقارنة إلى الترجمة البشرية التي تتميز بالمصادر والمراجع الكثيرة والمتوفرة.
  - 2. عدم القدرة على تعميم الكلمات المعربة، وجعلها مستخدمه بدل الإنجليزية.
    - قلة المصطلحات المعربة وعدم التطور في التعريب في كل جديد.
  - 4. عدم توحيد المناهج الدراسية في الدول العربية ، فالكل يستخدم مصطلح علمي مختلف.

ومع مرور الوقت عرفت الترجمة الآلية تطورا ملحوظا حيث ساهمت الذاكرات الترجمية في دفع عجلة الترجمة الآلية قدما، لاسيما عند ظهور مواقع الترجمة التي سعت بقدر كبير إلى تجميع أكبر عدد من المجهودات المبذولة في سبيل إنشاء الذاكرات الترجمية، والتي تمثل قاعدة بيانات لبرامج الترجمة المستعملة حاليا حيث يتسنى للمترجم اللجوء إليها حين تعذر الترجمة خاصة في النصوص المتخصصة.

وقد أشرنا في هذا الفصل كذلك إلى ماهية مواقع الترجمة ومستعمليها أو بالأحرى برامج الترجمة، ومن بينهم مثلا: الأشخاص الذين يتحدثون باللغة العربية و لا يتقنون أي من اللغات الأجنبية، يريدون تصفح مواقع الأنترنت مثلا أو قراءة الجرائد الإلكترونية باللغات الأجنبية، يتحتم عليهم اللجوء إلى هذه البرامج أي برامج الترجمة التي تساعدهم على فهم هذه النصوص.

اختتمنا هذا البحث بفصل تطبيقي، حيث تم التطرق فيه إلى ترجمة عشرة جمل إلى اللغة العربية كعينة أخذت من دليل الاستعمال لجهاز استقبال رقمي للقنوات الفضائية، حيث تتضمن هذه الجمل مصطلحات تقنية وهذا بمساعدة موقعين للترجمة أو بالأحرى برنامجي الترجمة REVERSO و REVERSO حيث أن موقع الترجمة REVERSO يعتبر أحد برامج التطبيقات الحاسوبية للترجمة الفورية متعدد اللغات و يوفر تلقائيا و بسرعة قصوى ترجمة اى نوع من النصوص (رسائل وتقارير ومقالات ومواقع على شبكة الانترنت)، من اللغة المصدر الى اللغة الهدف، و بالنسبة لبرنامج الترجمة ومحدثة آليا، مع العلم أنه يتعامل بذاكرات الترجمة مما يسمح الإنترنت، من خصائصه أنه ذو قاعدة بيانية ضخمة و محدثة آليا، مع العلم أنه يتعامل بذاكرات الترجمة مما يسمح لك إختيار المرادف حسب عدة سياقات، فقد ظهر هذا الموقع في أواسط سنة 2011 وقد تم تطويره من طرف مبرمجين مختصين في مجال الترجمة.

ومن ثم قمنا بدر اسة مقارنة بين الترجمتين مع الأخذ بعين الاعتبار خصائص النصوص التقنية و التي تتمثل في : الوضوح والدقة في المصطلحات و الوصف و الشكل حيث أن الكتابة التقنية تكون نقطية.

ومن خلال النتائج المتحصل عليها تبين أن برنامج الترجمة REVERSO قد نجح إلى حد بعيد في ترجمة النصوص التقنية فمثلا في الترجمة على مستوى المصطلح نجد المصطلح the receiver قد ترجم إلى جهاز الإستقبال بواسطة البرنامج أو الموقع REVERSO، أما عن برنامج GLOSBE فقد ترجمها إلى المتلقي وهي كلمة صحيحة ولكنها ليست في موقعها، بينما نجح البرنامج REVERSO في تحديد المصطلح المناسب له في اللغة الهدف، وعندنا أيضا مثال لـ Extension cord فقد ترجمها GLOSBE بكلمة سلك التمديد، أم بالنسبة لموقع REVERSO فقد ترجمها إلى سلك توصيل و هو الأقرب للمعنى المناسب.

وأخيرا نجد أن هذه الترجمة لا تعد نهائية بل تحتاج إلى تنقيح من طرف مترجم في الاختصاص، أي أننا تحصلنا على ترجمة آلية بمساعدة اليد البشرية للحصول على نتائج أفضل في الترجمة.

#### ملخص

في عالم التقنية المتقدمة، لا يمكن في أي حال من الأحوال تجاهل ترجمة المعدات الرقمية و معالجات البيانات أو التغاضي عنها، و رغم أن الترجمة تتعامل مع اللغة و التي تعتبر شيئا مرنا و معقدا في آن واحد يبدو من الصعب بما كان معالجة ترجمتها بصفة آلية بمساعدة البرامج و أنظمة الكومبيوتر.

تُبذَل جهود كبيرة في السنوات الأخيرة لأجل الحصول على ترجمة صحيحة ومكافئة للنص الأصلي، وذلك عبر الخدمات التي توفرها مواقع الترجمة على شكل ترجمة آلية.

يعالج هذا البحث إشكالية استعمال مواقع الترجمة من خلال التحقيق في مدى فعالية ترجمة النصوص التقنية، كونها أكثر النصوص استعمالا مثل دليل الاستعمال للأجهزة الإلكترونية باعتبارها نصوصا دقيقة.

يبدأ هذا البحث بالتعريف بخصائص النصوص التقنية و أبرز مميزاتها التي يجب التقيد بها عند الترجمة، لأن إغفالها قد يؤدي إلى الإخلال بالمعنى في النص الهدف مما يجعل فهمه صعبا عند القارئ، ومن ثم التعريف بالترجمة الآلية وخصائصها كونها تتشابه في الكثير من الخصائص مع مواقع الترجمة التي هي موضوع البحث.

وفي الأخير يختتم البحث بفصل تطبيقي على شكل دراسة مقارنة تم التطرق فيه إلى ترجمة نص عالي التقنية لدليل الاستعمال لجهاز إلكتروني بواسطة استعمال موقعي الترجمة "ريفرسو" و" قلوسب" قصد بيان مدى فعالية كل منهما في ترجمة هذا النوع من النصوص.

الكلمات المفتاحية: الترجمة الآلية، النصوص التقنية، دليل الإستعمال، ريفرسو، قلوسب.

# جامعة قاصدي مرباح ورقلة

كلية الآداب واللغات قسم اللغة الإنجليزية وآدابها



# مذكرة مقدمة لاستكمال متطلبات نيل شهادة الماستر

ميدان: الآداب واللغات الأجنبية مجال: الترجمة وعلم الترجمة تخصص: إنجليزي - عربي

## <u>بعنوان</u>

دور برامج الترجمة في ترجمة النصوص التقنية " دليل الأجهزة الإلكترونية " دليل الأجهزة الإلكترونية " REVERSO" أنموذجا

## <u>تحت إشراف الأستاذة:</u> الأستاذة دليلة مسلوب

من إعداد الطالب: بهدي حمو

نوقشت علنيا يوم: 2016/05/21

# أعضاء اللجنة:

الأستاذة ليلى يحياوي، جامعة ورقلة، رئيسا الأستاذة دليلة مسلوب، جامعة ورقلة، مشرفا ومقررا الأستاذ الدكتور محمد كوداد، جامعة ورقلة، مناقشا

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