

UNIVERSITY KASDI MERBAH OUARGLA Faculty of Letters and Languages Department of Letters and English Language



Dissertation
Academic Master
Domain: Letters and Foreign Languages
Major: Translation
English/Arabic/English

Prepared by:Lalmi TEDJINI

Zinelabidine GHEZAL

Title

Localization in Translating Technical Texts from English into Arabic Case of Tools and Equipment Rendition

Submitted in Partial Fulfillment of the Requirements for the Degree of Master in Translation Arbic English Arabic Publically defended on : 15th June 2019

Before the Jury:

• Dr. Samira SAYAH LEMBAREK,

Chairwoman. UKM- Ouargla

• Prof. Dr. Djamel GOUI,

Supervisor. UKM- Ouargla

• Dr. Mohamed KOUDDED,

Examiner. UKM- Ouargla

Academic Year: 2018/2019



جامعة قاصدي مرباح ورقلة كلية كلية كليسة الآداب واللغات قسم اللغة الانجليزية وآدابها



مذكرة ماسترأكاديمي ميدان: الآداب واللغات الأجنبية اختصاص: الترجمة إنكليزي - عربي - إنكليزي

> من إعداد: تجيني العلمي غزال زين العابدين

بعنوان

الاقلمة في ترجمة النصوص التقنية من الإنكليزية إلى العربية دراسة حالة تسمية الأدوات و المعدات

مذكرة مقدمة لاستكمال متطلبات نيل شهادة الماستر في اختصاص الترجمة عربية إنكليزية عربية

أمام اللجنة المكونة من:

- ✓ الدكتورة. السايح لمبارك سميرة رئييسا. جامعة قاصدي مرباح ورقلة
- ✔ الأستاذ الدكتور. قـوي جمال مشرفا. جامعة قاصدي مرباح و وقلة
 - ✔ الدكتور. كوداد محمد مناقشا. جامعة قاصدي مرباح ورقلة

السنة الجامعية: 2018 / 2019

DEDICATION

All praise to Allah who has guided and helped us

We dedicate this modest work to:

Our Parents who supported us over the years

Our dear wives who continuously encouraged us

Our brothers, sisters and both big families

and to all our colleagues

We will never forget your continuous help and aids

ACKNOWLEDGEMENTS

First of all, the wittiest recognition goes ahead to the munificent God.

This thesis would never be accomplished without the guidance and of our supervisor; we would like to express our deepest thanks to Prof. Dr. Jamel GOUI, for his guidance and his great patience with each one of us. We are grateful to his support and contribution, also for being kind enough to accept directing this work despite all his academic engagements

We should thank the Board Examiners for proof-reading and examining

We should thank the Board Examiners for proof-reading and examining our paper.

We also would like to express our sincere thanks to all our teachers who never hesitate to give help whenever needed.

Abstract

This study aimed at finding the influence of localization on translating technical documents and finding a way to reach a standard final translation, which can be understood to all the Arabs despite their locale. The study was based on technical documents extracted from the HSE documents in the industry of oil and gas (rigs) of the IDC company. The translation was into Arabic by two translators from two distinct locales (Iraq and Algeria). A comparison between two translations was used to conduct this research. Localization is to target the audience with all its specific features relating to its locale. For example: when you deliver a translation for an Egyptian client, it should be different for a Tunisian client. Consequently, the eastern Arab countries translators used the borrowing method and the literal translation in translating technical texts. On the other hand, the western Arab countries translators used the original Arabic equivalence for the technical terms and expressions.

Keywords: technical translation, localization, equivalence

الملخص

تهدف هذه الدراسة لبحث تأثير الأقلمة في ترجمة الوثائق التقنية وإيجاد طريقة للوصول الى ترجمة نموذجية مفهومة عند كل متحدثي اللغة العربية بغض النظر عن أمكنتهم المختلفة. واعتمدت الدراسة على وثائق مستخرجة من وثائق الحماية والأمن الصناعي في حقل المحروقات (الحفارات) للشركة العراقية للحفر. ترجمت الوثائق الى اللغة العربية بواسطة مترجمين من منطقتين مختلفتين (العراق والجزائر) ولإجراء هذا البحث استخدمت طريقة المقارنة بين ترجمتين. الأقلمة هي مخاطبة المتلقي مع جميع الاعتبارات المتعلقة بمنطقته المميزة له. مثلا الترجمة لزبون مصري تقتضي حتما الاختلاف عن الترجمة لزبون تونسي. وعليه كانت ملاحظتنا عن مترجمي الدول العربية المشرقية استعمالهم لطريقة الاعارة والترجمة الحرفية عن ترجمتهم للنصوص التقنية وفي المقابل يميل مترجمو الدول المغاربية الى ايجاد المقابل الاصلي في اللغة العربية عند ترجمة الألفاظ والعبارات التقنية.

كلمات مفتاحيه: ترجمة تقنية ، الأقلمة ، المكافئ

Résumé

Cette étude vise à investiguer les influences de la localisation sur la traduction des documents techniques et pour atteindre une traduction finale comprise par tous les arabes nonobstant leurs régions différentes. Cette étude est basée sur des documents techniques qui sont extraits des documents HSE de l'industrie des hydrocarbures (appareils de forage) de l'entreprise Irakienne de forage. La traduction a été vers l'arabe par deux traducteurs venus de deux régions différentes (l'Iraq et l'Algérie). La méthode de comparaison entre deux traductions a été utilisée pour faire cette recherche. La localisation est de viser les récepteurs en considérant toutes ses particularités régionales. Par exemple, la traduction pour un client Egyptien inévitablement se diffère de celui pour un autre client de la Tunisie. Par conséquent, les traducteurs des pays arabes de l'est utilisent l'emprunt et la traduction mot à mot dans la traduction des documents techniques, mais les traducteurs des pays arabes de l'ouest essaient de trouver l'équivalent pour les termes et les expressions techniques.

Mots clés: traduction technique, localisation, l'équivalent.

List of Figures

Figure 1: The original instruction sheet in ST and TT	30
Figure 2: The instruction sheet in ST and Algerian Arabic Translation	31
Figure 3: A clamp	32
Figure 4: A shackle	33
Figure 5: A catwalk	34
Figure 6: Heart massage method	35
Figure 7: A wind sock	36

List of Tables

Table 1: Examples about transcription	12
Table 2: Examples about naturalization	13
Table 3: Examples about translation	13
Table 4: Examples about derivation	14
Table 5: Examples about neologisms	15
Table 6: Some differences between Brazilian and European Portuguese	22
Table 7: Some differences between Canadian and European French	22
Table 8: Translation variations at lexical level	32

List of Abbreviations

Abbreviation	Expression
AD	Anno domini
DD	Day
e.g	Exempli gratia
etc	et cetera
HSE	Health Security and Environment
H2S	Hydrogen Sulfide
IDC	Iraqi Drilling Company
LISA	Localization Industry Standard Association
MBC	Middle East Broadcasting Center
MM	Month
MSDS	Material Safety Data Sheet
NOC	North Oil Company
P	Page
SOC	South Oil Company
ST	Source Text
TT	Target Text
UK	United Kingdom
USA	United States of America
YYYY	Year

Table of Contents

Dedication	I
Acknowledgments	II
Abstract	III
List of Figures	V
List of Tables	VI
List of abbreviations	VII
Table of Contents	VIII
Introduction	01
Chapter I: Translation of technical documents	05
Introduction	06
1. A brief history of technical translation	07
2. Definition of technical translation	09
3. Characteristics of technical text	11
4. Methods of translating technical texts	12
4.1. Transcription	12
4.2. Naturalization	13
4.3. Translation	13
4.4. Coinage	14
4.4.1. Revival	14
4.4.2. Derivation	14
4.4.3. Neologisms	15
Conclusion	15
Chapter II: localization & its effects on translating	technical
documents	16
Introduction	17
1.Definition of localization	17
1.1.Linguistic definition	18
1.2.Technical definition	18

2. Localization in translation studies	19
3. Localization in one language	21
3.1.In Portuguese.	22
3.2.In French	22
4. Basic Requirements of Localization	23
4.1.Text Format	23
4.2.Images and Colors	24
4.3.Local Format for dates	24
4.4. Currencies, Numeric and measurements formats	24
4.5.Legal requirements and regulations	25
Conclusion	25
Chapter III: Comparative analysis of two Arabic	translations of the
safety instruction document of the Iraqi Drilling Con	mpany26
Introduction	27
1.Methodology	27
2. Corpus Definition	27
3. Corpus Discussion	28
4. Analysis of the Corpus	28
4.1. Methodology of the analysis	28
4.1.1. Lexical analysis	29
4.1.2. Expression Analysis	34
Conclusion	37
Conclusion	38
Bibliography	41
Glossary	44
ملخص الدراسة	47

INTRODUCTION

Technology has always contributed in resolving different humanity problems especially in our modern time where it played a crucial role in easing the communication between people and communities. Inventions and discoveries also helped people change their lifestyle. Translation was the only resort for some societies to obtain the technology and reach the peak of civilization as the other societies did. However, translation of sciences and technologies is not like other types of translation. Thus, translating the English content into Arabic should take in considerations all the specific features of all distinct dialects and different cultures.

1. Statement of the problem

This study tries to investigate and understands the effects of the phenomena of localization on process of translating technical documents through the comparative study of an English text translated into two different Arabic versions by two translators from two different countries; Algeria and Iraq, for the purpose of finding differences as an impact of localization.

2. Aims of the study

The study aims at distinguishing the type of technical translation from other types of translation and to know its distinctive characteristics. It also aims at finding the influence of localization through examining the process of translating HSE documents from the Iraqi Drilling Company, as an example of technical documents.

3. Research Question

Main Question

 Can we reach a final a standard translation understandable by all the Arabs despite their cultural and geographical differences?

Sub-questions

- What is the notion of technical translation and what are the main characteristics of a technical text?
- To what extent the localization can influence the translation of technical documents?

4. Hypotheses

In an attempt to answer the questions raised in this study, the following hypotheses are:

There is clear influence on the translation of technical documents and it is on two levels:

- Lexical level
- Expressions level

Concerning the main question, it is possible to reach a standard translation understandable by all the Arabs despite their differences.

5. Motivations

- As we worked previously in the oil and gas industry, we hoped to really
 contribute to the enhancements in the field by studying the problems raised
 by workers in the field especially what concerns the equipments and the
 different tools.
- To help update the technical Arabic language.
- To help improve the methods used by technical documents translators.

6. Methodology

To find a solution for the raised problems, a comparative study between two translations was conducted for texts and technical documents taken from the Iraqi drilling company (IDC), those texts are brochures, reports and safety alerts for HSE in drilling rigs. The first translation was by the Iraqi translator while the second was by an Algerian translator. And for the sake of facilitating the task, the comparison was divided into two levels: lexical and expression.

7. Structure of the study

The work was divided into two parts: theoretical and practical

The theoretical part was for the sake of studying and investigating the theoretical details of the subject and to explain the different notions that concern the study. And it was divided into two chapters:

- ♣ The first chapter: about the notion of technical translation and its characteristics.
- ♣ The second chapter: about the notion of localization and its influence on translating technical documents.

The practical part: this part was dedicated to the comparison between the Iraqi and the Algerian translation.

8. Limitations of the study

- ♣ Lack of references retaining translation studies which was a serious obstacle to conduct this research.
- Financial problems due to the geographical distances.
- **♣** Sampling: two Arab countries out of 22 countries.

Chapter I

Translation of Technical

Documents

Introduction

Over the past century, science and technology developed in a rapid way all over the globe. The need for development remained the first priority for mankind to achieve continuity and durability for life. Over the years, the world witnessed a tremendous development in the field of industry, medical science and so many other disciplines. This will lead inevitably to the creation of new aspects, notions and terms. However, the huge number of languages in the world created a dire need for communication in order to dislodge difficulties that might hinder the progress. Hence, translation played the role of the bridge between civilizations.

At the beginning, translation focused more on literature and arts rather than science and philosophy. However, in the mid 18th Century, when the industrial revolution began in Europe, the translation became more specialised regarding diversity of disciplines while English was considered as a global lingua franca. Nowadays, the use of English is growing worldwide for international communication and the technical translation rose among other types of translation. Also, Gouadec (translation as profession, 2007) subcategorised the technical translation as one of the specialised translation types (p.28). Today, it is widely spreading as it was cited by Marin Adina MATROZIMARIN in her book "Standards and Difficulties in Technical Translation" that "according to the surveys, technical translation accounts for some 90% of the world's total translation output each year". One of its categories is the oil and gas field translation. The countries concerned with this field are providing a huge importance to this specialised domain which is one of the primary interests in Arab countries due to

their big reservoirs of natural resources. The translators of this field should be highly skilled and very accurate when dealing with words, context and general meaning.

1. A brief history of technical translation

The need for communication was an essential part in history of social life. Thus, translation played a crucial role to spread ideas and information among people of different cultures by transferring knowledge and creativity in several societies(Goui, D 2017). And it is essential to the development of technology. In other words, without translation, technologies cannot be widely spread.

It was very clear that translation was the keyword for technical contacts during the quest for development. The first phase of the technical translation was in the Abbasid Era, the Caliph El Mansour (714 AD - 775 AD) who was very eager for sciences and philosophy, ordered his messengers to travel to Constantinople asking for wisdom books and sciences from their emperor, this last was very generous by sending him books of Euclid and other books of sciences. The Caliph motivated his scholars to translate books from Syriac and Indian languages into Arabic. He was the founder of Bayt Al-Hikmah "house of wisdom", which was the first school of translation. However, it was at the end of the 12th Century when technical translation reached its peak. Several works of Eastern civilization were collected by Western societies when Latin was considered as a lingua franca. Books from Greek were translated into Latin. At that time the technical translation was firstly applied in the translation of "Organon" or so called "new logic" of Aristotle by James of Venice in the period 1125–1150. After that, Eugene from Sicily translated the book "Almajest" of the Greek philosopher "Ptolemaeus" who was also an astronomer, mathematician and geographer. (Khalaf Sondos Zidan, Missions access to books and scholars in the Abbasid period, 2009).

Moreover, the 12th Century was a period when translation occupied a leading role in linking Eastern civilization to the Western world in several domains such as astronomy and philosophy (book of Al-farabi "Ihsaa al Oloum" and book of El Ghazali "Makassid al Falassifa" were translated into Latin between 1135 and 1153.

In 13th Century, when Constantinople has fallen by the Latin in 1204,technical translation was very interesting due to the transfer of Greek books into Europe. Passing by the far Western side of Europe, when the Muslim conquest reached Al-andalous (Spain), the foundation of Toledo school of translators played a fundamental role in the evolution of technical translation (Daoudi Mustafa, translation in Al-andalus, 2012). This school engaged at that time to transfer the Arab and Greek civilization works to the central West. Books of Avicenna, Ibn al-haytham were translated into Latin by Gerard of Cremona (Gerardus Cremonensis; 1114 – 1187) who was originally from Italy.

In 14th Century, owing to the printing press machine, Muslim scholars like al-Farabi, Averroes and Ibn Khaldun became well known and their works were a cradle to the Renaissance Era (Between the 14th and the 17th centuries). Their works were published in all over the Western world which reached its peak relying on the technical translation of Muslim scholars books. This paved the way to the nationalism movement which led Europe to be divided into many nations; consequently, their books were translated into those different languages such as French, Italian, German and Spanish.

According to the former historical facts, the Eastern civilization inspired the west and produced the prominent works in Mathematics and Sciences, which were seized by Western civilization in the Renaissance Period by means of translation. Books like "Almanadir" of Ibn alhaytham that tackles the theory of the atoms and molecules has been translated to several European languages. Avicenna book of "Al qanun fi at-

tibb" has been used almost in all the European universities, without forgetting Alkhwarizmi books pertaining to Physics and Algebra.(Khalaf Sondos Zidan, 2009).

The innovation of the printing press machine and the continuous use of paper over the years were very beneficial to the nationalism movement. It was the first step for European countries to module their own history. Nowadays, every year, new words and notions are consistently created all over the world. It is the need for development what makes translation studies very fruitful to contribute in easing the task of professional translator to cope with specialised and technical domains.

2. Definition of technical translation

Many definitions have been given to the technical translation. The Cambridge Advanced Learners' Dictionary Third Edition (Elizabeth Walter) definition for the word "technical" is relating to the knowledge, machines, or methods used in science and industry.

In addition, the Oxford Learner's Pocket Dictionary (Victoria Bull): concerned with the practical use of machinery, methods, science or industry.

From the other hand, the Longman Dictionary of Contemporary English (Michael Mayor) defines technical language as (the language that is difficult for most people to understand because it is connected with one particular subject or used in one particular job).

However, it was very clear that definition of technical translation cannot be restricted to dictionaries due to its diversity. Daniel Gouadec (2007) defines technical translation as "specialization in its own right. It covers the translation of any material belonging to a particular area of knowledge, technical field or technology...... to some

people, technical translation is the translation of anything non literary" (Translation as a Profession, p.23).

In addition, Ghazala states in his book translation as problems and solutions (1995) that:

"Technical translation is the translation of scientific terms of all kinds: medical, physical, chemical, mathematic, mechanical, technological, biological, agriculture, computer, internet and other terms of the various branches of science" (p.156).

Therefore, the technical translation can be defined as a part of specialized translation, this translation is considered according to Peter Newmark (1988) as "non-cultural and therefore universal" (p.151). He also pointed out that: "Technical Translation is primarily distinguished from other forms of translation by its terminology".

However, as Jody Byrne mentioned in "The Journal of Specialized Translation", issue 11, January 2009 "Technical translation has traditionally been viewed in a way which belies its complexity and importance, namely that it is purely about conveying information and that as long as the 'cargo' of information was there, everyone would be happy and the translator would be paid.

Moreover, Kovalyova (specialized text: semantic difficulties of translation, n.d.) argued that:

the language of science is governed by the aim of functional style of scientific prose, which is to prove a hypothesis, to create new concepts, to disclose the internal laws of existence, developments, relations between different phenomena, etc. the language means used, therefore, tend to be

objective precise, unemotional, and devoid of any individuality; there is a striving for the most generalized form of expression (p.190).

3. Characteristics of technical text

Technical literature surrounds people in their daily life, starting with the patient information leaflet enclosed to the medicine and finishing with the list of ingredients described on yogurt pots. Principally, technical texts are designated to spread information about advances in technology and science among experts and specialists, but consequently they are widened among non-professionals as well. (Simkova, translation of chosen technical text and analysis of the method used during the translation process, 2009).

A technical text can be distinguished by some features, which cannot be found in any other type of text; those features would be summed up as follows:

- 1. It refers to a highly specialized field or domain (e.g. law, finance, computer science, telecommunications, etc.).
- 2. It targets a particular audience public through specific dissemination channels and/or used by specialists in specific circumstances. (Gouadec, p.28)
- 3. It has an informative function not only in particular field of science, but also in broader sense, because administrative can considered as scientific style as well.
 (Eva Mastna, the nature of scientific/technical texts from point of view of translation studies, 2010, p.14).
- 4. It uses a specific terminology: each scientific field of human activity generates the greatest amount of new words. As a result of constant efforts to discover essence of things and phenomena. There is a need to name new concepts subsequently by means of coining new words. (Mastna, 2010, p.14).

Simkova (2009) pointed out that:

The most significant lexical feature of scientific text is the usage of nouns. Scientific style is conceptual; it means that typical parts of speech used in technical text are technical terms-nouns or appropriately adjectives. To make the text unambiguous and clear, selection of the words should be carefully made, subjective terms are not appropriate.

4. Methods of translating technical texts

According to Ghazala, arabization, which is translation of technical text into Arabic is made by one of those methods:

4.1.Transcription:

It is also called interference. It is the literal spelling of English term in Arabic letters as it is exactly pronounced.

English	Arabic
Bank	بنك
Radio	راديو
Virus	فيروس
Television	تلفزيون
Internet	انترنت

Table 1. Examples about Transcription method

4.2. Naturalization

This method is based on adapting the English term to Arabic pronunciation, alphabet and grammar, by modifying its pronunciation only partly, changing the spelling of one or more of letters into close Arabic ones, and using it in singular, plural, masculine, feminine or verb.

English	Arabic
Technological	تكنلوجي
Magnetic	مغناطيسي
Hydrogen	هيدروجين
Oxidated/oxadized	مؤكسد

Table 2. Examples about Naturalization

4.3.Translation

It is the transmission of English technical terms into Arabic, using words that are already parts of Arabic language vocabulary.

English	Arabic
Geology	علم الأرض
Geometry	هندسة
Valve	صمام
Anaesthetic	مخدر
Radiation	اشعاع
Refrigeration	تبريد

Table 3. Examples about Translation

4.4.Coinage

This is the best method of arabization, it is the introduction of new terms that have not been in use in Arabic language beforehand. New Arabic terms are coined in three main ways:

4.4.1. Revival

Revival, also called engendering, it is the use of an old, dead word with new meaning. This means that the old word is given a new meaning, with its old meaning being usually ignored.

"is an old word used to mean 'a line of camels'. Now, it is used to arabise the well-known word 'train' whose compartments look like a line of camels in shape.

4.4.2. Derivation

Arabic is described as the language of derivation. It is based on measurements(قياس). There are in the Arabic language measures against which words are derived and gauged. The most famous are those of 'instrument names' "أسماء الآلة", such as (مفعالة) (مفعالة) (مفعالة) in particular. A good number of technical terms have been derived through these measures.

English	Arabic
Laboratory	مخبر
Guillotine	مقصلة
Washing machine	غسالة
Drill	مثقاب

Table 4. Examples about Derivation

4.4.3. Neologisms

They are the new words, ideas and expressions which were not known in classical Arabic. They comprise the major number of Arabized technical terms, their door is always open to receive newly arabised words to match the rapid development, computer and internet sciences over the world.

English	Arabic
Psychology	علم النفس
Computer	حاسوب
Software	برمجيات
Data processing	معالجة المعطيات
Electricity	كهرباء

Table 5. Examples about Neologisms

Conclusion

This Chapter mainly shed light on the history of Technical Translation. Owing to the continuous progress and development of technical field, it was very urgent to adapt a new type of translation to respond to these new exigent needs. The role of translation in the technical domain is crucial. Consequently, it is in some specific domains such as Oil and Gas field considered as a bridge to transfer new technologies all over the world, especially in the Arab region which is very rich in natural resources. In addition, it was obvious to some translators that dealing with this kind of specialised texts is not only restricted to provide the equivalence in the Target Language but also to simplify the information for a specific range of readers. Furthermore, some difficulties can obstruct the translator to reach an appropriate and an accurate translation. However, knowing the basic characteristics of a technical text would help the professional translator in his job to make a good translation.

Chapter II

Localization & its Effects on Translating Technical Documents

Introduction

Today, translation is an absolute necessity in our world. Thus, the role of a translator is a complicated task. Making a comparison between two translations would be useful to evaluate the factors that may affect the translation as a product. For the purpose of studying the differences between two versions of Arabic translations of the English text, those two versions are from two different regions of the Arab world, which they have distinct cultures that are clearly manifested in their language. When comparing, many challenging issues will arise such as culture-specific items, lexical ones, etc. However, it is obligatory to emphasis on the role of localization as an influencing factor. This latter, in its broad sense, is related to marketing and websites engineering, digital media and computer products...etc. Meanwhile, it has a peculiar sense pertaining to translation studies. A brief look at both definitions would be necessary because they are connected and related to each other.

Localization develops recently with globalization and the emergence of internet as an important means of communication. Also, with the beginning of marketing products and services using digital technologies which allow companies reach far-distant millions of clients of different cultures and different languages. Besides, it was very difficult to find documentation and literature related to the topic of localization because studies and researches are very little and also because it is relatively new field of activity.

1. Definition of localization

The term must be investigated linguistically (the literal definition of the word) and technically (relating to a particular subject).

1.1.Linguistic definition

According to Online Oxford Dictionary localization is the process of making something local in character or restricting it to a particular place.

The term "Localization" is derived from the verb (to localize) which means, according to Cambridge advanced learner's dictionary,

- 1. To limit something to a particular area.
- 2. To find the position of something

And according to Longman Dictionary of Contemporary English, the Verb (to localize) is:

1. To find out exactly where something is:

Eg: a mechanic is trying to localize where the fault is.

2. To limit the effect that something has, or the size of area it covers:

Eg: they hoped to localize the fighting.

And this second definition is the most close to the notion that we are investigating.

1.2. Technical definition

It is defined as the process of modifying a product for a specific locale. (Sandrini, 2008).

Localization is the process of customizing a product for consumers in a target market so that when they use it, they form the impression that it was designed by a native of their own country. And by reflecting this definition on translation we can say that localization is to make the translation (as a product) look like original and gives it all the cultural elements of the locale. This usually involves making it both linguistically and culturally appropriate for the target audience.

2. Localization in translation studies

Apart from separating the concept of localization and translation, it is very important to show the relation between them in the light of humanities studies.

It is very clear that translation and localization share the same objective of transferring a meaning to a specific culture. However, localization is about so many more things than simply transferring the meaning from one language into another, as Anastasiou & Shäler (2009) pointed out:

Translation is the text transfer from a source to a target language ... besides, that text is often accompanied by pictures, animations, logos, diagrams and other visual effects. We often see that visual effects change when they are transferred to a target language. That is in principle what localization means; it goes beyond the translation and adapts the source content to the culture of the place where the translated text is to be used. (p. 02).

The basic definition of translation is to convert the source text into an equivalent text in the target language. It is actually considered as just one of the processes entailed when doing localization work. For instance, in the past years, the Company Coka Cola launched their advertisement campaign by putting names of ordinary people on the bottles with the expression "Share a Coke with John, Brian, and Jack...etc. As a clear example of using localization to promote their product in Algeria, they used names such

as Samir, Nassim, Zahra... etc. Thus, if these bottles were commercialized in Algeria by the names of John and Jack, the profits will surely be low.

Furthermore, the Localization Industry Standards Association "LISA" (as cited in Anastasiou & Shäler, 2009) defines localization as follows "localization involves the adaptation of any aspect of a product or service that is needed for a product to be sold or used in another market". Localization is more than translating a text or giving the sameness of a sign in another language or culture. It goes beyond words. The Online Multilingual Magazine (as cited in Lako 2012) refers that "True localization considers language, culture, customs, and the characteristics of a Target Locale". Where the term "Locale" means what was defined by Anthony Pym as "those features of the customer's environment that are dependent upon language, country/region and cultural conventions (Pym, 1999). For instance, an American company, that manufactures coffins for funeral is promoting their newest product, will use in the advertisement people wearing black suits. However, if the same Company will promote their products in China, it is necessary to use people wearing white suits because the white color is used in funerals in China.

The notion of localization in its general concept is known as the process for marketing as it was summarized by Esselink (as cited in Costales, 2009) that translation is only one of the activities in localization, in addition to translation, a localization project includes many other tasks such as project management, software engineering and desktop publishing From an economic point of view, the localization process is remarkably lucrative "the localization offers a wide range of benefits for companies The global investments in localization accounts for five (5) billion dollars per year, although if all the vertical markets were included this amount could be as high as fifteen (15) billion dollars" (Costales, 2009, cited in LISA, 2007).

Also, Thibodeau (as cited in Costales, 2009) demonstrated that American Software Companies obtain fifty (50%) percent of their incomes from international sales. This means that localizing a product will automatically lead to gain from the new markets in different regions in the world.

3. Localization in one language

As mentioned before, localization is adapting a product, service or something to the needs of a given locale. This locale will vary according to the region, culture, religion...etc. However, LAKO Cristian, an assistant in Petru Maior University, Targu, Mures, cited in his article untitled "Localization and translation studies" that:

"American English and British English have both; their language and culture particularities due to the different environmental, historic and economic conditions. The same is true in French. Canadian French is slightly different from that used in France and Belgium. Customs can lead to even more particularization, as customs can vary from region to region." (p. 04).

Also, it is very common the culture differences in the Arab world; for example, entertainment broadcast is using the knowledge that there are more than twenty-two Arab countries with so many specific range of audiences, MBC Channel (Middle East Broadcast Channel) has started creating, over the last decade, several channels such as MBC Masr and MBC Iraq with different logos and programs in order to provide a product with the intention of being created specifically for the target audiences. And this is the main principle of localization. Such examples paved the road to tackle an important issue about dialects in localization. "When translating a written material in any form, it is critical to choose the right dialect in order to maximize the return on your

world has several dialects partitioned according to the geographical regions or political borders. For instance, the use of the expression "So Much" to promote for a service or a product in order to attract costumer and consumers in Algeria, the said company will use "بزاف", in Tunisia, they will use "بزاف", in Egypt, they will use "بزاف". this dialect differences are not restricted only to the Arab world, it also can be found in other languages. "Some of more common languages when these very important distinctions arise are French, Spanish, Portuguese and Chinese" (Guide to Translation and Localization, 2009, p.49).

3.1.In Portuguese

ENLISH	BRAZILIAN	EUROPEAN
	PORTUGUESE	PORTUGUESE
To access	Acessar	Aceder
Mouse	Mouse	Rato
Screen	Tela	Ecra

Table 6. Some differences between Brazilian and European Portuguese

3.2.In French

ENLISH	CANADIAN FRENCH	EUROPEAN FRENCH
Telephone Handset	Le récepteur	Le combine
You're welcome	Bienvenue	De Rien (and several others)
Blueberry	Le bleuet	La myrtille
Soccer	Le soccer	Le football
Snowbank	Le banc de neige	La congère
Go shopping	Magasiner	Faire des courses

Table 7. Some differences between Canadian and European French

The above tables show that differences can exist in the same language but in different regions. It would play a significant role when tackling localization. It is now a well-known fact that it is a must to know the basic information about the target locale in order to insure the best quality of your localization task. "Knowing the target audience will help determine if you need Spanish for Spain or Mexico, Portuguese for Portugal or Brazil... and even English for UK or U.S. Translating for the wrong country or region could mean your message is not communicated in a culturally appropriate manner" (Guide to translation and localization, 2009, p.127).

4. Basic Requirements of Localization

To perform a well designated localization process, several principles and requirements must be taken into consideration "In addition, localization involves a series of tasks and activities that have to be tackled in order to consider a product to be successfully adapted" (Costales, 2009,p. 08).

The following items will illustrate the main points that must be reviewed before localizing:

4.1. Text Format

It is considered as one of the important keys for translation and localization. If the original program or service is in Latin (French, English...etc) it is very delicate to transfer it into Arabic and Chinese; the encoding and language characters are not the same (In Arabic writing will be from right to left).

4.2. Images and Colors

It is very important when dealing with pictures "the use of images constitutes a potential danger when adapting the text to a different locale" if we will promote for a specific brand of European cheese in India, it is certainly that the "Cow" is not used as they are sacred. The colors also must be taken seriously when localizing; e.g. the yellow is positive color in United Kingdom as well as United States of America. However, in France, this color is associated with jealousy, betrayal and weakness (in the 10th Century, the French painted the doors of traitors and criminals in Yellow).

4.3. Local format for dates

The Gregorian calendar will be shifted to Muslim Calendar when targeting Arab World. In Addition, English format for date in the United States is: MM.DD.YYYY. However, in the United kingdom and most of the European Countries will be shifted to be: DD.MM.YYYY.

4.4. Currencies, Numeric and Measurements formats

The Currencies must be changed when dealing with localization according to the currency used in the target region. In addition, the use of numbers varies from one region to another. Also, the numbers will be changed depending on the target locale. For instance, the numbers in USA are written as 1, 2, 3...etc. However, if the target locale is in Saudi Arabia, the numbers will be written as \cdot , \cdot , \cdot , \cdot , ...etc.

For measurements, it is very common that differences arise when dealing with localization between United States of America and mostly the rest of the world; in order to use Centimeter, meter, kilometer and liter in USA, it is a must to change them to Inch, Feet, Mile and Gallon, respectively.

4.5. Legal requirements and regulations

One of the questions that the Translator / Localizer must answer is what are the legal and regulatory requirements in the target markets? Localization process to a target locale must pay attention to the legal requirements. "For instance, in video games, blood must be removed (or given a green color) in Germany and Poland in order to meet with the legal regulation" (Chandler, 2005, cited in Costales, 2009).

Conclusion

Owing to people's urgent need for translation to be global, scholars introduce localization. Indeed, the need for localization nowadays is growing rapidly since its application will often bring benefits both to industries and customers. This Chapter shed light on localization from a marketing perspective as well as most importantly, from a linguistic perspective. It is clear that translation is regarded as a part from the localization process in general. One of the best conventionally and fully accepted concepts and ideas that are unique, and referring to localization as a wider process than translation and which includes a wide range of additional tasks. Although many people can find it difficult to separate localization from translation, it is necessary to show that localization deals also with the semiotic and non-textual elements that any product may convey; colours, images, icons and currencies...etc.

However, it is also a fact that translation is considered as the important and undeniable task when localizing; which allows it to take the huge and considerable part when talking about localization process. In other words, the localization process relies on translation. The language aspect is covered in larger guidelines by the translation process and not surely it is considered to be the most time consuming part within the process of localization.

Chapter III

Comparative Analysis of Two Arabic Translations of the Safety Instruction Document of the Iraqi Drilling Company

Introduction

Analyzing a corpus is one of the main methods to investigate a translation field phenomenon. The essential idea behind a comparable corpus is that it contains a selection of target language texts that are different in some features which allows finding some differences. A corpus is not a random collection of texts but rather a collection of texts that have been selected according to specific criteria in order to meet the needs of the research at hand; in our case: the influence of localization in translation of technical documents.

1. Methodology

This research is basically about tackling the localisation from the view of translation studies. It is required to point out the strategies, methods and techniques that would be used while translating from English into two Arabic versions of translation from two different regions. Furthermore, the examination and analysis are studied from comparative and analytical perspectives. These examined texts are originally in English and already been translated into Arabic by the company translator who is originally from Iraq. In addition, and in order to establish a comparative discussion method, a second Translation into Arabic has been prepared by an Algerian translator by using the domestication in order to emerge the differences between both Arabic Translations.

2. Corpus definition

The corpus used in this study is extracted from Instruction Documents of the Iraqi Drilling Company (IDC). They are full of technical terms and expressions. Iraq can be considered as a leading country at the level of petroleum industry. It proved its important place in the international oil market both historically and in the present time.

In the recent years, war, economic sanctions and civil strife have prevented Iraq from substantially increasing its oil production capacity. But specialists agree that the oil potential of Iraq is significant and could be a major factor influencing oil supply and pricing trends in the coming two decades. Moreover, with vast oil potential yet to be explored, future development could hold greater exploits in the domain if the country could control its political, economic and social challenges.

3. Corpus discussion

Iraqi Drilling Company (IDC) is one of the major fundamental formations of Ministry of Oil .IDC is an Iraqi National Company established in 1990 and the main purpose of its establishment is to limit the drilling and work over operations in one national company working on all geographical area in Iraq after that operations was directed by and be in charge of the extraction companies such as South Oil Company (SOC) & North Oil Company (NOC).

4. Analysis of the Corpus

The corpus that has been randomly selected from the Iraqi Drilling Company (IDC) Safety Instruction Documents will be analysed from different angles in order to illustrate the main orientations for both Arabic translation versions without forgetting to shed light on the translation methods as well as techniques that have been used by both Arabic translators.

4.1 Methodology of the analysis

The analysis and discussion will be carried out on lexical and expression levels as well as highlighting the techniques and methods used in both Iraqi and Algerian Arabic translations. However, it was noticed that some differences have been raised between

the original text in English and the Iraqi Arabic translation such as the numbering, punctuation bullets...etc. this will not be discussed below as it has no large impact on the translation studies especially for this research.

4.1.1 Lexical analysis

The first table that is mentioned below is an original fragment of a safe work instruction of the IDC Company prepared in English and translated into Arabic (Iraqi version). In addition, a second table consists of the Original English Text and an Arabic translation for the same text but in Algerian version. The analysis will focus on finding and reviewing the lexical differences between both Arabic translations (Iraqi and Algerian).

In addition, it is very important to mention that both Arabic translations for the below safety instruction documents were equivalent to the Original English Text by having approximately the same number of lines and words. This is due to the specifications and technicality of the original text which did not need to be explained or illustrated as for a literal text and it was one of the reasons behind selecting the methods of the two columns with the translation facing the original text.



DOC.NO.: (OH&SWIEXT11)

PAGE 7 of 14

SECONDARY RETENTION / SECURING DEVICE

- Safety Pins (split pin, cotter pin, spring pin, nappy pin etc)
- Locking wire / safety wire
- Spiral lock
- Web check
- Bolts
- Wire Ropes, chain and connector
- Shackles
- Or Any other best industrial practices

8. Restricted Access Area / Red Zone area Management

Definition of Restricted Access Areas (All the areas at site/rig floor are categories into three zones).

8.1. Red Zone Area:

 where the layout and activities of the area present significant risk of Personnel are being exposed to potential dropped objects under normal Circumstances. (Applicable for rig floor, V-door and Cat walk, Crane and Forklift areas)

7. ألتامين الثاني للأدوات المثبتة لأعلى

- مسمار السلامة بأنواعه
 - كلامبات
- سلك قفل / سلك السلامة
- سلك السلامة المزود بسبرنج
 - البراغي
- الحبال المعدنية، سلسلة والموصلات
 - الشدادات او الشيكلات
- أو أي غير ها من الوسائل المستخدمة لهذا الغرض

10. إدارة المناطق المحظورة / المنطقة الحمراء

وتقسم المنطقة المحظورة في موقع العمل بالكامل الى ثلاث دوائر او مناطق

10.1 المنطقة الحمراء

وتصنف المنطقة على انها منطقة حمراء عندما تكون الأنشطة بها الموجودة بها تشكل احتمالية عالية لتعرض العاملين الى خطر الاجسام المتساقطة في حالات العمل الاعتيادية مثل (أرضية الجهاز – منطقة الباب على شكل حرف الفي –منطقة سحب الانابيب (كاتووك) - الكرين – الرافعة الشوكية)

Figure 1: The original instruction sheet in ST and TT

7. SECONDARY RETENTION / SECURING DEVICE	. أدوات التأمين الثاني :
Safety Pins (split pin, cotter pin, spring pin, nappy pin)	 مسامیر السلامة بمختلف أنواعه
clamps	• مشابك
Locking wire / safety wire	• أسلاك القفل
Spiral lock	• القفل الحلزوني
• Bolts	• براغي
Wire Ropes, chain and connector	 الحبال أو السلاسل أو الروابط السلكية.
Shackles	• lakt
Or Any other best industrial practices	 أو غيرها من الوسائل المستخدمة لنفس الغرض.
10. Restricted Access Area / Red Zone area Management	 تسيير المناطق المحضورة/ المنطقة الحمراء
All the areas at site/rig floor are categorized into three zones.	سنف كل مناطق العمل الى ثلاث مناطق:
10.1.Red Zone Area:	10 المنطقة الحمراء:
Where the layout and activities of the area present	ي المنطقة التي يكون فيها احتمالية خطرتعرض العمال الي
significant risk of Personnel are being exposed to potential	جسام المتساقطة مرتفعا جدا في الظوف العادية مثل: أرضية
dropped objects under normal Circumstances. (Applicable	مل, الفتحة بشكل V, منطقة سحب الأنابيب
for rig floor, V-door and Cat walk, Crane and Forklift	
areas)	

Figure 2: The instruction sheet in ST and Algerian Arabic translation

The lexical analysis of this study focuses on finding the different aspects when translating terms and words into both Arabic versions. Some of the findings are showed in the following table:

The Term in English	1 st Arabic Translation (Iraqi Version)	2 nd Arabic Translation (Algerian Version)
Clamps	كلامبات	مشابك
Spiral Lock	سلك السلامة المزود بسبرنج	القفل الحلزوني
Shackles	الشدادات او الشيكلات	أغلال
Catwalk	كاتووك	منطقة سحب الأنابيب

Table 8: Translation variation at lexical level

It was very clear that several differences were raised between both Arabic translations. Also, several translation methods have been used to reach the exactness in translation. The Iraqi translators translated "Clamps" by using the borrowing method into (کلامبات). However, The Algerian Translator focused on providing the equivalence in the Target Language (مشابك). (See figure 3 below).



Figure 3: A clamp

In the second example of "shackles", the Iraqi translation was able to give the equivalence by translating it into (الشدادات). However, the translator in this case added the word (الشيكلات) as borrowed from English in order to avoid any ambiguity that the user may face when reading the word (الشدادات) which can be considered as new term for the same user. In the other side, the Algerian translation was very clear by using only the equivalence (أغلال). This last translation was based on finding the equivalence by checking the shape of this device. (See figure 4 below).

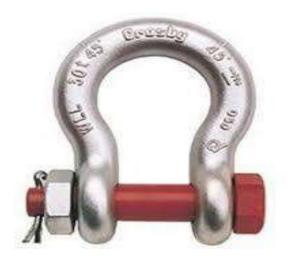


Figure 4: A shackle

In the third example, and according to the Iraqi translation, the borrowing method was also clearly used in this research. He used (کاتووك) to translate "catwalk". However, the Algerian translation was (منطقة سحب الأنابيب). This translation was based on exploring the main role of this element and what is the exact function of this rigging part. And this is why it was translated as (منطقة سحب الأنابيب). (See figure 5 below).



Figure 5: A catwalk

4.1.2 Expression analysis

After dealing with lexical differences, we will deal with expressions. Making a comparison between the two translations provided us with a list of some expressions that are translated differently as it is shown below.

Pattern 1

ST: If no heartbeat, applyheart massage.

إذا كان قلب المصاب توقف عن النبض، طبق تدليك القلب:(Iraqi Arabic Version)

في حال توقف نبضات القلب استعمل الانعاش القلبي الرئوي:(Algerian Arabic Version)

It is noticed that the Iraqi translator resorted to literal or word for word translation in the first example using "تدليك القلب" as an equivalent to « heart massage », which appear to be unfamiliar according to the Algerian version of Arabic or according to the "local". Therefore, the equivalent chosen by the Algerian translator was "انعاش قلبي , where he tried to describe and explain the meaning of this expression. Also, he added the word "رئوي" which does not exist in the source text but it explains that the operation consist of exhilaration and revivify of both; the heart and the lungs. And this style of translation may be considered as functional function-oriented translation. In

other words, the Algerian Translator tends to adapt the Equivalence Technique or Method when dealing with such notions. It is very clear that both translators (Iraqi and Algerian) share the same purpose of making it easy to their recipients to understand the meaning, though using different methods.



Figure 6: Heart massage method

Pattern 2

ST:Wind socks.

TT: (Iraqi Arabic Version): كاشف اتجاه الريح

TT: (Algerian Arabic Version):قمع ريح

In the case of "wind sock", the Iraqi translation tends to express the function of this tool, which is to detect the direction of the wind. And this method helps the receiver to better understand the tool even he didn't see it before. However, the Algerian translation tends to describe the form of the tool which gives a clear image to the receiver. In this case, it is noticed that localization is clearly used as a technique but not as a strategy. Both translators localized their translations to fit the recipient need. It might also be translated differently from the above translations if it is intended for other region. (See figure 7 below).



Figure 7: A wind sock

Pattern 3

ST: Third party personnel

موظفي شركة العمليات المصاحبة: (Iraqi Arabic Version)

and الشركة طرف ثالث: (Algerian Arabic Version)

The Third example is "third party Company" which means a company that provides an auxiliary product not supplied by the primary manufacturer to the end user (the two principals).

"شركة العمليات المصاحبة" was the choice of the Iraqi translator who tend to name the company by describing it as a provider of services. Whereas, the Algerian translation is close, this time, to the literal translation unlike the first example. The use of "طرف ثالث" indicates that there are forcibly two parties who take part in the contract. Some might comment it is merely word for word translation.

Word for word translation is the first to apply if it renders the same meaning and saves the essence of the expression.

Pattern 4

ST: MSDS material safety data sheet

TT: (Iragi Arabic Version): أوراق التعامل الأمن للمواد الكيماوية

TT: (Algerian Arabic Version):محيفة بيانات سلامة المواد

In this forth example, the two renditions of the expression "material safety data

sheet" are significantly different. The choice of word of the Iraqi translator was

depending on the context for example he added "الكيمياوية" according to the context,

which is to warn from the toxic gas h₂s where it is very common in scientific texts.

The translation of the Algerian translator saved the order of the words and he

chose "أوراق" instead of أوراق" as an equivalent for the word sheet. In this regard, the

Algerian translator considered that using adaptation, in this special case, is more

effective than using literal or word for word translations.

Conclusion

This chapter has tackled the overall analysis carried out for the corpora adopted,

taking into consideration the effects and some other factors that have been the cause

behind raising the differences between Iraqi and Algerian Arabic translations, for the

same English source text. It is noticed that the Iraqi translator tends to keep the

shocking elements in the process of translation for having the recipient quite

accustomed to dealing with such elements in the daily life. However, the Algerian

translator revealed to his recipient that finding the original equivalence in Arabic will

facilitate the process of understanding even if the terms are quite ambiguous for the

recipient. Accordingly, the Algerian translator is taking into consideration the language

enriching by dealing with terms which are newly created in source text and recently

translated into Arabic.

37

CONCLUSION

The important task of the translator, when dealing with such pure technical texts, is to confirm that the translation to be provided should be meaningful to the recipient but taking into consideration the recipient. The above mentioned facts are the reason behind finding the differences between Different Arabic versions of translations. However, these results that have been raised in this specific research are related to several historical, ideological and economical facts. It is undeniable that the Iraqi translator is using in such technical texts the translation methods of borrowing and literal translation. In the other side, it is noticed that the Algerian translator is using the original Arabic equivalence for such specific terms and expressions as it was clearly mentioned in the recent analysis for a set of facts; the historical facts in which the colonial heritage resulted the cultural and language dependency. The eastern Arabic countries (Iraq in this dissertation) are using English as a second language. However, in the Western Arabic countries (Algeria in particular), French is considered as the second language. In addition, English is considered as the Lingua Franca in the gas and oil field; the Iraqi translator is using only the Literal Methods when translating. If French was considered as the lingua franca in oil and gas domain, the borrowing and literal translation methods will be adopted by the Algerian translators and the Iraqi ones will provide equivalence in Arabic Language for all technical knowledge.

From another side, the economical fact played also a tremendous role in this subject; it is about defining the pioneer companies in this specific field. It is known for everyone that American and British oil and gas companies for exploring, Drilling and transporting are the leaders in this field. And because English is not considered as the second language in the Western Arab countries as it was said before, this will lead the translator to prove equivalence rather than borrowing or literal translation for Eastern Arab countries. As an example, the medical domain in Algeria is influenced by the French

medical field. This is the reason why French medical terms are frequently used in Algeria.

It is undeniable to bear in mind the effect of dependency when dealing with this kind of technical texts. It is very obvious that depending on English culture is widely spread in the Eastern Arab countries but not in the Western ones. More new terms and notions will be created in the source language which must be translated into different languages. But for this specific technical text, a unified Arabic translation can be reached if localisation would be studied as a technique not as strategy. This unified translation will be the result of comparing the equivalence as well as raising the differences that lead to create, even though, new terms and notions in Arabic. These terms will be initially adopted by a very small number of recipients but surely will be generalized for all recipients in all Arabic regions.

Bibliography

Books

Ghazala, H. (2008). Translation as problems and solutions. Lebanon: Dar El Malayin.

Gouadec, D. (2007). *Translation as a profession*. Amsterdam, the Netherlands :John Benjamins Co.

Ludwigsen, S. (Ed) (2009). *Guide to translation and localization*.(7th ed.). Portland, USA: Language Line Translation Solutions.

Mastná, E. (2010). *The nature of scientific/technical texts from viewpoint of translation studies*. (Unpublished Bachelor Thesis). Tomas Bata University, Zlín, Czech.

Newmark, P. (1988). A textbook of translation. London: Prentice-Hall.

Šimková, K. (2009). Translation of a chosen technical text and analysis of the methods used during the translation process. (Unpublished Bachelor Thesis). Tomas Bata University, Zlín, Czech.

Dictionaries

Bull, V. (2008). Oxford learner's pocket dictionary (fourth edition), Oxford University Press.

Mayor, M. (2009). Longman dictionary of contemporary English, Pearson Longman.

Walter, E. (2008). *Cambridge advanced learner's dictionary (third edition)*, Cambridge University Press.

Articles

Anastasiou, D., Schäler, R. (2010). Translating vital information: localisation, internationalisation, and globalisation. *Syn-thèses Journal*, *3*, 11-25.

Byrne,J. (2009). The coming of age of technical translation: an introduction. *The Journal of Specialised Translation*, 5 (11), 1-4.

- Fernández C.A. (2009). Translation 2.0. The localization of institutional websites under the scope of functionalist approaches. *CETRA Research Papers* 2008. 1-18.
- Khalaf, S.Z. (2009). Missions access to books and scholars in the Abbasid period. *Journal of Arabian Sciences Heritage*, 3 (8), 124-133.
- Kovalyova, E.M. (2015). Specialized text: semantic difficulties of translation. *Sumy State University*, 2, 190-191.
- Lako, C. (2012). Localization and translation studies. *Studia Universitatis Petru Major*. *Philologia*, 12, 202-208.doi:10.17684/issn.2393-1140
- Matrozi, M.A. (2015). Standards and difficulties in technical translation: a case study of the use of terminology in automotive engineering. *Language and Literature-European Landmarks of Identity*, 17, 238-245.doi:10.17684/issn.2393-1140
- Sandrini, P. (2008). Localization and translation. MuTraJournal, 2, 167-191.

APPENDIXES

Glossary

From English into Arabic

Glossary

English	Arabic
Abbasid Era	العصر العباسي
Arabization	التعريب
Aristotle	أرسطو
Averroes	ابن رشد
Avicenna	ابن سينا
Caliph	الخليفة
Catwalk	منطقة سحب الأنابيب
Clamps	مشابك
Coinage	صِيَاغَةُ الكَلِمات
Constantinople	القسطنطينية
Dialects	اللهجات
Dissemination Channel	قناة النشر
Domestication	التدجين
Drilling	التنقيب
Euclid	إقليدس
Globalization	العولمة
Instruction document	وثيقة تعليمات
Lingua franca	اللغة السائدة
Locale	المكان المحلي

Localization	الأقلمة
Neologisms	التعابير الجديدة
Ptolemaeus	بطليموس
Shackles	أغلال
Spiral lock	القفل الحلزوني
Syriac	اللغة السريانية
Toledo	طليطلة
Wind sock	قمع ریح

ملخص الدراسة

الاقلمة في ترجمة النصوص التقنية من الإنكليزية إلى العربية العربية دراسة حالة تسمية الادوات و المعدات

مقدمة

لطالما ساهمت التكنولوجيا بحل مشكلات البشرية المختلفة وخاصة في وقتنا الحاضر الذي احتلت فيه التقنية أهمية كبيرة حيث سهلت التواصل بين الأفراد والمجتمعات فأصبح فيه العالم الكبير بيدو كقرية صغيرة، كما ساهمت من خلال الاختراعات والاكتشافات في تغيير نمط حياة الإنسان وطرق عيشه فتسابقت الأمم في اكتسابها والضفر بها، فكان لزاما على الأمم التي تأخرت في نيل العلوم والمعارف أن تحذو حذو من سبقوها لذا كانت الترجمة هي الملاذ الوحيد لنقل المعارف والتقنيات من المجتمعات الممتلورة علميا وتكنولوجيا الى المجتمعات الأقل تطورا لكن ترجمة العلوم والتقنيات ليست كغيرها من أنواع الترجمات المختلفة فهي لابد متصفة بخصائص معينة تميزها عن الترجمات الأخرى فعند ترجمة المحتوى التقني من اللغة العربية، التي هي لغة الكثير من الدول المختلفة اللهجات ومتعددة الانكليزية الى اللغة العربية، التي هي لغة الكثير من الدول المختلفة اللهجات ومتعددة الثقافات ومتنوعة الخصائص الجغرافية، كان لزاما على المترجم الانتباه لكل هاته الاختلافات وأقلمة ترجمته حسب المتلقى الهدف الذي يريد أن ينقل إليه تلك المعلومات.

تحديد الإشكال

تهدف هذه الدراسة لتسليط الضوء وبحث تأثير الأقلمة في ترجمة الوثائق التقنية المختلفة، وذلك من خلال دراسة مقارنة لنص مترجم من اللغة الإنكليزية إلى اللغة العربية ، بواسطة مترجمين من دولتين عربيتين مختلفتين وهما دولتا : العراق

والجزائر وذلك سعيا لإيجاد الفروقات التي يمكن أن تخلفها الأقلمة بين الترجمتين المختلفتين.

إشكالية البحث

الإشكالية الرئيسية:

هل يمكن الوصول الى ترجمة نهائية مفهومة لكل العرب بغض النظر عن اختلافاتهم الثقافية والجغرافية؟

الإشكاليات الفرعية

- ما هو مفهوم الترجمة التقنية وما هي خصائصها ومميز اتها؟
- ما هو تأثير الأقلمة على ترجمة النصوص التقنية والعلمية؟

الفرضيات

محاولة للإجابة على التساؤلات المطروحة، تم وضع الفرضيات الآتية:

هناك تأثير واضح للأقلمة على النصوص التقنية ويكون على مستويين:

- ✓ على مستوى الألفاظ والمصطلحات
 - ✓ على مستوى العبارات والجمل

أما بالنسبة للإشكالية الرئيسية فيمكن الوصول الى ترجمة نهائية موحدة مفهومة لدى كل العرب بمختلف انتماءاتهم الثقافية والجغرافية.

المنهجية:

لإيجاد حل للإشكالات المطروحة في هذا البحث، تم انتهاج طريقة المقارنة بين ترجمتين مختلفتين لمجموعة من النصوص والوثائق التقنية المأخوذة من الشركة العراقية للتنقيب، وهذه الوثائق هي عبارة عن ملصقات وتقارير وتنبيهات في موضوع الأمن والسلامة اللازمة في مجال حقل المحروقات والغاز الترجمة الأولى هي لمترجم عراقي والترجمة الثانية لمترجم جزائري ولغرض تسهيل عملية البحث والاستقصاء، تم تقسيم المقارنة إلى مستويين: مستوى الألفاظ والمصطلحات ومستوى العبارات والجمل وكانت المقارنة من خلال التقنيات والطرق المستعملة من كلا المترجمين.

هيكلة البحث:

تم تقسيم البحث إلى قسمين: نظري وتطبيقي

أما النظري فكان لدراسة الجوانب النظرية وشرح المفاهيم المتعلقة بالبحث وكان في فصلين:

الفصل الأول: وخصص لدراسة مفهوم ترجمة النصوص التقنية والعلمية وبحث خصائصها المميزة لها.

الفصل الثاني: خصص لدراسة مفهوم الأقامة وتأثيرها على ترجمة النصوص التقنية المختلفة

أما القسم التطبيقي فكان لإجراء المقارنة بين الترجمتين؛ العراقية والجزائرية.

نقائص الدراسة

- ✓ ندرة الكتب والمراجع الخاصة بالدراسات الترجمية والذي شكل عائقا كبيرا
 لإجراء هذا البحث.
- ✓ العائق المالي وذلك لأن الدراسة متعلقة بظاهرة الأقلمة التي وجب دراستها في منطقتين بعيدتين جغرافيا.
 - ✓ اقتصرت در استنا على دوليتين عربيتين من أصل اثنان وعشرون دولة.

الفصل الأول: ترجمة النصوص التقنية

نبذة تاريخية

كانت الترجمة ولا تزال أداة وجسرا للتواصل بين الشعوب، فاستطاعت أن تخرج هاته الشعوب من حدودها الجغرافية الضيقة لتتعامل وتحتك مع جيرانها والدول القريبة منها. وكلما تقدمت أمة في علم من العلوم أو فن من الفنون تسابقت الشعوب الأخرى لترجمة هاته المعارف والمعلومات لمواكبتها، وفي العصور القديمة لعبت الترجمة دورا هاما في نشر التعاليم الدينية، والنتاج الفني والأدبي ،كما ساعدت في إحداث التفاعل بين الحضارات القديمة المختلفة كالبابلية والأشورية والفينيقية والفرعونية و الإغريقية، فالترجمة قديمة قدم الإنسان لكن الترجمة النصوص التقنية بدأت مع انتشار العلوم عند اليونان والفرس فترجمها المسلمون في بيت الحكمة في العهد العباسي ثم من خلال ترجمة التراث الإغريقي إلى اللاتينية على يد مترجمين

أوربيين. ثم بعد ذلك اضطلعت مدرسة طليطلة بدور فعال في ترجمة التراث الإسلامي إلى العالم الغربي.

تعريف الترجمة التقنية

هناك تعريفات عديدة للترجمة التقنية فحسب قاموس كامبريدج فكلمة تقني هي كل ما يتعلق بالعلم، الآلات أو الطرائق المستعملة في العلم والصناعة.

وكذلك معجم لونغمان وأكسفورد بما يقارب هذا المعنى.

ويعرفها دانيال غواداك بأنها الترجمة المتخصصة للمواد التي تنتمي الى حقل معرفي معين أو مجال تقني خاص... وهي عند البعض كل ما هو ليس بأدبي.

أما حسان غزالة فعرفها بأنها ترجمة المصطلحات العلمية سواء كانت طبية، فيزيائية، كيميائية، رياضية أو أي فرع من العلوم.

وهناك الكثير من التعريفات التي هي مذكورة في الفصل الأول.

خصائص النص التقنى

للنص التقني خصائص عديدة تميزه عن غيره من النصوص منها:

- النص التقني ينتمي إلى حقل متخصص في فن أو مجال معين
- يتميز بوظيفة إعلامية ، أي أنه يمد المستمع بمعلومات جديدة
 - لدیه جمهور خاص ولیس عام.
- استعمال المصطلحات الخاصة: فلكل حقل مصطلحاته الخاصة به.

مناهج الترجمة التقنية

1. الرسم الصوتي (Transcription)

مثال: بنك = bank

2. التطبيع (Naturalization)

مثال: مغناطيس= magnetic ، مغناطيسي ، magnet

3. الترجمة (Translation)

مثال: علم الأرض = Geology

4. صِيَاغَةُ الكَلِمات (Coinage)

- الإحياء (Revival) مثال: قطار= train
- factory : مثال (Derivation) مثال الإشتقاق
- المستجدات (Neologisms) مثال : علم النفس = Psychology

الفصل الثاني: الأقلمة وتأثيرها على ترجمة الوثائق التقنية

تعريف الأقلمة

التعريف اللغوي

حسب ما ورد في معجم أوكسفورد الأقامة هي عملية جعل الشيء محليا أو ضبطه ليناسب مكانا معينا.

التعريف الاصطلاحي

هي عملية تحويل منتج معين ليتناسب مع مكان معين.

أو هي عملية تكييف المنتج في سوق مستهدفة بحيث يشعر المستهلكون عند استعمالها أنها المصممة محليا من أجلهم. وعند اسقاط التعريف على الترجمة (كمنتج) فهي جعل الترجمة تبدو محلية أصلية.

الأقلمة في الدراسات الترجمية

ترتبط الاقلمة والترجمة في كونهما يشتركان في نفس الهدف والذي هو تسويق المنتج وجعله يلائم الثقافة الهدف. فالمعنى الأساسي للترجمة هو تحويل النص من اللغة المصدر إلى اللغة الهدف والأقلمة هي تحويل المنتج لما يناسبه في الثقافة الهدف فمثلا شركة كوكا كولا عند تسويقها لمنتجاتها في دولة أوروبية مثل انجلترا استخدمت أسماء مثل : جون، برايان، جاك. أما عند تسويقها لمنتجها في الجزائر استخدمت أسماء على غرار : أحمد ، سمير، نسيم ، زهرة الخ.

الأقلمة في لغة واحدة

في نفس اللغة توجد اختلافات وخصوصيات مثل التي توجد بين إنجلترا والولايات المتحدة الأميركية وكذالك بين فرنسا وبلجيكا.

فمثلا القناة الخاصة mbc تعاملت مع هاته الخصوصيات ووجهت لمشاهديها العرب قنوات حسب انتماءاتهم حيث يتابع المصريون masr mbc ويتابع العراقيون

iraq فترجمة اللفظ "so much" يمكن أن يكون "برشا" في تونس، "بزاف" في الجزائر، "أوي" في مصر إلى غير ذالك من المكافئات المختلفة حسب اللهجة.

المتطلبات الأساسية للأقلمة

- شكل النص: الاختيار من اليمين الى اليسار أو العكس أو من الأعلى الى الأسفل كالبابانية
- الصور والألوان: تختلف دلالة الألوان من ثقافة لأخرى كذلك يجب الأخذ بعين الاعتبار لبعض الصور فمثلا البقر مقدسة عند الهنود وغير ذالك.
 - التنسيق المحلي للتواريخ: فهناك التقويم الميلادي والتقويم الهجري.
- العملة والترقيم والقياسات: اختلاف العملة من دولة لأخرى وكذلك القياسات فيستعمل الفرنسيون المتر بينما يستعمل الانكليز الميل.
- الالتزامات القانونية والتشريعات: يجب الحذر فيما يتعلق بالتشريعات فما هو مسموح به عند مجتمع ما يمكن أن يكون محضورا عند مجتمع آخر.

الفصل الثالث: الجزء التطبيقي

المقارنة بين الترجمتين (العراق والجزائر) للنص التقني

اختيار مادة علمية لإجراء المقارنة هو أمر ضروري لكشف الاختلافات الناجمة عن عملية الأقلمة وأثر ها على عملية ترجمة النصوص التقنية.

المنهجية

تم اختيار عدة مقاطع من نصوص تقنية مختلفة، وتمت المقارنة بين الترجمتين العراقية والجزائرية لفحص الاختلافات في الطرق والتقنيات التي استعملها كلا المترجمين.

التعربف بالمادة

المادة المستخدمة في هذا البحث هي عبارة عن وثائق الحماية والأمن(تقارير، منشورات، تنبيهات...الخ) للشركة العراقية للتنقيب وهي شركة رائدة في مجال البترول والغاز. أما بالنسبة للنصوص فهي ذات طابع تقني مشبعة بالألفاظ التقنية والعلمية المستعملة في مجال صناعة النفط والغاز.

مناقشة المادة

تمت المقارنة على مستويين:

• مستوى الألفاظ

اتضح بعد ملاحظة الأمثلة المفصلة في الجزء التطبيقي لجوء المترجم العراقي لاسلوب الإقتراض من اللغة المصدر (الانجليزية) مثلا (كلامبات= clamps الشيكلات= shackles) في حين حاول المترجم الجزائري ايجاد المكافئ حتى وإن كان هاذا المكافئ غير شائع الاستعمال. مثال مشابك = clamps و أغلال= shackles

• مستوى العبارات

على مستوى العبارات كانت الترجمة العراقية قريبة الى الترجمة الحرفية مثال: تدليك القلب = heart massage قمع الريح = windsocks بينما تبنى المترجم الجزائري الترجمة الوصفية الشارحة مثال:

انعاش قلبي رئوي= heart massage كاشف اتجاه الريح= windsocks

الخاتمة

اعتمدت المقاربة العراقية في الترجمة على استخدام الترجمة الحرفية والنقهرة لإيصال المعنى للمتلقي وتبنت المقاربة بين اللغتين المصدر والهدف بينما اتجهت الترجمة الجزائرية إلى استعمال الطريقة الوصفية الشارحة وإيجاد المكافئ حتى وإن كان غير شائع الاستعمال وذلك بإحياء بعض المفردات والكلمات مما يساهم في إثراء القاموس التقني العربي.