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(دراسة تطبيقية على مطويات السلامة لشركة بريتش بتروليوم)

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# Dissertation: Academic Master

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Title:

Translating Health Safety and Environment Terminology into Arabic

Case Study: British Petroleum HSE brochure

# Dissertation submitted in partial fulfilment of the requirement for the Master's Degree in Translation

# **Publically defended**

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# Dedication

All praise to Allah who has guided and helped me.

I Dedicated my dissertation work to:

- my grandfather pure soul, may God have mercy on him
- -My first hero. Dad & my heaven. Mum who have raised me to be what I am now
  - -My sisters Isra & Asma, My little brother Mahdi
- -All my family members, faithful friends and colleagues
- I will always appreciate all they have done, especially

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I dedicated this work and give special thanks to my besties Chifa Mokeddem. Chaima Habita and her wonderful mother Fatima Zahra Lamnai.

Chaima Belaid

# Dedication

I dedicated this modest work to the sake of Allah my creator and my master.

To My beloved parents, who supported me over years and never failed to give me financial and moral support. Especially, my dear father, the symbol of patient and power. I also dedicated this dissertation to my sisters and brothers, to all my teachers and my partner Chaima.

Chifa mokeddem

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#### **List of abbreviations:**

SL : Source Language

TL : Target Language

LSP: Language for Special Purpose

HSE: Health Safety and Environment

NEBOSH: National Examination Board in Occupational Health and Safety

BSS: British Safety System

**BP:** British **P**etroleum

#### Abstract:

Terminologies are known to be difficult to translate, especially when the translator has little or limited training in scientific or technical field. Despite the fact that HSE jargon translation is extremely difficult and hard, HSE industry terminology translation is becoming increasly important nowadays.

The present study analyzes the difficulties encountered when translating terms in HSE brochures from English into Arabic. It presents the theoretical framework and establishes translation definition, before moving on scientific and technical translation, then translation and terminology definition, types and origin. Moreover, an overview of HSE industry terminology along with a brief definition of HSE, and identifies certain difficulties and obstacles that exist in translating its terminology into Arabic and attempt to overcome those challenges and problems by stating possible solutions and methods.

This study adopts a qualitative-quantitive approach, it tackles HSE industry terminology. It analysis and compare between the English-Arabic translation of HSE new hired induction brochures of BP GVGAS In Salah. The outcome emphasizes the difficulties of translating HSE terms from English into Arabic, as well as the significance of obtaining training to work as a translator in this field. The study concluded that the heavy use of literal translation, borrowing, a lack of experience in the subject, and a lack of up-to-date English-Arabic HSE industry dictionaries and glossaries are all factors that have contributed to translation issues.

Key words: Health Safety and Environment terms, technical translation, translation procedures, brochures.

#### ملخص:

تعرف ترجمة المصطلحات انها صعبة ، بالأخص عندما يمتلك المترجم خبرة محدودة او يفتقر التدريب في المجال العلمي او التقني.

على الرغم من حقيقة ان ترجمة مصطلحات الصحة، السلامة والبيئة جد صعبة، إلا ان هاته الاخيرة اصبحت ترجمتها ذات أهمية متزايدة في الوقت الحاضر

تحلل هذه الدر اسة الصعوبات التي تواجه المترجم أثناء ترجمة مصطلحات مطويات الصحة، السلامة والبيئة من الانجليزية الى العربية.

في الإطار النظري نقوم بتعريف الترجمة والترجمة العلمية والنقنية ثم الترجمة والمصطلحات بأنواعها وأصلها. إضافة الى ذلك، نظرة عامة لمصطلحات صناعة الصحة السلامة والبيئة والمشاكل التي تواجه ترجمة هاته الاخيرة من الإنجليزية الى العربية ومحاولة للتغلب على تلك المشاكل والتحديات التي تفيد كحلول وإنسب الطرق.

تتبنى هذه الدراسة منهجيتين كمية ونوعية، تتناول مصطلحات صناعة الصحة السلامة والبيئة. مع تحليل ومقارنة بين الترجمة الإنجليزية والعربية لمطويات أساسيات السلامة لشركة بريتيش بتروليوم بعين صالح.

أظهرت النتائج صعوبات ترجمة مصطلحات الصحة، السلامة والبيئة من الإنجليزية الى العربية، فضلا عن اهمية العمل وتدريب المترجمين في هذا المجال. كما استخلصت الدراسة ان كثرة استخدام الترجمة الحرفية، الاقتراض ونقص الخبرة في هذا المجال وعدم وجود قواميس حديثة او مسارد في صناعة الصحة السلامة والبيئة من الإنجليزية-العربية، من العوامل التي ادت الى ظهور مشاكل في الترجمة.

**الكلمات الدلالية:** مصطلحات الصحة السلامة و السنة، المصطلحات، الترحمة التقنية، احر اءات الترحمة، مطويات، مسار د

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#### Introduction

Arabic language is considered as one of chief world languages and it is the top most language in North Africa and Middle East .it is one of the sixth most widely spoken language throughout the world based on the number of native speakers. It is one of the world's oldest languages and is the official language of 26 different countries. Furthermore, because Arabic is the language of the Quran and is the liturgical language of Islam, according to the latest statistics more than 350 millions of people speak Arabic as a first language with its different dialects, and at least 35 million as a second language. More than 20 countries use Arabic as their official language. in light of the world's rapid development in all fields, scientific, technological, and artistic It has become necessary for everyone, individuals, groups, countries, and institutions, to activate the translation movement and lift it out of the state of stagnation that it has been in for a long time and into a situation of stability, followed by development and prosperity.

According to translator journal (AL-MUTARGIM المترجم 2004.Oran), during the last century and the beginning of this century, the Arab scientific and cultural scene witnessed a growing interest in translation, beginning with (the National Project for Translation) in Cairo, (the Arab Foundation For Translation) in Beirut, and then (the Higher Arab Institute for Translation) in Algeria. Translation is important in all domains or almost all sorts of life and plays a huge role in several domains development in a way or another. Oil and gas sector is one of the most important sectors that some countries rely on for an economic flourishing nowadays. According to the U.S. Energy Information Administration, The Arab region is home to 4 of the top 10 highest oil producing countries in the world. In this context, We chose HSE culture, which is the number one priority in the oil and gas sector, as a method of formulating, addressing, controverting the reasonable applicable reduction of and accidents, fatalities, losses, and occupational health. This generates the need of translating terminologies from English into Arabic for the HSE sector.

#### 1.Statement of problem

One of the fundamental problems that translators may confront is how to manage with translating HSE industry terminology from English into Arabic, additionally the absence of HSE industry wording in Arabic lexicon, the strategies to decipher this phrasing into Arabic and overcoming the impediments and issues as well as taking into consideration the differences between English and Arabic within the etymological nature of building words

#### 2. The purpose of the study

The research attempts to analyse Health, safety and environment terminology into Arabic. It aims to investigate how to make Arabic contain the terminology to highlight the methods and procedures used in translating such technical terms, and whether these methods are used to overcome the obstacles translator face and whether it is reliable enough to ensure good results and serve the Arabic language in translating Health safety and environment terms.

#### 3. The research question

In trying to investigate Health safety and environment terminology translation problems encountered in translating English specialized terminology into

Arabic, it is necessary to answer the following questions

#### 3.1Main question

Which procedures are used in translating the HSE terminology from English into Arabic?

#### 3.2Sub-questions

What are the linguistic obstacles facing the translator in translating HSE terminologies into Arabic?

To what extent does the translator succeed in rendering terminologies in Arabic in terms of clarity, correctness and accuracy?

#### 4. Hypotheses

It is hypothesized that the obstacles translator faces when translating HSE terminology into Arabic, maybe accounted due to the lack of HSE terminology in Arabic language.

#### 5.Methodology

Our study is a mainly qualitative, we applied the descriptive analytical method to it. i.e. it both describes analysis and quantifies the translation of HSE terms from English into Arabic, Therefore, this study is principally corpus-based with particular focus on HSE terminologies as the major linguistic features of the corpus under study. It attempts at investigating the procedures used in translating HSE terms and the difficulties that face the translator in rendering these terminologies.

#### 6.Structure of the study

The study based on two sections or chapters that interrelate to answer the research questions and to accomplish its aim. The first one is a theoretical deal with the relevant literature about translation in general, technical translation and with HSE terminologies in specific. The second, is and overview on HSE, which we will define it and then tackled the appropriate techniques to overcome the obstacles in translating its terminology from English into Arabic. The last one, is practical framework and analytic, it focuses on collecting HSE translation samples, brochures and glossary translated into Arabic and tries to explain the difficulties emerging from the differences between both languages so that to uncover the main translation procedures used to overcome those difficulties.

# Chapter I Translation & Terminology

#### Introduction

This chapter deals with the most important points of translation in general and of terminology in particular. As well as it explains the differences between scientific and technical translation.

#### 1. Definition of Translation:

All people on earth are separated by their culture, and language is a special feature that makes us very different from each other. We speak the same language, so we can easily share our ideas and feelings. We use language both when speaking and when writing. Different languages represent different cultures and ways of thinking. Many years ago, people had much less communication problems because they didn't have to talk to people outside the community. Bringing people around the world closer by developing new communication equipment. Today we have to talk to people from other countries much more often than we did 20 years ago. Therefore, problems caused by different languages are more common, and new languages need to be adapted and learned in order to better understand each other. These problems are caused not only by differences in vocabulary, but also by differences in grammatical structure and spelling.

Translation is a process that helps people overcome such problems. When we translate text, we convey the meaning of a particular phrase or word. This meaning is transferred from the source language to the target language. To translate a sentence, the translator must translate each word into the target language and create a new sentence according to the appropriate structure. As mentioned above, languages vary by structure, and translators need to consider the structure and context of both languages to provide the meaning of a sentence, so this fact determines the complexity of such a process. To do.

Translation is the process of transferring a message from one language to another to convey the meaning of a word or phrase. Most professionals distinguish between the features needed for the translation process (source text, semantic information, target text, etc.). Translators also need to make the text easier to read and allow the reader to recognize the target text in a natural way.

Regardless of its popularity, translation was treated differently. According to Catford (1965), Translation is the process of replacing textual material in one language (SL) with textual equivalent material in another language (TL). Translation is a process in the sense that it is an operation, according to this definition. It can be performed by people over time as words are translated into simpler ones in the same language (rewording and paraphrasing). It's also possible to do it from one language to another.

According to Nida (1969), translation means finding the closest possible equivalent to the text, which is natural for the target language. Thus, this definition means not only an equivalent meaning, but also an equivalent style. Nida states that the target text must be not only understood by a reader, but it also must reflect the style of a source. Therefore, main mission of every translator is to translate a text naturally.

#### 2. Scientific and Technical Translation:

#### 2.1 Scientific translation:

Scientific translation is mainly about translating terms in the fields of science and technology of all kinds, medicine, physics, chemistry, mathematics, computer sciences...etc from one language into another (Ghazzala 1995).

Scientific translations do not involve literary texts; they only deal with texts from the world of electronics, medicine, law, economics, engineering, chemistry, computer science, automotive engineering, geology, etc. The number of technical fields is infinitely large, and terminology is expanding and changing daily.

The scientific translation is considered as one of the most important issues, as the world develops, new technology appears, and along with them emerge new terms to which finding an equivalent may pose a problem.

As Nida (1964) said in this point; it is not easy at all to translate scientific terms that emerged in western developed countries languages into a language of third world countries which are still having financial and social problems.

#### **Technical Translation:**

Technical translation has long been considered the ugly duckling of translation, especially in academia. Technical translations are neither particularly exciting nor attractive, nor do they have the attractiveness or cache of other types of translations. Technical translations are often pushed to the bottom of the translation effort and are considered merely exercises in technical terms and expertise. In fact, these factors, especially their expertise, have made some circles afraid and dislike technical translations, much like the modern barbarians of the linguistic world.

technical translation encompasses the translation of special language texts, i.e., texts written using Languages for Special Purposes (LSP).

As such, technical translation (and "technical terminology" as well) includes not only the translation of texts in engineering or medicine, but also such disciplines as economics, psychology and law"

In the broader sense, technical translation is synonymous to specialized translation. In the narrower sense, "technical translation is one part of specialized translation" (Newmark, 1988, p. 151).

#### 3. Translation and Terminology:

#### 3.1 Translation:

The goal of translation is to make communication between people who speak different languages easier.

Translators and interpreters work with terminology, thus they must be knowledgeable with the terms used in both the source and destination languages, as well as the subject matter they are translating.

In general, in specialized translation, the reader is a domain expert; this implies that technical translators must have a minimum level of competence in one of the two languages they work in in order to produce and respect the content of two texts.

Translators employed bilingual or multilingual vocabularies to translate terms that appeared in the text.

They may be required to function as terminologists in order to find synonyms for terms that do not exist in the accessible vocabularies.

Furthermore, the terminology provided to translators provided information about the use of terms and the concept, because the way the real world is reflected in the structure of a special language may differ from language to language, especially in fields that are not highly structured, such as medicine.

#### 3.2Terminology:

science

Terminology is an ancient branch of study that deals with the study and compilation of particular terms. However, it has only lately been developed, taking into account its ideas, bases, and strategies.

Now its importance has been appreciated on both the national and the international scale. Terminology, as we grasp it today, first started to take shape in the 1930s and has only lately moved from dilettantism to a truly scientific approach (Cabré, 1992, p. 1).

Because the word terminology refers to three concepts: terminology as the study of terms, terminology as the practical component of completing terminological work, and terminology as a group of specialized phrases, its definition has varied.

As a result, some definitions have been gathered from various sources, including:

1/ The International Association of **Terminology** 1982 defines that terminology is concerned with the study of the systems of symbols and linguistic signs employed for human communication in a specialized area of knowledge and activities. It is primarily a linguistic discipline \_\_ Linguistics being interpreted here in its widest possible sense with an emphasis on semantic (systems of meaning and concept) and pragmatic. It is interdisciplinary the sense that it also borrows concepts and methods from semiotics, epistemology, classification, etc. Although the terminology has been in the past mostly concerned with the lexical aspects of specialized languages, its scope extends to syntax and phonology. In its applied aspects terminology is related to lexicography and uses techniques of information

Terminology is now associated generally with the provision of information services that claimed the collection of information about terms to compile dictionaries and glossaries and more recently entire in term bank (Sager, 1990, p.4).

technology.

2/ Terminology is the study of terms which refer deliberately to specific concepts within particular subject fields. In other words, terms are always studied in relation to the conceptual system to which they belong and in which they function as depositors of knowledge (Elmgrab, 2011, p.492).

3/ Collins Dictionary gives two meanings of terminology, the first one can be understood as the body of specialized words relating to a particular subject, and in the second it defines as the study of terms. The two definitions point that the word terminology is polysemic. For that terminology refer to a particular vocabulary used in a special professional field or to the methodical study of terms (Ivana, 2018, p.9).

Terminology is a general word that refers to a group of specialized words or meanings related to a specific field, also it is considered as the scientific study of terms that are used in specialized domains and developed in such fields, or extracted and modified from elements already existing in other fields.

To summarize, terminology refers to all terms and expressions used in a particular field, such as business, science, technology, literature.....etc.

#### 3.2.1Origin of Terminology:

The word terminology drived from Latin terminus ("a term") + -ology ("study of"), from -o- ("(interconsonantal)") + -logy, from Ancient Greek -λογία (-logía, "-logy, branch of study, to speak")

Due to the expanding internationalization of science, Lavoisier and Berthollet, as well as Linné in botany and zoology, took an interest in naming scientific concepts in the 18th century.

in the 19th century, Botanists (in 1867), zoologists (in 1889), and chemists (in 1892) all expressed a desire to have a set of criteria for developing terminology for their specialties at international gatherings.

Terminology, as we understand it today, first began to take shape in the 1930s. The Austrian E. Wüster (1898–1977), was the founder of the modern terminology and he considered the main representative of what is known as the Vienna School.

During the first half of the 20th century, linguistics and social scientists paid little attention to terminology, but starting in the 1950s, they began to take an interest.

In general, linguistics has been concerned with developing a theory to account for the principles governing all possible human languages, so it's curious that terminological studies have received so little attention.

Nonetheless, terminology was given a role in linguistic analysis within the perspective of "multiple aspects of language seen as a tool for communication" (Cabré, 1992, p. 1).

#### 3.2.2Types of Terminology:

Various types of terminologies can be distinguished, depending on the criteria used.

1/ Theory-oriented Terminology: As far as we know, the term Theory-oriented Terminology does not exist. It is suggested by Thelen (2012: 132) that it is the natural counterpart of the term Translation-oriented Terminology. By Theory-oriented Terminology it is understandable that "[...] the type of terminology work done by terminologists who are essentially concerned with the relation between terms and concepts, concept formation, term formation and standardisation" (Thelen 2012: 132, see also Thelen 2008).

Systematic Terminology is another synonym for Theory-oriented Terminology.

Theory-oriented Terminology is specifically for and by terminologists; their objective is in the first place to contribute to Terminology (Thelen, 2012.132).

#### 2/ Translation-oriented Terminology:

The term Translation-oriented terminology is used in various sources (e.g. Muráth 2010: 49 – "translation-oriented terminology work"; Korkas/Rogers 2010: 127 – "translation-oriented terminologist"). It refers to the type of Terminology carried out by translators for use in translations.

By Translation-oriented Terminology it is understandable [...] the kind of terminology work done by translators, either monolingually (in order to analyse the meaning of a term in the source language and/or the meaning of an equivalent term in the target language) or bilingually or multilingually (in order to compare the results of the monolingual analyses to see if there is equivalence between them), but always with a view to translation, where effectiveness and efficiency of the translation process and speed are most important. (Thelen 2012:132).

# Chapter II: An Overview of HSE Industry

#### 1. Introduction

In this chapter, we will define the HSE industry and we will discuss an overview of HSE terminology and the difficulties of translating them from English into Arabic, as well as how to overcome these obstacles. with investigating the methods used in translating English HSE terms into Arabic.

#### 2. Definition of HSE (Health Safety and Environment)

HSE is an abbriviation or an acronym for Health, Safety & environment . It describes the processes or activities (planning, execution, control, and improvement) that companies implement to ensure health, safety and environmental protection , particularly in working environment. In addition to the term HSE, the following abbreviations are common:

- HSSE (Health, Safety, Security & Environment).
- SHE (Safety, Health & Environment).
- EHS (Environment, Health & Safety).

Health,Safety&Environment are important especially for industrial companies.including those in energy sector . The contents of HSE management systems include identification and analysis of workplace hazards,the devolopment of group-level-guidlines and minimum requirements ,additional training and education for employees (e.g. in the areas of accident prevention , accident response and emergency precautions ),and HSE audits .regulary at company locations ,and collecting health,safety&environment statistics ,fire protection,noise protection,medical preacautions , health and safety measures when travelling , environmental protection and much more .

HSE standards, regulations and campaigns help continuously optimize all activities with regard to technical organizational and behavior-based safety. HSE incident detabases are used to document, investigate and evaluate incidents in order to elicit and learn from trends and initiate preventive measures in time.

#### 3. Overview on HSE terminology

The HSE industry is rife with jargon and abbreviations, as well as anachronisms and frequently perplexing language. Even the most seasoned professional may find it challenging to keep up with all of the specific terms. HSE, SHE, OHSE, OHS...etc. Are all names for the same subject?

#### 4. Difficulties of translating HSE terminology into arabic

Many constraints exist in the transfer of information and technology from one language to another because each language has unique characteristics such as grammatical and lexical properties, as well as cultural aspects that create barriers for translators and readers of those texts

"Each language has a triple form of distinctness. Firstly, each language has aseparate and distinct set of linguistic structures and by extension, to a greater or lesser extent, different linguistic representations of reality. Secondly, each language community has a specific set of social practices that are articulated throughlanguage. Thirdly, each language community is a discourse community or set of discourse communities that expresses history, culture, and beliefs systems through the discourses that have evolved within the community." (Hagege, cited in Cronin, 2003) These what makes the translation of HSE industry hard, so that the translator is required to be familiar with the technical field in which it is translated. Here are some of the difficulties:

#### 4.1. Terminological problems of translating HSE terminology into Arabic

The translation of HSE industry is extremely difficult. Because when translating HSE terminology, translators encounter a variety of issues provided either by the text to be translated or by the various contexts of creation and reception of the original and translated text, among which are terminological problems.

Translators must detect whether a problem is related to terminology in order to use a terminological strategy to fix it.

A translation problem is only terminological when it concerns words, which are lexical units with precise meanings in the HSE industry. A terminological challenge may be related to term

comprehension and pragmatic qualities in an English language text, or to the search for equivalents. According to Al-Hattāb (1999), the main features of scientific text are the technical terms, which

provide major difficulties for Arab translators when finding an appropriate equivalent in Arabic.

The following are some of the difficulties that translators face:

- The difficulty of coining Arabic equivalents for HSE terminology eg: hard hat = خوذة
- The rapid technological developments in this field
- The lack of knowledge of HSE terms
- The difficulty of abbreviations. ''even the most known abbreviations cannot be always found in standard English English online dictionaries '' (Webster4, Cambridge5, Oxford6) so that translators must search for the meaning themselves.
- The Arab world's lack of cooperation in developing and unifying Arabic equivalents for new terms.
- Lack of comprehending of all or part of HSE terminology, including its meaning, grammatical application, and pragmatic utility in the SL.
- having doubts about the style used in HSE terminology.
- Terminological difficulties when the translator cannot find new terms, collocations, acronyms and compound in English-Arabic dictionaries and in browser translation tools.

#### 4.2. Things that help with the difficulties

#### 4.2.1 printed and website translation glossaries

A translation glossary is a list of standardized key terminology found in documents that need to be translated. It may also include your company's approved translations or definitions for those terms. The NEBOSH (National Examination Board in Occupational Safety and Health) and BSS (British Safety System) are considered as the most worldwide helpful glossaries in HSE domain.

#### 4.2.2 translation Brochures

In the most basic terms, brochure translation entails translating a company's brochure from its original language into another language. In other words, brochure translation aids in the reduction of any atmosphere of misunderstanding that may arise between the company and its clients, regardless of their country of origin or language background. For eg (Total energy golden safety brochure, Aramco brochure, British petroleum brochure)

#### 5. Techniques and Strategies to overcome the obstacles

Translating HSE industry terminology from English into Arabic presents significant linguistic challenges. First because the Arabic language's need for the scientific and technical terms is an agreed-upon issue among the Arab linguists in spite of the differing views and interpretations in solving problem, which is one of the biggest problems of the Arabic language in the present era (Faisal,1986).

The issue of the scientific and technical term is a need that must be pursued to realize the purpose connected with identity of the cultural nation, and spreading modern science (Al-Samarrai,1982) specially that launching the scientific term in Arabic is one of the targets looked for by the Academy of the Arabic language to achieve; Furthermore, Ali Al Quasimi states: '' the primary objective of providing unified Arab terminology is to find an Arab common scientific language understood by all scientists and technicians in various Arab countries making it an effective tool for educatio, research, writing and translation in the fild of science modern technology''(Al Qasimi, 1986).

As a result, HSE industry translation has become a critical step toward the acquisition of new terminology of safety in oil industry; thus, the creation of new Arabic scientific vocabulary is urgently needed to enrich the Arabic language.

#### 5.1 Techniques of translating HSE terminology from English into Arabic

#### التعريب (at-ta'rib) التعريب

Arabization (or arabicization, by analogy to Anglicization, Germanization, etc.) is the translation of technical terms into Arabic .Ghazala (1995) uses the term "Arabization" or "Arabicization" as a synonym for technical translation.

In terminology, Arabization means "the transfer of the foreign word and its meaning into Arabic according to rules and bases guaranteeing its clarity and eloquence" (Ganim, 1989) ". However, according to Mattlub (1983), Arabization is "the writing of foreign words in Arabic or orthography" (Mattlub, 1983, p.29. Ghazala (1995) refers to this method as "naturalization,"

which is similar to Mattlub's definition of Arabization. He claims that "it is to take the English

term and adapt it to Arabic alphabet and grammar, by changing one or two of its letters into the

Arabic ones and having singular, plural, masculine, feminine or verbs forms of it"; This means

that Ghazala believes that using Arabic in translation has not resulted in been accomplished in

an acceptable manner.

Arabization is very important because it provides us with modern scientific terms

indispensable in its scientific development; it enriches the language with words expressing all

human meaning (khalifa,1992).

5.1.2 Methods of Arabization

We tackled these methods in the same order as Hassan Ghazala (2008) in his book translation

as problem and solution, moving from the least effective to the most effective.

(تحويل الاقتراض الكتابة العروضية) 5.1.2.1 Transcription, transference or borrowing

Is the exact spelling of the English term in Arabic letters, Transcription or borrowing works

best with Arabization of the HSE industry terminology; it is one of the most widely used

procedures for translating scientific terms by introducing minor phonetic and morphological

changes to the foreign term.

It consists of writing English scientific terms in Arabic using the Arabic alphabet with no

changes to their pronunciation in English.

**Examples:** 

• Ammonia: الأمونيا

• Phenol: الفينول

• Chlorine: کلورین

کربون :Carbon

Transcription is a poor and ineffective method of Arabization. For the reason that it does not

provide the Arabic meaning of the Arabic word. Furthermore, the transcribed terms are not pure

Arabic and do not sound like Arabic; they are simply borrowed and shaped in Arabic letters.

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Moreover, Ghazala (1995) confirmed that this method of translation a poor also, as he argues «Transcription is the poorest and worst method of translation, for it means to open door widely to allow foreign words to invade the Arabic language ».

#### (التجنيس) 5.1.2.2 Naturalization

According to Ghazzala (1995), Naturalization is the attempt to adopt the English terms to the morphology of Arabic word structure and can be seen as evolution of the transcription method. This method involves adapting an English term to Arabic pronunciation, alphabet, and grammar by changing the spelling of one or more of its letters into close Arabic ones and using it in singular, plural, masculine, feminine, or verb form.

#### **Examples:**

- Oxide = أوكسيد
- Oxidized (adj.) = مؤكسد
- Oxidizer (n) = مؤكسد
- Mechanism (n.) میکانیکیة
- Mechanisms (n.p) میکانیکیات
- Mechanical (adj.) میکانیکیة /میکانیکی
- Mechanic (n.) میکانیکیه /میکانیکی
- Mechanize (v.) يمكنن
- Mechanization (n.) مكننة
- Mechanically (adv.) میکانیکیا
- Technology = تكنولوجيا
- Technologist(s) (n/plural) = تكنولوجية . تكنولوجية
- Technologies (plural) = تكنولوجيات
- Technological (adj.) = تكنولوجي
- Technologically (adv.) = تكنولوجيا
- Magnet (n) مغناطيس
- Magnetic (adj) مغناطيسي/ مغناطيسي
- Magnetism/magnetization (n) مغنطة
- Magnetize (v) يمغنط

Ghazzala (1995) considers naturalization to be superior to transcription, but it is still

inconvenient. As a result, it is not pure Arabic; the basic or roots of terms are English, even if

they have been naturalized. This method does not take into account meaning; for example, the

lay reader. For example:

تقَانـة ,تقنيـة = Technology

• Biology = علم

• Biologist = عالم عالم

According to Baker (1987) transcription and naturalization have not been agreed language

traditionalists because they are a threat the identity of Arabic. As a result, translators are likely

to encounter situations in which they must be more creative by employing methods that ensure

the high quality and faithfulness of translating HSE industry terms in order to overcome this

stumbling block, Ghazzala (1995) suggested that coinage is the best method for translating

scientific terms.

As for Baker (1987), coining new terms is the only way that ensures the creation of new

specialized glossaries (HSE) for the Arabic language.

Ghazzala (1995) argued that this method should be avoided except in the case where translators

could not find equivalent for the term in Arabic language.

5.1.2.3 Translation

Translation as a method is the transmission of English technical terms into Arabic using words

already in the Arabic lexicon. In other words, only Arabic words are used.

**Examples:** 

• Scafold: سقالة

• Work accident: حادثة عمل

• Hazard: مخاطر

• Vibration: اهتزاز

ضوضاء:Noise

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### النقش / السك 5.1.2.4 Coinage

It is one of the most effective methods of Arabization. It is the invention of new terms that have not previously existed in the Arabic language, and there are three methods of coinage as follows.

#### a) Revival الاحياء

Revival (also called 'engendering' (التوليد)) is the use of a long-dead word to convey a new meaning. This means that the old word has been given a new meaning in place of its previous meaning. Baker (1987) said that this method uses Arabic lexicon instead of trying to introduce new concepts that may take time to be adopted. These are some examples that were intoduced by 'Arabic Language Acadimies' (مجامع اللغة العربية):

- a) Newspaper (جريدة)is an old word used to mean '' a small palm stick used to write on patches (فعريد). Nowadays it is used as an Arabic equivalence to newspaper
- b) Car (سيارة) was used in classical Arabic to mean 'long distance desert travlers' (as mentioned in Holy koran, Chapter of Yusuf, verse 10). Today, it is used to mean car, any kind of car in general ( with its old meaning being retrained through the Quran ).
- c) Telephone (هاتف) was usually used to mean 'a person whose voice is heared, but not seen' Recently, however, ot has been reused to Arabize 'telephone'.

Revival is an effective, but difficult, method of Arabization. The terms that have been Arabized are entirely Arabic. It was a reaction to the invasion of foreign words into Arabic. Unfortunately, This method is not always successful because some attempts to revive archaic words did not fit modern Arabic vocabulary or were not compatible with modern technology, such as the HSE industry, and were "a subject of much ridicule" (Baker, 1987:186).

#### b) Derivation (الاشتقاق)

Arabic is known as the language of derivation. According to Ghazzala 1995 it is founded on measurement (قياس). The most famous measures are those of '' instrumnet names '' like مفعل , مفعل , مفعال , مفعال

#### **Examples:**

#### مفعل 1.

Factory (مصنع) / Slaughter house (مذبح.مسلخ) / Laboratory (مخبر)

#### مفعلة .2

Butchery (ملحمة) Pump (مضخة)

#### مفعال 3.

(مكواة) Rafinary (مصفاة)

Derivation is one of the most important mechanisms of translating HSE industry terms. '' The most natural way of enriching language without altering its identity '' (Baker 1987, p 186). all the examples are belonging to what is known in Arabic ''al-ishtiqaq al-saghir'' (simple derivation). where the stem is modified by prefixation, suffixation, infexation and vowels. eg,

Factory = مصنع from صنع to manufacture.

#### c) Neologisms المستجدات

They are new words, ideas, and expressions that did not exist in classical Arabic. They account for the vast majority of Arabized technical terms. This method according to Baker (1987) enjoys much acceptance.

#### **Examples:**

- 1. Health & Safety Department = الامن الصناعى
- 2. Biomechanics = ميكانيكا حيوية
- 3. Biotechnology = تقنية بيولوجية
- 4. Electricity= کهرباء

This is the most effective and successful method of Arabization. That is precisely and perfectly what Arabization entails. All of the terms proposed by this method are either completely new or new expressions and concepts that appear in today's Arabic language.

#### 5.2 Strategies using in translating HSE terms into Arabic:

#### 5.2.1 Borrowing:

Borrowing is a strategy in which the translator transfers the SL word form to the TL to fill "a

lexical gap or to create a certain effect" (Vinay & Darbelnet, 1995, p. 8). In other words, when

the TL lacks an equivalent for a term, the translator utilizes the identical SL word but in TL

transcribed letters, like these words: Facebook فيسبوك, are borrowed from English

to Arabic.

**5.2.2 Calque:** 

This strategy is 'a special kind of borrowing whereby a language borrows an expression form

of another, but then translates literally each of its elements' (Vinay and Darbelnet (1995, p. 32).

It is used when a translator wants to replace the same expression or structure of the SL with the

same expression or structure in the TL using a literal translation method.

**5.2.3** Literal translation:

According to Vinay and Darbenlet (1995, p. 33,34), Literal, or word for word, translation is

the direct transfer of a SL text into a grammatically and idiomatically apropriate TL text in

which the translators'. It is acceptable only if the translated text has the same syntax and content

as the original. Furthermore, literal translation does not allow for changes to the structure of the

source text.

5.2.4 Equivalence

According to Vinay and Darbelnet, the same condition can be defined in various ways or

structures. In these cases, translators must deal with the method that generates equivalent texts.

Especially when it comes to cultural beliefs, we must remember to focus on the sense rather

than the image.

However, if the terms have an Arabic equivalent, translators must use them instead of

transcription, for example:

• Fireman: اطفائی

• Heavy work: عمل شاق

• Firefighting: اطفاء الحريق

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#### 7. Conclusion

This chapter discusses HSE terminology. It began with a definition of HSE and an overview of HSE terms. Second, it attempted to discuss a number of issues, problems, and obstacles associated with HSE industry translation that arose while translating HSE terms. Without forgetting the main goal of this chapter, which is to find solutions by investigating the techniques used in translating HSE terminology from English to Arabic, and how translators should select the appropriate technique to ensure accurate translation.

# Chapter III Analyzing HSE industry terminology

#### **Introduction:**

in this part of the study 'Translating Health Safety and Environment terminology into Arabic', the analysis of HSE glossary samples of British petroleum brochures. which is namely 'New hired HSE induction brochure' and. That has two versions the English one and a translated version into Arabic, we chose fragments, pieces of text, and terms at random and attempted to compare and analyze them in terms of procedures, strategies, and techniques used. We've also discussed the qualities of technical English text.

#### 2. An overview of the Corpus:

The corpus we have chosen is 'New hired HSE induction brochure (GVGAS BP in Salah) and International Association of Oil and Gas Producers brochures in both English and Arabic versions. This corpus was chosen since it is a technical document that contains texts and terms which are relevant to our research.

This document contains 22 page in English also in Arabic version, that we will analyze also.

#### 3. Methodology:

The methodology used in this practical section is a comparison of the two translation copies of New hired HSE induction brochure (GVGAS BP In Salah). As a result, the focus of this research will be on comparing the source text, which is written in English, to its translation (target text), which is written in Arabic, in order to suit the specific needs of the target audience, which are Arab employees in the HSE sector.

#### 4. Analysis of the corpus:

Some of the brochure's and videos instructions have been translated from English to Arabic. Some of them are listed below in their ST, followed by their TT.

#### Pattern 1:





## **Analysis of pattern 01:**

This text is taken from International Association of Oil and Gas Producers brochures. The procedure used in this pattern is equivalent Protection equipment= أدوات ,Tools = أدوات , the translator used literal Translation method in the word Work Materials = مواد العمل , he also used calque as a procedure to translate the word Anchor points = نقاط الربط

#### Pattern 2:





## **Analysis of pattern 02:**

The expression Work Authorisation was translated into Arabic تصريح العمل here the translator used literal translation as a procedure, and he translated the word hazards into by using calque.

#### Pattern 3:





#### **Analysis of pattern 03:**

In the third pattern, the translator used litteral translation to translate the title Safe mechanical lifting, and also to translate the sentence Equipment and load into Arabic, the translator used transposition as a procedure to translate the word Load into Arabic. The expression Exclusion zones was translated into Arabic by مناطق الحظر by using modulation as a procedure.

The following patterns are taken from New hired HSE induction brochure BP

### Pattern 04:



# **Analysis of pattern 04:**

The following title Lifesaving rules translated into Arabic by فواعد الحفاظ على الأرواح using equivalence procedure, also in translating the term Hard hat into خوذة السلامة, the translator used modulation as a procedure to render the meaning of the term.

#### Pattern 05:



### Analysis of pattern 05:

The procedure used in this pattern is literal translation (Actions to be taken on hearing alarm = الإجراءات الواجب اتخاذها عند سماع الإنذار here most of the words are translated literally as an appropriate procedure), (Stop work = توقف عن العمل, Workplace = منفذ which mean a door that is used to let people out of a building is translated into arabic منفذ by using modulation as approcedure.

Pattern06



## Analysis of pattern 06:

The translator used modulation procedure on translating the title General fire alarm into Arabic الإنذار العام الخاص بالحريق to ensure and convey the meaning, and he used addition procedure in translating the expression Muster point location into Arabic by موقع ومكان التجمع.

### Pattern 07:



### **Analysis of pattern 07:**

The translator translates the title How to raise alarm into Arabic كيف نصدر الإنذار by using modulation procedure especially in the word raise which mean in Arabic وفع, but in order to enhance the meaning. While he use literal translation in translating the following words:

تکلم بوضوح = Speak clearly

قدم اسمك = Give your name

طبيعة الحادث = The nature of the incident

نقطة النداء = Call points

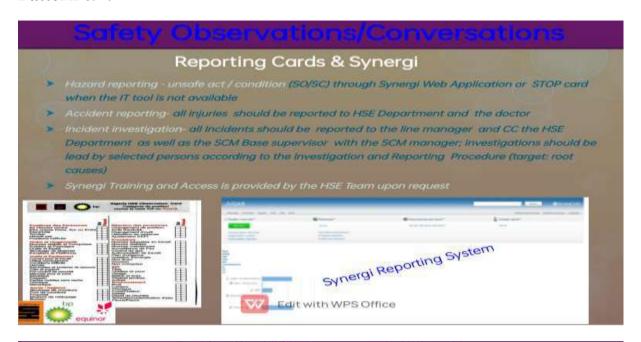
#### Pattern 08:



## Analysis of pattern 08:

- In the following sentence, the translator translated the tittle Site Rules into Arabic by using expansion procedure to exeed the number of words explicitly.
- He also translated the expression stop card into Arabic بطاقة ملاحظات by using equivalence, because it is wrong to say بطاقة توقف so, it is appropriate to render the meaning of the expression.
- The procedure used to translate the expression Alcohol into Arabic الكحول can be borrowing or transcription because it is the literal spelling of the English term in Arabic letters as it pronounced or the vice versa, and it exists in both languages.

#### Pattern 09:





## Analysis of pattern 09:

- In this pattern the translator uses literal translation to translate the title safety observation & conversation into Arabic محادثات و ملاحظات السلامة in this case, we propose that the translation of the word observation would be مراقبه because the former is more appropriate for conveying the message's meaning.
- In the translation of the abbreviation IT which means technology into Arabic تكنولوجيا can be transcription or borrowing which mean the same thing.

- The procedure used to translate this expression HSE department into Arabic قسم الصحة is literal translation and, there is an equivalent by using expansion for the translating abbreviations such as (HSE = (الامن الصناعي) its sound more Arabic than the literal translation.
- He also used literal translation in translating the term line manager into Arabic المدير, may say that the literal translation in here is appropriate to render the meaning of the expression .

#### Pattern 10:



## Analysis of pattern 10:

The following title security alarm translated into Arabic by الخاص بالأمن جهاز الإنذار using addition procedure, in order to transfer its meaning more clearly and accurately for the TL reader. because he could translate it as إنذار أمني.

in translating the word Radio into Arabic by الديو he used transcription, because it is the literal spelling.

#### Pattern 11

The Procedure	English	عربي
Equivalence	Protection Equipment	المعدات والحمولة
Borrowing	Tools	أدوات
Translation	Work Materials	مواد العمل
Literal translation	Dropped Object	الاجسام المتساقطة
Calque	Anchor Points	نقاط الربط
Literal translation	Protected area	منطقة محمية
Translation	Hazards	مخاطر
Transposition	Equipment and load	المعدات والحمولة
translation	Barriers	الحواجز
Modulation	Exclusion areas	مناطق الحظر
Literal translation	Suspended load	حمولة معلقة
Literal translation	Moving objects	الاجسام المتحركة
Revival	Vehicles	المركبات
Literal translation	Pressure releases	تحرير الضغط
Addition	Flammables	المواد القابلة للاشتعال
Literal translation	Ignition sources	مصادر الاشتعال
Literal translation	Hot work	العمل الساخن
Literal translation	Energy Isolation	عزل مصادر الطاقة
Literal translation	Energy sources	مصادر الطاقة
calque	Tagged	علامات تحذيرية
Literal translation	Confined space	المكان المحصور
calque	Rescue plan	خطة انقاذ
Literal translation	Bypassing Safety Controls	تجاوز ضوابط السلامة
Modulation	Safety-critical equipment	معدات السلامة المهمة
Literal translation	Procedures	إجراءات
transcription	Alchol	الكحول
Literal translation	Safety observion conversation	محادثات ملاحضات السلامة
Literal translation	Hazard reporting	الإبلاغ عن الخطر
Literal translation	Site Rules	قواعد النظام الداخلي
Literal translation	Site Hazards	اخطار الموقع
Borrowing	Stop Card	بطاقة السلامة
Equivalence	Fire exit	بصفه الشارعة
Neologism	HSE	منفد النجدة وسلامة مهنية
Literal translation		معدات الحماية الفردية
Equivalence	Personal protective equipment Hard hat	معدات الحماية العردية خوذة الحماية
-		حوده الحماية بيئة العمل
Equivalance  Encotropolation	Ergonomic Nove staff	بينه العمل عمال جدد
Free translation	New staff	•
Formingles	HSE LINE MANAGER	مدير الامن الصناعي بطاقة ملاحظات
Equivalence	STOP CARDS	بطاقة مارخطات بطاقة مهنية
Equivaelnce	Badge	بطاقه مهيبه

Equivalence	Line manager	المدير المباشر
Revival	Phone	هاتف
Addition	Security alarm	جهاز انذار الخاص بالامن
Literal translation	Continious siren	صفارة انذار مستمرة
Literal translation	Emergnce	طوارئ
Transcription	Radio	راديو

The following sentence Safety- critical equipment was translated into Arabic by معدات السلامة by using modulation procedure which is means for result; the means is المهمة and the result is critical that all the sentence was translated literally.

Hazard reporting: this expression was translated into Arabic by الأبلاغ عن الخطر literally. The translator here translated خطر by hazard, while he may use danger to make it appropriate.

In the following expressions the translator gives two different meanings for the same words:

Both sentences means an Operational Tool to Change Safety Behavior, here the translator can use Safety behavior checklist, to enhance the meaning.

As a suggestion, we suggest that there is some modification need to be made in order to produce better outcome for the target language for example :

New staff = موظفین جدد

العمل بالمواد المسببة للحريق = Hot work المناطق المحظورة = Exclusion zones

#### **6.Findings:**

The following results were discovered by a comparison of HSE brochures written in English (ST) and its translation into Arabic (TT):

The analysis of patterns 01 to 11 reveals that the most commonly used procedures in translating terms and expressions into Arabic are literal translation, transposition, translation by addition, expansion, modulation, and calque; the most commonly used procedure is literal translation, which is appropriate in some cases but inappropriate in others. The majority of terms were translated in terms of function.

#### 7. Conclusion:

This chapter was written to respond to the hypothesis stated in this study about the difficulties that translators experience when translating HSE industry terms into Arabic, as well as their approaches. The practical chapter of this research is a comparative study between translating English HSE terms into Arabic.

The analysis revealed that the challenges faced by translators are related to their lack of prior knowledge of HSE business terminology and conducting some research in this sector.

This section has gone a step further, demonstrating through corpus analysis that terminology can cause a variety of issues in the HSE industry's translation. Some of the difficulties encountered include identifying terms, comprehending terms, locating the correct equivalent, dealing with the absence or inability to locate an adequate equivalent, dealing with denominative variation, avoiding incorrect transcriptions and the hard use of literal translation.

#### **General Conclusion**

This study has enlightened a critical and important field of Oil industry, which is HSE with a with a special focus on its terms. The study investigated the problems of translating HSE term into Arabic.

This study aims to investigate the difficulties that translators face when translating HSE terminology into Arabic, as well as the methods they use to render those terms.

As a result of this study, two results were obtained. The first result was that the majority of translators do not apply the correct procedure to translate his terminology

The second revealed that he procedures might be a reason for rendering incorrect expression and meanings, and that the lack of updating the techniques is representative of translation issues.

The practical part of the study emphasis that translators use literal translation irrationally. After analysing HSE terminology, the study suggests that both scientific and technical translation and their procedures should be given more attention and higher importance. Finally, this study confirmed that translating HSE terms is more than just rendering meaning between two languages. However, it is a highly extensive process that needs to use newer

theoretical methods and a good translator who is fully aware of how a certain technology domain operates.

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# الملخص:

#### المقدمة:

في ظل التطور السريع الذي يشهده العالم في شتى المجالات، أصبح من اللازم على الجميع تتشيط حركة الترجمة للغة العربية واخراجها من حالة الركود التي مرت بها لفترة طويلة. حيث ان اللغة العربية واحدة من اللغات الرئيسية في العالم، ووفقا لأحدث الاحصائيات يبلغ متحدثيها أكثر من 350 مليون شخص كلغة ثانية وأكثر من 26 مليون شخص كلغة ثانية وأكثر من 26 مليون شخص كلغة ثانية وأكثر من 26 دولة تتخدها كلغة رسمية.

نظرا لأهمية الترجمة في جميع المجالات ودورها الكبير في تطويرها، وقع اختيارنا على احدى قطاعات مجال النفط والغاز لأنه من أهم المجالات الاقتصادية في العالم ومن هذا السياق اخترنا قطاع الصحة السلامة البيئة لأنها الأولوية الأولى في هذا المجال، كطريقة لتخفيض معدل الحوادث الوفيات وتحقيق الصحة المهنية ذات الصلة. وهذا ما يولد الحاجة لترجمة مصطلحات قطاع الصحة السلامة والبيئة من الإنجليزية الى العربية.

## إشكالية البحث:

من المشاكل الاساسية التي يواجهها المترجمون هي كيفية ترجمة مصطلحات صناعة الصحة السلامة والبيئة من الإنجليزية الى العربية لعدم وجود صياغتها في المعجم العربي. يتمحور بحثنا هذا حول ايجاد استراتيجيات فك رموز صياغة هاته المصطلحات الى اللغة العربية والتغلب على العقبات مع مراعاة الاختلافات اللغوية بين الإنجليزية والعربية ضمن الطبيعة الاشتقاقية لبناء الكلمات.

# الهدف من الدراسة:

في هذا البحث نحاول تحليل مصطلحات الصحة السلامة و البيئة الى اللغة العربية . وتهدف هاته

الدراسة لتسليط الضوء على الاساليب والإجراءات المستخدمة في ترجمة هاته المصطلحات. و إذا كانت هاته الاساليب تستخدم للتغلب على العقبات التي يواجهها المترجم، و هل هي موثوقة بما يكفي لضمان نتائج جيدة في الترجمة و تخدم اللغة العربية في ترجمة مصطلحات الصحة و السلامة .

## أسئلة البحث:

انطلاقا من الاشكالية، و في محاولة للتحقيق في المشاكل التي صودفت في ترجمة مصطلحات الصحة السلامة و البيئة من اللغة الإنجليزية الى العربية، من الضروري الاجابة على الاسئلة التالية:

## السؤال الرئيسي:

- ما هي التقنيات المستخدمة في ترجمة مصطلحات الصحة السلامة و البيئة من الإنجليزية الى العربية ؟

### الاسئلة الثانوية:

- ما هي العقبات اللغوية التي تواجه المترجم أثناء ترجمة مصطلحات الصحة السلامة و البيئة الى اللغة العربية ؟

الى اي مدى ينجح المترجم في تقديم المصطلحات في اللغة العربية من حيث الوضوح ، الصواب و الدقة ؟

### الفرضيات:

يفترض ان العقبات التي يواجهها المترجم عند ترجمة مصطلحات الصحة السلامة والبيئة من الإنجليزية الى اللغة العربية، تكمن بسبب عدم وجود مصطلحاتها في اللغة العربية.

## المنهجية:

در استنا نوعية بشكل أساسي، قمنا بتطبيق المنهج التحليلي الوصفي عليها. أي انها تصف التحليل وتحدد كمية ترجمة مصطلحات الصحة السلامة والبيئة من الإنجليزية الى العربية بالتالى، تعتمد هذه

الدراسة اساسا على المستندات مع التركيز على مصطلحات الصحة السلامة والبيئة بشكل خاص. باعتبارها الصفات اللغوية الرئيسية للمستندات قيد الدراسة، وبهذا نحاول التحقيق في الإجراءات المستخدمة والصعوبات التي تواجه المترجم في تقديم هاته المصطلحات.

### خطة البحث:

تستند هذه الدراسة على قسمين، او بالأحرى فصول مترابطة للإجابة على أسئلة البحث وتحقيق أهدافه.

الفصل الأول: هو القسم النظري الذي يتعامل مع الادبيات ذات الصلة حول الترجمة بشكل عام والترجمة التقنية ومع مصطلحات الصحة والسلامة والبيئة بشكل خاص.

الفصل الثاني: هو نظرة عامة على الصحة والسلامة والبيئة التي سنعرفها ومن ثم تناول التقنيات المناسبة للتغلب على العقبات في ترجمة مصطلحاتها من اللغة الإنجليزية اللغة العربية.

الفصل الثالث: هو الإطار العملي والتحليلي، ويركز على جمع عينات ترجمة الصحة والسلامة والبيئة من مطويات ومعاجم مترجمة إلى اللغة العربية، ويحاول شرح الصعوبات الناشئة عن الاختلافات بين اللغتين بحيث يتم الكشف عن إجراءات الترجمة الرئيسية المستخدمة للتغلب على تلك الصعوبات.

# 1. الفصل الأول:

يتناول هذا الفصل أهم نقاط الترجمة بشكل عام والمصطلحات بشكل خاص. كما يشرح الفروق بين الترجمة العلمية والتقنية.

# ماهي الترجمة العلمية والترجمة التقنية؟

يعرف الاستاذ الجامعي المختص في الترجمة والأسلوب حسن سعيد غزالة ، الترجمة العلمية ب والتكنولوجيا من ترجمة المصطلحات في مجالات العلوم علوم الكمبيوتر ... الخ من لغة إلى أخرى جميع الأنواع، والطب، والفيزياء، والكيمياء، والرياضيات،

اما الترجمة التقنية فهي نوع من انواع الترجمة المتخصصة التي تشمل ترجمة الوثائق التقنية، والنصوص التي تتعامل مع التطبيق العملي للمعلومات العلمية والتكنولوجية، اي بشكل عام تنطوي على ترجمة النصوص اللغوية الخاصة

#### علم المصطلحات

علم المصطلحات بشكل عام هو دراسة المصطلحات التي تشير إلى مفاهيم محددة ضمن مجالات معينة. بمعنى آخر ، يتم دائمًا دراسة المصطلحات في فيما يتعلق بالنظام المفاهيمي الذي ينتمون إليه

### اصل علم المصطلحات

كلمة المصطلحات مشتقة من المصطلح اللاتيني term

اما المصطلحات بمفهومها الحديث الذي نعرفه اليوم تم طرحه في سنة 1930، كما تم تأسيس المصطلحات الحديثة على يد العالم النمساوي المختص في المصطلحات على يد العالم النمساوي المختص في المصطلحات (1977 -1898)

# انواع المصطلحات

للمصطلحات انواع مختلفة ومتنوعة تستخدم وفقا لمعايير معينة، ونخص بالذكر:

# 1 / المصطلحات النظرية:

Marcel تم اقتراح هذا الاسم من قبل الاستاذ المحاضر بكلية زويد للعلوم التطبيقية في هولندا Thelen

# 2 / مصطلحات الترجمة:

هذا نوع من المصطلحات يشير إلى نوع المصطلحات التي تم تنفيذها بواسطة المترجمين الستخدامها في الترجمات الخاصة.

## 2.الفصل الثاني:

في هذا الفصل، سنعرف صناعة الصحة والسلامة والبيئة وسنأخد نظرة عامة على مصطلحات الصحة والسلامة والبيئة وصعوبات ترجمتها من الإنجليزية إلى العربية، وكذلك كيفية التغلب على هذه العقبات. مع التحقيق في الأساليب المستخدمة في ترجمة مصطلحات الصحة والسلامة والبيئة الإنجليزية إلى اللغة العربية.

# 1. تعريف الصحة السلامة والبيئة:

هي العمليات أو الأنشطة التي تنفذها الشركات لضمان الصحة والسلامة وحماية البيئة، وخاصة في بيئة العمل. الصحة السلامة والبيئة مهمة خاصة بالنسبة للشركات الصناعية خاصة قطاع الطاقة. تشمل محتويات أنظمة إدارة الصحة والسلامة والبيئة تحديد وتحليل المخاطر في مكان العمل، وتغيير المبادئ التوجيهية على مستوى المجموعة والحد الأدنى من المتطلبات، والتدريب والتعليم الإضافيين للموظفين.

# 2 نظرة عامة على مصطلحات الصحة السلامة والبيئة:

تعج صناعة الصحة والسلامة والبيئة بالمصطلحات والاختصارات، بالإضافة إلى المفارقات التاريخية واللغة المحيرة في كثير من الأحيان. حتى أكثر المحترفين خبرة قد يجدون صعوبة في مواكبة جميع المصطلحات المتخصصة.

# 3. صعوبات ترجمة مصطلحات الصحة السلامة والبيئة إلى اللغة العربية:

توجد قيود كثيرة في نقل المعلومات والتكنولوجيا من لغة إلى أخرى لأن لكل لغة خصائص فريدة مثل الخصائص النحوية والمعجمية، فضلا عن الجوانب الثقافية التي تخلق حواجز أمام المترجمين والقراء لتلك النصوص. وفيما يلي نذكر بعض الصعوبات والمشاكل:

# 4. المشاكل المصطلحية لترجمة مصطلحات الصحة والسلامة والبيئة إلى اللغة العربية:

المشاكل المصطلحية هي من أكثر المشاكل التي تواجه المترجمين خاصة اثناء ترجمة المصطلحات التقنية، حيث يصعب عليهم إيجاد مكافئ مناسب باللغة العربية.

ومن الأشياء التي تساعد في حل هاته الصعوبات نجد:

-المسارد المترجمة الالكترونية والمطبوعة والتي هي قائمة بالمصطلحات الرئيسية الموحدة الموجودة في الوثائق التي تحتاج إلى ترجمة.

-مطويات او كتيبات مترجمة حيث تساعد ترجمة الكتيبات في الحد من أي جو من سوء الفهم قد ينشأ بين الشركة وعملائها، بغض النظر عن بلد منشئهم أو خلفيتهم اللغوية.

# 5. التقنيات والاستراتيجيات للتغلب على العقبات:

### التعريب:

و هو نقل الكلمة الأجنبية ومعناها إلى اللغة العربية وفق قواعد وأسس تضمن وضوحها وبلاغتها، (غانم،1989). ومن أساليبه ما يلي:

## الكتابة العروضية النقل والاقتراض:

هو التهجئة الدقيقة للمصطلح الإنجليزي بالحروف العربية، والنسخ أو الاقتراض يعمل بشكل أفضل مع تعريب مصطلحات صناعة الصحة والسلامة والبيئة؛ وهو واحد من أكثر الإجراءات استخداما على نطاق واسع لترجمة المصطلحات العلمية من خلال إدخال تغييرات صوتية ومورفولوجيا طفيفة على المصطلح الأجنبي.

## التجنيس:

وفقا لغزالا (1995)، فإن التجنيس هو محاولة لاعتماد المصطلحات الإنجليزية على مورفولوجيا بنية الكلمة العربية ويمكن اعتباره تطويرا لطريقة النسخ. تتضمن هذه الطريقة تكييف مصطلح إنجليزي مع النطق العربي والأبجدية والقواعد النحوية عن طريق تغيير تهجئة واحد أو أكثر من حروفه إلى حروف عربية قريبة واستخدامه في شكل مفرد أو جمع أو مذكر أو مؤنث أو فعل.

## الترجمة:

الترجمة هي نقل المصطلحات التقنية الإنجليزية إلى اللغة العربية باستخدام الكلمات الموجودة بالفعل في المعجم العربي. وبعبارة أخرى، يتم استخدام الكلمات العربية فقط.

# النقش / السك:

هو اختراع مصطلحات جديدة لم تكن موجودة من قبل في اللغة العربية، عبر ثلاث طرق رئيسية وهي:

# الاحياء أو إعادة الاحياء

هو استخدام كلمة عربية قديمة او ميتة منذ فترة طويلة لنقل معنى جديد. مما يعني إعطاء معنى جديد لها.و قالت بيكر 1987 إن هذه الطريقة تستخدم المعجم العربي بدلا من محاولة إدخال مفاهيم جديدة قد تستغرق وقتا طويلا لاعتمادها.

## الاشتقاق والاستخراج:

تعرف اللغة العربية بأنها لغة الاشتقاق. وفقا لغزالة 1995، فإنه يقوم على القياس، لتدابير الأكثر شهرة هي تلك الخاصة بالأوزان مثل مفعل, مفعلة, مفعال.

#### المستجدات:

هي أفكار وتعابير جديدة لم تكن موجودة في اللغة العربية الفصحى. وهي تمثل الغالبية العظمى من المصطلحات التقنية المعربة. هذه الطريقة تتمتع بقبول كبير وفقا لبيكر (1987).

# 6. الاستراتيجيات:

## الاقتراض:

الاقتراض هو إجراء ترجمة يشمل استخدام نفس الكلمة أو التعبير في النص الأصلي في النص المستهدف، لملء فجوة معجمية او انشاء تأثير معين (فيناي ودربلني 1995).

# النسخ:

هذه الاستراتيجية هي "نوع خاص من الاقتراض حيث تستعير لغة شكلا تعبيريا من نوع آخر، ولكنها تترجم بعد ذلك حرفيا كل عنصر من عناصرها (فيناي ودرباني 1995).

# الترجمة الحرفية:

الترجمة حرفيا او كلمة بكلمة، هي النقل المباشر للنص الأصلي الى النص المستهدف غير مخصص نحويا واصطلاحيا (فيناي ودربلني 1995).

#### التكافؤ:

يمكن تعريف نفس الحالة بطرق أو هياكل مختلفة. في هذه الحالات، يجب على المترجمين التعامل مع الطريقة التي تولد نصوصا مكافئة (فيناي ودربلني 1995).

# الفصل الثالث (الجزء التطبيقي):

# المنهجية والعينة:

العينة التي اخترناها في التطبيق هي "الكتيب التعريفي الجديد للصحة والسلامة والبيئة وكتيب الرابطة الدولية لمنتجي النفط والغاز " بالنسختين الإنجليزية والعربية. تم اختيار هاته العينة لأنها وثيقة تقنية تحتوى على نصوص ومصطلحات ذات صلة ببحثنا.

المنهجية المستخدمة في هذا القسم العملي هي مقارنة بين نسختي الترجمة من الكتيب التعريفي للصحة والسلامة والبيئة الحديث وكتيب الرابطة الدولية لمنتجي النفط والغاز. ونتيجة لذلك، سينصب تركيز هذا البحث على مقارنة النص المصدر، المكتوب باللغة الإنجليزية، بترجمته (النص المستهدف)، المكتوب باللغة العربية، بما يتناسب مع الاحتياجات المحددة للجمهور المستهدف، وهم الموظفون العرب في قطاع الصحة والسلامة والبيئة.

و نكتفي بذكر المثالين الاتيين.





# العينة الأولى:

# تحليل العينة الأولى:

هذا النص مأخوذ من كتيبات الرابطة الدولية لمنتجي النفط والغاز. الإجراء المستخدم في هذا النمط مكافئ المعدات والحمولة = Protection Equipment الأدوات = Tools في كلتا اللغتين توجد هذه الكلمة، استخدم المترجم طريقة الترجمة الحرفية في كلمة مواد العمل = Work Materials، كما استخدم Calque كإجراء لترجمة كلمة نقاط الربط = Anchor points.

## العينة الثانية



# تحليل العينة الثانية:

الإجراء المستخدم في هذه العينة هو الترجمة الحرفية (الإجراءات الواجب اتخاذها عند سماع التنبيه = Mirestrictions to be taken on hearing alarm حرفيا كإجراء مناسب)، (توقف عن العمل = Stop work , مكان العمل = Workplace )

# نتائج البحث

بعد التحليل توصلنا الى ان الإجراءات الأكثر استخداما في ترجمة المصطلحات والتعبيرات إلى اللغة العربية هي الترجمة الحرفية والنقل والترجمة عن طريق الإضافة والتوسع والتشكيل والنسخ. الإجراء الأكثر استخداما هو الترجمة الحرفية والنسخ، وهي مناسبة في بعض الحالات ولكنها غير مناسبة في حالات أخرى. تمت ترجمة غالبية المصطلحات من حيث الوظيفة.

### الخاتمة:

في هذا البحث تحصلنا على نتيجتين، النتيجة الأولى هي أن غالبية المترجمين لا يطبقون الإجراء الصحيح لترجمة مصطلحات الصحة والسلامة والبيئة.

والنتيجة الثانية أن إجراءاته قد تكون سببا في تقديم التعبير والمعاني غير الصحيحة، وأن عدم تحديث التقنيات يمثل قضايا الترجمة.

يؤكد الجزء العملي من الدراسة أن المترجمين يستخدمون الترجمة الحرفية بشكل مفرط وغير عقلاني. و في الأخير أكدت هذه الدراسة أن ترجمة مصطلحات الصحة والسلامة والبيئة هي أكثر من مجرد تقديم معنى بين لغتين. بل هي عملية واسعة النطاق للغاية تحتاج إلى استخدام أساليب نظرية أحدث ومترجم جيد يدرك تماما كيفية عمل مجال تكنولوجي معين.