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# ترجمة الصناعة النفطية إلى العربية

# مذكرة مقدمة لإستكمال متطلبات نيل شماحة الماستر فيي الترجمة

تمت مناقشتها علنيا

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# **Dedication**

We dedicate our dissertation to our family and our friends.

Specially feeling gratitude to our beloved parents and those words of encouragement, support and believing in us. A special thanks to Dounia, Hamida, and to the whole American Corner Ouargla family those who helped us in any way possible and contribute to our dissertation.

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# List of abbreviations

ST: Source Text
TT: Target Text
SL: Source Language
TL: Target Language
OI: Oil Industry
CF: Cubic Feet.
BTU: British Thermal Unit.
BOE: Barrel of Oil.
BOEPD (BOE/D): Barrels of Oil Equivalent Per Day.
TOE: Ton of Oil Equivalent.

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### **Abstract**

The English - Arabic oil industry terminology translation is increasingly becoming a topic of much importance nowadays. Oil on the Arab side and technology on the Western side contribute to this importance. This paper highlights the problems encountered in English-Arabic oil industry terminology translation and tries to establish certain possible procedures which may finally lead to practice of this sort of technical translations. It also identifies certain difficulties and obstacles that exist in translating OI terminology into Arabic and attempt to overcome those challenges and problems by stating possible solutions and methods. The paper also proposes samples and examples for English - Arabic oil industry translations in further attempts to Arabize the OI translation into Arabic (Arabization) driving this study to more extensive result.

# **Keywords:**

Oil industry (OI) terminology, Arabic and English for OI terminology, Specialized terminology, Procedures, Arabization of OI terminology.

# الملخص

ترجمة المصطلحات الصناعة النفطية من اللغة الإنجليزية الى اللغة العربية على نحو متزايد و موضوع ذو أهمية كبيرة في الوقت الحاضر. النفط من الجانب العربي والتكنولوجيا من الجهة الغربية تساهم في هذه الأهمية. وتبرز هذه الدراسة المشاكل التي تواجهها ترجمة المصطلحات الصناعة النفطية من الإنجليزية إلى العربية ومحاولة إقتراح بعض الإجراءات التي قد تؤدي في النهاية إلى ممارسة هذا النوع من الترجمة التقنية. و أيضا تحديد بعض الصعوبات والعقبات التي توجد في ترجمة المصطلحات الصناعة النفطية إلى اللغة العربية ومحاولة للتغلب على تلك التحديات والمشاكل التي تفيد كحلول والطرق ممكنة. وتقترح هذه الدراسة عينات ونماذج لترجمات في الصناعة النفطية من اللغة الإنكليزية الى اللغة العربية ومحاولات أخرى لتعريب ترجمة إلى اللغة العربية (التعريب) بحيث تحتوي هذه الدراسة نتائج أكثر شمولا.

# الكلمات المفتاحية:

مصطلحات الصناعة النفطية, مصطلحات الصناعة النفطية في اللغة الانجليزية و العربية, المصطلحات المتخصصة, الاجراءات تعربب مصطلحات الصناعة النفطية.

# Introduction

Arabic translation is holding global importance and is widely used. The Arabic language is spoken by over 186 million people as a first language, and at least another 35 million as a second language. More than 20 countries use Arabic as their official language.

According to the U.S. Energy Information Administration, the Arab world is home to 4 of the top 10 highest oil producing countries in the world. This generates the need for translation from English into Arabic for the Energy sector.

# 1. The statement of problem

One of the main problems that translators may face is how to deal with translating oil industry terminology from English into Arabic, also the lack of oil industry terminology in Arabic vocabulary, the techniques to translate this terminology into Arabic and overcoming the obstacles and problems as well as taking into account the differences between English and Arabic in the linguistic nature of constructing words.

# 2. The purpose of the study

The present research attempts to translate the oil industry terminology into Arabic (Arabization). How to make Arabic contain the terminology? To highlight the methods and procedures often used in translating technical texts such as energy sector, and whether this methods are the source to overcome the obstacles translator face and whether it is reliable enough to ensure good results and serve the Arabic language in translating oil industry terminology.

This paper aims to reach pure result of translating OI texts into Arabic, to naturalize the OI terminology into Arabic vocabulary going through the techniques and strategies to overcome the obstacles in translating OI text and suggest solutions and how Arabic can host the oil industry terminology all this due to the urgent need of the Arabic translation in oil industry in last few years in the period covered by this study will be focused in how to render the O I in natural Arabic this description attempts also to restrict the terminology of the industry into Arabic languages and within the specific specialized texts. The study aims also to determine the obstacles facing the translators in the oil industry to naturalize the translation.

# 3. The research question

In attempting to investigate the oil industry terminology translation problems encountered in translating English specialized terminology into Arabic, it is necessary to answer the following questions:

1- What are the techniques used in translating the oil industry terminology from English into Arabic (Arabization)?

# 3.1 Sub-questions

- 1- What are the terminological obstacles faced by translators in translating oil industry terminology into Arabic?
- 2- What are the possible as solutions?
- 3- How to make Arabic host that terminology?

# 4. Hypotheses

To answer the questions raised by this study, it is hypothesized that the obstacles translator face when translating OI terminology into Arabic, maybe accounted for the lack of OI terminology in Arabic vocabulary.

The non-updated procedures or not adopting the appropriate method that ensures a high quality translation in such technical field as OI field.

# 5. Methodology of the dissertation

The methodology of this study is based on two sections. The first is a theoretical section which deals with the terminology and specialized translation in general and with oil industry terminology in specific, the need of OI terminology in Arab world. Also the study analyses the difficulties and the challenges that stand as an obstacles in translating OI terminology into Arabic, developing these procedures to overcome the challenges and problems to translate the oil industry terminology into Arabic.

The second section is practical framework and analytic it focuses on collecting OI translation samples, data and glossary translated into Arabic then classified them according to certain criteria which will be case study to work on solutions to arabize the translation into Arabic language in the OI terminology.

# Chapter I Theoretical Section

### Introduction

This chapter will be focusing on defining terminology, terminology and specialized translation, and will be devoted to talk about an overview of oil industry terminology and the translation of oil industry terminology from English into Arabic. At the first we start with a general review of the different definitions of the terminology in general and oil industry terminology along with the obstacles it causes in specialized translation, how to overcome these obstacles and suggest procedures and techniques of translating scientific and technical texts into Arabic language.

# 1.1. Definition of terminology

Terminology, as a field of knowledge, deals with the study of terms. Like any subject, terminology has its applied side, which can be found basically in the collection, analysis and, in some cases, standardizing of terminological units in glossaries or databases.

Terminological units are the object of study of terminology as a field of knowledge and can be described from three different perspectives. Linguistically, terms are lexical units of language that activate a specialized value when used in certain pragmatic and discursive contexts. The special value results in a precise meaning recognized and stabilized within expert communities in each field.

The linguistic, cognitive and communicative perspectives are inseparable for a holistic description of terms; however, the three approaches are treated separately for scientific purposes.

Terminological units are all the lexicalized units used in special fields. Within these units, those of nominal category with referential and denominative value are the prototypical terms. But specialized knowledge can also be expressed by units of other lexical categories (verbs, adjectives and phrases) or other types of units: supra lexical (specialized phraseology and fixed sequences) or infra lexical (specialized formants).

# 1.2. The linguistic differences between English and Arabic

When oil industry technology is developed in western countries and used in Arabic speaking countries, they carry with them new terms that may have no equivalents in Arabic, therefore, linguistic issues concerning language development must be considered.

When new oil industry sector function, many technical terms have been introduced into Arabic through transliteration or coining. This phenomenon makes it challenging to find standards for technical terms commonly used in English. Over time, as more as oil industry terms are translated into Arabic, these challenges will reduction. Translation involving oil industry terminology is considered a vast challenge for Arabic language. While it is not easy to express oil industry terms in Arabic, the translator needs to use pure Arabic terms that can accurately express the exact meanings of the source language terms. Basic linguistic differences between English and Arabic can make translation challenging in technical and scientific work. Basically, Arabic is a language that has developed primarily through literature, religious texts, and poetry. Very little modern scientific or technical writing has originated in Arabic, creating a shortage of oil industry equivalent terminology in Arabic as the table shows bellow these are some major differences between English language and Arabic language.

<u>English</u>	<u>Arabic</u>
- Words are composite.	- Words are paradigmatic.
- Only few grammatical items are	- The majority of grammatical
compound.	items are compound.
- Rigid word order.	- Flexible word order.
- Very few inflections	- Highly inflectional.
- Uses abbreviations, acronyms,	- Rarely uses abbreviations,
formulae, and registers.	acronyms, formulae, and cliches.
- Narrow range of gender distinction.	- Wide range of gender distinction.
- There is clear-cut tense-aspect	- There is no clear-cut tense aspect
distinction.	distinction.
- There is no dative or dual.	- Contains dative and dual.
- Scientific and technical	- Shortage of scientific and
terminology covers all relevant	technical terminology that may

fields.	cover all fields.
- Archaic expressions are almost obsolete.	- Archaic expressions are still in use.
- Uses so many compound lexical structures.	- Uses few compound lexical structures.
- Metaphor and other forms of figurative language are reserved for poetic use of language and certain related fields.	- Metaphor and other forms of figurative language are very much frequent even in Modern Standard Arabic.
- Adverbs are mostly formed by the affixation of (ly) to adjectives.	- Adverbs are formed by prepositional premodification of nouns and adjectives; English prepositions such as before, after, above, over, below, under, behind, and between are adverbs in Arabic.
- Capitalization is sometimes used for semantic implication e.g.  Mosaic, Nativity etc.	- Does not use any form of capitalization.
- Does not use vocalization.	- Vocalization has a semantic function.
- Punctuation has a bearing on the interpretation of texts.	- Punctuation has little bearing, if any, on the interpretation of texts.
- A part from such suffixes as (-ling and -ette) there is no paradigmatic diminutive in English.	- Paradigmatic diminutive exists.
- It has no diglossia.	- Diglossia exists.
- There are about twenty configurations of vowel sounds.	- Few vowels sound used mainly in vocalization.
- There are no pharyngeal or glottal sounds except in the aspirated (H) and the colloquial glottal stop.	- Pharyngeal and glottal sounds are among the standard phonemes in Arabic.

The differences that exist between Arabic and English play a significant role in scientific translation in general and in oil industry translation in specific. Both of the languages belong to

different language families. As for English language it belongs to Germanic languages while Arabic language belongs to Semitic, ultimately this leads to plenty of differences concerning vocabulary and grammar, and most of the language features. Al-Hassnawi deduced from this comparison, that Arabic language suffers a serious shortage of technical and scientific terminology, and it is in a great need of introducing terms that serve Arabic vocabulary, while English language is considered a highly sophisticated technological language.

# 1.3. Terminology and specialized translation

Terminology has an important role in scientific and technical translations, and it is a crucial concept in scientific texts. Byrne (2006:03) stated that "Terminology is, perhaps, the most immediately noticeable aspect of a technical text and indeed it gives the text the "fuel" it needs to convey the information". As well as, Yowell and Lataiwish (2000) mentioned that terminology is considered to have a very significant part in English- Arabic translation. Nowadays, the Arab world witnesses an important process of transferring new founded western terminology. This process aims at finding an equivalent for the source language terminology in the target language.

# 1.4. The scientific and terminology translation

Worldwide, even as the English language has advanced to the level of a world lingua franca, a growing number of global treaties directly involve scientific subjects, e.g. oil industry. This has added new demands to scientific translation by many publics and linguistic communities. The large amount of new scientific information, along with the urge to put it into Arabic while also transmitting much of it to Arab audience, creates a context for a large expansion in translation activity.

Translation of scientific material from English to Arabic has to apply a wide range of methods, which still used nowadays.

More often these days for professional scientific translators to work one-on-one with a text, mediators and advisors are still used, for example if a translator's knowledge of the target language or discipline is imperfect. Due to the evolving nature of technical language as the oil industry, a growing number of translators now have scientific training. Scientific translators must use specialized dictionaries and tend to work in a limited number of fields (e.g. areas of oil industry)

Terminology in oil industry urges the need for such accuracy in translation into Arabic. Today, science depends heavily upon highly specialized and ever expanding technical vocabularies in Arabic, a challenge to every translator. Inaccurate rendering of even a few terms can ruin a translation's faithfulness.

Such realities show that theoretical issues are indeed involved. The common notion that translating science is a linguistically unsophisticated process, based on word-for-word rendering. Technical language is not universal; there is no one-to-one correspondence among different tongues when they express scientific information. Yet the translator of science is not considered important enough as a creative, producing agent, to be discussed even by those who write on what has been called the translator's "invisibility" (Venuti, 2008). Scientific translators, however, produce cultural products that qualify as originals in the target language.

# 1.5. The relations between terminology and specialized translation

The relationship between translation and terminology has been addressed by various authors both in the field of translation and terminology. From the point of view of translation, terminology is considered a tool to solve particular problems, while in terminology, translated documents may serve as a source for extracting terms when there are no original texts on the subject in the target language.

The relations between translation and terminology in detail from the perspective of specialized translation and analyze the terminological problems translators face and the most appropriate strategies and resources to solve them. We present the different degrees of terminology involvement translators may have.

Terminology and translation are characterized by their long tradition as applied subjects, in contrast to their recently established character as disciplines. Terminology and translation emerge from the practical activity caused by the need to express specialized thought or to solve comprehension problems.

Second, due to their relatively recent scientific nature, both translation and terminology try to advance in conforming of their status as disciplines by placing emphasis on the features that distinguish them from other subjects and adhering to theories which sustain their autonomous nature as fields of knowledge.

Thirdly, terminology and translation are interdisciplinary fields having a cognitive, linguistic and communicative basis. As a result, their foundation principles come from the cognitive, language and communication sciences.

Last but not least, language is the essence of both disciplines. Language is the expression system that reflects speakers' conception of reality and allows individuals to interact and express their ideas and thoughts.

Despite their similarities, translation and terminology are different fields of knowledge that focus on two different objects: translation deals with the study of the translation process and the analysis of the translated text, and terminology focuses on the lexical form and content nodes representing knowledge as structured in the experts' mind.

Terminology and translation are also explicitly distinguished by their purposes. Translation is concerned with expressing in a language a semantic-pragmatic structure originally produced in another language. Terminology aims at collecting specialized terminology to compile them and produce terminological resources (glossaries, dictionaries, vocabularies or databases) intended to be readily accessible and useful to translation experts, among other professionals.

Finally, translation and terminology bear an asymmetrical relationship. Specialized translation inevitably needs terminology to produce an accurate text. This is so because experts use terms for their texts. In practical terminological work terms are gathered from texts produced by specialists in real communicative situations. On the other hand, in the process of elaboration of glossaries, term extraction from original texts instead of translated texts is a priority. Only in situations where there is no discourse on a subject in a given language, are translated texts used as terminological source.

Translationally speaking as an activity, terminology is conceived as a tool for translation. Terminology resources provide to translators the information needed to solve their problems, that is, to find an equivalent in the target language, learn the meaning of a term in the source language or select the best option among several alternative terms.

But beyond its instrumental role, terminology also serves translators as a means for acquiring knowledge about a special domain. The terms of any specialty, interrelated by different types of relationships constitute knowledge structures. Thus, knowing the terminology of a field implies acquiring knowledge of it. In this sense, terminology has a metacognitive

function as it helps translators to organize their knowledge on the subject, and provides them the lexical units (terms) to express the specialized knowledge units of the field adequately.

# 1.6. Overview on oil industry terminology

The oil industry terminology is made up of many factors, each one has a specific job that spans the spectrum - from the discovery of the fossil fuels to the delivery to the end user. Along the way there are many industries that make this progression possible. The exploration and production (E&P) companies focus on the search, discovery and production of the commodity. The drillers "pull" the oil out of the ground. The refiners take oil and "crack" or change it into usable forms. (Unearth Profits in Oil Exploration And Production.)

These sub-industries are only a few of the moving parts that make up the oil industry. As with many industries, oil industry has a language of its own that investors need to understand before making investments.

### Examples:

**BBL:** Barrel of oil, a volume of 42 U.S. gallons (0.16 m<sup>3</sup>).

CF: Cubic feet, a unit measurement for large volumes of natural gas.

**BTU:** British thermal unit, a unit of energy. It can be used to determine the quality of the resource when burned.

**BOE:** Barrel of oil equivalent is a unit of energy based on burning one barrel (42 U.S. gallons) of crude oil.

**BOEPD** (BOE/D): Barrels of oil equivalent per day. One barrel of oil is generally deemed to have the same amount of energy content as 6,000 cubic feet of natural gas.

**BBL/D:** Barrels per day; a term used to measure daily production and consumption and can also be quoted as bpd.

**TOE:** Ton of oil equivalent; a metric measurement equivalent to approximately 6.841 BBOE.

### Unit measures

Each of the preceding terms can be attached to a unit of measurement. For example, 16 MMBOE would mean 16 million barrels of equivalent.

 $\mathbf{M}$  = one thousand

MM =one million

 $\mathbf{B}$  = one billion

T =one trillion

# 1.7. The need of translating oil industry terminology from English into Arabic

Arabic language has global importance and it is widely spread. The Arabic language is spoken by over 186 million people as a first language, and at least another 35 million as a second language. More than 20 countries use Arabic as their official language. In some countries more than one language coexists, for example in Algeria, where Arabic and French are spoken. This is also the case in Morocco, Tunisia and most of the Maghreb region where both Arabic and French are regularly used.

The U.S. Energy Information Administration, the Arab world is home to 4 of the top 10 highest oil-producing countries in the world. This generates the need for translation from English into Arabic for oil industry.

Business in the Middle East centers on oil. It has 53 percent of the globe's oil reserves and Saudi Arabia alone accounts for 19% of this amount. This demand for oil is predicted to increase by 50% by the year 2030. With oil all set to be high in demand, so will be the need for Arabic translators. Companies like British Petroleum have a large interest in the Middle Eastern and Saudi petroleum markets. This ensures that Arabic translation for oil industry is and will be in demand in future.

# 1.8. Difficulties in translation O.I terminology into Arabic

# 1.8.1. Terminological problems of translating oil industry terminology into Arabic

When translating oil industry terminology, translators face a diversity of problems posed either by the text to be translated or the different contexts of production and reception of the original and the translated text, among these problems there are terminological problems. Translators need to recognize when a problem is related to terminology in order to solve it with a terminological method.

A translation problem is terminological only when it affects terms, as lexical units with an exact meaning in oil industry. A terminological problem may be related to term understanding and the term pragmatic properties in the English language text, or to the search for equivalents. The following are cases translators face:

- Lack of knowledge in all or part of oil industry terminology, its meaning, its grammatical use or pragmatic value in the SL.
- Not knowing if in the Arabic language (TL) there is a lexicalized unit semantically and pragmatically equivalent to the term used in the original text.
- Doubting whether a given unit of the Arabic (TL) is the most appropriate equivalent among the alternatives found.
- Ignoring or having doubts about the style used in oil industry terminology.

In order to solve the problems encountered in the understanding of the oil industry text ST, translators use reference books to learn the meaning of units or their grammatical and pragmatic conditions of use. These reference works are often reduced to monolingual specialized dictionaries in the English language in field of energy sector (oil and gas industry) or bilingual and multilingual terminological databases. Translators expect to find the information they need to fully comprehend the text to translate, and may also consult experts with competence in the field of oil industry the SL.

In the translation phase, translators must fundamentally solve equivalence problems, i.e. finding an equivalent or selecting the most appropriate equivalent. Unlike the logic of translation, solving terminological problems is not about finding a method to ensure equivalence, but finding an equivalent term.

Among the problems caused be the inexistence of terminology which reference works left unresolved, we can find the following cases related to the Arabic language TL:

- It is not possible to find a lexicalized unit (term) because specialists do not use this language to communicate on the subject.
- There is no lexicalized unit satisfactory from the linguistic point of view because specialists make systematic use of the borrowing.
- There is no standard unit agreed upon by the specialists of oil industry (US energy administration information) or sanctioned by standardization or normalization bodies.

In the quest for equivalents, translators start, at least in principle, from the assumption that all terminological units in the English text will have an equivalent terminological unit in the Arabic text. If the search is unsuccessful and no equivalent is found (a situation that only occurs when oil industry issue has never been dealt with in the Arabic language) translators may propose a solution, i.e. a new term, which should be accordingly acknowledged in the footnote.

It is clear that to be able to propose a term translators must have acquired a sound knowledge of lexical morphology, lexicology, sociolinguistics and pragmatics. Besides, some degree of feasibility of use of the suggested term is required.

When confronted with different alternative terms, to decide between choosing one possibility or coining a new term is not an easy task. It implies considering all the possibilities and means of resolution for each type of problem and act accordingly for example in our case in translating oil industry terminology into Arabic. Broadly speaking, translators must consider other proposals and neological criteria established by standardization bodies, the general structure of language and lexical resources available (including borrowing and finding possible equivalent of the oil industry terminology) and the grammatical possibilities to form new terms, the characteristics of oil industry terms system the new terminological unit will form part of and the linguistic viability of the proposed terms, and the chances of being accepted and used by the expert group.

Once all the possibilities have been considered, the translator must make a decision and choose the term to be used in the translation. This term must be sufficiently documented so as to avoid the proliferation of terms coined by translators, as individual translators are not sources of consolidated reference terminology.

# 1.9. Techniques to overcome the obstacles

Translation of oil industry from English into Arabic poses huge linguistic obstacles. One of these obstacles, yet a significant one, runs as follows: Translation of scientific term is considered by Al-Hassnawi (2010) as a real *intellectual challenge*. It requires skills, intelligence, and mastery of both English and Arabic. Arabic suffers a serious shortage of vocabulary that covers the fields of oil industry; therefore, translators should consider this problem before anything else. Moreover, Krollman (1978) stated that terminology is responsible for 40% to 60% of the technical translator's errors, and it takes up to 50% of his

precious time to set the appropriate terms. Beeston (1970: 115) explained the importance of having new terminology for the scientific field as: The need for a large new vocabulary dealing with technological and scientific matters is, however, the least interesting feature of the new lexical development; more fascinating, though more elusive, is the evolution of new words for intellectual concepts.

Thus, oil industry translation has become a crucial step towards the acquisition of new technologies and spread of technology all over the world, hence, the coinage of new Arabic scientific vocabulary is seriously required to enrich the Arabic language.

# 1.9.1. Techniques of translating oil industry terminology from English into Arabic (Arabization التعريب)

Dealing with terminology requires specific skills in the form of some methods to be fruitful and serve the Arabic language. In this respect, numerous options are available for translators to translate oil industry terms into Arabic.

Arabic agencies have devoted themselves officially or unofficially to produce new set of oil industry terminology for Arabic that may facilitate the translation process when it comes to introduce new terms from the English language. According to Ghazzala's (1995:163) point of view.

# (الكتابة العروضية, الاقتراض, تحويل) 1.9.1.1. Transcription, transference or borrowing

Transcription or borrowing best works with Arabization the oil industry terminology, it is one of the procedures widely used to translate scientific terms by introducing minor phonetic and morphological changes to the foreign term. It consists of writing the English scientific terms using the Arabic alphabet with no alteration to their pronunciation in English language. as following examples:

- 1. Petronet = بترونت
- 2. Butane = بيوتان
- 3. kerosene = كيروسين

Transcription does not give the meaning of the word in Arabic, also the transcribed terms are not pure Arabic or sound like Arabic, they are just borrowed and shaped in Arabic letters. Using transcription neither serves the Arabic language nor enriches its vocabulary. In fact, it is

just an offence to the Arabic language, because it implies that Arab translators are unable to invent new pure Arabic terms and prefer the easy way to translate oil industry terms, thus, neglecting the significant statue of the Arabic language.

# 1.9.1.2. Naturalization (التجنيس)

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 consists of adding new affixes to the foreign terms leaving their roots unchanged. The added affixes are to adjust the terms into the Arabic morphology as is the case of verbs, nouns, gender, adjectives and adverbs:

# **Examples:**

خدمات النفط اللوجستية = Oil logistics services

بتروكيماويات = Petrochemicals

Hydrogen (n) = الهيدروجين

Hydrogenate Hydrogenizes (v)

Hydrogenation (n)

Hydrogenated (adj)

تكسير هيدروجيني = Hydrocracker

الهيدروكربونات = Hydrocarbons

مادة هيدروكربونية, هيدروكربون = Hydrocarbon

هیدروکربوني = Hydro-carbonic

تكنولوجيا = Technology

تكنولوجية. تكنولوجية = (n/plural) تكنولوجية.

تكنولوجيات = (Plural) تكنولوجيات

تكنولوجي = (adj.)

تكنولوجيا = (adv.) تكنولوجيا

أوكسيد = Oxide

مؤكسد = Oxidized (adj.) = مؤكسد

مؤكسد = Oxidizer (n)

بيولوجيا = Biology

بيولوجي = Biologist (n)

بيولوجية = (adj.)

میکانیك =Mechanics

میکانیکیات/ میکانیکیة= (n/plural) میکانیکیات/

میکانیکی/ میکانیکیة= ( Mechanical (adj.)

میکانیکي/ میکانیکیة= Mechanic (n)

یمکنن= (v) یمکنن

Mechanically (adv.) = میکانیکیا

Naturalization is considered better than transcription by Ghazzala (1995), although it is still not convenient. Thus it is not pure Arabic, the basic or the roots of terms are English even if they are naturalized. This method does not consider meaning, the lay reader, for example, would not know the meaning of the word مؤكسد. To avoid this type of problem, Ghazzala (1995) suggested another method that, in his opinion, would fulfill the appropriate translation of scientific terms and he simply suggested to translate, i.e., taking the scientific English terms and transfer them by using pure Arabic vocabulary. For example:

- تقنية, تقَانة = 1. Technology
- علم الأحياء = Biology
- 3. Biologist = عالم الأحياء

According to Baker (1987) transcription and naturalization have not been agreed language traditionalists because they are a threat the identity of Arabic. Thus, translators are likely to come across a situation where they need to be more creative by following certain methods that may ensure the high quality and faithfulness of translating oil industry terms. In an attempt to

get over this obstacle, 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 (oil industry) 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.

# 1.9.1.3. Equivalence

Vinay and Darbelnet stated that same condition could be defined in different forms or structures. In these situations translators are dealing with the method that originates equivalent texts. Specially when it is related to cultural belief, where we should not forget to bear in mind the sense not the image.

Yet, if the terms have equivalent in Arabic, translators have to use them instead of transcription, for example:

- عقل = 1. Al-Khafji
- 2. Crude = الخام
- قار = 3. Bitumen
- 4. Valve = صمام
- 5. Vibration = ذبذبات

This method will be considered as a critical problem opposed to translators, if they use it for ordinary terms that have equivalents in Arabic as shown by the word 'Al-Khafji' usually transcribed as الحقل and for which the phrase الحقل can be used.

### 1.9.1.4. Coinage

This method aims at presenting new terms in the Arabic language via three main processes.

# 1.9.1.4.1. **Derivation**

Baker (1987) said that the Arabic language is usually referred to as the language of derivation. She explained that the Arabic language word root system is built up on three fundamental consonant roots, each one holds a given meaning. The roots are used for the

production of nominal and verbal forms by adding prefixes, suffixes, infixes and vowels. For example:

- Information معلومة from معلومات
- 2. Generator = مولا to generate.
- 3. Factory = مصنع from صنع to manufacture

According to Ghazzala (1995) derivation is based on measurements; it aims at using certain measures found in the Arabic language to derive new terms. The most used ones are machinenames. For example:

مفعل	مفعلة	مفعال
مکثف = Condensate	مضخة = Pump	مثقاب = Driller
مخبر = Laboratory		مصفاة = Refinery

Baker (1987) supported this method and claimed that it makes understanding of the meaning of terms easier for the readers since they are inherited from the root, which is already familiar, used to derive that term. In other words, the derived terms are not new to the vocabulary, they already exist but in different forms. Furthermore, it is favored by academics since it does not affect the identity of the Arabic language and the derivation process is based on pure Arabic vocabulary roots.

On the other hand, Ghazzala (1995) argued that derivation is still a restricted way because it cannot be applied to all the terms as some of them would not accept measures.

### 1.9.1.4.2. Revival

Revival tries to put back into use old Arabic words that were used but fade away with the time and assigns them new meanings. Baker (1987) said that this method uses Arabic lexicon instead of trying to introduce new concepts that may take time to be adopted. For example:

- 1. Well = (بئر (الجُب originally used to mean water well
- 2. Rig = برج الحفر (حفارة) originally used to look for groundwater
- 3. Drilling = تنقيب (عملية الحفر) حفر originally used to look for water

4. Pump = مضخة originally used to pump the groundwater

Revival has proved its efficiency, however, it is still not easy to look for old Arabic words, it consumes time and effort and cannot be applied to cover all new introduced terms in the field of oil industry. Using this method is not always successful because some of the attempts to revive archaic words did not suit modern Arabic vocabulary or to be matched with the new technology of the modern world such as oil industry they were "a subject of much ridicule" (Baker, 1987:186).

### 1.9.1.4.3. **Neologisms**

Neologisms aim at introducing new terms and concepts into the Arabic language by translating the meaning. This method according to Baker (1987) enjoys much acceptance. For example:

- 1. Petroleum geologist = عالم الأرض المتخصص في النفط
- وقود السيارات = 2. Gasoline
- 3. Health & Safety Department = الأمن الصناعي
- 4. Jet fuel (Kerosene) = وقود الطائرات

Finally, there have been great efforts to bring new oil industry terminology into Arabic, throughout several methods which may server the Arabic language, yet these techniques should not threaten the Arabic identity. Translators should consider the linguistic differences between English and Arabic, for that they need to coin terms that are linguistically suitable to Arabic.

## 1.10. Conclusion

This chapter dealt with oil industry terminology translation. First it introduces definitions of the key terms included in the study along with the nature of oil industry terminology. Second it tried to discuss numerous issues, problems obstacles concerning oil industry translation, which produced while translating oil industry terms, after it presents several procedures that insure an exact rendering to oil industry terms, this chapter presented that terminology is considered to be an obstacle in translation oil industry terms from English language into Arabic language the translator should acquire a mastery of the two languages and a wide background knowledge to the field of oil industry, which may help in choosing the appropriate translation techniques in order to guarantee the precise translation of the English terms into Arabic

# **Chapter II**

# Analyzing oil industry patterns

# Introduction

In this part of the study, the analysis of glossary samples functioned in Iraq, Kuwait, Arab Organization For Translation (special terminology product) and Arab Oil & Natural Gas website, the biggest resource in the web about oil & natural gas industry these resources are used by translators in the field of oil industry translation from English into Arabic, this chapter will be descriptive comparative between the procedures used by translators in regarding the source text from English into Arabic in the field of oil industry. In that sense, every decision in the act of translation with respect to the identity of Arabic language.

The core of this chapter is to prove or disprove the hypotheses raised by this study which hypothesizes that the difficulties, problem and obstacles translators face when translating oil industry texts may be accounted for the lack of Arabic vocabulary in such technical field as an oil industry or for the non-updates procedures or not adopting the appropriate method that ensures a high quality translation in such technical field as oil industry sector.

### **2.1. Pattern 1**

# BARREL

The liquid quantity consisting of forty-two (42) United States gallons under a pressure of one (1) atmosphere and a temperature of sixty (60) degrees Fahrenheit.

# 2.1.1. The methods of translation used in this pattern

This text is taken from glossary terms in the web-site of Iraq Ministry of Oil Inspector General Office. When the text is analyzed in terms of text type we see that the text is a definition to an oil industry term.

The procedure used in this pattern is equivalent (Barrel = برميل) in both languages this word exist, it is also 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, also the word (Gallons = فالون), (Fahrenheit = فهرنهایت) it is borrowing and transcription of word for their nature as a name Gallon unite of measuring liquids and Fahrenheit degree is a scale of measuring temperature and the appropriate method to translated a name is borrowing.

# 2.1.2. The analysis of the pattern with respect to the genius of Arabic L

In the sense and nature of Arabic language and it identity the translator in the source text translated the word (Gallon) to (غالون) which is not very common in Arabic language as unite of measurement rather than the word (التر) which is and equivalent for the word (liter), mostly used by Arab speakers, never the less the word (Gallon) used in petroleum industry to measure oil, the barrel contains (42 gallons and its 159 liters), the word (Fahrenheit) (فهر نهایت) is new to Arabic due to its lack of technical vocabulary.

Also the numbers are translated from Arabic numbers (42, 60) to Persian numbers. The origin numbers in the source text are Arabic not the translated ones.

There is no coherence or cohesion between the elements of the target text, the definition been translated word by word rather than sense by sense taking no consideration how it can serve the Arabic language and its identity.

# 2.1.3. The analysis of the pattern with respect oil industry terminology in Arabic

In the target text the translator did not serve the Arabic language neither by contributing to new terms in Arabic in the field of oil industry nor by coordinating the elements in Arabic order. Since the readers are considered to be concerned with oil industry, in general. Terminology of oil industry in the target text excludes the naturalization of Arabic language out in technical texts which stand as barrier in the target text. Because words in Arabic are not in the correct order and it cannot be easily understood within the context. On the other hand, translators who have very limited information about the industry mentioned will have some comprehension problems with the following words as such: (Gallons = فهر نهایت). (Fahrenheit =

# 2.1.4. Translating the pattern demonstrating the proper techniques of Arabization

البرميل

هو كمية السائل المتكونة من (42) اثنين و أربعين غالون أمريكي (159لتر) تحت ضغط جو ودرجة حرارة واحدة (60) ستين درجة فهر نهايت.

# 2.2. Pattern 2

# CRUDE OIL

All hydrocarbons regardless of gravity which may be produced in the liquid state at absolute pressure (14.696) pounds per square inch and (60) degrees Fahrenheit, including asphalt and tar, but excluding NGL that is not blended with Crude Oil.

# النفط الخام

يعني كافة الهايدروكربونات بصرف النظر عن الوزن النوعي التي قد يتم إنتاجها و تخزينها في الحالة السائلة بضغط مطلق مقداره (14.696) باوند على العقدة المربعة و (60) درجة فهرنهايت متضمنة الإسفلت والقار، ويستثنى من ذلك سوائل الغاز الطبيعي غير الممتزجة مع النفط الخام.

# 2.2.1. The methods of translation used in this pattern

This text is taken from glossary terms in the web-site of Iraq Ministry of Oil Inspector General Office. When the text is analyzed in terms of text type we see that the text is a definition to an oil industry term.

The procedure used in this sample is equivalent (Crude oil = النفط الخام), the translator used naturalization method in the word (hydrocarbons = الهيدروكربونات) he kept the radical and base or the origin word but he add affixes to adapt with the Arabic nature.

The translator also translated the unite of measurement (pound = باوند for weights and inch = عقدة for distance) using borrowing or transcription in the word (pound = عقدة) (asphalt = (الاسفات), (tar = قار) and (Fahrenheit = فهرنهایت) which they mean the same thing, but the word (inch = عقدة) is an error translation (Inch = عقدة).

Also the method used in translating abbreviations (NGL = سوائل الغاز الطبيعي) is literal translation which serves the meaning properly.

# 2.2.2. The analysis of the pattern with respect to genius of Arabic L

In the sense and nature of Arabic language and it identity the translator in the source text translated the words (pound = باوند), (asphalt = قال), (tar = قال), and (Inch = قال) into target text using the transcription as a procedure but this method do not serve Arabic vocabulary as enriching its technical terminology in general and in oil industry in specific which had been better searching for natural equivalent mostly used in Arabic and common in field mentioned above for example in the Arab world in general and in Algeria specifically we measure length with meter (1 Inch/ pouce in French = 2.54 cm), (Inch = بوصة/ إيهام اليد), also there is other unite of measurement in old Arab world such as (50cm = الذراع = 3.54 cm).

Also the unite of measurement (pound = باوند) mostly used in western world but in Arabic language (kilogram = كيلوجرام) is the most common unite of measurement (1 pound = 500g), we suggest as translator to transform unite of measurement with mentioning the origin.

The natural equivalent serves the target text better than other procedures and it renders the exact meaning to the target text for example: (asphalt and tar = الزّفت / طلي بالقطران).

# 2.2.3. The analysis of the pattern with respect oil industry terminology in Arabic

Arabic terminology in the context of oil industry is mainly standing as a barrier in front of the translators. Technical words used in the text cannot be comprehended by the ordinary reader. Furthermore, both the reader and the translator are aware of the fact that those terms are not quite familiar with the Arabic audience. The source text in terms of terminology is seen in the translation. Since the oil industry terminology is imported from the west along

with the technology itself, so when translating into Arabic language the translator preferred borrowing method for the lack of technical equivalents in the target language and the poorness of Arabic technical vocabulary specially in the field of oil industry or for ignoring and not searching for the equivalent terms, such as the following examples:

كيلوجرام / باوند = Pound الزفت /الاسفات = Asphalt طلي بالقطران / قار = Tar /فهرنهايت = Fahrenheit

It can be said that, through borrowing the source terminology for the Arabic translation, the translation becomes to a certain extend confusing for the Arab audience who may not be familiar with words such as (قار - فهرنهایت – الاسفات - باوند), etc.

# 2.2.4. Translating the pattern demonstrating the proper techniques of Arabization

#### النفط الخام

كل الهيدروكربونات بغض النظر عن الوزن الناتج في حالته السائلة بضغط مطلق قدره (14.696) باوند أو (29.392) كيلوجرام في انش مربع أو البوصة مربع أو في 2.54سنتيم مربع و (60) درجة فهرنهايت متضمنة الزف و الطلي بالقطران, و يستثنى من ذلك سوائل الغاز الطبيعي الغير ممزوجة مع النفط الخام.

### **2.3. Pattern 3**

## HSE

Health, Safety & Environment

" أج أس أي '

وتعنى الصحة والسلامة والبيئة.

### **HYDROCARBONS**

It means oil and natural gas, where "oil" refer to all hydrocarbons which are in a liquid state at standard atmospheric pressure (1.01325 bar) and temperature (15° C); and . "Natural gas" Refer to all hydrocarbons which are in a gaseous phase at standard atmospheric pressure (1.01325 bar) and temperature (15° C).

" الهيدروكريونات "

يعني النفط والغار الطبيعي، حيث يقصد بـ "النفط" جميع الهيدروكربونات التي تكون في حالة سائلة في الضغط الجوي القياسي (1.01325 بار) ودرجة الحرارة (1.5 درجة مثوية)، وويقصد بـ "الغاز الطبيعي" جميع الهيدروكربونات التي تكون في المرحلة الغازية في الضغط الجوي القياسي (1.01325 بار) ودرجة الحرارة (1.5 درجة مئوية).

## 2.3.1. The methods of translation used in this pattern

This text is taken from glossary terms in the web-site of Iraq Ministry of Oil Inspector General Office. When the text is analyzed in terms of text type we see that the text is a definition to an oil industry terms.

The procedure used in this sample is literal translation (HSE =, "أو أس أي"), the translator used naturalization method in the word (Hydrocarbons = (الهيدروكربونات) he kept the radical and base or the origin word but he add affixes to adapt with the Arabic nature.

One of the units of measuring oil pressure is (Bar = بار) the translator used transcription in this term but in the temperature degree is found an equivalent for the sing of the temperature (15°C) = (درجة مئوية).

### 2.3.2. The analysis of the pattern with respect to genius of Arabic L

The genius of Arabic language do not think in the manner of (HSE, Health, Safety and Environment = الصحة و السلامة و البيئة) there is an equivalent by using expansion for the translating abbreviations such as (HSE = الأمن الصناعي) its sound more Arabic than the literal translation.

Naturalization is one of the procedures may help in Arabization process more than borrowing or transcription in the case of non-finding the natural equivalent as in the example of (hydrocarbons = الهيدروكربونات)

In the example of  $(15^{\circ}\text{C}) = (15^{\circ}\text{C})$  the translator has successfully served the Arabic language in finding the appropriate and natural equivalent.

In the example of unite of measuring oil pressure (bar =  $\psi$ ) the translator has no other option but to borrow the word or to coin new term.

# 2.2.3. The analysis of the pattern with respect oil industry terminology in Arabic

Analyzing the target text in terms of oil industry terminology in Arabic, it brings some new words that are completely related with oil industry. The text is a definition of oil industry term and the text gives us information about the oil industry terminology in Arabic. One who is not familiar with these terms may have some difficulties in understanding some parts. The language used in the text tends to make the subject matter easier and unknown words are explained to the reader as seen in example such as:

$$(15^{\circ}C) = (15^{\circ}C)$$
 (15°C)

The language of the text functions as dictionary definitions and it is seen that each definition in Arabic are translated from the previous one in English. Some of the terminology of the oil industry in the target language sorted out from the origin text is as follows:

# 2.3.4. Translating the pattern demonstrating the proper techniques of Arabization

### الهيدروكربونات

هي النفط و الغاز الطبيعي حيث يرجع مصطلح "النفط" الى جميع الهيدروكربونات في حالة سائلة في ضغط جوي معياي (1.01325 بار) و درجة حرارة (15 درجة مئوية) ويرجع مصطلح "الغاز الطبيعي" الى جميع الهيدروكربونات التي تكون في مرحلة الغازية في الضغط الجوي المعياري (1.01325 بار) و درجة حرارة (15 درجة مئوية).

#### 2.4. Pattern 4

### NATURAL GASOLINE

The pentane and heavier part of Natural Gas Liquids pressure intermediate with vapor between Condensate and LPG: having a boiling point within the range of gasoline. It is liquid at atmospheric pressure and temperature; but volatile and unstable; can be hydrocarbons blended other produce with to commercial gasoline.

# " الغازولين الطبيعي "

يعني البنتان والجزء الأثقل من سوائل الغاز الطبيعي ذات الضغط البخاري المتوسط بين المكثقات وأل بي جي وله نقطة غليان ضمن مدى الغازولين .وهو سائل في الضغط الجوي ودرجة الحرارة الاعتياديين لكنه متطاير وغير مستقر ويمكن أن يُخلط مع هيدروكربونات أخرى لإنتاج غازولين تجاري .

## 2.4.1. The methods of translation used in this pattern

This text is taken from glossary terms in the web-site of Iraq Ministry of Oil Inspector General Office. When the text is analyzed in terms of text type we see that the text is a definition of a petroleum industry term.

In this sample the translator used two procedures in the title transcription or borrowing for (Gasoline = الغازولين) and an equivalent for (Natural = الطبيعي), in the target text most words are borrowed as well as abbreviation is being transfer form English letter pronunciation to Arabic letters sounds for example: (Pentane = اللبنتان), (LPG = في جي جي ), also naturalization in the words (Hydrocarbons = الهيدروكربونات)

### 2.4.2. The analysis of the pattern with respect to the genius of Arabic L

Respecting to the Arabic language and its terminology in the field of oil industry the translator in this sample did not bring much new terminology to the Arabic language more than posing a threat to its identity by exaggerating in the transcription and borrowing method which makes Arabic language always in the arrears progress of its terminology in this technological field and follower rather than creator of the terminology.

The translators also attempt to Arabize the text by the method of naturalization and finding equivalents, however the translator translated the abbreviation (LPG = "أل بي جي"), literally which may cause a confusion to ordinary audience or reader it is better to mention the resource and translate the abbreviation or point at it in the footnote.

# 2.4.3. The analysis of the pattern with respect oil industry terminology in Arabic

The procedures of Arabization in oil industry terminology cannot all serve the one purpose which is producing, coining or creating new terminology in Arabic which could be functioned by translators in technical fields, sometimes equivalents are provided but due to the ignorance or laziness of the translators they to the easiest solution which is borrowing or transcription as the following words

Examples:

(Gasoline = البنزين/وقود السيارات) Transcription / (Gasoline = الغازولين) Equivalent (LPG = (أل بي جي Borrowing / (LPG = Liquids Petroleum Gas = سوائل غاز البترول) Equivalent (Pentane = مادة هيدروكربونية / Borrowing (البنتان

# 2.4.4. Translating the pattern demonstrating the proper techniques of Arabization

#### البنزين الطبيعى

و هو البنتان و الجزء الأثقل من سوائل الغاز الطبيعي في ضغط بخاري متوسط بين المكثفات و سوائل البترول الغازي و لدية درجة غليان في مدى البنزين و هو سائل في الضغط الجوي و درجة حرارة لكنه متطاير و غير مستقر و يمكن أن يخلط مع الهيدروكربونات أخري لإنتاج وقود السيارات.

#### **2.5. Pattern 5**

# NATURAL GAS LIQUIDS or "NGLs"

The propane and heavier components of Natural Gas that can be classified according to their vapor pressures; as low vapor pressure (Condensate), intermediate vapor pressure (Natural Gasoline) and high vapor pressure (LPG).

سوائل الغاز الطبيعي "أو "أن جي أل"

تعني البروبان والمكونات الأثقل من الغاز الطبيعي التي يمكن أن تُصنّف حسب ضغوط أبخرتها كضغط بخاري متوسط (مكثفات) وضغط بخاري متوسط (الغازولين الطبيعي) وضغط بخاري عالي (أل بي جي).

# 2.5.1. The methods of translation used in this pattern

This text is taken from glossary terms in the web-site of Iraq Ministry of Oil Inspector General Office. When the text is analyzed in terms of text type we see that the text is a definition of a petroleum industry term.

This example did not just translate the abbreviation but it stated each letter what it stands for and the method used in its translation is literal translation (Natural Gas Liquids or "NGLs" = السوائل الغاز الطبيعي أو أن جي أل

The sample has examples in transcription as such:

(الغازولين = Gasoline)

(البروبان = Propane)

Also the equivalents are founded in the text for the petroleum industry terminology for example:

(مكثفات = Condensate)

### 2.5.2. The analysis of the pattern with respect to genius of Arabic L

The text was explanatory descriptive as definition for "NGL" in the target language the translator demonstrate some methods in attempt to Arabize the text some had served the meaning others not, as far as the translator finds an equivalent for the term in Arabic thee more the text sound Arabic nature than the most common method which is borrowing.

The translator tries to distinguish the technical terms by putting them between brackets to be noticed by the reader.

# 2.5.3. The analysis of the pattern with respect oil industry terminology in Arabic

The translator have not bring much change to the present state of oil industry terminology in Arabic in this sample, however there is some modification need to be made in order to produce better outcome for the target language and the field of knowledge for example:

(Natural Gasoline = بنزین الطبیعي/ وقود السیارات الطبیعي) Equivalent better than borrowing

(LPG = "عوب الغازي"/"أل بي جي) mentioning each letter what stands for would be much clearer for the reader.

Also the choose of Arabic words in comparing to the nature of the text which is technical to what is mentioned (low = واطئ), I believe the (منخفض) would serve the meaning properly.

# 2.5.4. Translating the pattern demonstrating the proper techniques of Arabization

موائل الغاز الطبيعي

و هي البروبان و المكونات الأثقل من الغاز الطبيعي و تصنف حسب ضغط البخار, ضغط بخار منخفض (مكثفات), ضغط بخار متوسط (ينزين طبيعي), ضغط بخار عالي (سوائل البترول الغازي)

# **2.6. Pattern 6**

Chain Reaction	سلسلة تفاعلات
Fusion	انصهار/ اندماج
Giant Hydrogen Cloud Orbit	مدار غيمة هيدروجينية عملاقة
Gravitation	تثاقل
Heating Element	عناصر تسخين
Oxidation	تأكسد
Rust	صدأ
Sample	عينة
American Petroleum Institute (API)	معهد النفط الأميركي
Aromatic Hydrocarbons	هيدروكربونات عطرية
Cracking	تكسير
Geophysics	(علم) فيزياء الأرض
Gravitation	ثقالة
Liquefied Natural Gas (LNG)	غار طبيعي مسيل بالتثايج
Liquefied Petroleum Gas (LPG)	غار نفطي مسيل بالضغط
Petrology	علم البترول
Technique (s)	(تقنیات تقنیة)
Technology (s)	( <mark>تقانة <sub>ب</sub>تكنولوجيا ،)</mark>
Technology transfer	التقنية نقل
Triode	صمام الكتروني ثلاثي
Well Logging	تسجيل قياسات البئر
Biotechnology	(بايوتكنولوجيا /حيوية تكنولوجيا)
Casing	أنبوب تغليف للبئر النفطي

## 2.6.1. The methods of translation used in this pattern

This pattern is taken from glossary terms in the Arab Organization For Translation (special terminology product). When the text is analyzed in terms of text type we see that the text is a definition of a petroleum industry term.

Arab Organization For Translation has used many different procedures in process of Arabizing the oil industry terminology one of those is naturalization as it shows in the following examples:

Giant Hydrogen Cloud Orbit	مدار غيمة هيدروجينية عملاقة
Oxidation	تأكسد
Aromatic Hydrocarbons	هيدروكربونات عطرية
Technique (s)	(تقنیات تقنیة)
Biotechnology	(بايوتكنولوجيا /حيوية تكنولوجيا)

As we can notice the translators have made some changes in level of affixations with keeping the base or the radical untouched this method may give an Arabic impression to the words but nevertheless this does not change the fact about origin of the word and it does not serve Arabic properly.

Also one of the procedures used by this group of translators is equivalent this method is much better than importing new terms rather than searching for its own words as the flowing examples show:

Chain Reaction	سلسلة تفاعلات
Fusion	انصبهار/ اندماج
Rust	صدأ
Sample	عينة
American Petroleum Institute (API)	معهد النفط الأميركي
Cracking	تكسير
Liquefied Natural Gas (LNG)	غار طبيعي مسيل بالتثليج
Liquefied Petroleum Gas (LPG)	غار نفطي مسيل بالضغط
Triode	صمام ثلاثي الكتروني
Well Logging	تسجيل قياسات البئر

Casing	أنبوب تغليف للبئر النفطي

Major of these words are used in everyday Arabic they are well known by any speaker of Arabic it does not need to be specialize to recognize the terms, this helps the translator to address the audience easily, in addition the translators even used some explanations to simplify the technical words.

One of the new methods in Arabization in revival which is bring oil Arabic terms which are not used anymore or rarely found this group of translator has used this method in this example

Technology (s)	( تقانة )

The word (تقانة) is not very common in all Arab world which is an equivalent for the word Technology, for Arabic language such words need to be revival to function as an alternative for the borrowing method which can be no use for Arabization procedure

Following the foot of bring new methods that server Arabic language Neologisms is one of them it aim at introducing new terms and concepts into the Arabic language by translating the meaning. This method according to Baker (1987) enjoys much acceptance. For example:

Geophysics	(علم) فيزياء الأرض
Petrology	علم البترول

The new words could be an explanation or combining elements

## 2.6.2. The analysis of the pattern with respect to genius of Arabic L

This group of translators has almost neglected the borrowing and transcription for its negative influence on the target language and adopted proper and better methods.

As we can notice this sample, Arabic language has be proved positively, developed and strongly posed itself by introducing new terms in the field of oil industry and coining others by different methods of Arabization.

# 2.6.3. The analysis of the pattern with respect oil industry terminology in Arabic

This pattern contributed to Arabic language vocabulary in the field of oil industry by creating new terms, reviving others and searching for possible equivalents that matches the exact meaning of the original words

# 2.6.4. Translating the pattern demonstrating the proper techniques of Arabization

The pattern above has made simple translation which can be understood by regular reader without referring to technical dictionary, the words are clear and simple.

## **2.7. Pattern 7**

Al-Khafji (offshore oil field)	حقل <mark>الخفجي</mark> بحري حقل
Aviation Turbine Kerosene Jet A- 1	وقود الطائرات
base oil	زيتية القاعدة
benchmark price	سعر النفط القياسي
bitumen	بيتيومين
blending plant	مصنع مزج الزيوت
BOEPD	برميل مكافئ من النفط يوميا
bunker fuel	وقود السفن
Burgan (well)	برقان (بئر)
butane	بيوتان
calcined coke	<u>قحم مکلسن</u>
chemical fertilizer	سماد كيماوي
coke	<u>فحم بترولي</u>
condensate gas	غار مکثف
cracking operation	عملية تكسير
crude distillation	تكرير النفط الخام
cubic feet per barrel	قدم مكعب للبرميل
desulphurization	ازالة الكبريت
development drilling	حفر تطوير
diesel	ديزل
distillate	مشتق
distillation tower	برج التقطير
distillation unit	وحدة االتكرير
ethane (gas)	ایثان (غاز)
ethyl benzene	ایثل بنزین

ethylene	إثيلين
ethylene glycol	إثيلين جلايكول
ethylene glycol production unit	وحدة انتاج الإثيلين جلايكول
exploration	تنقیب/استکشاف
exploration drilling	استكشاف حفر
exploratory well	بئر استكشافي
flowlines (pipes from gathering	خطوط نقل أنابيب نقل من مركز التجمع الى خزان النفط
center to storage tank)	
gasoline	وقود السيارات
granular Sulphur	حبيبات الكبريت
granular urea	يوريا حبيبة
gravity lines	خطوط الجاذبية
green coke	فحم صناعي
hydrant pumps	مضخات الجهاز الحابس
hydrocarbon	مادة هيدروكربونية هيدروكربون
jet fuel	وقود الطائرات
kerosene	<u>کیروسین</u>
Kuwait Petroleum International	كويت بتروليوم انترناشيونال سبلاي كومباني
Supply Company (KPISCO)	
leaded gasoline	بنزين يحتوي على الرصاص
98 Octane Super Unleaded Gasoline	بنزين خصوصي خالي من الرصاص عالي <mark>٩٨</mark> الأوكتين
oil recovery	استخراج/ استخلاص النفط
oil refining	تكرير النفط
oil rig	برج حفر
onshore	<u>بر ي</u>
offshore	بحري
refinery margin	هامش ربح المصفاة
refining	تكرير
rich gas	غاز ثقيل
rig	مجموعة أجهزة وحدة الحفر / برج حفر
wellhead (Christmas tree)	رأس البئر (يسمى شجرة عيد الميلاد لتشابه الشكل)

## 2.7.1. The methods of translation used in this pattern

This pattern is taken from glossary terms in Arab Oil & Natural Gas website, the biggest resource in the web about oil & natural gas industry (Kuwait). When the text is analyzed in terms of text type we see that the text is a definition of an oil industry term

This pattern used some procedures of Arabization along with some errors and mistakes maybe caused for machine translation or the ignorance of the translator. Differently from the previse sample this one has used transcription and borrowing I the following examples:

bitumen	بيتيومين
butane	بيوتان
diesel	ديزل
ethane (gas)	ایثان (غاز)
ethyl benzene	ایثل بنزین
ethylene	إثيلين
ethylene glycol	إثيلين جلايكول
ethylene glycol production unit	وحدة انتاج الإثيلين جلايكول
kerosene	کیر و سی <i>ن</i>
Kuwait Petroleum International	كويت بتروليوم انترناشيونال سبلاي كومباني
Supply Company (KPISCO)	

As we can notice the common element between these words is they are all names of chemical products, but the last example is error of machine translation because the whole sentences is being transcript from English letters to Arabic ones

Most words in this sample are equivalents, translators in this sample has looked for equivalents and searched for alternatives more than relaying in borrowing, even some words can have other different meaning outside the context of oil industry, but they have other function within the glossary of oil industry for example:

Kerosene	وقود الطائرات
BOEPD	برميل مكافئ من النفط يوميا
bunker fuel	وقود السفن

coke	فحم بترولي
distillate	مشتق
exploration	تنقیب/استکشاف
gasoline	وقود السيارات
recovery (oil)	استخراج/ استخلاص النفط
refining (oil)	تكرير النفط
oil rig	برج حفر
onshore	بر ي
offshore	بحري
margin (refinery)	هامش ربح المصفاة
refining	ישכעر
rich (gas)	غاز ثقیل
rig	مجموعة أجهزة وحدة الحفر / برج حفر

The words may be compounded in target language sometimes as an explanation and others as creating new expressions fits the original meaning

Naturalization also appeared in this sample as in the following examples:

calcined coke	فحم مكلسن
hydrocarbon	مادة هيدروكربونية هيدروكربون

Though the translators made some modification in level of affixes, still one word in English can be rendered in more than one in Arabic using this method

# 2.7.2. The analysis of the pattern with respect to genius of Arabic L

In the great good for Arabic language translators better adapt the appropriate methods of Arabization in order be faithful in their outcome.

In this glossary sample Arabic language has its ups and downs the translators did not successfully produce and Arabic outcome in the mentioned field, due to some false technical interpretations and others to importing the whole concept of foreign technical identification for example:

wellhead (Christmas tree)	رأس البئر (يسمى شجرة عيد الميلاد لتشابه الشكل)

The translators could find a better alternative for the expression (Christmas tree) to keep the soul of Arabic language, the propose in Arabization not westernization.

# 2.7.3. The analysis of the pattern with respect oil industry terminology in Arabic

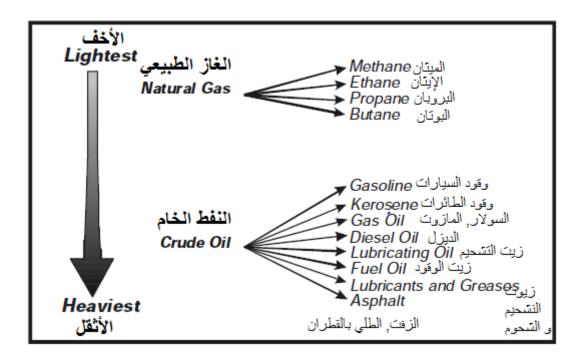
Before translating a text like that, the translator should do some research to become familiar with the basic terms in oil industry. What is more, he should be able to understand the processes explained in the text to find proper technical equivalences to the words and phrases in the sours text. In this analysis the translation of terminology is classified according to the functional translation methods used since this sample text is glossary and a corpus relayed upon and a background to some translators. The variety of methods has been employed. Borrowings, naturalization, established equivalences in the target language (Arabic) and some descriptions explanatory sentences, but it didn't serve much Arabic language as enriching it's vocabulary in such technical field.

# 2.7.4. Translating some of the pattern demonstrating the proper techniques of Arabization

diesel	وقود الديزل
hydrant pumps	مضخات الصنبور
Kuwait Petroleum International	الشركة الكويتية العالمية للتوزيع البترول
Supply Company (KPISCO)	
98 Octane Super Unleaded Gasoline	بنزين خصوصىي خالي من الرصاص عالي 98 الأكتين
rich gas	غاز غني
wellhead (Christmas tree)	رأس البئر

# 2.8. Translating oil industry patterns demonstrating Arabization techniques.

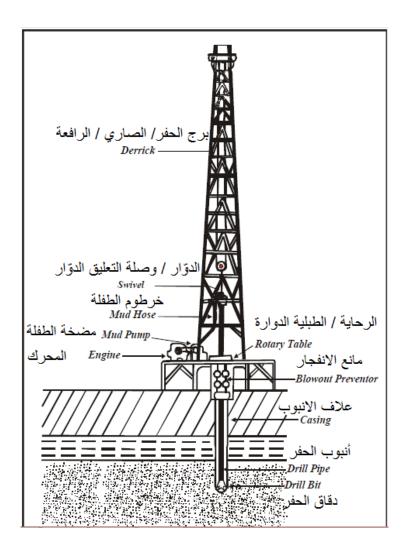
#### **2.8.1. Patterns 8**



In this pattern we have gave the first priority to finding natural or formal functional equivalent in the products of Gas we drop the word (غاز) with the translated word because it is redundancy and over translation in the field of oil industry the words (Methane, Ethane, Propane and Butane) are necessarily gases so it's no need to mention the word (غاز) again, nevertheless in the crude oil we found formal equivalents as an explanation for the origin word according to its function in the field as (Gasoline = وقود المسارات, Kerosene = وقود المسارات), Kerosene = وقود المسارات

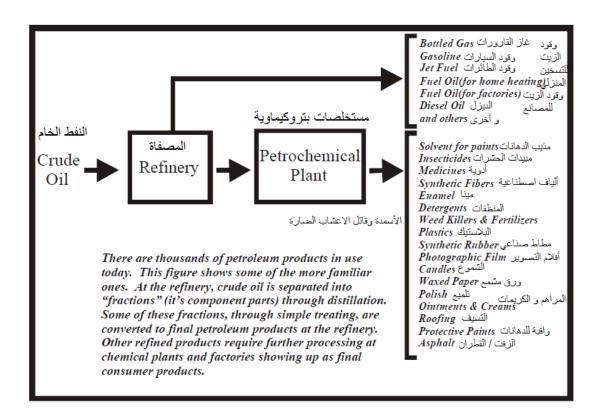
But in the word Asphalt we found and natural equivalent and maybe the original word is derived from Arabic (Asphalt=الزفت القطران) means down what is left from refining crude oil.

### 2.8.2. Pattern 9



In this pattern the translated words are mostly natural Arabic used in oil industry Arabic books in the Arab oil and gas website which they used the word (Derrick = صاري) which the closest meaning to the Derrick and also the word (Mud Hose = غرطوم الطفلة) and (Drill Bit = الرحاية), (Rotary Table = الرحاية) those new words are not very familiar in the Arabic terminology in field industry, we can always find an equivalents for the oil industry terminology in Arabic because Arabic is a rich language and generative one with its terms, grammar and structure.

#### 2.8.3. Pattern 10



In this pattern we have found some formal and natural equivalent in Arabic language in different manners, by word to word equivalent or sense for sense by explaining the term and in other hand by adding affixes or keyword term (naturalization) which defines the original word. In order to produce new terms in Arabic language (coining, Neologism) in the field of oil industry.

#### 2.9. Conclusion

This chapter carried out to answer the hypotheses raised in this study, concerning the problems translators face while translating oil industry terminology into Arabic and its relation to the methods they used.

The analysis exposed that the difficulties translators face, are due to their lack of background knowledge regarding the oil industry terminology and doing some research concerning this field, as well as their ignorance to the importance of adopting new Arabization methods which facilitates the translation process and ensure a good translation production. Therefore, some recommendations will be suggested to be guideline for translators, which may help them in giving more attention to the methods of translating oil industry terminology, and be exposed more to the scientific and technical translation theories and practical framework, in order to achieve high quality translation.

#### Recommendations

The result of this study is to grow awareness in translators to the importance of adopting the appropriate Arabization methods while translating oil industry terminology into Arabic, and rendering those terminology into natural Arabic to enrich its vocabulary, in produce natural or formal equivalents to keep the Arabic language identity, also they exaggerate in transferring the terms into Arabic language rather than searching for an alternative solution which it become westernization more than Arabization, as the world develops Arabs should tag along and be creative in the production of the terminology for the new introduced terms.

Some recommendation will be suggested may be a solution for translators to reconsider the best methods, which should convey meaning and aims at using in pure Arabic vocabulary.

Translation procedures most used by translators in such kind of technical translation from English into Arabic (Arabization) translators should be introduced to scientific and technical translation as theories as well as methods used to translate oil industry terminology into Arabic. At the first level they should be practicing in such fields, where they will be introduced to translation theories, even though, the curriculum does not contain the study of technical translations and its methods. Translators should be equipped with the basic technical translation tools, and be aware to first stages of their academic achievement of the translation

skills, as well as to be updated and armed with new technical and scientific terminology in the field to produce precise equivalents. However, the translator should be taught to be creative and avoid westernizing Arabic language.

#### **General Conclusion**

These above considerations led translation scholars to adopt new perspectives in order to deal with the growing needs of oil industry translation as a technical branch. In this context, it may well be stated that purely equivalence based or source oriented translation theories did not suffice the requirements of oil industry translation.

This study aims to examine the problems translator face while translating oil industry terminology into Arabic, and to find out the methods they use to render those terminology, and whether these methods are responsible for difficulties they face or suggest other solution and new methods

This research revealed two outcomes, the first one was that the most translators do not use the right method of Arabization and even if translators used the appropriate methods, they could not provide adequate equivalents, and this was due to their lack of knowledge and background of the translator in the field oil industry, and do not master of the two languages, also due to the poorness of Arabic vocabulary in technical fields as such oil industry and Arabic language do not keep up with the updated technology so translator directly flee to easy solution which is borrowing.

The second result showed that the methods may be a reason for producing incorrect and unacceptable translation. The methods should be updated and keep up technical and scientific wave, the Arabic language suffers a serious lack of scientific vocabulary, thus one should pay more attention and give higher importance to scientific translation and its methods that would ensure the enrichment of Arabic language along with producing new terminology in Arabic language.

Recommendations and suggestion is to develop scientific and technical translation and the techniques that may facilitate the process of translation such fields as oil industry into Arabic, may help in confronting the problems translators face in translating oil industry terminology.

Therefore, this study puts forward that oil industry translation is not just juxta positioning of two languages or a simple linguistic transfer, but it is a very comprehensive process which needs the employment of the recent theoretical methods in translation studies, along with a full examination of texts, terminology, background information and global conditions that create the demand for oil industry translation in Arabic language.

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#### الملخص

ترجمة المصطلحات الصناعة النفطية من اللغة الإنجليزية الى اللغة العربية على نحو متزايد و موضوع ذو أهمية كبيرة في الوقت الحاضر. النفط من الجانب العربي والتكنولوجيا من الجهة الغربية تساهم في هذه الأهمية. وتبرز هذه الدراسة المشاكل التي تواجهها ترجمة المصطلحات الصناعة النفطية من الإنجليزية إلى العربية ومحاولة إقتراح بعض الإجراءات التي قد تؤدي في النهاية إلى ممارسة هذا النوع من الترجمة التقنية. و أيضا تحديد بعض الصعوبات والعقبات التي توجد في ترجمة المصطلحات الصناعة النفطية إلى اللغة العربية ومحاولة للتغلب على تلك التحديات والمشاكل التي تفيد كحلول والطرق ممكنة. وتقترح هذه الدراسة عينات ونماذج لترجمات في الصناعة النفطية من اللغة الإنكليزية الى اللغة العربية و محاولات أخرى لتعريب ترجمة إلى اللغة العربية (التعرب) بحيث تحتوي هذه الدراسة نتائج أكثر شمولا.

#### الكلمات المفتاحية:

مصطلحات الصناعة النفطية, مصطلحات الصناعة النفطية في اللغة الانجليزية و العربية, المصطلحات المتخصصة, الاجراءات, تعريب مصطلحات الصناعة النفطية.

### المقدمة

تكتسي الترجمة إلى اللغة العربية أهمية بالغة نظرا لاستعمالها بشكل واسع حيث أن عدد الناطقين بلغة العربية يعد بحوالي 186 مليون شخص كلغة أولى . و 35 شخص كلغة ثانية. و أكثر من 20 دولة تعتمد اللغة العربية كلغة رسمية لها. و بالنسبة للإدارة الأمريكية للطاقة و المعلومات و يمتلك العالم العربي في رصيده من 10 إلى 4 دول منتجة للنفط هذا و إن دل إنما يدل على الحاجة الماسة لمترجمين من الانجليزية إلى العربية في مجال النفط.

# الإشكالية

واحدة من أهم المشاكل التي يمكن إن يواجهها المترجم هي كيفية التعامل مع ترجمة المصطلحات النفطية من الانجليزية إلى اللغة العربية كذلك افتقار اللغة العربية للمفردات المتعلقة بالصناعة النفطية التقنيات اللازمة لترجمة هذه المصطلحات إلى اللغة العربية و التغلب على العوائق و العقبات مع الأخذ بالاعتبار الاختلاف اللغوي بين اللغتين الانجليزية و العربية من حيث البناء و التركيبة اللغوية .

# الأهداف من الدراسة

يسلط هذا البحث الضوء على ترجمة مصطلحات الصناعة النفطية إلى اللغة العربية (التعريب), كيفية تمكين اللغة العربية من احتواء المصطلحات, الأساليب و الإجراءات المستعملة في ترجمة النصوص التقنية مثل قطاع الطاقة, و عما اذا كانت هذه الأساليب هي المصدر للتغلب على عقبات الترجمة و ما اذا كان موثوق

بها بما يكفي لضمان تحقيق نتائج جيدة و خدمة اللغة العربية في ترجمة مصطلحات الصناعة النفطية حيث تهدف هذه الدراسة إلى التوصل الى نتيجة لترجمة نصوص الصناعة النفط إلى اللغة العربية، لتجنس المصطلحات صناعة النفط في المفردات العربية التي يمر بها تقنيات واستر اتيجيات للتغلب على العقبات في ترجمة النص في الصناعة النفطية واقتراح الحلول وكيفية اللغة العربية يمكن أن تستضيف المصطلحات الصناعة النفطية كل هذا بسبب الحاجة الملحة للترجمة الى العربية في صناعة النفط في السنوات القليلة الماضية, في الفترة التي شملتها الدراسة سوف ترتكز على كيفية ترجمة المصطلحات الصناعة النفطية باللغة العربية. وتهدف الدراسة أيضا إلى تحديد العقبات التي تواجه المترجمين في صناعة النفط لتجنيس الترجمة.

# السؤال الرئيسي للبحث

في محاولة للتحقيق في المشاكل المتعلقة بترجمة المصطلحات النفطية خاصة من اللغة الانجليزية إلى العربية فمن الضروري الإجابة على الأسئلة الآتية :

-1- ما هي الإجراءات المتبعة في ترجمة مصطلحات الصناعة النفط من الإنجليزية إلى العربية (التعريب)؟

### الاسئلة الثانوية

- ما هي العقبات المتعلقة بمصطلحات الصناعة النفطية و التي يمكن للمترجم أن يواجهها في تعامله مع مصطلحات الصناعة النفطية ما هي الحلول الممكنة؟
  - كيفية جعل اللغة العربية تحتضن مصطلحات الصناعة النفطية؟

# الفرضيات

للإجابة على الأسئلة التي تم طرحها في هذه الدراسة، حيث يفترض بأن من اكبر العقبات التي يواجهها المترجم عند ترجمة المصطلحات إلى اللغة العربية، تكمل في عدم وجود المصطلحات صناعة النفطية في المفردات العربية.

او الاجراءات غير محدثة أو عدم اعتماد الطريقة المناسبة التي تضمن ترجمة عالية الجودة في هذا المجال التقني كالمجال النفطي.

# هيكل الدراسة

وتستند منهجية هذه الدراسة على قسمين. الأول هو القسم النظري الذي يتعامل مع المصطلحات بصفة عامة والترجمة المتخصصة في المصطلحات الصناعة النفطية بصفة خاصة وعلى حتمية وجود مصطلحات الصناعة

النفطية في العالم العربي. كما تحلل هذه الدراسة الصعوبات والتحديات التي تقف بمثابة عقبات في ترجمة مصطلحات الصناعة النفطية إلى اللغة العربية، وتطوير هذه الإجراءات للتغلب على التحديات والمشاكل لترجمة المصطلحات صناعة النفط إلى اللغة العربية.

القسم الثاني هو الإطار العملي والتحليلي حيث يركز على جمع عينات من و الكلمات التقنية ترجمة البيانات المراد ترجمتها إلى العربية ثم تصنيفها وفقا لمعابير معينة والتي سوف تكون على شكل دراسة حالة تهدف إلى الجاد حلول لتعريب ما يمكن تعريبه من إلى اللغة العربية في المصطلحات الصناعة النفطية.

# الفصل الأول.

### إجراءات ترجمة المصطلحات صناعة النفط من اللغة الإنجليزية إلى اللغة العربية (التعريب)

التعامل مع المصطلحات يتطلب مهارات محددة على شكل نظريات لتكون مثمرة وخادمة للغة العربية. وفي هذا الصدد، تتوفر العديد من الخيارات للمترجمين لإنتاج مصطلحات صناعة النفط في اللغة العربية.

لقد سخرت الوكالات العربية الرسمية منها و غير الرسمية لإنتاج مجموعة جديدة من المصطلحات في الصناعة النفطية الى العربية ومن شأنها أن تسهل عملية الترجمة عندما يتعلق الأمر بانتاج مصطلحات جديدة في اللغة العربية.

## الكتابة العروضية والنقل و الاقتراض

يساعد النسخ و الاقتراض في عملية تعريب مصطلحات الصناعة النفطية، وهي واحدة من الإجراءات المستخدمة على نطاق واسع لترجمة المصطلحات العلمية أو التقنية من خلال إدخال تغييرات الصوتية والصرفية طفيفة, ويكون ذلك خلال كتابة المصطلحات العلمية باللغة الإنجليزية باستخدام الأبجدية العربية مع عدم وجود تغيير في النطق في اللغة الإنجليزية.

#### التجنيس

التطبيع هو محاولة لتبني شروط الإنجليزية التي تتشكل من بنية الكلمة العربية، وفقا (1995 غزالة) ويمكن أن ينظر إليها على أنها تطور طريقة النسخ. يبنى هذا الأسلوب على اللاحقات جديدة لمفردات أجنبية تغادر جذور ها دون تغيير. هي اضافة اللواحق لضبط المصطلحات في تشكيل الكلمة بالعربية كما هو الحال في الأفعال والأسماء والجنس والصفات والظروف.

#### المقابلة

هذا الشروط نفسها يمكن تعريفها على انها هياكل مختلفة. من حيث النصوص. اذ يرجعه فيناي و دربلنت الى الاعتقاد الثقافي، حيث يجب أن لا ننسى أن نضع في اعتبارنا الشعور ليس الصورة.

#### النقش او السك

ويهدف هذا الأسلوب في تقديم مصطلحات جديدة في اللغة العربية عبر ثلاث عمليات رئيسية

#### الاشتقاق و الاستخراج

يرى بيكر (1987) أن اللغة العربية وعادة ما يشار إليها على أنها لغة الاشتقاق. بحيث يتم بناء نظام جذر الكلمة باللغة العربية حتى على ثلاثة جذور أساسية، اذ ان كل واحد يحمل معنى الخاص به. ويكون ذلك بحروف العلة infixesوتستخدم جذور لإنتاج أشكال رمزية واللفظية بإضافة البادئات، اللواحق،

#### إحياء او إعادة الاحياء

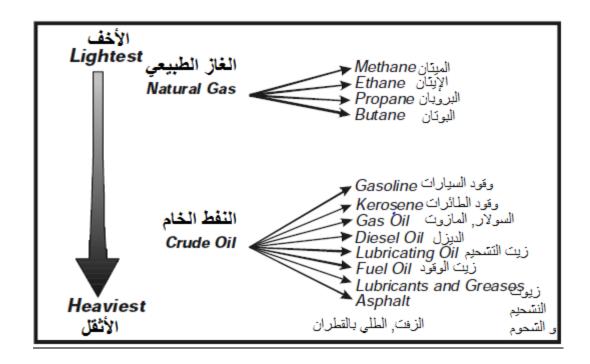
و هو استخدام الكلمات العربية القديمة التي كانت تستخدم ولكنها تتلاشى مع الوقت حيث يتم تعين معاني جديدة لها. وقال بيكر (1987) أن هذا الأسلوب يستخدم معجم اللغة العربية بدلا من محاولة إدخال مفاهيم جديدة قد يستغرق وقتا طويلا لاعتمادها.

### تكوين كلمات جديدة (مستجدات)

تهدف إلى إضافة و تقديم مصطلحات والمفاهيم الجديدة في اللغة العربية عن طريق ترجمة معنى. و هذه الطريقة وفقا لبيكر (1987) تلقى الكثير من القبول.

# الفصل الثاني

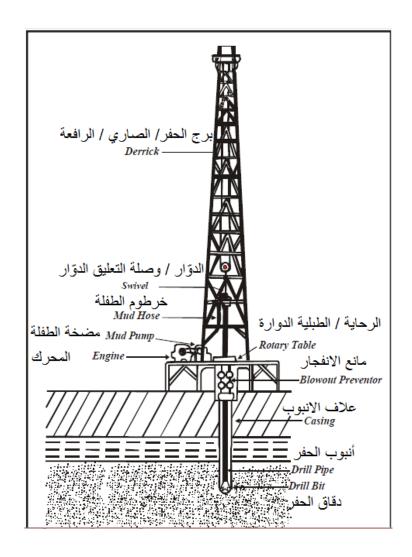
## العينة الأولى



في هذه العينة لقد أعطى الأولوية لإيجاد المعادل الوظيفي او الطبيعي في منتجات الغاز نسقط كلمة (غاز). مع الكلمات مترجمة لأنه تكرار (الميثان، الإيثان، البر وبان والبيوتان) اذن غازات لذلك لا حاجة لذكر كلمة (غاز) مرة أخرى، على الرغم من ذلك في مجال النفط (البنزين =: وقود السيارات الكيروسين = وقود الطائرات)

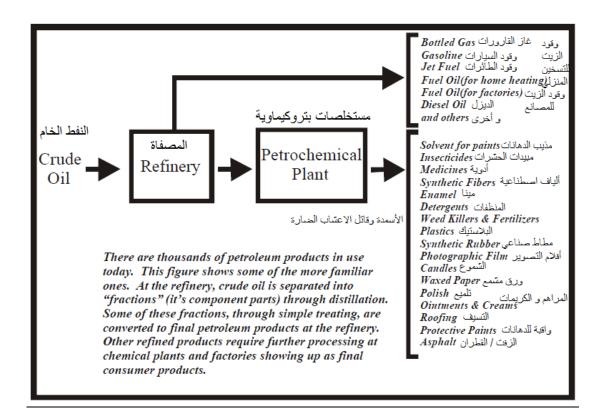
ولكن في كلمة الإسفلت وجدنا ويعادله وربما مشتق من الكلمة الأصلية من اللغة العربية (الإسفلت = الزفت القطران) كلمة (أسفلت) يعنى أسفل ما تبقى من تكرير النفط الخام.

#### العينة الثانية



في هذه العينة من الكلمات المترجمة في معظمها عربية مستخدمة في الكتب العربية في صناعة النفط في موقع النفط والغاز العربي الذي استخدم كلمة (ديريك = صاري) التي الأقرب معنى لديريك وكذلك كلمة (الطين خرطوم = خرطوم الطفلة) و (مثقاب = دقاق الحفر)، (جدول الروتاري = الرحاية) تلك الكلمات الجديدة ليست مألوفة جدا في المصطلحات العربية في المجال، ونحن يمكن أن نجد دائما المعادل للمصطلحات صناعة النفط باللغة العربية لكون اللغة العربية لغة غنية وتوليدية واحد مع أحكام و نحو اللغة.

#### العينة الثالثة



وجدنا في هذه العينة بعض المصطلحات وما يعادلها في اللغة العربية بطرق مختلفة، عن طريق الكلمة إلى كلمة أو معنى لمعنى من خلال شرح المصطلح ومن ناحية أخرى عن طريقة إضافة اللاحقات (التطبيع) الذي يعرف الكلمة الأصلية. من أجل إنتاج مصطلحات جديدة في اللغة العربية (سك، لفظة جديدة) في مجال صناعة النفط.

# الخاتمة

وكشف هذا البحث نتيجتين، و هو أن معظم المترجمين لا يستخدمون الطريقة الصحيحة للتعريب، و هذا نتيجة لافتقار هم للمعرفة و الزاد المعرفي الخاص بصناعة النفط، وأيضا بسبب فقر المفردات العربية في المجالات التقنية مثل صناعة النفط واللغة العربية لا تتماشى مع التكنولوجيا الحديثة حتى يلجئ المترجم مباشرة إلى الحل السهل وهي الاقتراض.

أظهرت النتيجة الثانية أن طرق الترجمة قد تكون سببا لإنتاج ترجمة غير صحيحة وغير مقبولة. يجب أن يتم تحديث الطرق ومواكبة موجة التقنية والعلمية، واللغة العربية تعاني من نقص خطير في المفردات العلمية، وبالتالي ينبغي لأحد أن يولي مزيدا من الاهتمام وإعطاء أهمية أكبر للترجمة العلمية والأساليب التي من شأنها ضمان إثراء اللغة العربية تقنيا و علميا مع إنتاج مصطلحات جديدة خادمة اللغة العربية.