Investigating Linguistic Problems Encountered by Translators When Translating a Scientific Text from Arabic into English

A Thesis Submitted in Partial Fulfilment of the Requirements for the Degree of M.A. in English Language ((Applied Linguistics

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قال تعالى:

سورة طه الآية (114)
Dedication

.To my relatives
Acknowledgements

First, I thankful to the Almighty Allah who has given me strength, wisdom, as well as guidance in conducting this research. I would like to thank the supervisor Dr. Ayman Hamad Elneil, for his constant encouragement and fruitful help offered to me during my research. It is he who guided me into the research field of translation and it is also he who has inspired me a particular interest in scientific translation. I very grateful to my best friends who encouraged me and help me. Finally, I would like to thank my family members, who remained constant source of encouragement and support whenever I feel troubled or frustrated.
This study aims at investigating the linguistic problems encountered by translators when rendering a scientific text from Arabic into English. It aims also to analyze the linguistic problems encountered translator when translating a scientific text from Arabic into English. In terms of cohesive problems encountered translator when translating a scientific text from Arabic into English. To achieve the goal of this study, the researcher followed a descriptive analytical method, the study is conducted by the students of Sudan University of science and Technology college of language 3rd years. The researcher used a test asking students to translate a scientific text from Arabic into English, from this study the researcher concluded that: most of the students are unable to use synonyms in their translated texts. Some of the students are unable to use cohesive devices in translating a scientific text from Arabic into English. This study recommended the addition of scientific translation courses in order to be fully mastered.

المستخلص
تهدف هذه الدراسة إلى تقصي المشكلات اللغوية التي تواجه المترجمين عند ترجمة النص العلمي من اللغة العربية إلى الإنجليزية. الهدف من هذه الدراسة تحليل المشكلات اللغوية التي تواجه المترجم عند ترجمة النص العلمي إلى الإنجليزية، وتحقيق هذه الهدف يتبع الباحث المشهد الوصفي التحليلي، وقد أجريت دراسة لطلاب جامعة السودان للعلوم والتكنولوجيا لكلية اللغات المستوى الثالث. وكان عدد من الطلاب غير قادرين على استخدام المترادفات عند ترجمة النصوص. بعض الطلاب ليس لديهم المقدمة الكافية لاستخدام أدوات الربط عند ترجمة النص العلمي من العربية إلى الإنجليزية. وقد أوصت الدراسة إلى إضافة كورسات في ترجمة العلمية ليصبح أكثر كفاءة.

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Chapter One

Introduction
Chapter One

Introduction

Background  1.1

Different languages give different way to look at the world but translation provides us the opportunity to explore and interact with these different view of world. Translation refers to carrying the meaning of text from one language to another. Linguistic study becomes crucial for the purpose of translation. As science and technology develop, new English word used to express new concepts, techniques and invention come into existence. Most linguistic theories involve several level of analysis of text. One popular conception of the task of translation is the transfer of structure in target language. Catford, (1965:335). Linguistic is the scientific study of language. There are three aspects language form, language meaning, and language in context. Most translation scholars and linguistics agree that the translation process
is achieved as communicative process from foreign language to the mother tongue, so translation consider unique linguistic device that has the very important task of conveying the sense of the text from one language to another language. Nida,(1954:322) has, in his discourse on scientific translation pointed to this challenge. He said: if the translation of scientific text from one language to another participating in modern culture development is not too difficult, it is not surprising that converse is true that translating scientific material from modern Indo-European language into language largely outside the reach of western science is extremely difficult. This is one of the pressing problems confronting linguistic .Antrar,(2003:90-139

:Statement of Problems 1.2

Most students face obstacles in translating the scientific text into English .This study is going to investigate the linguistic problems encounters translators when transferring the Arabic text into English

:Objective of study 1.3

:This study aims

To analyse the linguistic problems encountered translator of scientific text from Arabic into English

To analyse the cohesive problems encountered translator of scientific text from Arabic into English

:Questions of the study 1.4

:This study is aims to provide answers for the following questions

What are the linguistics obstacles that encounter translators when translating from Arabic into English?
What are the cohesive obstacles that encounter translators when translating from Arabic into English?

**Hypotheses of the study 1.5**

The researcher assumes the following:

1. Some terms in the Arabic language which have no equivalent in English make obstacles in translation.
2. The weakness in any one of the two languages also make it difficult to translate.

**Significance of the study 1.6**

This study finding solution to the problem of translation of scientific terms makes the door wide open to natives to contact each other.

**Limits of the study 1.7**

This study is limited to students at Sudan University of Science and Technology. Time is limited to academic year 2016-2017, and topic is investigating the linguistic problems encountered by translators when rendering a scientific text from Arabic into English.

**Methodology of the study 1.8**

In this study the researcher adopts descriptive analytical method. The researcher uses tool of test in this study. The
Chapter Two

Literature Review and Previous Studies
Chapter Two

Literature Review and Previous Studies

Introduction: 2.1

In this chapter the researcher review the definition of translation by famous figures in field, and the previous studies.

Translation is the transmitted of written text from one language into another. Although the terms translation and interpretation are often used interchangeably, by strict definition, translation refer to the written language. Translation is the communication of the meaning of the source. Language text by means of an equivalent target, language text
WILLSS (1982:112) also defined translation as a text-oriented event. Translation is a procedure which leads from written source language text to an optimally equivalent target language text and requires syntactic, semantic and stylistic and text pragmatic comprehension by translation of the original text.

NEWMARK is ranked as another prominent scholar in translation studies. According to NEWMARK (1991:5), translation is rendering the meaning of text into another language in the way that the author intended the text.

2.2 Type of translation

2.2.1 Literal Translation

Is probably the oldest type of translation practice. It involves conveyance of denotative meaning of phrases and sentence in text from one language to another.

2.2.2 Metaphorical Translation

Involves the translation of SL metaphor into TL metaphors. It is inevitable in literary translation, serious work of literature abound in creative metaphors.

2.2.3 Precis Translation

Is a translation method where the translator gives TL summary of the SL text he is dealing with. Such TL summary translation usually provide the reader with only the main point of the SL text, thus ignoring many find detail that deemed contextually unimportant or even irrelevant.

2.2.4 Free Translation and Adaptation

Translation method whereby an SL literary text is relayed into the TL by reproducing the matter without the manner, or the content without the form. Therefore, it is usually paraphrase.
that is much longer than the original and often wordy and pretentious as for adaptation, it
another translation method whereby the SL text is freely translated into TL

:Translation Strategies 2.3

Strategies are sets of procedures that are used to translate: each one has scale of facility that
may be more helpful than other. BOSCO (1997) classified translation techniques or strategies
in tow types

:Direct Translation Techniques 2.3.1

Direct translation techniques are used when these are conceptual element that can be transposed
into the target language. BOSCO (1997) classified those techniques as follows

Borrowing .1

Calque .2

Literal Translation .3

Borrowing: BSCO (1997) defines borrowing attempt to take word from one language and 2.3.2
put them in another language alphabet. These word are naturalized to grammar and
pronunciation of target language

Computer كمبيوتر

Microwave ميكرويف

Calque or loan translation is the literal translation, it translate borrowed from another 2.3.2
language literary, preserving the language structure and manner of expression may not be
familiar to target language

:Literal Translation 2.3.3

Is to translate from the source language into the target language and preserver the same effect
and wording of the source text only the language is changed
2.3.2 Oblique Translation Techniques

BOSCO (1997) claimed that these techniques are used when adjusting or changing the meaning, the grammatical and stylistic element of the target language.

1. Transposition
2. Modulation
3. Reformulation or Equivalence
4. Adaptation
5. Compensation

2.3.2.1 Transposition
Is to involve changing part of speech order when translating, especially at the grammatical level. Zakhir (2008) said that this type is used frequently because of the wide range of possibilities it offers for the translator.

2.3.2.2 Modulation
Is a type of translation where the translator adds change to the grammatical and semantic structure of the source language to suit the target language without affecting meaning, because it has to convey the same idea of the source text.

2.3.2.3 Equivalence
This technique requires the translator or to be creative, especially in the case of translating idioms, proverbs, or slogans of advertising. This process allows the translator to reduce or expand the number of words.

2.3.2.4 Adaptation
In this type, the translator attempts to make textual materials that are specific to the given language, culturally appropriate to another language.

2.3.2.5 Compensation
Is a strategy used to replace items that cannot be translated from the source text by another in the target language.
text, to express the meaning using different items not available in the source text but have the same sense

**Grammar 2.4**

Grammar is the set of structural rules governing the composition of clauses, phrases and word given natural language. The term refers also to study of such rules, and this field include morphology, syntax, phonology, often complemented by phonetics, semantics and pragmatic. A grammar translation is one of the most effective methods that focuses on reading and translating the sentence which demonstrates grammatical rules to acquire English as second language. This method was used long time ago to teach Latin and Greek as a second language, then it was not recommended for while until it has been revived in the 19th century by German to be preferable method again. A way of teaching in which students study grammar and translate words into their own language. They do not practice communication and there is little focus on speaking. A teacher presents a grammar rule and vocabulary lists and then students translate a written text from their own language into the second language. See communicative approach. A dynamic grammar of a scientific translation is a flexible framework that can capture the evolution of science whilst not excluding other frameworks of analysis.

### 2.4.1 Principles and goals of grammar:

There are two main goals to grammar-translation classes. One is to develop students’ reading ability to a level where they can read literature in the target language. The other is to develop students’ general mental discipline. The users of foreign language wanted simply to note things of their interest in the literature of foreign languages. Therefore, this method focuses on reading and writing and has developed techniques which facilitate more or less the learning of reading and writing only. As a result, speaking and listening are overlooked. In addition to the four skills in any language, the grammar is an elementary mainstays.

-Protar and Celce. Murcia (1979)
outlined the important aspects of the Grammar Translation Method as follows:

(1) The native language is used to teach second language which emerges by some exercises.
(2) The meanings of difficult word are given in the list form.
(3) The teacher explicates grammar point and exceptions that student might face.
(4) The rules present the right forms and their influences in words.
(5) Starting with reading literary texts
(6) Then, the student apply the grammatical rules on the read texts.
(7) Translation a variety of sentences to the first language.
(8) A little concentration on communication activities. The main attention is placed on reading, translation, and grammatical rules with notable ignoring to the pronunciation.

2.4.2. Grammatical problems:
Ghazala (1995:32) believes that learners of translation should be warned against their presupposition that English grammar identical with Arabic grammar and hence they can translate each other in a straightforward way. The following discussion will concentrate on explaining the process of translating text from SL into TL or the way round to make IS have clear knowledge of how to deal with grammatical terms of Arabic and English.

2.5 Cohesion:
Cohesion is one of the important areas in translation to discuss, so the researcher is going to explain it briefly for the purpose of the study.

Halliday and Hasan are prominent figures who discussed the concept of cohesion. They (1976:13) recognize cohesion as the network of lexical and grammatical relation which aim to join part of certain text together and produce it as one unit. They mentioned that "the concept of cohesion account for the essential semantic relations where by any passage of speech of by any passage of speech or writing is enabled to function as text".

Fawcett (1997) defines cohesion as the use of grammatical or structural devices to guarantee text integrity. In other words, there are two basic way to clarify cohesion:
First is a set of grammatical devices which organize the text in time, sequence of the tenses, space and logic.
The other is a set of lexico-grammatical devices that are used for maintaining links to identify between items of semantic information in the text.
De Beaugarde and Dressler (1981:3) point out that cohesion is related to the connection of the elements of the surface structure, i.e., the connection of words and sentences of certain text.
Fairclough (1992:77) says that cohesion is "how clauses uses are linked together into sentence, and how sentence are linked from large units in text.
Bell (1991:165) notices the importance of the cohesive devices in translation as they exist in text in order to satisfy certain purpose. He also consider cohesion as the mutual connection that combines actual word in use within sequence of clauses or sentences.
Baker (1992) argues that the grammatical and lexical cohesive relations organize and to some extent, create the text. In this regard, she adds that cohesion is surface relation, it connects together the actual words or expression that we can see or hear.

2.6 type of cohesion:

2.6.1 Reference:
Halliday and Hasan (1976:31) point out that every language makes use of the referential linkage between sentences and phrases which constitute a text. In other words, it is the relation that holds between an item in the text and what points to in the related world and this relation lends the text its continuity.
Pronouns are considered to be the most typical example of reference in English. They are used to refer either to objects or to persons within the same linguistic environment.

2.6.2. Substitution:
Halliday and Hassan (1976:88) define substitution as "relation in the wording rather than in the meaning" In other words, a substitution has grammatical nature. So, linguistic elements is/are replaced by other linguistic element(s). As far as substitution is concerned, "do", "one" and "the same" are the commonly used items in English.

Halliday and Hasan (1976:90-139) provide three types of substitution:
1. Nominal as the words' one, "ones" and "some". These can replace items which are heads nominal group. Substitute item must have the same structural function of one which it substitutes. Thus the word "one" is appropriate for the substitute item.

2. Verbal Substitution:
   For example the verb 'do' is a common verbal substitute item as cohesive linkage between part of this example:

3. Clausal Substitution, according to Halliday and Hassan (1976:90), "so" in addition to "not" function as clausal substitution.

2.6.3. Ellipses:
Another major term related to the grammatical coherence is ellipsis.
Halliday and Hassan (1976:43) define ellipsis as 'substitution by zero'. In other words, it is said in an implicit way but understood. They divide ellipsis into three main kind:
1. Nominal ellipsis as in: "How did you enjoy the exhibition?". (Halliday and Hassan 1976:149). In the above mentioned example, the person who answered the question want to say that a lot of exhibitions.
2. Verbal ellipsis as: Have you been swimming? – Yes I have.
   Halliday and Hassan (1976:167) in this example, the one who replies means (yes, I have been swimming), so it is understood from the short answer given.
3. A clausal ellipsis as in the following example:
   It's cold. – Yes (Halliday and Hassan 1976:216) the original reply is: yes it is cold. So it is understood by saying, yes.

2.6.4   Conjunctions:
Conjunctions, according to Halliday and Hasans's (1966 : 226), are elements which are cohesive not in themselves but indirectly, by virtue of their specific meanings. The classification below, which is based on Halliday and Hasans's (1976), summarizes briefly the main conjunction relation:
- Additive such as: and, in addition, moreover, furthermore, also….etc.
-Adversative such as: but, however, yet, by contrast, on the other hand, as matter of fact …. Etc.

-Causal such as: because, for, so, therefore; consequently, under the circumstances, it follows….etc.

-Temporal such as: subsequently, after that, that, on another occasion, finally, at last….etc.

**Definition of scientific translation 2.7**

Scientific translation is mainly about translating term in the field of science and technology of all kind , medicine, physics, chemistry, mathematic, computer science…… etc from one language another. Ghazzala(1995)

The scientific translation is considered one of the most important issue, as the world develop, new technology appears, and long with them emerge new term to which finding and equivalent may pose problem. As Nida(1964) said in this point, it is not easy at all to translate scientific term that emerged in western developed countries language into language of third world countries are still heaving financial and social problems

**Requirement of scientific translator 2.8**

According to London Institute of Linguistics, to be a scientific translator one should have:

1. Broad knowledge of the subject – matter of the text to translated
2. A well-developed imagination that enables the translator to visualize the equipment or process being described
3. Intelligence, to be able to fill in the missing links the original text
4. A sense of discrimination, to be able to choose the most suitable equivalent term from the literature of the field or from dictionaries
5. The ability to use one own language with clarity, conciseness and precision
6. Practical experience in translating from related fields. In short, to be
technical translator one must be science , or engineer , linguist and writer .


Out of the six requirements listed above , the first deserves special consideration because it bears on the early attempts to found theory of translation advocating that the text whether literary or scientific should be deal with according to the way language is used in them (Adams, 1967:87). This means that it is theory which goes back to the old epistemological controversy over the object and subject of reality , and which may imply, when extended to language varieties, a dichotomy between science and literature . According to Adams (ibid

**The Aim Of Scientific Translation 2.9**

Byrne(2006) claim that, scientific translation primary goal to deliver scientific information , it aim at presenting well expressed information that may be used easily , properly and effectively . He referred to scientific translation communicative service, which offers new information for new audience, since scientific translation is regarded as communicative service , it certainly involves three main people , which are the author , the translator and reader. He added also, it is much more than just rendering source text language and style

**Arabic – English scientific Translation 2.10**

Translation of science from Arabic into English poses huge linguistic obstacles. One of these obstacles, yet significant one, runs as follow

Translation of scientific term is consider by AL-Hassnawi(2010)as real intellectual challenge. It requires skills, intelligence, and mastery of both English and Arabic. Arabic suffer serious shortage of vocabulary that cover the field of technology and science, translators should consider this problem before anything else

:Beeston (1970:115) explained the importance of having new for the scientific field as

The need for the large new vocabulary dealing with technological and scientific matters. Scientific translation has become crucial step toward the acquisition of new technologies and
spread of technology all over the world, the coinage of new scientific vocabulary is seriously required to enrich the Arabic language. One of the main problems that translation students may face is how to deal with translating scientific text from Arabic into English, and choosing the best method to achieve quality translation.

2.11. Model of translation a scientific texts from Arabic into English:

the problems caused by anorexia

People with anorexia have dry skin and thinning hair on the head. They may have a growth of fine hair all over their body. They may feel cold all the time, and they may get sick often.

People with anorexia are often in a bad mood. They have a hard time concentrating and are always thinking about food. It is not true that anorexics are never hungry. Actually, they are always hungry. Feeling hunger gives them a feeling of control over their lives and their bodies.

It makes them feel like they are good at something--they are good at losing weight. People with severe anorexia may be at risk of death from starvation.
Many researchers dealt with scientific translation linguistic problems that undergraduate students face in Arabic scientific text into English.

1. Dubois et al (1973:22) Aims to find the extent to which University English language learners can. Says: “translation is the expression in another language (or target language) of what has been expressed in another source, language, preserving semantic and stylistic equivalences”. But already been suggested by many translation scholars such as Baker (1992) and Newmark (1988:91) that the notion of equivalence is problematic in the study of translation, and to overcome this problem, various translation strategies have been suggested by various authors within the field of translation.

2. Nida (1964: 223) highlights this aspect of scientific translation as follows:

   This level of language, experientially is lifeless, is linguistically very manipulatable. For to the extent that language can be separated from the unique qualities of experience and can be made a kind of linguistic mathematics, its units can easily be arranged and re-arranged with little interference from the cultural context. Nida (1964: 223) highlights this aspect of scientific translation as follows: It emerges from the above-mentioned comparison between English and Arabic, which drastically lack scientific and technical terminology, suffers an irreversible process of disintegration through diglossia, and harbors scanty abbreviations, acronyms, formulae and registers. But since science and technology create situational features which involve new concepts, techniques, and processes that can be imitated and imagined, it is binding for Arab translators to coin equivalent terminology and develop corresponding programs of expression which Arabic morphology and flexible word order can provide. However, theoretical possibilities may in many cases fall short of practical application and this is very much the case with English technical translating into Modern Standard Arabic today.

3. Beeston (1970: 115) Studied the problems in translating in Hutchinson University, he says:
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. However, a part from the cultural gap, the problem of scientific translation from English into Arabic remains mostly a matter of understanding and representing the techniques, the processes, and the details which science and technology involve. In this regard, Farghal and Shunnaq (1999:210) state that “the major problem facing translators at scientific text standardization and dissemination in the sphere of science and technology”. “When it comes to Arabic”, they continue, “scientific discourse is a translation activity, as Arabic is usually target language, and creation reasoning are done in language.


He posed the problem of translation in different settings and contexts and then proposed solutions for those problems which might face the translator of Arabic into English text. He argued that translation is a way of rendering the meaning of the source text into the target text.

He also came across the elements of translation which are the components of language: grammar, vocabulary, style and phonology. After that, he discussed the methods, process and units of translation. Ghazala pointed out that problems of translation are those difficulties that face the translation in the process of translation between two language.


There is no blocking or stopping to the automatic processing. In contrast to their literary counterparts, scientific texts underline the information content without bothering about features that are characteristic of poetic texts, such as rhyme, and connotative or symbolic meaning.

Comments:

In comparison with the studies carried out of problems that face the translators and students in translation from one language to another. Some of the scholars say the major problems of translation indifferent setting and context, but the other says the problems of translation is
problematic in the study of translation, and says remains mostly matter of understanding and presenting the techniques, the processes, and the details which science and technology involve.

Consequently, the researcher designed attest of translating a scientific text from Arabic into English to show the problems that face students when translate.

Chapter Three

Methodology
Chapter Three

Methodology

Introduction 3.1

In this chapter the researcher shows all the steps that were undertaken from the beginning up to the end of the research. This methodology was used by the researcher to achieve the required objectives. It consisted of method, tool, population, sample, and validity and reliability of the tool and procedures.

Research Method 3.2
The research used a descriptive analytical method. The researcher used a test asking the students to translate Arabic scientific text into English, then the researcher will analyze the problem of scientific translation in terms of grammar aspects and cohesion.

**Tool of Data Collection 3.3**

A test was used as a tool to collect the required data. The test was constructed in order to obtain data from students of Sudan University of Science and Technology, it investigates the linguistic problems encountered by translators when rendering Arabic scientific text into English. The test contained two questions one in the linguistic and other is about the cohesive.

**Population and Sample 3.4**

The students of English at Sudan University of Science and Technology represent the population of the study. The Sample of the study is purposive convenient sample, 3rd year students of English at Sudan university of Science and Technology.

**Validity and Reliability of the test 3.5**

The researcher used a test – retest device to measure the reliability of the instrument. The test was given to a similar group from the same population to select sample. It was given them again after one week to check the reliability of their answers. The results show stability in the responses. The students were given 70 minutes to answer the test.

**Procedure of the study 3.6**

The researcher used a test to asked student to translate a scientific text from Arabic into English, a test was given of 3rd year students of English at Sudan University of Science and Technology, the researcher distributed the test paper to forty students selected them randomly to choose the exact sample of the study.
Chapter four

Data analysis and Discussion of the Results
Chapter four

Data analysis and Discussion of the Results

Introduction 4.1

This chapter presents the results of the questions of the study which aimed at presenting problem. Students faced when translating Arabic scientific text into English. Following are the study questions and their result. These are the question of the study

What are the linguistic obstacles that encounter translator when translating from 1 Arabic into English
What are the linguistic cohesion obstacles that encounter translator when translating from Arabic into English

**Discussion of Results 4.2**

The results of students in the test are presented in the table below.

**Grammatical aspect 4.2.1**

(Table 4-1)

<table>
<thead>
<tr>
<th>Subjective agreement of conjunction</th>
<th>Correct answers</th>
<th>Incorrect answer</th>
<th>Percentage of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>and.1</td>
<td>49</td>
<td>1</td>
<td>98%</td>
</tr>
<tr>
<td>but.2</td>
<td>48</td>
<td>2</td>
<td>96%</td>
</tr>
<tr>
<td>or.3</td>
<td>31</td>
<td>3</td>
<td>62%</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Table (1) shows that 49 students with percentage of 98% used conjunction correct when translation a scientific text from Arabic into English. 128 correct reposes with percentage of used correct conjunctions.

(Table 4-2)

<table>
<thead>
<tr>
<th>Subjective agreement of prepositions</th>
<th>Correct answer</th>
<th>Incorrect answer</th>
<th>Percentage of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>without.1</td>
<td>40</td>
<td>6</td>
<td>74%</td>
</tr>
<tr>
<td>to.2</td>
<td>37</td>
<td>3</td>
<td>50%</td>
</tr>
<tr>
<td>with.3</td>
<td>23</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>total</td>
<td>100</td>
<td>13</td>
<td></td>
</tr>
</tbody>
</table>
Table (2) show that

Student of English understanding preposition as follows: 40) students with the percentage of 50 used preposition correct, (23) learners with the percent of 20% used prepositions correctly when translate scientific text. Respond to them correctly. (37) students with percentage of 50% used correctly. There are 100 correct responses with the percentage of 70% used preposition

Cohesion 4.2.2

(Table (4-3)

<table>
<thead>
<tr>
<th>Reference</th>
<th>Correct answer</th>
<th>Incorrect answer</th>
<th>Percentage of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>That diverts without harm to the marine environment</td>
<td>40</td>
<td>5</td>
<td>90%</td>
</tr>
<tr>
<td>These muds comprise various sold suspended in water</td>
<td>10</td>
<td>10</td>
<td>20%</td>
</tr>
<tr>
<td>The same similar as oil -based mud</td>
<td>25</td>
<td>13</td>
<td>80%</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

Table (3) show that

Students of English language used reference correct when translating a scientific text into English as follows: 40) students with percentage of 90 answered correct (10) learners with the present of 20% used correct references. (25) student with percentage of 80% used correctly reference. There are 75 correct response with the percentage of 63% used correct references when translate scientific text into English.
Table (4-4)

<table>
<thead>
<tr>
<th>Substitution and Ellipses</th>
<th>Correct answer</th>
<th>Incorrect answer</th>
<th>Percentage of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Their level strict.1 internal</td>
<td>30</td>
<td>23</td>
<td>90%</td>
</tr>
<tr>
<td>Most companies.2 have their own strict</td>
<td>20</td>
<td>12</td>
<td>80%</td>
</tr>
<tr>
<td>Dont exist.3</td>
<td>10</td>
<td>5</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

Table (4) show that

Student of English language used substitution and ellipses correct when they translate scientific text as follows: (30) students with the percentage of 90% used correctly substitution and ellipses. (20) learners with the present of 80% used it correctly. (10) student with percentage of 12% used substitution and ellipses correctly. There are 60 correct responses with the percentage 60% used correctly substitution and ellipses when translate scientific text into English.

Table (4-5)

<table>
<thead>
<tr>
<th>Synonyms and Antonyms</th>
<th>Correct answer</th>
<th>Incorrect answer</th>
<th>Percentage of correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>54</td>
<td>2</td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>50</td>
<td>4</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>52</td>
<td>5</td>
<td></td>
<td>62%</td>
</tr>
</tbody>
</table>
Table (5) show that:

Student of English language understanding synonyms and antonyms when translate scientific text as follows: (54) students with the percentage of 98 of understanding synonyms and antonyms correct, (50) learners with the present of 90% used them correct when translate, (52) students with percentage of 62% used correct of synonyms and antonyms, (30) students with percentage of 25% understanding and used them correct when translate text. There are 186 correct response with the percentage of 63% when translate scientific text into English.
Chapter Five

Conclusion, Recommendation and Suggestions for Further Studies

5.1 Conclusion:

This study has investigated the linguistic problems of translating a scientific text from Arabic into English, it has also focused on strategies employed by students of translation from
Arabic to English. The chapter concluded with recommendation and suggestion for further studies.

**Finding 5.2**

From this study the researcher concluded that

1. Most of students are unable to use synonyms in their translated texts. The chapter concludes with recommendations and suggestions for future research.

Some of the students are unable to use cohesive devices in translating a scientific texts from Arabic into English

**Recommendation 5.3**

This study recommended the addition of a scientific translation courses in order to be fully mastered. And increase number hour of material of translation

**Further Studies 5.4**

Investigating the best strategies and techniques that could improve the translation from English to Arabic.

Paying more attention to the scientific problem encountered by students in process of translation.

**References**


Activities for Drilling:

Drilling the field requires the injection of a mixture into the wells and this includes materials such as water and light materials with different densities in the water. (Drilling water).

An activity table is used to drill the field, which includes the activities of oilfield materials, and these materials are used in the drilling operation, and this includes materials such as water and light materials with different densities in the water, and this is done to improve the efficiency of the drilling process. This activity is used in discussions on the different aspects of the drilling process, and this includes the use of mud, and this is done to improve the efficiency of the drilling process.

1. Replacing diesel oil with another oil that is lower in cost.
2. Improving technical processes that reduce the amount of mud.
3. Reducing the size of the mud and reducing the amount of mud by using a separating machine.
4. The research in the drilling activities of the drilling activities, and this includes the use of mud, and this is done to improve the efficiency of the drilling process. This activity is used in discussions on the different aspects of the drilling process, and this includes the use of mud, and this is done to improve the efficiency of the drilling process.

Collège des Études supérieures

Investigating The Linguistic Problems Encountered By Translator When Rendering Arabic Scientific Text Into English

A test for University Students

: Translate this Text From Arabic Scientific Into English

أنشطة تنقيب النفط والحفر

يحتاج حفر الاطيان إلى تشحيم مثقاب قطعة لتثبيت الثقاب ضد الانهيار. وقل قطع صخريه إلى السطح ومنعها من تدفق سوائل داخل الثقاب. وتشمل هذه الأطيان مواد صلبة مختلفة مخفية في الماء (الماء، اطيان نفطي، قائمه) أو مستحلبات نفطية مع الماء (الاطيان النفطي، قائمه) ويعيد تدويرها خلال عملية الحفر، الاطيان النفطي، القاعده مفيدة خاصة في حفر الأبار حادة الزاوية من المنصه، ولكنها تتطلب من الحقول بديل للطين الفاصل من قطع الحفر قبل الفرير، وعندما تستخدم مادة النافط، قائمة القطر تحتوي على 15% من النفط.

وتشمل الخطوات المتخلصه لتقليص التأثيرات المعاكسه: وهذا يتضمن

1. استبدال زيت الديزل كزيت أساسي، بزيت ثمنا ذي سمية منخفضة.
2. تحسين الأساليب التقنية للمعالجة، وتقليل الكميات المنكسه.
3. تخفيف كمية الطين و النفط الملتصق بالقطع المفرغه باستعمال اجهزة الفصل.
4. البحث في الاطيان ذاتها المماثلة للاطيان النفطيه قائمه ولكنها تحوي نفط اقل بكثير.

معظم انشطة التنقيب والحفر تخضع لانظمه وطنية توضع علي مستويات تحول دون الحاق ضرر بالبيئة البحرية، وتحوز اغليه الشركات ايا مستوياتها ذاتيه الداخلية الصارميه التي في، بينها حيث لا يوجد متطلبات وطنية.