

Exploring The Problems Of Machine Translation From Arabic Into Englishlanguage Facedby SaudiUniversity Student Of Translation At The Faculty-- Of Arts,Jazan UniversitySaudi Arabia

Amin Ali

AlMubark University Saudi Arabia

Abstract: *The current paper aims at casting a new light and exploring the problems of Machine Translator as an aid used by the Saudi students of translation to render from Arabic into the English language. Also, the study aims at finding out such problems encountered by these students who pursue their A.Bin translation. To achieve the objectives of the study, a sample of 50 students who were enrolled in the translation programs in the Faculty Arts for female students (Al-Ardah) during the academic year 2014/2015 who were randomly selected by the researcher. A questionnaire that consisted of 10 questions with multiple choices was administered. The collected data were analyzed properly. The study has come out with spectra of results among them are the followings:*

1. *The students who were the sample of the study faced various types of problems such as syntactic and semantic problems when using machine translation for rendering their given tasks.*
2. *The rendition of target language used in the machine translator is inaccurate.*
3. *Some of translating cultural specific terms through a machine translator were out of context.*

Keywords: *problems machine translation, culture, language, context, syntactical semantic faculty of arts Jazan University.*

I. Introduction

The globalization and growth of technological advancements touch every part of our lifestyles, fittingly; expressing information in several languages has grown to be one of the most important characteristics in communication. This needs substantial levels of rapidity and efficiency in translation facilities.

Arabic language is one of the world main languages and one of five formal languages of the United Nation. It is a native language for 330 million people in the world, it is also, used as a second language by a further 1.4 billion people in the many countries including Africa and southeastern Asia (Soudi et al., 2012).

Along with the increasing need for cross-cultural and translanguing communication in an increasingly globalized world, therefore, machine Translation may play a pivotal role in helping language experts in their daily work in general and in aiding non-professionals to understand and create text in target languages in particular

Today's Machine Translation is tremendously smart in providing fascinating ideas in thinking about what language is and how to understand a language excellently however; there is no comparison at all to the way human beings translate. As (Hutchins, 1986) opines that a machine translator is "the software associated with computer systems in the interpretation of text messaging, from one normal language straight into another". Moreover, a machine translator can translate texts; thus, it cannot convey the sense and implications. Machine or a piece of software cannot interpret the sense of anything and more so will not translate if it does not understand the meaning of the text. Based on the common claim that a Machine Translator is a substitute to the human translators, which is not true because Machine Translation systems are often measured to be inadequate and accused of not living up to the intention they made for (Hutchins, 1986). However, if machine translators are considered as translation tools or communication aids rather than as a replacement for an individual translator, it will be discovered that they are significant and often are widely underestimated.

Human translators select the accurate expression by using information from several sources, many of which derive from knowledge of the world, cultural dissimilarities and implications. Machine Translation software is resources for defining whether a translation is suitable or not, however, they are very limited. As the interest in, and demand for Machine Translation grows, it is reasonable to presume that translators who work in scientific fields will be more and more required to interact with Machine Translators. Research on the topic of machine translation within Translation Studies is still quite narrow (Hutchins, 1986). Most published research work on the topic of Machine Translation has been conducted in computational and experimental research in software engineering (Hutchins, 1986), however not carried in Translation studies itself.

II. Objectives and Questions of the Study

This paper identify and describe the problems faced when using a Machine Translator in translation from Arabic language into the English language by the Saudi students majoring in in translation in Arts Faculty at Jazan University. It also attempts to understand the causes of these problems and give some recommendations to help overcome them. In order to accomplish these objectives, the study clarified the following questions:

1. What are the problems that the students majoring in translation when using a Machine Translator?
2. Is the language used in the Machine Translator easy to understand?
3. Does Machine Translator imply the disappearance of a human translator?

III. Significance of the Study

A lot of research work carried out in Translation studies is on problems that translators faced in translation in general, however practical studies that deal with Machine Translation in the Arabic language are relatively small and only focus on one human translation. Therefore, this study is designed to fulfill a gap in literature since it purposes to identify and describe the problems faced by students when using a Machine Translator. The result of this study and recommendations for future research will help other scholars who wish to begin research on this issue. However, the results of this study cannot be generalized further than the selected sample.

IV. Sample of the Study

In this paper, the sample selected for this research consists of 50 students from Kazan University who is pursuing their B. A in translation. There was clearly logic behind why this particular group of students was actually recommended as the participants. First, the actual requirements regarding selecting the learners were determined by their usage of the computer aid in their studies. Second, they were in the final year and taught in English. Third, they are native speakers of the Arabic language. They were 50 female learners, aged between 21 and 25 years old.

V. Instruments of the Study

In this study, the researcher applied a questionnaire as a tool to gather data. The questionnaire was conducted, particularly to reach the objectives of this present research. The questionnaire included 10 specific questions (see Appendix A). A letter which explained the scope, objectives of the study and the confirmed permission to carry out the questionnaire was presented to the participants. The questionnaire was created to associate the barriers that the learners encountered and the causes to their problems.

VI. Review of Related Literature

Researchers in the field of natural languages have made a serious attempt to back up manual translations by using machine translators. Consequently, Machine Translation therefore is considered as a valuable subject for researchers, profitable to developers and users (Hovy et al., 2002). Researchers want to stratify their concepts to find out the dissimilarities that can be made by machine translators. By doing so, it will be easier for designers to identify the most challenging issues and make enhancements on the machine translators.

(Shaalán, 2000) said that translation of Arabic sentences into English language was a problematic task. The difficulty comes from various sources, one being sentences in Arabic language are too long. Another challenges the sentence structure. An Arabic phrase is actually syntactically unclear and complex, due to the usage of many grammatical relationships, order of words and content along with conjunctions. Therefore, most of the studies in Arabic Machine Translator mostly focus on the translation from English to Arabic.

Also, (Alawneh et al. (2011)) reiterated the need to deal with the arrangement and the order of words in a machine translation from English language to Arabic language. Also, offered hybrid-based strategy to handle those problems. Moreover, (Alawneh et al., 2011) stated a couple of characteristics that had an impact on the ordering issue that were derived from the fact that various languages have different text orientation. Also, (Soudi et al., 2012) claimed that remarkable differences between the Syntax of the Arabic language and that of English language are another source of difficulty.

Next, (Izwaini, 2006) said that an important feature of Machine Translation is to maximize the meaning of text so that minimum attempts and fewer times are needed to comprehend the output. The operator should not put upwards too much effort to join the various elements of the translation. Moreover, (Izwaini, 2006) said that an excellent Machine Translation should try to go for an additional step away from the essence level. Procedures required to be developed and improved so that the output can touch the excellent product possible with small editing needed.

In addition, (Izwaini, 2006) indicted that deletion and addition were problems that Machine Translation wants to look at so that its output is a reproduction of the source language text with no elements deleted or extra elements added. Spelling is another problem that requires attention.

Moreover, (Izwaini, 2006) classified the problems of Machine translation from Arabic language into English language as: first, non-vocalization is a problem of lexis that leads to a wrong choice of words in the target language and hence a major cause of interpretations. The second lexis problem is inadequate lexicon, rendering it producing completely wrong meaning of text for instance, the name of a place or a person. A third problem of lexis is words with multiple meanings, several Arabic terms might have a couple of overlapping connotations in English language and the system want to determine which one to choose, for instance the term مركز can mean center, position, rank, status. A fourth difficulty associated with lexis is having multiple senses; cultural features associated with the Arabic language issuing constructs that literally mean 'friend of', 'mother of', and 'father of' to show possession.

Furthermore, (Shaalán et al., 2004) has focused on matters of design and application of a Machine Translation program, which usually translates a reasonably difficult English noun phrase into Arabic language. In addition, (Shaalán et al., 2004) displayed that the Machine Translation approach is favorable and may be used to automate the translation of thesis headings within the computer science domain. Moreover, (Shaalán et al., 2004) collected 116 real titles of thesis from the computer science discipline. The evaluation of all titles is based on comparing the Machine Translation output with the human translations. In case where there was clearly a variation between the machine translation and the individual translation it concerned merely a fragment of the complete noun phrase. Most of these types of Machine Translation ended up partially accurate.

(Al-Maskari and Sanderson, 2006) indicated that during translation of questions from Arabic into English, several translation errors appeared which are of the type: wrong pronoun, wrong word order, wrong word sense and wrong transliteration. The decoded questions were fed into AnswerFinder, which had a huge influence on its accuracy in returning correct answers. AnswerFinder was greatly affected by the relatively reduced output of machine translation.

To overcome such problems (Al-Maskari and Sanderson, 2006) suggested that, first is to make some modifications to the question translation process to reduce the influences of translation by automatically editing remarkable regular errors using a regular written expression. Second, try constructing an interactive Machine Translation system by providing users more than one translation options to pick a more accurate option from.

(Feder, 2003) said that its recognizable from the common definitions of Translation Studies and machine Translation, that Translation Studies inspects translations, whereas, machine Translation are mechanical tools used to create translations. Translation Studies transacts with artistic and assessment, a component of the translation process, while Machine Translation concerns technical aspects and therefore, does not transact with the translation process as a subjective and complex process involving for instance, cultural knowledge. Although the two fields have the same subject matter, which is text, they handle it differently. Translation Studies examines and evaluates text, creation and purpose of translation, whereas Machine Translation's emphasis is on how to help human translators in the creation of target text and on how to make this job easier and faster. These two components may be considered complementary, but their goals are obviously different.

(Hutchins, 2001) said that since the concepts of applying computers aids to render normal languages was initially suggested from the 1940s as well as the primary inquiries were restarted in the 1950s, translators have seen improvement possibly in contempt or in fear. Moreover, they have discarded the idea that everyone might even think that translation can be mechanized, or they are even scared that their own career could be taken over entirely by machines.

On the other hand, there is no hesitation that computer-based translation devices are certainly not competitors to human being translators, however they generally assist them in order to enhance efficiency, throughout a complex translation they have ever attempted. In this context (Hutchins, 2001) distinguished:

1. Machine Translation devices, which purposes to pledge the entire translation procedure, but whose production must positively be reviewed.
2. Machine Translation (translation Aids), which assist the particular expert translator.
3. Translation devices for the non translator individual user, which create simple versions to help in understanding. These types of distinctions were not identified before the 1980s.

Moreover, (Hutchins, 2001) said that the major emphasis of Machine Translation study is to the development of systems that translate written scripts of scientific as well as technical nature, away from systems that translate literary and legal texts. In fact any kind of texts messages where style with presentation are essential elements of the message. On the other hand, there are apparent possible advantages even when the achievement is only partial.

(Salem et al., 2008) said that more to the problems involved in creating an efficient translation aids from Arabic language into English language, the word order of Arabic language creates hindrances to the language in translation process.

Moreover, (Salem et al., 2008) stated that Arabic language has a great set of morphological features. These kinds of characteristics are generally available such as prefixes or suffixes that can entirely enhance the particular sense of the word. Furthermore, in Arabic there are remarkable words that carry the definition of a complete sentence, for instance *سنسافر* which mean, in English we will travel. Arabic free word order creates an enormous challenge to Machine Translators due to the vast possibilities to express the same sentence in English.

(Bowker and Ehgoetz, 2007) carried out a research to discover user approval regarding Machine Translation productivity, using time, cost and quality, as three variables for assessment. Moreover, (Bowker and Ehgoetz, 2007) asked experts of translation to judge three various target language texts of the identical source language texts. Three distinct target language texts of every source language text were created: raw Machine Translation production, post edited Machine Translation output and human translation. To be able to improve the raw Machine Translation production, first, translate the source language texts with the Machine Translation system, recognize unfamiliar words and added entries of these terms to the Machine Translation dictionary.

(Arenas, 2008) conducted a research to explore the relationship concerning quality and productivity of the post editing results from translation reminiscences as well as Machine Translation with regards to texts translated without any assistance. Quality has been assessed as the number of errors in the target language text. The mistakes were identified, measured along with processing speed was estimated as the number of source language words processed in each minute.

(Schäfer, 2003) said that the investigation of the samples of raw Machine Translation production coming from various Machine translation systems which, depicted that the mistakes are a great deal in common. A number of mistakes happened in every language pairs, no matter the system applied. Moreover, Schäfer (2003) provided general classification of Machine Translation mistakes happening regardless of language pair and Machine Translation system. The primary mistake categories were grammatical, syntactic, lexical and errors due to imperfect input.

(Fiederer and O'Brien, 2009) explored Machine Translation from the viewpoint of contrasting it with human being translation. (Fiederer and O'Brien, 2009) carried out the investigation to see if Machine Translation production actually decreased the translation quality than human translation. They selected 30 phrases from an individual manual in English which were both translated by a human being and a machine. The majority of the evaluators preferred human translations.

(Pym, 2009) carried out a class experiments making use of Google Translator. The main goal of the research was to motivate the learners to determine issues with their translation processes along with technology. The participants of the research were 19 second year Master's degree students. Quantitative data was obtained by means of figuring out the entire period required to produce the last translation. The findings of the experiment showed that there was no important variation in the period taken to create the production by the Machine Translation and without it, not worthy distinction relating to the language groups. More so, it had no systematic dissimilarity between the qualities of the translations as evaluated by the learners.

(Craciunescu et al., 2004) said that Machine translation is definitely an autonomous computer system with approaches and strategies which might be labeled as: First, the direct approach to be used within machine translation devices, requires at the least a linguistic concept. The direct method depends on a predefined source language and target language binomial in which every expression of the source language system is straightway connected to a similar component in the target language with a unidirectional association.

Second, the transfer technique focuses on the concept of level representation and consists of three levels; the study level, the transfer level and the generation level. The study level presents the original language text message linguistically along with an original language dictionary. The transfer level changes the outcome with the investigation level as well as determines the linguistic along with structural equivalents involving the pair of languages. This relies on a bilingual lexicon from the source language into target language. The generation level creates a new text within the second language on the basis of linguistic information from the original language through a second language dictionary.

Third, the axis language approach is around the notion of producing a text message free without any specific language. This specific rendering purposes as being fairly neutral, common axis which is distinctive completely from both source and target language. Theoretically, this technique reduces the machine translation procedure to two steps: evaluation and production. The study of the source text guides to a conceptual rendering, the different elements which might be united through the production component within the equivalents in the second language. The study on this approach is related to artificial intelligence and representation of knowledge. The systems in line with the concept of a pivot language tend not to intention at straight translation, but alternatively reformulate the original text message from the crucial information.

(Al-Kabi et al., 2013) pointed out that Arabic language has always been a challenge for machine translation because of its rich and morphological complex features. Moreover, Arabic has a variety of word forms and word orders which make it possible to express any sentence in various forms. Furthermore, (Al-Kabi et al., 2013) said that the existence of several dialects and the fact that the word order is not usually identical to the source language and target languages, this leads to the opportunity of having more than one meaning for the same sentence.

Also (Al-Kabi et al., 2013) said that the exactness of any machine translator is generally evaluated by matching results to human judgments translation. One of the techniques used to assess machine translation systems is called Bilingual Evaluation Understudy which was introduced in the study of Papineni et al. (2002) which, claimed to be language independent and highly correlated with human evaluation.

Several efforts were made to accomplish or improve machine translation of Arabic into other languages. Some of these attempts are the work of (Al Dam and Guessoum, 2010), (Carpuat et al., 2010), (Adly and Al Ansary, 2010), (Salem et al., 2008) and (Riesa et al., 2006).

Currently and in future, uses of Machine Translation are limited to significance translation, or a quick translation for smart users, when individual translation is actually out of question as a result of time and other issues. The Machine Translation is intended at serving tolerant user transacting with transitory texts, generally speaking, they assist communication in many circumstances.

It is really understandable that human being translators must react undesirably in order to accept the idea of Machine Translation. This is partly simply because their own particular traditional education has made all of them to assume a top standard regarding functionally modified or innovatively translated literary texts, and they find the Machine Translation results improper.

The encouraging aspect associated with enhanced communication through Machine Translation, for the human being translator, is that it stimulates curiosity about texts in unidentified languages with individuals who would previously have merely ignored their reality. In the long run, this inquisitiveness can only lead to a request for better human being translation. In fact, it is possibly true to say that English is a bigger threat to multilingualism and the translator than Machine Translation.

VII. Finding and analysis

Machine translator represents an actual barrier to the students in translating from the Arabic language to the English language. Answers from the questionnaire were presented in the following categories;

7.2 How often do you use the Machine Translator?

The descriptive analysis for the question; “how often do you use the Machine Translator?” is shown in Table 7.1 and Figure 7.1. According to the frequency test for this question, a majority of the respondents, that is 50 percent, said they used Machine translation everyday while only 15 percent of them said they used Machine Translation a few times in a week. However, only 20 percent among the 50 participants used Machine Translation a few times in a fortnight. From the total participants only 7 percent used the Machine Translation once in a while. Figure 7.1 shows all the results from the questionnaire of the 50 participants.

Table 7.1 how often do you use the Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
Everyday	27	50.9	54.0	54.0
A few times in a week	8	15.1	16.0	70.0
A few times in a fortnight	11	20.8	22.0	92.0
Once in a while	4	7.5	8.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

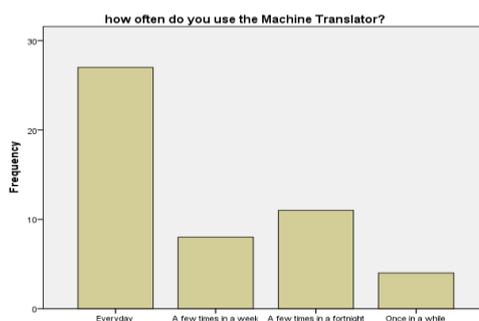


Figure 7.1

8.2 Does the Machine device Translator serve the purpose of its creation?

The descriptive analysis for the question; “does the Machine device Translator serve the purpose of its creation?” is in Table 7.2 and Figure 7.2. According to the frequency test for this question, among the 50 participants, 32 percent who used the Machine device translator said it needs improvement, while only 28 percent of them said that it serves the purpose of its creation to some extent. However, only 15 percent among the 50 participants who used the Machine Translation said yes the Machine translation serve the purpose of its creation. From the total participants only 18.9 percent who used the Machine Translation said no it does not serve the purpose of its creation. Figure 7.2show all the results from the questionnaire of the 50 participants.

Table T 7.2 Does the Machine device Translator serve the purpose of its creation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	8	15.1	16.0	16.0
No	10	18.9	20.0	36.0
To some extent	15	28.3	30.0	66.0
Needs improvement	17	32.1	34.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

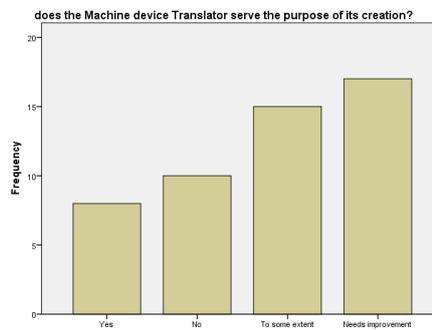


Figure 7.2 Does the Machine device Translator serves the purpose of its creation?

7.3 Is the language utilized in the Machine Translator simple to be comprehended?

The descriptive analysis for the question; “is the language utilized in the Machine Translator simple to be comprehended?” is shown in Table 7.3 and Figure 7.3. According to the frequency test for this question, among 50 participants, the majority of the respondents, 64 percent said no, because the language used in the Machine Translator is not easily comprehensible. While only 13 percent of them said the language used in the Machine Translator easily understood to some extent. However, only 2 percent among the 50 participants who used the Machine Translation said yes the language used in the Machine Translator is easily understood. From the total participants only 15 percent who used the Machine Translation said that language used in the Machine Translator needs improvement. Figure 7.3shows all the results from the questionnaire of the 50 participants.

Table 7.3 Is the language utilized in the Machine Translator simple to be comprehended?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	1	1.9	2.0	2.0
No	34	64.2	68.0	70.0
To some extent	7	13.2	14.0	84.0
Needs improvement	8	15.1	16.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

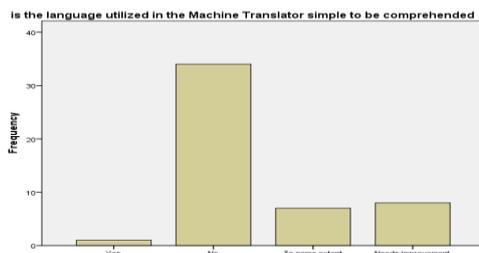


Figure 7.3 Is the language utilized in the Machine Translator simple to be comprehended?

7.4 What type of information do you generally search for in a Machine Translator?

The descriptive analysis for the question; “what type of information do you generally search for in a Machine Translator?” is shown in Table 7.4 and Figure 7.4. According to the frequency test for this question, among 50 participants, a majority of the respondents, 39 percent said they used Machine Translation to increasing their vocabulary. While only 35 percent of them said they used Machine Translation to understand the meanings of the terms when translating a text. However, only 13 percent among the 50 participants who used the Machine Translation said they understood the meanings of the technical terms. From the total participants only 5 percent used the Machine Translation to learn new words. Figure 7.4 shows all the results from the questionnaire of the 50 participants.

Table 7.4 What type of information do you generally search for in Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
For understanding the meanings of the technical terms	7	13.2	14.0	14.0
To learn a new word	3	5.7	6.0	20.0
To understand the meanings of the terms when translating a text	19	35.8	38.0	58.0
For increasing your vocabulary	21	39.6	42.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

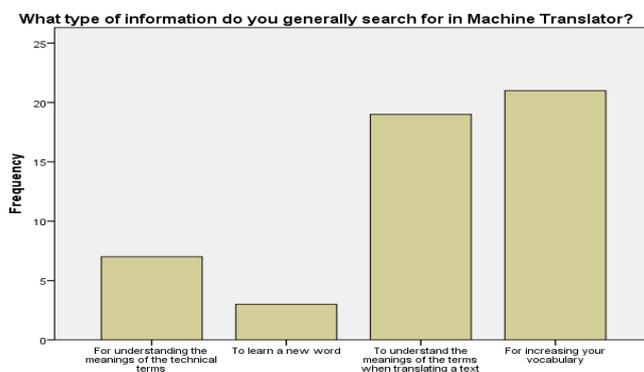


Figure 7.4

7.5 Can you find all of the words that you are looking for in a Machine Translator?

The descriptive analysis for the question; “Can you find all of the words that you are looking for in a Machine Translator?” is shown in Table 7.5 and Figure 7.5. According to the frequency test for this question, among 50 participants, a majority of the respondents, 73 percent said they found most of words they were looking most of the times. While only 20 percent of them said they cannot find all the words that they were looking for from the Machine Translator. Figure 7.5 shows all the results from the questionnaire of the 50 participants.

Table 7.5 Can you find all of the words that you are looking for in a Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	11	20.8	22.0	22.0
Most of the times	39	73.6	78.0	100.0

	Total	50	94.3	100.0	
Total		53	100.0		

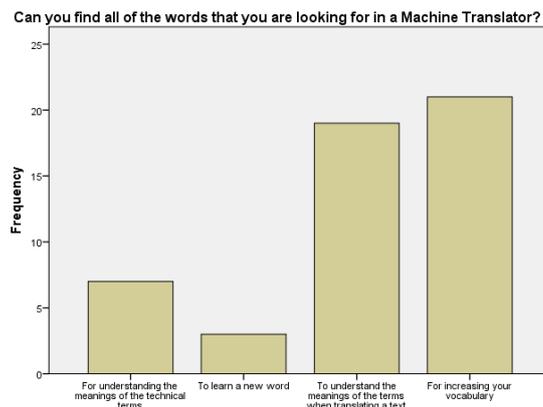


Figure 7.5 Can you find all of the words that you are looking for in a Machine Translator?

7.6 What can you say about the translation of the word الفلافل as translated by the Machine Translator?

The descriptive analysis for the question; “What can you say about the translation of the word الفلافل as translated by the Machine Translator?” is shown in Table 7.6 and Figure 7.6. According to the frequency test for this question, among 50 participants, a majority of the respondents, 66 percent they said it is difficult to translate such a word using a machine translator. While only 28 percent of them said machine translation mistranslated the word. Figure 7.6 shows all the results from the questionnaire of the 50 participants.

Table 7.6 What can you say about the translation of the word الفلافل as translated by the Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
Mistranslated	15	28.3	30.0	30.0
Difficult to translate	35	66.0	70.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

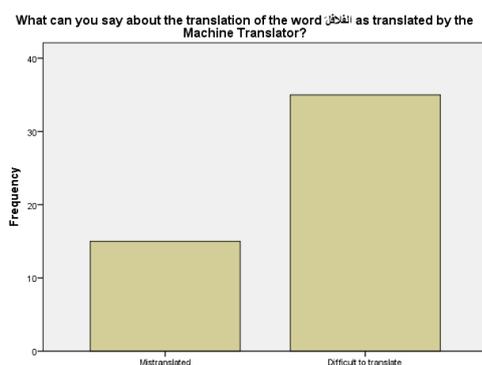


Figure 7.6 what can you say about the translation of the word الفلافل as translated by the Machine Translator?

7.7 What can you say about the translation of the word الملوخية as translated by the Machine Translator?

The descriptive analysis for the question; “What can you say about the translation of the word الملوخية as translated by the Machine Translator?” is shown in Table 7.7 and Figure 7.7. According to the frequency test for this question; among 50 participants, a majority of the respondents, 72 percent they said it is difficult to translate such word using a machine translator. While only 23 percent of them said Machine Translator mistranslated the word. Figure 7.7 shows all the results from the questionnaire of the 50 participants.

Table 7.7 What can you say regarding the translation of the word **الملوخية** through the Machine Translator?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Mistranslated	12	22.6	24.0	24.0
	Difficult to translate	38	71.7	76.0	100.0
	Total	50	94.3	100.0	
Total		53	100.0		

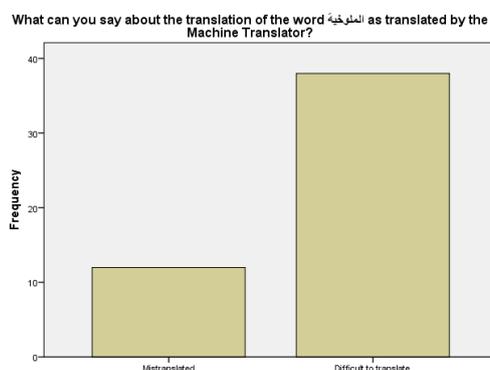


Figure 7.7 what can you say about the translation of the word **الملوخية** as translated by the Machine Translator?

7.8 What can you say about the translation of the word **الطهارة** as translated by the Machine Translator?

The descriptive analysis for the question; “What can you say about the translation of the word **الطهارة** as translated by the Machine Translator?” is shown in Table 7.8 and Figure 7.8. According to the frequency test for question, among 50 participants, a majority of the respondents, 77percent they said it is difficult to translate such a word using a machine translator. While only 15 percent of them said Machine Translator mistranslated the word. Only two percent said that the meaning of the term cannot be easily understood by the users. Figure 7.8 shows all the results from the questionnaire of the 50 participants.

Table 7.8 What can you say about the translation of the word **الطهارة** as translated by the Machine Translator?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Mistranslated	8	15.1	16.0	16.0
	Difficult to translate	41	77.4	82.0	98.0
	The meaning of the term cannot be easily understood by the users	1	1.9	2.0	100.0
	Total	50	94.3	100.0	
Total		53	100.0		

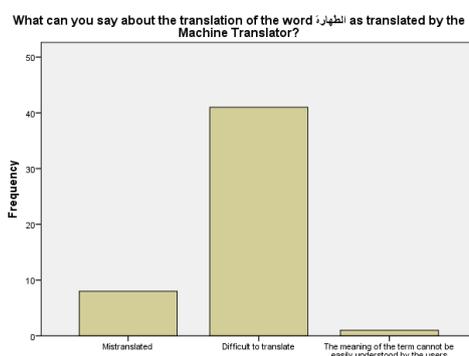


Figure 7.8

7.9 What can you say about the translation of the word **عديلة** as translated by the Machine Translator?

The descriptive analysis for the question; “What can you say about the translation of the word **عديلة** as translated by the Machine Translator?” is shown in Table 7.9 and Figure 7.9. According to the frequency test for

this question, among 50 participants, a majority of the respondents, 59 percent said it is difficult to translate the word using a machine translator. While only 21 percent of them said the Machine Translator mistranslated the word. Only 11 percent said that the meaning of the term cannot be easily understood by users. Figure 7.9 shows all the results from the questionnaire of the 50 participants.

Table 7.9 What can you say about the translation of the word عديلة as translated by the Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
Mistranslated	11	20.8	22.4	22.4
Difficult to translate	31	58.5	63.3	85.7
The meaning of the term cannot be easily understood by the users	6	11.3	12.2	98.0
Total	49	92.5	100.0	
Total	53	100.0		

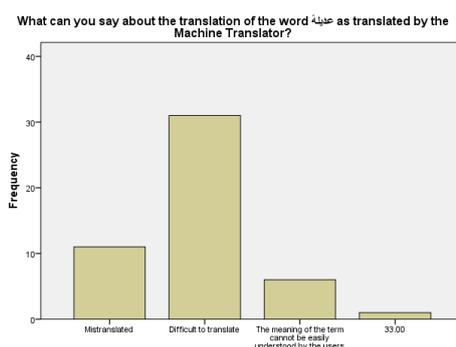


Figure 7.9 What can you say about the translation of the word عديلة as translated by the Machine Translator?

7.10 What can you say about the translation of the word عدة as translated by the Machine Translator?

The descriptive analysis for the question; "What can you say about the translation of the word عدة as translated by the Machine Translator?" is shown in Table 7.10 and Figure 7.10. According to the frequency test for this question, among the 50 participants, a majority of the respondents, 72 percent they said it is difficult to translate the word using a machine translator. While only 23 percent of them, they said a machine translator mistranslated the word. Figure 7.10 shows all the results from the questionnaire of the 50 participants.

Table 7.10 What can you say about the translation of the word عدة as translated by the Machine Translator?

	Frequency	Percent	Valid Percent	Cumulative Percent
Mistranslated	12	22.6	24.0	24.0
Difficult to translate	38	71.7	76.0	100.0
Total	50	94.3	100.0	
Total	53	100.0		

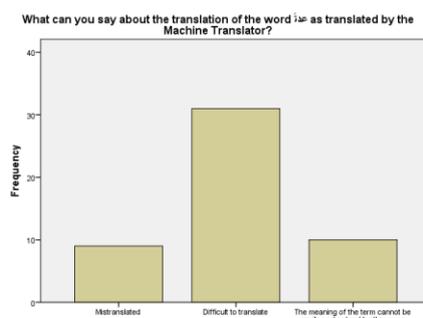


Figure 7.10 What can you say about the translation of the word عدة as translated by the Machine Translator?

VIII. Discussion

Findings disclosed that Machine Translation represent actual obstacles for the students in Jazan university in translating from Arabic language into English language. The frequency tests show that a majority of the students used the machine translator every day. Due to various development and present dynamic world there is need for a more effective means of translation, since there are not many human translators, or because individuals and organizations do not see translation as a complex activity demanding a high level of experience.

In answering the question whether or does the Machine Translator serve the purpose of its creation, a majority of the students, 32 percent of them said that the machine translation need some improvement. However, Machine Translation helps the students to make their job more efficient and faster. Therefore, the answer for the question "Does the Machine Translator serve the purpose of its creation?" showed that the Machine Translation needs to be improved. The idea grew to become extensively assumed that, the aim of Machine Translation has to be improved to completely automate to create quality translations. The usage of human being help was regarded as a temporary arrangement design as reported by (Bar-Hillel, 1960).

The question whether or not the language used in the Machine Translator was easily understood, a majority of the students, 64 percent said no, because the language used in the Machine Translator was not easily understood in the translated script. Machine Translation cannot give a proper translation, because some terms are peculiar to a specific field and have no equivalent in target language. Most a times, the text translates well, and it can be easily comprehended, but other times, there are mistranslated expressions or sentences that do not follow proper syntax and can prevent understanding. The raw machine translation product is not considered a high-quality translation equivalent to what a human translator can produce, because the translation will need to go through different degrees of editing by a human translator before it can be used or publicly distributed.

Moreover, in answering the question, "what kind of information did you frequently look up at Machine Translator?" a majority of the respondents, 39 percent said they used Machine Translation to increasing their vocabulary, while translating the word or the term from Arabic into English language. Machine Translation grants instant translations between dozens of various languages. It can translate terms or sentences between any alliances of various languages.

In addition, the question could you find all the words that you were looking at Machine Translator? A majority of the respondents, 73 percent said most of the times they found all the words they were looking for using the Machine Translator. The problem of machine translators can translate words, but they cannot translate meaning. By definition, a machine translator will never comprehend the definition of anything. Sometimes they are some words or terms that are difficult to find them while translating because they are peculiar to particular languages.

Language is something that just individuals will be capable to completely comprehend and translate. Machine Translator arranged to produce automated translation to reasonably impressive levels, but machine translation will never be able to compete with human translators. The various forms, circumstances, cultures and differences included in the language are merely a few basic items that machines can't understand.

There are quite a few characteristics across languages that help to highlight why individuals will continuously have the upper-hand over machines when it approaches to translation. Several words really don't translate well between languages.

Finally, words like *الملوخية*, *عَدَّة*, *عَدِيْلَه* and *الفلافل* were problematic for the Machine Translation because they did require knowledge of English culture and they are peculiar to cultural specific concepts. The overall percentage score calculated for these words was nearly seventy one percent and this provided supporting evidence that these words were not easy to translate.

In the process of translation, automated or human the sense of specific cultural concepts text in the source language must be fully restored in the target language while translating. On the surface this appears straightforward, it is far more complicated. Translation is not a mere word-for-word replacement. A translator must explain and investigate all of the components in the text and know how every word may affect another. This needs great expertise in target language cultural. The greater difficulty rests in how machine translation can provide publishable quality translations.

The current Arabic language usually is well-known as having arrangement asymmetries that are sensitive to word order effects. Most of these asymmetries were caused by a range several of effects problem first, through the investigation of the problems at the source language and second, the particular generation of difficulties in the target languages. Languages usually are different in the agreement demands. A number of such languages as Arabic language need person, gender, number along with case agreements. Machine translation process grows by utilizing a number of strategies determined by their particular issues and difficulty.

IX. Conclusion

The outcome of the investigation shows that the Machine Translation activity from Arabic language into English language faced many obstacles in the translation process. In contrast, a language is simply a subject

important for mankind; the idea of language poses enormous difficulties for machine Translation. The real reason for this is the practically infinite variety in a natural language. The words as well as rules along with how they can be linked together vary considerably from language to language. Although each and every language have common structures, commonly named deep structures. Simple translation applications depend on surface structure and they render one word after another. Several aspects promote the incorrect creation of machine translation. Human natural language is complicated, vague, ambiguous and imprecise. Words having more than one meaning, sentences with grammatical structures having several meanings, the identification of pronouns and other grammatical difficulties lead to translation software to fail.

Several deficiencies in the production of Machine Translation have been presented in this paper, due to either inadequate interpretation of the users or faulty generation of the target language words. Totally automated, great quality machine translation has not yet been attained. Still there is a lot that we can do to enhance the quality of Machine Translation production and expand its utility. In this paper, we have displayed the need to handle machine translation problems when translating from Arabic language to English language.

References

- [1]. Adly, N., and Al Ansary, S. (2010). Evaluation of Arabic machine translation system based on the universal networking language. *Natural Language Processing and Information Systems*. Springer.
- [2]. Al-Kabi, M. N., Hailat, T. M., Al-Shawakfa, E. M., and Alsmadi, I. M. (2013). Evaluating English to Arabic Machine Translation Using BLEU. *International Journal*. 4.
- [3]. Al-Maskari, A., and Sanderson, M. (2006). The affect of machine translation on the performance of Arabic-English QA system. *Proceedings of the Workshop on Multilingual Question Answering*, 9-14.
- [4]. Al Dam, R., and Guessoum, A. (2010). Building a neural network-based English-to-Arabic transfer module from an unrestricted domain. *Machine and Web Intelligence (ICMWI)*, 2010 International Conference on, 94-101.
- [5]. Alawneh, M., Omar, N., Sembok, T. M., Wiwatwithaya, S., Phasukkit, P., Tungjitkusolmun, S., Sangworasilp, M., Pintuviroj, C., Parvaresh, S., and Ayatollahi, A. (2011). MACHINE TRANSLATION FROM ENGLISH TO ARABIC. *Heart*. 409.
- [6]. Arenas, A. G. (2008). Productivity and quality in the post-editing of outputs from translation memories and machine translation. *Localisation Focus*. 11.
- [7]. Bar-Hillel, Y. (1960). The present status of automatic translation of languages. *Advances in computers*. 1(1), 91-163.
- [8]. Bowker, L., and Ehgoetz, M. (2007). Exploring User Acceptance of Machine Translation Output: A Recipient Evaluation. 2007). *Across Boundaries: International Perspectives on Translation*. Newcastle-upon-Tyne: Cambridge Scholars Publishing. 209-224.
- [9]. Carpuat, M., Marton, Y., and Habash, N. (2010). Improving arabic-to-english statistical machine translation by reordering post-verbal subjects for alignment. *Proceedings of the ACL 2010 Conference Short Papers*, 178-183.
- [10]. Craciunescu, O., Gerding-Salas, C., and Stringer-O'keeffe, S. (2004). Machine Translation and Computer-Assisted Translation. *Translation Journal*. 83.
- [11]. Feder, M. (2003). Machine-assisted human translation: Its position. *Perspectives: Studies in Translatology*. 11(2), 135-143.
- [12]. Fiederer, R., and O'brien, S. (2009). Quality and machine translation: a realistic objective. *The Journal of Specialised Translation*. 1152-74.
- [13]. Hovy, E., King, M., and Popescu-Belis, A. (2002). Principles of context-based machine translation evaluation. *Machine Translation*. 17(1), 43-75.
- [14]. Hutchins, J. (2001). Machine translation and human translation: in competition or in complementation. *International Journal of Translation*. 13(1-2), 5-20.
- [15]. Hutchins, W. J. (1986). *Machine translation: past, present, future*. Ellis Horwood Chichester.
- [16]. Izwaini, S. (2006). Problems of Arabic machine translation: evaluation of three systems. *The British Computer Society (BSC)*, London. 118-148.
- [17]. Papineni, K., Roukos, S., Ward, T., and Zhu, W.-J. (2002). BLEU: a method for automatic evaluation of machine translation. *Proceedings of the 40th annual meeting on association for computational linguistics*, 311-318.
- [18]. Pym, A. (2009). Using process studies in translator training: self-discovery through lousy experiments. S. Göpferich, F. Alves & IM Mees (Eds) *Methodology, Technology and Innovation in Translation Process Research*. 135-156.
- [19]. Riesa, J., Mohit, B., Knight, K., and Marcu, D. (2006). Building an English-iraqi Arabic machine translation system for spoken utterances with limited resources. *INTERSPEECH*.
- [20]. Salem, Y., Hensman, A., and Nolan, B. (2008). Towards Arabic to English machine translation.
- [21]. Schäfer, F. (2003). MT post-editing: how to shed light on the "unknown task". *Experiences at SAP. Controlled language translation, EAMTCLAW*. 3133-140.
- [22]. Shaalan, K. (2000). Machine translation of Arabic interrogative sentence into English. *Proceedings of the 8th International Conference on Artificial Intelligence Applications*, 473-483.
- [23]. Shaalan, K., Rafea, A., Moneim, A. A., and Baraka, H. (2004). Machine translation of English noun phrases into Arabic. *International Journal of Computer Processing of Oriental Languages*. 17(02), 121-134.
- [24]. Soudi, A., Farghaly, A., Neumann, G., and Zibib, R. (2012). *Challenges for Arabic Machine Translation*. John Benjamins.