

Machine Translation as a Model for Overcoming Some Common Errors in English-into-Arabic Translation among EFL University Freshmen

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Abstract

This research work aimed at making use of Machine Translation to help students avoid some syntactic, semantic and pragmatic common errors in translation from English into Arabic. Participants were a hundred and five freshmen who studied the *Translation Common Errors Remedial Program* prepared by the researchers. A testing kit that included *A Translation Common Errors Test* booklet, a table of specifications, scoring criteria and a model answer key were prepared by the researchers as well. Besides, a ten-session *Translation Common Errors Remedial Program* also designed by the researchers was implemented. The theoretical basis of that program was the Presentation-Practice-Production (PPP) method. The one-group pre-posttest design was adopted. Statistically, the Paired-samples *t*-test was utilized to manipulate the collected data. It was found that the *Translation Common Errors Remedial Program*, which employed Machine Translation as a model, was effective in bettering participants' translated texts syntactically, semantically and pragmatically. The Researchers added their own observations and concluded with some recommendations for further research.

Keywords: Machine Translation, translation teaching, translation tests, remedial programs, common errors.

Machine Translation as a Model for Overcoming Some Common Errors in English-into-Arabic Translation among EFL University Freshmen (*)

Translation is a vital skill for foreign language learners. It is used for both academic and entertaining purposes. With the increased dependence on computer software and Internet applications, foreign language learners resort to Machine Translation (MT) so as to obtain quick and easy translation for source texts. Notwithstanding, a complete reliance on MT leads to serious lexical, semantic and syntactic errors in the target text; especially, when the source language and the target one are culturally and glottogonically different (i. e. English and Arabic).

Asserting the importance of translation, Grossman (2010) pointed out that the need for translation exceeded the traditional role of accessing other people's literature to play a more significant cultural role in bettering relationships and increasing mutual understanding between two peoples. A third notable role of translation was enlightenment represented in one's ability to see from a different angle.

Euphemism was evaluated by a qualitative approach so as to determine the influence of sociocultural differences in translating euphemistic expressions from English-into-Arabic. Syrian and Iraqi translators participated in that study. Results showed that both translators frequently resorted to such techniques as omission and literal strategy. These techniques did not express euphemistic words functionally. Moreover, both translators attempted to translate the euphemistic expressions semantically at the expense of rendering them adequately into the target culture. Despite the similarities and differences in adopting certain translation strategies by both translators, Syrian translation was euphemistically better than the Iraqi one. (Anber & Swear, 2016).

(*) This research work is written according to the American Psychological Association (APA), Sixth Edition Publication Manual.

Zhao (2013) analyzed students' common translation errors. He pointed out that these errors were represented in students' inflexible use of translation skills, their mistakes in translating idioms, inflexible and boring statements and students' insufficient knowledge of cultural background.

Classified as a sub-field of Artificial Intelligence (AI), MT was defined as specialized computer programs that translate one human language to another. Machine Translation was also included under the umbrella term of computational linguistics. Handling it as a teaching/learning strategy, MT underwent changes over time. In the past, it was considered to be a useful tool for getting the gist of a text. In the present, such Web-based versions of MT as *Google Translate*, *Yahoo Babel Fish* and *Bing Translator* are hoped to serve some communication purposes among languages of similar systems and origins (Garcia, 2010; Täuschel, 2008).

A lot of ink flowed on the importance of MT. It has a scientific importance as it represents an interesting, controllable, not to mention reliable tool for testing ground knowledge in language. In addition, MT has a commercial importance resulting from its being accessible and – in most cases – free. Machine Translation tools are highly competitive in the sense that they allow launching content simultaneously in multiple languages on commercial sites. Besides, MT renders fast translated texts at a button press. Philosophically, MT is important because it represents a challenge to automate a human activity that requires comprehensive knowledge and several skills. Machine translation tools also give a general idea of the text, despite of the inaccuracy of the translated output. Using different translation engines, MT tools are helpful in the sense that they complement each other on the bilingual dictionary level (Goldsborough, 2009; Homiedan, 2001; National Research Council & National Academy of Sciences, 1990; Täuschel, 2008).

Machine Translation was said to have three levels of problems. The base level was concerned with the technical problem of how symbols can transfer the translated content accurately from one language into another. The next level addressed the semantic problem of how the transmitted symbols convey the desired meaning precisely. The most advanced level was about the effectiveness problem, that is, how the translated meaning affects conduct effectively in the desired way. Those three levels were more concisely presented as the syntactic, semantic and pragmatic problems of MT. Ambiguity of human languages; especially English, was also a barrier that hinders MT from determining the correct synonym that best suits the context of a translated content. Furthermore, the disability of MT to deal accurately with jargon taken for granted by native speakers was one of the most obvious problems for those who depended on automated translation tools (Brown, Asher, & Simpson, 2006; Ferrier, 2006; Goldsborough, 2009).

In the Egyptian environment, Marghany (2016) discussed the different problems encountered by EFL undergraduates on resorting to MT. He used a descriptive analytical technique to analyze translated texts from Arabic into English. Results indicated various types of grammatical and lexical problems. Seven suggestions were proposed including investigating the factors that affect improving MT and exploiting translation to teach L2.

Being interested in the syntactic level of errors in MT, Groves and Mundt (2015) asked students to write essays in their first languages. Then, these essays were translated into English via *Google Translate*. Findings referred to the existence of serious grammatical errors in the translated output. Notwithstanding grammatical errors, it was remarked that the obtained translation met the minimum required accuracy standard set by most international universities.

The recommendation given was not to neglect MT in teaching English for academic purposes as it is a promising tool in that field.

A type of MT; namely, Neural Machine Translation (NMT) was manipulated by Luong, Pham and Manning (2015). In their analysis, translation tasks between German and English were carried out. Using specialized electronic programs, three thousand sentences were evaluated. They suggested effective global and local approaches to improve NMT. Results recommended NMT over traditional MT for translating names and long sentences.

Focusing on *Google Translate* as a common tool of MT, a number of studies questioned the accuracy of the free, Web-based translation resource. Balk et al. (2012) compared the accuracy of the output translated articles in eight languages using *Google Translate*. Using *Google Translate*, each article was translated into English. Moreover, the time required to translate each article was tracked. One of ten fluent speakers extracted data from the original article versions, whereas the English translated article versions were extracted by one of five native English researchers. The conclusion of the study mentioned that the tool was effective in reducing language bias. However, cautious reviewing for translated texts was recommended.

In a higher education environment, a study was made to compare quality and accuracy among the outputs of *Google Translate*, students' translation and professional translation. The sample included thirty six texts assessed by five raters. A ready-made rubric: Colina's assessment tool (2009) was used. Translations provided by *Google Translate* were found the weakest. Their quality was estimated below-average. These translations needed essential modifications to make sense and be formally accepted (Rensburg, Snyman, & Lotz, 2012).

Questioning the reliance on MT as a product of globalization, Açıkgöz and Sert (2006) adopted a moderate approach to study the adequacy and inadequacy of MT at certain pragmatic

levels. They did not hold a comparison between human translation and Machine Translation. Rather, they tried investigating the MT obstacles that led to producing restricted-quality pieces of translation. It was recommended to get use of MT during the different stages of the translation process. In conclusion, they advocated employing a “semi-automated translation process” in which translators hold a balance between human translation and MT. The advocated process was proposed to be integrated into the syllabi of translation departments.

The above review of related studies recommends the use of MT as a beneficial means for translation. However, cautious usage is required on dealing with MT tools, as their linguistic accuracy is questioned. In addition, most previous studies did not concentrate on such specific problems as translation common errors. Hence, the current research may fill in a gap among its predecessors exploring the effectiveness of MT as a teaching/learning tool in overcoming common errors in translation. To sum up the current research problem, the following main question is proposed:

- What is the effectiveness of Machine Translation in overcoming some common errors in English-into-Arabic translation?

Three sub-questions branched off:

- What is the effectiveness of Machine Translation in overcoming syntactic common errors in English-into-Arabic translation?
- What is the effectiveness of Machine Translation in overcoming semantic common errors in English-into-Arabic translation?
- What is the effectiveness of Machine Translation in overcoming pragmatic common errors in English-into-Arabic translation?

To answer these questions empirically, they had to be turned into the following testable null hypotheses:

- There is no significant difference between participants' pretest scores and posttest ones on syntactic common errors in English-into-Arabic translation.
- There is no significant difference between participants' pretest scores and posttest ones on semantic common errors in English-into-Arabic translation.
- There is no significant difference between participants' pretest scores and posttest ones on pragmatic common errors in English-into-Arabic translation.
- There is no significant difference between participants' pretest scores and posttest ones on common errors in English-into-Arabic translation.

Method

Participants

A hundred and five freshmen (95 females, 10 males, $M_{age} = 18.5$ years) were recruited at the *Translation Common Errors Remedial Program* prepared by the researchers. Those participants were all students enlisted in Arabic Department at the Faculty of Education in the academic year 2017/2018. The sample was deliberately selected as participants' specialization suggested their good knowledge of Arabic language rules and conventions necessary to produce an ideal Arabic translation. Moreover, participants have been studying English for ten years. Thus, they were expected to have a good deal of linguistic knowledge about English as well. Translation from English-into-Arabic is a familiar question at the Egyptian General Secondary and preparatory Education Certificate Exams. Consequently, participants' performance on similar translation tests was anticipated to be quite satisfactory.

Tools

A *Translation Common Errors Test* was constructed by the researchers. The aim of this test was to measure EFL university students' translation skills in avoiding common errors committed during translation from English-into-Arabic. The designed test package included a test booklet, a table of specifications, scoring criteria and a model answer key.

The test booklet started with general instructions followed by fifty test items. The number and formulation of these items were eventually decided after having the tools judged by some educational experts. Statistical techniques of item analysis were also considered to put the test in its current final form. The prototype form of the test was tried out on February 21st, 2017. Participants in the tryout were 38 freshmen (31 females, 7 males $M_{age} = 18.5$ years).

A table of specifications was prepared by the researchers to identify the three main error categories, the test items and the scores assigned to each category:

Table 1

Table of Specifications

Error Category	Number	Error					Score
		Item					
Syntactic and Morphological	1	Neglecting the Absolute Object	1	2	3		69
	2	Using Informal Arabic Words	4	5	6	7	
	3	Using Incorrect Prepositions	8	9	10	11	
	4	Not Using Collocating Words	12	13	14		
	5	Incorrect Usage of the Definite Article	15	16	17		
	6	Inappropriate Translation of Verb to Be	18	19	20		
	7	Incorrect Sentence Beginnings	21	22	23		
Semantic	1	Incorrect Translation of Special Word Meaning	24	25	26		45
	2	Expressing the Same Meaning	27	28	29		
	3	Confusing Adjectives	30	31	32		
	4	Negative Negation	33	34	35		
	5	Idioms	36	37	38		
Pragmatic	1	Gender Equality	39	40	41		36
	2	Political Issues	42	43	44		
	3	Religious Issues	45	46	47		
	4	Scientific and Logical Errors in the Original Text	48	49	50		
Test Total Score						150	

Since translation assessment allows a lot of bias, tools also included simple scoring rubrics for test raters. The criteria upon which the rubrics are based help raters decrease subjectivity in dealing with the test. Thus, they only focus on the errors to be located and their relation to the overall meaning:

Table 2

Scoring Rubrics for Translation Common Errors Test

Score	Rubric
3	Error avoided; ideal translation.
2	Error committed; meaning successfully expressed.
1	Error committed; meaning unsuccessfully expressed.

If a student's total score is 50, he or she commits the common errors and fails to convey the meaning of the text. A student with a 100 total score, also commits the common errors, yet manages to convey the meaning of the text. An ideal translation that avoids the common errors gets the full score of 150.

To guarantee a high degree of objectivity, test raters were provided with a model answer for test items beside the scoring rubrics. Each item was ideally translated; however, raters were instructed that the nature of the measured skills allowed a range of flexibility in scoring according to the test takers' ability to convey the meaning with or without committing the common errors.

Test Tryout

Once the test was prepared, it had to be tried out to estimate its validity and calculate its reliability. The optimum time limit for answering the test was also calculated before the test was administered in the experiment context. Thirty eight freshmen took the test for tryout purposes.

The time the first student who finished the test consumed was added to that the last student who finished the test took and divided by two. Thus, the test optimum time was an hour not including giving directions and answering students' questions.

The even number of test items facilitated establishing test reliability by the split-half technique. Guttman's general formula for split-half reliability was adopted. The following values were obtained:

Table 3

Values for Calculating Split-half Reliability

σ^2 odd	σ^2 even	σ^2 total	r aa
1.32	1.63	5.13	.84

Results indicated that the test reliability equaled .84. According to Bausell (2015), a reliability coefficient of more than .80 is suitable for educational behavior and health outcomes as it attributes only 20% of the score to either error or noise. Consequently, the current *Translation Common Errors Test* proved to be a reliable tool.

Furthermore, the researchers sought establishing the validity of score-based interpretations. Cronbach's Alpha was calculated to confirm the internal consistency of test items. Using PASW Statistics for Windows (2009), the calculated value of Alpha equaled .834. In social and educational sciences, an Alpha value that is higher than .70 indicates an accepted level of internal consistency (Warner, 2012). Thus, the *Translation Common Errors Test* is valid.

Materials

A *Translation Common Errors Remedial Program* designed by the researchers was implemented. In a broad sense, the designed program aimed at improving EFL learners' translation from English-into-Arabic. It focused on helping these learners avoid sixteen common errors in translation. The behavioral objectives that branched off read:

At the end of the program, translators should be able to:

1. employ the absolute object effectively.
2. use formal Arabic words correctly.
3. employ correct prepositions effectively.
4. use collocating words correctly.
5. employ the definite article correctly.
6. translate verb to be appropriately.
7. begin sentences correctly.
8. translate the meaning of special words correctly.
9. express the same meaning appropriately.
10. avoid confusion in describing adjectives.
11. avoid using negative negation.
12. translate idioms correctly.
13. employ gender equality in translation appropriately.
14. handle political issues in translation wittily.
15. handle religious issues in translation appropriately.
16. mend scientific and logical errors in the original text.

Theoretically, this program was based on the notions of behaviorism. It adopted the Presentation-Practice-Production (PPP) method. PPP is a variation of audiolingualism in which learners are exposed to adequate background information on the topic under study, then, they practice what they theoretically acquired for sufficient time, and – finally – they produce correct language themselves. However, the current program suggested reversing the first two steps; in other words, the followed steps were Practice-Presentation-Production. This sequence was

proposed so as to employ Machine Translation at the Practice step as a deficient model of translation. In the Practice step, participants were given a number of Machine Translated sentences that addressed the handled common errors. They were asked to determine whether the translated model sentences were correct. In addition, they were asked to identify the error. In the following step – Presentation – the instructor discussed what participants inferred at their practice. Afterwards, he/she located the common error under discussion and pointed out how ideally it should have been avoided. To make sure that learning impact continued, the Production step provided participants with translation tasks to be carried out independently. It was supposed that the addressed translation common errors should not have been made at this step.

The program was blueprinted in ten sessions including two sessions for administering the pre-posttest. The test administrations took an hour per session. The other remedial eight sessions took two hours each. Two errors were handled per session:

Table 4
Program Blueprint

Sessions	Common Errors Handled	Number of Hours
One	Pre-administration of <i>Translation Common Errors Test</i>	1
Two	1. Neglecting the Absolute Object. 2. Using Informal Arabic Words.	2
Three	3. Using Incorrect Prepositions. 4. Not Using Collocating Words.	2
Four	5. Incorrect Usage of the Definite Article. 6. Inappropriate Translation of Verb to Be.	2
Five	7. Incorrect Sentence Beginnings. 1. Incorrect Translation of Special Word Meaning.	2
Six	2. Expressing the Same Meaning. 3. Confusing Adjectives.	2
Seven	4. Negative Negation. 5. Idioms.	2
Eight	1. Gender Equality. 2. Political Issues.	2
Nine	3. Religious Issues. 4. Scientific and Logical Errors in the Original Text.	2
Ten	Post-administration of <i>Translation Common Errors Test</i>	1
Total Number of Hours		18

The first seven errors related to the syntactic and morphological category. The next five errors belonged to the semantic category. The pragmatic category was represented by the last four errors.

The program booklet included a detailed guide for trainers showing them how to manage each session. For each session, objectives were behaviorally stated, then the three steps of the PPP method were explained. In the practice step, translators were given some Machine Translation samples. They were asked to determine whether the Arabic translation was free from errors or not. Twenty minutes were given to translators to finish this task. The presentation step followed. The trainer received translators' responses and wrote them down. A twenty-minute discussion followed. Finally, the trainer illustrated the error and gave the recommended translations. The last step was production. Translators were given some sentences to translate themselves in twenty minutes. Feedback from the trainer followed.

Procedure

The current research work employed the one-group pre-posttest design. A hundred and five participants were pretested on English-into-Arabic translation common errors. Then, they studied a ten-session remedial program to help them avoid sixteen common errors in translation. After finishing the program, the whole group was posttested. Statistical analysis of the pre-posttests was provided and its results were discussed.

Results

In order to test the four null hypotheses set for determining the *Translation Common Errors Remedial Program* effectiveness, Paired-samples *t*-test was utilized. The analysis was made electronically via PASW Statistics for Windows (2009). Statistical analysis of data rendered the following results:

Hypothesis One

There is no significant difference between participants' pretest scores and posttest ones on syntactic common errors in English-into-Arabic translation.

Paired-samples *t*-test was applied to compare differences in participants' performance before and after treatment. The following result was obtained:

Table 5

Syntactic Common Errors Paired-samples t-test

	Paired Differences			<i>t</i>	df
	Mean	Std. Deviation	Std. Error Mean		
Syntactic Errors Posttest – Syntactic Errors Pretest	3.914	1.976	.193	20.295*	104

(*) Significant at the (0.05) Level.

Revising the critical value table of *t*, it was found that the critical value of *t* for a two-tailed test and a degree of freedom that equaled 104 was 2.626. Comparing that critical value to the calculated one, it turned out that the calculated *t* is greater. This meant that there was a significant difference between participants' pretest scores and posttest ones on syntactic common errors in English-into-Arabic translation. Thus, the first null hypothesis was rejected.

Hypothesis Two

There is no significant difference between participants' pretest scores and posttest ones on semantic common errors in English-into-Arabic translation.

Following the same steps for testing the first hypothesis, Paired-samples *t*-test was also adopted. Table 6 summarizes the result:

Table 6

Semantic Common Errors Paired-samples t-test

	Paired Differences			<i>t</i>	df
	Mean	Std. Deviation	Std. Error Mean		
Semantic Errors Posttest – Semantic Errors Pretest	2.200	1.266	.124	17.801*	104

(*) Significant at the (0.05) Level.

Since the critical *t* value equaled 2.626 when the degree of freedom was 104 and the test was two-tailed, the calculated *t* of 17.801 was significant. That entailed rejecting the null hypothesis, because there was a significant difference between participants' pretest scores and posttest ones on semantic common errors in English-into-Arabic translation.

Hypothesis Three

There is no significant difference between participants' pretest scores and posttest ones on pragmatic common errors in English-into-Arabic translation.

Electronic Analysis of data was made adopting Paired-samples *t*-test. This analysis rendered the following results summarized in Table 7:

Table 7

Pragmatic Common Errors Paired-samples t-test

	Paired Differences			<i>t</i>	df
	Mean	Std. Deviation	Std. Error Mean		
Pragmatic Errors Posttest – Pragmatic Errors Pretest	2.381	1.496	.146	16.308*	104

(*) Significant at the (0.05) Level.

Revising the t -value table, critical t was 2.626, if the degree of freedom was 104 and the test was two-tailed. Statistical analysis of data rendered a calculated t of 16.308. Having a calculated t that was greater than the critical one entailed rejecting the null hypothesis. Consequently, it was concluded that there was a significant difference between participants' pretest scores and posttest ones on pragmatic common errors in English-into-Arabic translation.

Hypothesis Four

There is no significant difference between participants' pretest scores and posttest ones on common errors in English-into-Arabic translation.

This hypothesis was related to the test total score. On the same track, Paired-samples t -test was applied electronically. The following result was obtained:

Table 8

Total Common Errors Paired-samples t -test

	Paired Differences			t	df
	Mean	Std. Deviation	Std. Error Mean		
Total Errors Posttest – Total Errors Pretest	8.495	3.175	.310	27.419*	104

(*) Significant at the (0.05) Level.

At a two-tailed test, when the degree of freedom was 104, the critical value of t was 2.626. Calculated t was 27.419. In this case, the null hypothesis was not accepted. The researchers concluded that there was a significant difference between participants' pretest scores and posttest ones on common errors in English-into-Arabic translation.

Discussion

The research work in hand set four null hypotheses to test how effective a suggested program based on Machine Translation in overcoming common translation errors from English into Arabic. The common errors handled were classified into three categories: syntactic errors, semantic errors and pragmatic errors. Statistical analysis of pre-posttest data resulted in rejecting all hypotheses. This result will be better analyzed and discussed in the light of previous studies and researchers' observations and deductions during the experiment.

The first hypothesis supposed that the MT-based program did not help participants overcome syntactic errors in English-into-Arabic translation. However, statistical manipulation revealed that the program did help participants avoid syntactic errors. Alves et al. (2016) had an explanation for this as they came to the conclusion that Machine Translation provided lower post-editing effort and time than traditional human post-editing. However, the positive attitudes towards relying on MT did not lead to its adoption in all cases. Employing MT was based on such factors as institutional resources, users' needs and abilities and the nature of translation tasks. These ergonomic factors were crucial in utilizing Machine Translation (Cadwell, Castilho, O'Brien, & Mitchell, 2016).

On the same track, the increased prevalence of translation technologies was recently highlighted in many research works. The growing uptake of MT in particular and the perceived increase of its prevalence in future were noted. The adoption of MT led to significant changes in the human translation process, in which post-editing appeared to be exclusively used for high-quality content publication (Gaspari, Almaghout, & Doherty, 2015). Furthermore; Sato's (2010) recommendations to improve the PPP model – followed in structuring the current *Translation Common Errors Remedial Program* – could lead to such a positive result. The researchers were

careful about not presenting examples without context in the second practice stage. Similarly, the third stage of production was given enough time so that participants could improve their translation. Moreover, this finding agreed with Ghuzlaan's (2005) conclusion in which she asserted that MT is a useful tool for general translation purposes. Nevertheless, MT needs human editing so as to avoid syntactic errors.

The second hypothesis was related to semantic errors committed during translation from English into Arabic. This null hypothesis proposed that there was no impact of MT as a model on avoiding translation semantic errors. Findings proved the significant effect MT had on participants' overcoming of semantic errors. A brand new study conducted by Deng and Xue (2017) drew attention to the point that not all translation divergences can be bridged with semantic representations, because some divergences are open-ended. Thus, MT cannot guarantee comprehensive semantic representations. The current program might have rendered positive results in dealing with translation errors as it avoided that shortcoming of MT. In the same year, a similar perspective for improving MT was discussed by Luong, Besacier, & Lecouteux (2017). They suggested two novel ideas for bettering MT. The first idea was about supplying a recommended trusted word-list that contained a number of synonyms instead of forcing translators to use only one word, whereas the second idea depended on broadening the alternatives utilizing a graph search. Both ideas were fruitful. The current researchers made use of the first idea in implementing their program. Nevertheless, Poibeau (2016) questioned the semantic efficiency of Machine Translation systems. He manipulated the idea by dividing Machine Translation systems into three generations. The first generation (1950-1965) was not successful in bridging meaning because it had either a weak or an absent semantic analysis component. The second generation (1980s and 1990s) relied completely on statistical analysis

which rendered semantically dissatisfying translations. Even the contemporary generation of Machine Translation systems; which adopted the “*big-data*” approach by collecting large groups of texts to integrate semantic information; was still far from producing sound meaningful translations.

A contradictory view point believed that Machine Translation techniques based on parallel corpora – such as Google Translate utilized in the current program – proved its effectiveness in translation without radical improvements; especially from and into two sharp-contrasted languages like Arabic and English (Alkahtani, 2011).

In MT, meaning is a crucial element that should be given much attention. It is helpful to diagnose and analyze problems before translation to attain a well-formed output. Word meaning is basically determined by its surrounding context. Since MT, had limited capacity to analyze and infer such a context, human revision of MT translation would be necessary for keeping the semantic aspect of a translated text (Izwaini, 2011). The same result was reached by Okour (2008) as she found that MT had more deficiencies than human translation. It was among her recommendations to have human post-editing intervention of MT texts. She emphasized human’s better abilities to understand, analyze and produce better translation than MT.

Supposing that the current program based on MT to overcome English-into-Arabic translation pragmatic common errors had no significant impact, the third hypothesis was proposed in a null format. The obtained results proved that the third hypothesis was not true. Participants’ pragmatic errors were notably avoided after the experiment. The principles adopted in the program in regard to clarifying common pragmatic errors contradicted with the recommendations given by Kadiu (2016). In his study, Kadiu (2016) stipulated undecidability and uncertainty as pre-conditions of ideal translation. In terms of pragmatics, such conditions

would not be fair. The West's misunderstanding of many Arab religious and political beliefs was very obvious in programming MT tools. One way for eliminating such misunderstandings would be through pragmatically appropriate translation. In addition, cultural differences should have also been taken into account. That was why the presentation stage in the current program was provided.

The comprehensive fourth hypothesis proposed that the *Translation Common Errors Remedial Program* could not improve participants' translations in terms of avoiding common errors on the three dimensions all together: syntactic errors, semantic errors and pragmatic errors. Findings revealed that the hypothesis was not true; the program did help participants avoid English-into-Arabic translation common errors. This result concurred with that obtained by Vieira (2017) who highlighted the role of post-editing of machine translated texts as a solution for decreasing burdens and efforts imposed on human translators. He emphasized using post-editing to improve grammar and lexis drawing attention to its usefulness as a time-saving and effort-keeping procedure. Moreover, the current results were consistent with Ratniece's (2016) which concluded that educational support and motivation were two crucial factors in solving Machine Translation problems faced by university freshmen.

A noteworthy remark stated by Uzun (2016) referred to the inadequacy of English lexicon that led to a big cultural gap and translation problems for Foreign Language Learners. Comparing human translation with Machine Translation outputs showed obvious differences in accuracy and meaning clarity. In terms of learners' attitudes to use Machine Translation tools, it was found that there was an inclination to resort to such tools. The *Translation Common Errors Remedial Program* took into consideration these results. It was designed to make the best use of Machine Translation and to avoid its defects simultaneously.

There were a number of observations taken by the researchers during the program sessions and the pre-posttest administrations. These observations may help explain the attained results and deepen the discussion.

It was noted that participants lacked accuracy in translating tenses. English past tenses were usually translated into present Arabic ones. This suggested that participants overlooked meaning when dealing with a target text since they translated the gist of the text in a hurry without paying attention to semantic necessities. In this concern, MT outperformed human translation. The MT translation examples provided to participants as *deficient models* were already deficient in certain aspects; however, they offered correct tense translations.

Another remark was that participants tended to translate initial pronouns literally into their Arabic equivalents. While this is inevitable in English, ideal good Arabic usually omits initial pronouns and let them be understood either from context or by later pronouns in the sentence. Like the previous observation, this tendency in human translation was also avoided in MT outputs.

Colloquial Arabic words and slang interfered notably with participants' translated outputs. This third observation was avoided by Machine Translation systems that outputted formal Arabic translations for English texts.

Furthermore, participants' translations delineated their inability to express Arabic passive forms. There was a negligence of using Arabic punctuation marks and special characters marking the passive voice. Participants tended to employ the active voice when sentences were passive. Although MT often avoided that defect, it still far from utilizing Arabic punctuation marks and special characters for passive voice.

A last observation was participants' tendency to translate numbers into mathematical forms rather than letters. This tendency reflected their weakness in writing ideal Arabic. It might also indicate participants' trend of dealing with knowledge superficially. Machine Translation produced outputs that were written in letters. However, it failed to apply Arabic grammatical rules related to number-subsequent word agreement.

It can be inferred from the above-mentioned researchers' observations that although Machine Translation often lacks accuracy, it still has its own merits that may obviate human translation shortcomings. Being aware of MT pros and cons is essential for translators so as to reach ideal translations.

Conclusion

Reliance on either Machine Translation or human translation should be practiced with caution; especially if the source language and the target one were sharply contrasted in orthography, origin and culture. It is recommended not to rely upon one type of translation as each has its privileges as well as its drawbacks. Translators should also be aware of the syntactic, semantic and pragmatic common errors they may commit before manipulating a text. Further research can be done on how to improve MT tools and how to support human translation. It is also suggested for professional translators to study such courses as the current *Translation Common Errors Remedial Program* as a prerequisite for practicing translation. Moreover, school and university students who study translation courses can make use of this program. Common errors in translation from Arabic-into-English should also be investigated to complement the current study.

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