

Human Touch in AI Translation: Strategies Employed By Professional Translators in Post-Editing Arabic-English AI Generated Translations of Media Texts

Dr. Mujahed Hossien Tahir Zayed^{1*}, Ms. Wafa Riyad Mousa Nuirat^{2*}

^{1*}Ph.D. Mujahed Hossien Tahir Zayed, Arab American University Palestine.

^{2*}Wafa Riyad Mousa Nuirat. Arab American University Palestine.

*Corresponding Author: Dr. Mujahed Hossien Tahir Zayed

Citation: Zayed, M. H. T; Nuirat, W. (2024). Human Touch in AI Translation: Strategies Employed By Professional Translators in Post-Editing Arabic-English AI Generated Translations of Media Texts. *Educational Administration: Theory And Practice*, 30(4), 2055-2062
Doi: 10.53555/kuey.v30i4.1804

ARTICLE INFO

Submitted: 3-9-2023

Revised: 26-12-2023

Accepted: 20-1-2024

Published: April 2024

ABSTRACT

Artificial intelligence has been widely used in translation industries. However, not enough studies have been conducted to investigate the appropriateness of the translations produced by ChatGPT for Arabic-English media texts and the strategies that can be used to improve such translations in case they prove inappropriate. As such, the current study aimed to investigate the extent to which the translations provided by ChatGPT for media texts from Arabic into English are accurate and to identify the strategies employed by professional translators when they post-edit or improve the translations provided by ChatGPT for media texts from Arabic into English. The findings of the study indicated that the translations produced by ChatGPT for Arabic-English media texts are not totally appropriate and need to be post-edited by human translators. The result of the study also revealed that human translators employed three main strategies to improve the translations of ChatGPT for media texts from Arabic into English, namely addition or expansion, omission or semantic minimization and play over diction. These strategies have been proven to make the translations of ChatGPT more appropriate and acceptable to the recipients of the target language text.

Keywords: Artificial Intelligence, translation, ChatGPT, strategy, source language, target language.

INTRODUCTION

Artificial Intelligence has been noticed to be widely used by translators over the past couple of years. It has become a popular translation tool among translation practitioners whether they are novice or professional in all language pairs. One of the most important fields in which translators use AI is media translation as it is deemed to be a significant reflective part which encapsulates terms relevant to various fields of life. Many researchers, such as Khoshafah (2023), have recently conducted studies to evaluate the impact and accuracy of AI powered translation tools in the target text. According to Khoshafah (2023), Artificial Intelligence can handle a variety of difficult and uncommon language pairs, including Arabic and Chinese. This could be helpful for businesses that need to interact with partners or customers who speak different languages. She also states that ChatGPT has simultaneous interpreting capabilities, which are essential for time-sensitive operations like customer service, crisis management, and international conferences. In addition, Khoshafah (2023) continues saying that ChatGPT may update and enhance the caliber of the translation by taking into account users' comments. In addition, researchers have also dealt with the importance, benefits and the mechanisms employed by AI powered translation tools, especially ChatGPT. Hence, Possati, 2021 and Schulman et al. (2022) state that deep learning is used by OpenAI's powerful language model ChatGPT to process and generate natural language text. It can comprehend and produce human-like prose with astounding precision thanks to the enormous amount of data it has been trained on (Tate et al., 2023). ChatGPT can help with research, generate text for various documents, and offer comments on the written

texts' grammar, style, and coherence.

Thus, investigating the translations provided by AI powered tools, especially ChatGPT has become of crucial importance in order to help professional translators ensure the quality of the product they provide their clients with and make the best use of such an AI powered translation tool. In fact, artificial intelligence (AI) has developed quickly, enabling a wide range of applications that are revolutionizing a variety of industries (LeCun et al. 2015; Zhang et al. 2021). The advent of novel technologies like neural machine translation (NMT) and pre-trained large language models (LLMs) have accelerated the advancement of translation technology (Bahdanau et al., 2014 & Vaswani et al., 2017). These AI-driven methodologies have sparked the development of a new generation of tools for language and translation services, such as conversational chatbots that can translate and communicate in several languages in real-time, like ChatGPT.

The present study will investigate the translations which ChatGPT provides when rendering media texts from Arabic into English in terms of their accuracy and acceptability as well as the strategies that professional translators may employ in post-editing and correcting these translations in case there are deficiencies of any sort therein. As such, the present study is expected to provide professional translators with a set of strategies they may employ in post-editing the translations they get when using ChatGPT in translating media texts from Arabic into English.

Features of Media Texts and Their Translation

The most readable source of information on earth is the newspaper. In the newspaper, the information should be presented properly and objectively. The wording should be understandable and appropriate. News is not just what happens, but also what may be viewed and presented as noteworthy, according to Fowler (1991), who claims that the news media choose events for reporting based on a complicated set of criteria of news worthiness. In other words, news must be meaningful in addition to being a straightforward account of events.

Language barriers can no longer divide people in the recent era. Therefore, it is quite reasonable that translation functions as the primary component in mass communication. Media translation is one of the most significant translational areas in this context. Its primary purpose is to deliver reliable information in a variety of languages, making it easier to communicate with people throughout the globe.

The translator for news media must interpret the thoughts and messages of the source material as well as translate the words, and they must be extremely exact to avoid changing the original meaning. A truly skilled translator should replicate the source text's stylistic and linguistic expressive devices in the translation in addition to faithfully translating the actual material.

According to Bielsa and Bassnett (2009), information that travels through news organizations to other cultures is not only "translated" in the inter-linguistic sense but also molded, edited, synthesized, and changed for the consumption of a new group of readers.

Since the language used in media texts is a unique, distinct discourse with its own lexical norms and style, translators must carefully study and comprehend the function of linguo-stylistic devices in media texts in order to succeed in their position as media translators. As such, Hatim and Mason (1997) define translation as an act of communication that aims to communicate another act of communication across cultural and language borders, maybe with different readers or listeners in mind. Thus, the major task of translators of informative texts is to convey to the readers its *content* in the clearest, most comprehensive form, since media texts are eminent by stylistic restraint.

Literature Review

Some studies have been carried out to answer the inquiries raised by researchers, translators, and students regarding artificial intelligence and its role in translation. Hence, Li, and Chen (2019) state, in their paper on the AI translation, that the four basic online machine translation platforms are Google Translate, Baidu Translate, Microsoft Translate and Youdao Translate, pointing out that the translation speed of the four platforms exceeds human translators. The platforms are available, and they are open to the public free of charge. They, *ibid* (2019), found that although the interfaces of the platforms are similar, each platform offers additional functionality in order to optimize the users' experience.

Furthermore, the paper discovers that the current Neural Machine Translation system is good at processing the complex grammatical structures and word. The results of this article indicate that the current machine translation has made great progress in quality, but there is still a gap from the goal of direct use. This can be achieved through post-editing and at the same time improving work efficiency. The researchers asserted that the purpose of AI is to assist rather than replace human translation practitioners.

Additionally, Wang (2023) conducted a study on the impacts and challenges of AI translation and affirmed that machine translation, especially translation based on neural network technology has made a leap forward

and is progressively accepted and widely used. Wang (2023) adds that professional translators are relying on AI translation. Yet, Wang (2023) asserts that more research on whether machine translation software is superior to professional translators should be carried out or not.

A consequential question is whether AI translation is competent to play a role in translating all types of texts or would it suit a genre rather than another? Drobot (2021) questioned the possibility of NMT to translate literary text and asserted that a solution which might be available from looking at studies in automatic translation of literary texts would be collaboration between machine translation and human translators. Drobot (2021) argues that even human translations may lack the life experience necessary to translate certain literary texts. Likewise, machine translations need more instructions. Translating literary texts may be complex due to their use of figurative meaning. Nevertheless, any text can be complicated further by the degree to which the context is understood.

Culinary texts could also be translated from a language to another. Hasyim et. al (2021) agree that GT can accurately translate the corresponding French-Indonesian culinary text concepts using words, phrases and sentences. Yet, the machine translator GT has encountered problems with translating cultural equivalents in French and Indonesian culinary texts and sadly has not been able to accurately identify the cultural context of the source language and target language.

Khoshafah (2023) investigated the accuracy of ChatGPT as a translation tool and concluded that it is a trustworthy one as it is able to handle many complex and rare language pairs. In fact, there are a number of facts which are to be taken into consideration when opting for ChatGPT in translation. ChatGPT may not be appropriate for translating highly technical or specialized content that requires domain-specific knowledge, such as legal documents, medical reports, scientific studies, religious, historical, and literary terminology. Khoshafah (2023) recommended using it as long as humans' post-editing exists.

Naeem (2023) assert that depending on MT to translate metaphorical, idiomatic, and grammatical collocations is insufficient. Naeem (2023) adds that using Google Translate as an example of machine translation was unable to adapt collocations in the target language to the experiences and beliefs of the target audience. Consequently, machine translation and AI powered translation tools like this may require human post-editing using applicable strategies such as communicative translation to effectively translate collocations.

The above literature indicates that AI powered translation needs human post-editing and some sort of control. This initiates the need to investigate the translation of media texts from Arabic into English by AI powered tools paying attention to the strategies used by professional translators to post-edit this translation in case it is proven inconvenient.

Statement of the Problem

Media terminologies constitute a considerable part of the translation share when it comes to the materials and information to be delivered to the public. Therefore, the translation of these expressions inappropriately leads to misunderstanding of the world current issues. This initiated the need to translate such terminologies and texts using the most advanced techniques in order to ensure the accuracy of the translated text. Translators, even professional ones, started to translate media texts using AI powered translation tools, such as ChatGPT. In Fact, ChatGPT has been proven to provide inaccurate translations. Hence, Khofashah (2023) states that translators must not entirely rely on ChatGPT in translating significant or sensitive materials because it is machine and may not provide accurate translations. Having this said, translators became in crucial need to post-edit the translations they conduct using ChatGPT as an AI powered translation tool. This is supported by the opinion of Khofashah (2023) concluding that translations provided by automatic translation have to be monitored by professional translators to alleviate any possible negative results. Based upon, this paper will investigate the translation of media texts provided by ChatGPT to judge their accuracy and acceptability. Then, the study will explore the strategies that can be used to post-edit these translations in order to come up with a useful model that translators can use to improve the translations provided by ChatGPT when translating media texts from Arabic into English.

RESEARCH METHOD

The objectives of the current study impose the use of a descriptive analytical approach. This approach is employed to evaluate the accuracy of the translations provided by ChatGPT, and then present them to professional translators to find out the strategies they use when post-editing the translations, which ChatGPT provide for media texts from Arabic into English. Thus, five media texts are selected from various Arab news networks following the purposive sampling technique. This technique is usually used to select certain samples

that fit the purpose of a study, in our case the strategies of post-editing AI translation. The translated texts by ChatGPT will be assessed by two translation experts, who will be consulted as inter-raters for this study in order to decide whether the translations of ChatGPT are appropriate or not. In case the translations of ChatGPT are inappropriate, they will be presented to ten professional translators to improve them. The ten translators are used following the maximum variation strategy to have participant experienced in various fields of translation, especially media translation. Successive to the assessment of ChatGPT translations, the translators will be interviewed in order to identify the strategies they employed in post-editing the translations of ChatGPT. The strategies and the analysis will be presented to the raters in order to decide whether they are appropriate to be used as a model for post-editing ChatGPT translations in Media texts from Arabic into English.

Research Objectives

The present study aims to achieve the following objectives

1. To investigate the accurateness of the translations provided by ChatGPT in translating media texts from Arabic into English.
2. To identify the strategies that professional translators employ in post-editing the translations provided by ChatGPT when translating media texts from Arabic into English.

Research Questions

The present study aims to answer the following questions

1. To which extent are the translations provided by ChatGPT for media texts from Arabic into English accurate?
2. What are the strategies employed by professional translators when they post-edit the translations provided by ChatGPT for media texts from Arabic into English?

Date Analysis and Discussion

In this section, the data of the study are to be analyzed and discussed for the sake of answering the research questions. Basically, the translations produced by AI powered translation tool (ChatGPT) from Arabic into English for media texts seems to be acceptable to a certain extent, but it needs improvements of various sorts so as to be appropriate and comprehensible to non-Arab recipients. In the following part, the researchers explore the translations provided by ChatGPT along with the improvements suggested by professional Arab translators in order to have a clear idea on how to identify the strategies used to make such translations appropriate.

Text 1

Original Text	اندلعت مواجهات عنيفة في مخيم جنين، وشارع جنين - حيفا، وقرب دوار الداخلية، بين الثيان وفوات المحتال، التي أطلقت وابل من الألحيرة النارية ونبائل الصوت والغاز السام المسيل للدموع بانجاهم، دون أن يبلغ عن إصابات، كما تسببت زوات المحتال بتقطاع التيار الكهربائي عن المخيم ومحيط دوار الداخلية
ChatGPT Translation	"Violent clashes erupted in Jenin camp, Jenin-Haifa street, and near the Interior roundabout between the youth and occupying forces. The occupying forces unleashed a hail of live ammunition, sound bombs, and tear gas in their direction, without any reported injuries. The occupying forces also caused a power outage in the camp and the surrounding area of the Interior roundabout
Human translations	Violent clashes erupted in Jenin camp, Jenin-Haifa street, and near the interior ministry's roundabout between the youth and occupying forces which fired a hail of live ammunition, sound bombs, and tear gas towards the young people though no injuries were reported. The occupying forces also caused a power outage in the camp and the surrounding area of the The interior ministry's roundabout.
Changes	1- Interior ministry roundabout 2- Adding 'which' 3- 'Fired' instead of 'unleashed'

The above translated texts by humans and ChatGPT are similar in many ways as it has been mentioned in the introductory paragraph of this section. Yet, some differences were found and led to make some improvements. It is noticeable that the human translation added the word 'ministry' to the name of the roundabout for the sake of making the English text recipient friendly and clearer to understand the idea knowing the exact location intended in the original text. In Arabic the name of the roundabout is "دوار الداخلية". ChatGPT used the literal translation strategy and translated it as "the Interior roundabout", but the human

translation added the word “ministry” to the name of the roundabout to clarify to the target reader that Interior in this context refers to the office of the Interior Ministry in the area on which the name of the roundabout got the name. This indicates that the professional translators employed the strategy of addition in order to improve the translation provided by ChatGPT. Some Arab researchers mentioned previously that literal translation sometimes makes sense in translating certain types of Arabic expressions, such as (Zayed et. al, 2021). However, in the context of this study it is found that literal translation is not the best one to be used when translating media texts from Arabic into English. Furthermore, the human translation used a different lexical term which is ‘fired’ instead of ‘unleashed’. When using the verb ‘fired’ instead of ‘unleashed’, the translator explained what exactly was freed as the verb ‘unleash’ means to free from. When using the verb ‘fired’ the translator got directly to the point by saying that the occupying forces shot the youth by the mentioned weapons. Thus, the professional translators are noticed to have employed another strategy which can be called play over diction i.e choosing different lexical items that serve the intended meaning in appropriate contexts.

Another difference is when the human translation made a link between the sentences by using a relative clause starting with ‘which’ instead of splitting the sentences. This usage of relative clause made less repetition and stronger connection.

Text 2

Original Text	اعتبر الرئيس التركي أن نظيره السوري بشار الأسد ال يبتذل أي جهد بخصوص تطبيع العلاقات بين البلدين، قائل: "الأسد يراقب نوط من بعيد، دون أن يبذل جهدا بخصوص الخطوات التي نتم بالصيغة التركية والروسية والبرانية والسورية بشأن تطبيع علاقاتنا مع دمشق". وأشار إلى أنه "ال يوجد حتى الآن موقف إيجابي من الجانب السوري، نأمل أن يأخذوا مكانهم على الطاولة معنا ومع إيران وروسيا في مواصلة العملية"، معتبرا أنه "من المهم نهوية الظروف الإنسانية في سوريا، للعودة الطوعية والأمنة لالجئين، وإحياء العملية السياسية تحت رعاية الأمم المتحدة".
Chat GPT translation	The Turkish President considered that his Syrian counterpart, Bashar al-Assad, is not making any effort regarding the normalization of relations between the two countries, saying, 'Assad is merely observing from afar without exerting any effort concerning the steps being taken in the Turkish, Russian, Iranian, and Syrian formats for normalizing our relations.' He pointed out that 'there is no positive stance from the Syrian side so far, and we hope they will join us, along with Iran and Russia, in continuing the process.' He considers it important to create suitable conditions in Syria for the voluntary and safe return of refugees and to revive the political process under the auspices of the United Nation
Human Translations	The Turkish President considered that his Syrian counterpart, Bashar al-Assad, is not making any effort regarding the normalization of relations between the two countries, saying, 'Assad is merely observing from afar without exerting any effort concerning the steps being taken in the Turkish, Russian, Iranian, and Syrian formats for normalizing our relations.' He pointed out that 'there is no positive stance from the Syrian side so far. we hope they will join us, along with Iran and Russia, to continue the process.' He considers it important to create suitable conditions in Syria for the voluntary and safe return of refugees and to revive the political process under the auspices of the United Nations.
Changes	1- Using a full stop instead of the linker and 2- 'To continue 'instead of 'in continuing'

The human translation barely made any changes except shortening the long sentence by splitting it up into two sentences instead of using the linker ‘and’. ChatGPT is accurate and is able to convey the meaning. Yet, the human translation made the text more English style as periodical sentences are preferred in English rather than using parallel sentences with the linker ‘and’. Furthermore, the human translation used the ‘infinitive phrase: to continue’ to express the target of the ‘joining’ while ChatGPT used the ‘prepositional phrase: “in continuing” to express the same target. It seems that using the infinitive phrase is more accurate and communicative. This leads the researchers to say the professional translators employed a third strategy in improving the translation of ChatGPT. This strategy is called deduction or semantic minimization. This strategy comes in line with results obtained by Nuirat and Zayed (2023) as they have proven the existence of translation shifts in terms of minimizing the source text when translated between Arabic and English. The name deduction is widely used in simultaneous interpreting as a strategy to save time and convey the most acceptable meanings.

Original Text	أفاد الجهاز المركزي للإحصاء، إن معدلات الأمية في فلسطين من أقل المعدلات في العالم (2.2% بين الأفراد 15 سنة فأكثر) لعام 2022. وأوضح الإحصاء في بيان صحفي اليوم الخميس، لمناسبة اليوم العالمي لحوو الأمية، أن معدل الأمية بين الأفراد الفلسطينيين 15 سنة فأكثر في أراضي عام 1948، بلغ 3.6% عام 2017 حسب بيانات جمعية الجليل (ريكاز). ونع ّف منظمة الأمم المتحدة للتربية والثقافة والعلوم "اليونيسكو" الشخص الأمي بأنه الشخص الذي لا يستطيع أن يقرأ ويكتب جملة بسيطة عن حياته اليومية.
Chat GPT translation	The Central Bureau of Statistics reported that illiteracy rates in Palestine are among the lowest in the world (2.2% among individuals aged 15 and above) for the year 2022. The statistics clarified in a press statement today, Thursday, on the occasion of International Literacy Day, that the illiteracy rate among Palestinians aged 15 and above in the lands of 1948 was 3.6% in 2017 according to the data of the Galilee Society (Rikaz). UNESCO defines an illiterate person as someone who cannot read or write a simple sentence about their daily life.
Human translations	The Central Bureau of Statistics reported that illiteracy rates in Palestine are among the lowest in the world for the year 2022 (2.2% among individuals aged 15 and above). In a press statement today, Thursday, on the occasion of International Literacy Day, the statistics clarified that the illiteracy rate among Palestinians aged 15 and above in the lands of 1948 was 3.6% in 2017 according to the data of the Galilee Society (Rikaz). UNESCO defines an illiterate person as someone who cannot read or write a simple sentence about his/her daily life.
Changes	1- Moving the data between parentheses to the end of the sentence instead of the middle. 2- Moving the adverbial sentence (in a press statement...) to the beginning of the sentence.

Text 3

In this text, it is noted that both ChatGPT and human translations are appropriate. However, the human translator made tiny adjustments to make the text sound more English. The human translation moved the prepositional phrase (in a press statement today) to the beginning of the sentence instead of putting it in the middle. In English language, the normal location of prepositional phrases is either at the beginning of the sentence or the end of it. By such movement, the translated text sounds more English. Moreover, the human translation moved the information between the parentheses to the end of the sentence which is also a more natural English technique.

Text 4

Original text	من قلب المعاناة والحصار في قطاع غزة وصل مشروع "العين الذكية" إلى وكالة الفضاء الأميركية "ناسا" وسجل كبراءة اختراع لتريق مليون من ثالث نتيات بالصف السادس، يُعرف عليهن المهندس نصر شويخ (27 عام). ناز المشروع ضمن مسابقة رفنها مؤسسة "الليزر" في الضفة وغزة، التي كانت تبحث بين المدارس عن لفاءات طالبية نرعهاا وتبناهاا ليكونوا ضمن نريق ، وندها يطلب من الطالب أن يبتكر فكرة لتطبيقها تكنولوجيا، بعنوان "هات فكرة "Tech Talent" وحلق ندها
ChatGPT translation	From the heart of suffering and siege in the Gaza Strip, the "Smart Eye" project reached the U.S. space agency NASA and was registered as an invention for a team of three girls in the ninth grade, supervised by engineer Nasr Shweikh (27 years old). The project won in a competition organized by the "Nayzak" Foundation in the West Bank and Gaza, which sought among schools for student competencies to nurture and adopt them to be part of the "Tech Talent" team. In it, the student is asked to innovate a technological idea titled 'Have an idea and soar with it'
Human translations	From the womb of suffering and siege in the Gaza Strip, the "Smart Eye" project reached the U.S. space agency NASA and was registered as an invention for a team of three girls in the ninth grade. They were supervised by engineer Nasr Shweikh (27 years old). The project won in a competition organized by the "Nayzak" Foundation in the West Bank and Gaza, which sought among schools for student competencies to nurture and adopt them to be part of the "Tech Talent" team. The student is asked to innovate a technological idea titled 'Have an idea and soar with it.'"
Changes	1- The word 'womb' instead of the word 'heart' 2- Deletion of the pronoun which and separate the information in a new sentence

In this text translated from English to Arabic, both the human and the AI translations are precise. Still, the human translation is a bit more accurate as the translator changed the position of the time '3:00 am' next to the word 'attempt' to determine that this specific timing refers to the time of the 'attempt' not the time of the 'statement'.

Text 5

Original text	صرحت وزارة الدفاع الروسية في بيان لها إنه في حوالي الساعة 03.00 نجرا، "تم إحباط محاولة قام بها نظام كيبيف لتنفيذ هجوم إرهابي بثلاث مسيرات على أهداف في الأراضي الروسية". وأوضح البيان أن أنظمة الدفاع الجوي المناوبة دمرت مسيرتين جزءا فوق أراضي روسنوف وأخرى فوق منطقة رامنسكي في مقاطعة موسكو. وذكر عمدة موسكو سيرغي سوبيانين عبر "تلغرام" أنه لم تقع إصابات أو أضرار في موقع سقوط حطام المسيرة
ChatGPT translation	The Russian Ministry of Defense stated in a statement that at around 3:00 AM, an attempt by the Kyiv regime to carry out a terrorist attack with three drones on Russian territory was thwarted. The statement explained that the duty air defense systems destroyed two of them over the Rostov region and another over the Ramenskoye area in the Moscow region. Moscow Mayor Sergei Sobyenin mentioned on "Telegram" that there were no casualties or damage at the site where the drone wreckage fell.
Human translations	The Russian Ministry of Defense stated in a statement that an attempt at around 3:00am by the Kyiv regime to carry out a terrorist attack with three drones on Russian territory was thwarted. The statement explained that the duty air defense systems destroyed two of them over the Rostov region and another over the Ramenskoye area in the Moscow region. Moscow Mayor Sergei Sobyenin mentioned on "Telegram" that there were no casualties or damage at the site where the drone wreckage fell.
Changes	1- the position of the Time '3:00 am'

In the translation of this text to English by human and ChatGPT, the translated texts are able to convey the message. Both translations are very similar. However, it is notice that the human translator used a different lexical term for the phrase "من زلب" by saying 'from the womb' while ChatGPT used the phrase "from the heart". The AI translation is literal, yet correct. The human usage of the word "womb" is not literal but might not be very common in English and this has something to do with diction or word choice as previously mentioned in this section. In Arabic language, if we want to explain that something is coming from a deep place (metaphorically) we use the term "رحم", as the babies come to life after staying for nine months in their mothers' wombs. So, in Arabic it's very common to indicate the depth by using the term 'womb' but I doubt that this is the case in English.

Another change in the translation done by human is the deletion of the pronoun 'which' and the separation of the information in a new sentence and this is also relevant to the strategy of deduction which is previously mentioned in this section. ChatGPT sounds more English this time as it's very common to link sentences by using relative clauses whose relative pronouns are deleted if grammatically possible.

Conclusion

By and large, there are some frequently used online translation tools, such as Google Translate, Microsoft Translator, and others, which all deliver great accuracy and cover many languages. Nevertheless, these days ChatGPT is among the newest and strongest tools as it can handle many complex and rare language pairs, such as Arabic, Chinese and Japanese. So, overseas businesses that need to communicate with multilingual consumers or partners may benefit a lot from this.

Based on the analysis conducted in the previous section, we find that the translations by ChatGPT translations are not totally appropriate, but they can be so in case some improvements are made to them by human translators. Thus, there have been some differences in style and words, as in the first text when few changes in style or words took place. Chat GPT translation is also grammatically correct but lacks proper English word order as in text three when the prepositional phrase was put in the middle while it's much more frequent to put it at the beginning or the end of English sentences. Therefore, to make the most and the best of ChatGPT as a translator, users should be aware of the linguistic capabilities of ChatGPT and follow the strategies mentioned in the discussion section to improve the translations provided by such an AI powered translation tool.

REFERENCES

1. Bahdanau, D., K. Cho, and Y. Bengio. (2014). Neural machine translation by jointly learning to align and translate. arXiv preprint arXiv:1409.0473.
2. Bielsa, E., Bassnett, S. (2009). Translation in Global News. London: Routledge.
3. Fowler, R. (1991). Language in the News: Discourse and Ideology in the Press. Psychology Press.
4. Hasyim, M.; Saleh, H.; Yusu, R.; Abbas, A. (2021). Artificial Intelligence: Machine Translation Accuracy in Translating French-Indonesian Culinary Texts. (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 12, No. 3, 2021
5. Hatim, B., Mason, I. (1997). The Translator as Communicator. London: Routledge.
6. Khoshafah, F. (2023). ChatGPT for Arabic-English Translation: Evaluating the Accuracy. Research Square, 1, 18. <https://doi.org/10.21203/rs.3.rs-2814154/v2>
7. LeCun, Y., Y. Bengio, and G. Hinton. (2015). Deep learning. Nature 521: 436-444.
8. Li, H. & Chen, H. (2019). Human vs. AI: An Assessment of the Translation Quality between Translators and Machine Translation. International Journal of Translation, Interpretation, and Applied Linguistics. Volume 1 • Issue 1 • January-June 2019
9. Nuirat, W & Zayed, M. H. T. (2023). Investigating Translation Shifts in the Translation of the United Nations Resolution 181 from English into Arabic under Catford's Approach. Migration Letters. Volume: 20, No: S12(2023), pp. 280-291
10. Possati L. (2021): "The algorithmic unconscious: how psychoanalysis helps in understanding AI" (Routledge). AI & Soc (2022).
11. Schulman, J., Zoph, B., Kim, C., Hilton, J., Menick, J., Weng, J., Uribe, J. F. C., Fedus, L., Metz, L., Pokorny, M., Lopes, R. G., Zhao, S., Vijayvergiya, A., Sigler, E., Perelman, A., Voss, C., Heaton, M., Parish, J., Cummings, R. N., ... Ryder, N. (2022, Nov. 30). ChatGPT: Optimizing language models for dialogue. OpenAI.com. <https://openai.com/blog/chatgpt/>
12. Tate, T., Doroudi, S., Ritchie, D., Xu, Y., & Uci, M. W. (2023). Educational Research and AI Generated Writing: Confronting the Coming Tsunami. EdArXiv. <https://doi.org/10.35542/osf.io/4mec3>
13. Vaswani, A., N. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, Ł. Kaiser, and I. Polosukhin. (2017). Attention is all you need. In Proceedings of the 31st International Conference on Neural Information Processing Systems, 6000-6010. NIPS Foundation.
14. Wang, L. (2023). The Impacts and Challenges of Artificial Intelligence Translation Tool on Translation Professionals. SHS Web of Conferences 163, 02021 (2023). <https://doi.org/10.1051/shsconf/202316302021>
15. Zayed, M, H, T.; Sulong, W, M, W.; Husain, S.; Yahya, Y. (2021) Strategies Used in Arabic-English Translation of Idiomatic Expressions in the Novel Men in the Sun. Review of International Geographical Education (RIGEO), 11(9), 2209- 2219. Doi:10.48047/rigeo.11.09.193
16. Zhang, A., Z. C. Lipton, M. Li, and A. J. Smola. (2021). Dive into deep learning. arXiv preprint arXiv:2106.11342.