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| RESEARCH ARTICLE

## ChatGPT in Translating Cultural Nuances in O Night by Gibran Khalil Gibran

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| ABSTRACT

This study investigates the challenges of using ChatGPT in translating the cultural nuances in the O Night poem by Gibran Khalil Gibran from Arabic into English. Then, the study compares ChatGPT's translation with human translation. The sample consisted of 40 culture-bound expressions that were purposefully selected from the poem. They are analyzed using a mixed-methods approach based on Wang's (2023) framework of the challenges embedded in AI translation tools. The findings reveal that the majority of the culture-bound expressions translated by ChatGPT are inadequate with the percentage (75%). This inadequacy is attributed to the fact that ChatGPT relies on denotative meaning due to its inability to translate the connotative meaning. Another challenge in ChatGPT is manifested in using an inappropriate linguistic style. Besides, its poor logical structure and its inability to capture the cultural nuances require human intervention to post-edit and refine the translation provided by ChatGPT. To overcome these challenges, the study recommends using contextual translation to convey the connotative and expressive meaning of poetic verses.

| KEYWORDS

*ChatGPT, O Night, cultural nuances, human translation*

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### 1. Introduction

Artificial intelligence (AI) is considered one of the capitalist methods that alters the lives of people either positively or negatively. Nowadays, AI is used in various domains, including but not limited to healthcare, engineering, education, and translation. This study is concerned with investigating the use of AI in translation, particularly in translating cultural nuances in *O Night* by Gibran Khalil Gibran.

AI in translation is defined as a transformative technology that enhances the translation process, which combines natural language processing (NLP), deep learning (DL), and machine learning (ML) (Mohamed et al., 2024). The use of AI in translation has its advantages and disadvantages (Okpor, 2014). The benefits of using AI lies in its convenience and flexibility (Wang, 2023). However, the shortcomings of using AI are embodied in its inability to provide accurate expressions to the source text because of its reliance on the denotative meaning rather than the connotative meaning, its lack of choosing the appropriate linguistic style, logical expressions, and culturally appropriate terms (Mandal, 2018). All of which calls for human intervention to refine the quality of translation to the receptor language. In doing so, the translator is required to select the best synonymous expression that renders the intended meaning faithfully, expressively, and contextually.

This study is concerned with an AI tool, namely, ChatGPT, in terms of translating cultural nuances. Knowing that ChatGPT means an intelligent conversational system that is tailored to perform several human-like texts (Gao et al., 2023). ChatGPT in translation has advantages that are manifested in providing acceptable and natural-sounding translation, while its disadvantages are embodied in style, mechanics, and register that requires human intervention (AlAfnan, 2024).

Moreover, this study is concerned with the translation of cultural nuances, which are defined as the intricacies and variations that exist within different cultures (Ting-Toomey & Dorjee, 2018). The translation of cultural nuances requires providing accurate and clear translation between distinct languages (Hui et al., 2024). This is driven by the fact that accurate translation is considered an integral part of yielding successful cross-cultural dialogue with a vivid dissemination of knowledge and ideas (ÓhÉigeartaigh et al., 2020). However, ChatGPT fails in providing culturally accurate translation because of its lack of deep cultural understanding and its reliance on statistical patterns (Obeidat & Jaradat, 2024). All of which leads to mistranslation of culturally specific references and contextual nuances, leading to inadequate translation that requires modification.

Little is known about the use of AI and ChatGPT in translating cultural nuances. So far, several studies have addressed the use of AI in translating. To clarify, Mohamed et al. (2024) investigated the benefits and challenges of using AI in translation. Besides, Wang (2023) compared the use of AI in translating business, news reports, and literary reports with human translation using three AI translation tools: *Baidu Translate*, *Dear Translate*, and *DeepL*. Moreover, Alowedi & Al-Ahdal (2023) compared AI with human translation in translating two Arabic poems, *Nothing of Note* and *One Day*. As for the studies on the use of ChatGPT in translation. They focused on the coherence and strength of academic texts created by human writers and ChatGPT (Zheng, 2023), compared the ChatGPT translation with human translation in translating figurative language (Sahari et al., 2024), examined ChatGPT's ability to translate English poetry into Chinese (Wang et al., 2024).

None of these studies addressed the challenges of using ChatGPT to translate the cultural nuances of *O Night* from Arabic into English. Therefore, this study is conducted to bridge this gap in literature by addressing the challenges of using ChatGPT in translating cultural nuances in *O Night* poems from Arabic into English based on Wang's (2023) framework of the adequacy of AI translation. This framework classifies the challenges of ChatGPT into four aspects, namely, the inability to translate the connotative meaning, the use of inappropriate linguistic style, poor logical structure, and the inability to capture the cultural nuances. In addition, the researcher suggests a suitable translation to refine the translation provided by ChatGPT. This study is anticipated to provide sufficient knowledge regarding the inadequacy of using ChatGPT in translating cultural nuances from Arabic into English.

The significance of this research stems from the fact that it contributes to the knowledge of how specific cultural intricacies cannot be accurately translated using artificial intelligence, such as ChatGPT. Cultural differences are critical to giving proper meaning and context for verbal and nonverbal communication across cultures; hence, there is no question about the significance of efficient and appropriate translation of cultures to facilitate the understanding process and to productively share messages across cultures and languages. Through analyzing the translation of *O Night* by Gibran Khalil Gibran, this study fills the existing literature gap, as no sporting research has been conducted to assess ChatGPT's capabilities of translating oriental references and contextual connotations in this poetic piece. Besides, the study provides an empirical review of the adequacy of AI translation concerning Wang's (2023) framework to support a better understanding of the areas in which the AI approach performs poorly in terms of connotative meaning, specific linguistic style, logic, and cultural context. In addition, this study also underlines the fact that AI translation will always have its limitations and calls for human intervention to provide better translations in terms of cultural and contextual relevancy by interpreting the coarsely translated ChatGPT text. Finally, this work will be useful for a fundamental and practical understanding of the opportunities and challenges of using AI tools in the translation process and will be helpful for further discussion of the integration of AI in the sphere of linguistics and translation studies.

## 2. Literature Review

### 2.1 Studies on AI Translation Tools

This section reviews the studies conducted on the use of AI in translation, such as Mohamed et al. (2024), Wang (2023), Alowedi & Al-Ahdal (2023). First off, Mohamed et al. (2024) reviewed the literature on the use of AI in translation by addressing the advancements, challenges, and ethical considerations surrounding the use of AI in translation. The study found that AI enhanced the translation accuracy due to its ability to handle complicated linguistic subtitles. However, AI faced a challenge in handling an intensive DL model, which requires computational resources and extensive data to handle this issue. The study concluded that it was an assistant tool to facilitate the translation, but it cannot substitute human translation. Based on the foregoing, it can be argued that AI requires post-editing on the part of translators to guarantee that the translation is applicable to the target language readers.

Similarly, Wang (2023) investigated the effectiveness and the challenges associated with using AI in translation from Chinese to English. The sample consisted of three passages that were selected from business texts, literary texts, and news reports. One passage was selected from each text that was translated using the following AI translation tools, namely, *Baidu Translate*, *Dear Translate*, and *DeepL*. The AI translation was evaluated based on six aspects, namely, accuracy, ideology, connotations of the source language, logical expression, linguistic style, and cultural context. Following that, the study interviewed three professional translators to translate and evaluate any misleading translation provided by AI. The study found that AI translation needs logical refinement in terms of the language order of language expressions. Moreover, the fidelity of the original language and the language style should be improved. Interestingly, the study found that human translators were able to provide accurate translation in providing formal and concise language devoid of colloquial expressions compared to AI translation tools.

Regarding the use of AI in translating from Arabic into English, Alowedi & Al-Ahdal (2023) carried out a comparative study on the use of AI in translating poems from Arabic into English vs. human translation. The sample consisted of two Arabic poems, namely, *One Day* and *Nothing of Note*. The poems were translated by professional translators. After that, they were translated using AI. The data were analyzed using a critical linguistic investigation of the translation outputs. The findings pertained to *Nothing of Note* showed that AI failed in capturing the cultural nuances inherited in the poems, leading to translation loss. Besides, AI incorporated a variety of adjectives that distorted the intended meaning. However, human translators used conjunctions that were effective not only in making the translation coherent but also in creating a lyrical continuance to the adjectival antonyms. Moreover, AI used incorrect addition, which was considered misleading unlike human translation. The analysis of *One Day* significantly revealed the failure of AI in rendering the socio-cultural context. The study concluded that using AI in translation is ineffective in capturing historical inferences, cultural nuances, and figurative language.

## **2.2 Studies on the Use of ChatGPT in Translation**

Several studies (Zheng, 2023; Sahari et al., 2024; Wang et al., 2024) investigated the use of ChatGPT in translation. Zheng (2023) compared the coherence and strength of academic texts created by human writers and ChatGPT. Employing a qualitative analysis framework based on Halliday & Hasan's (1976) cohesion model and Charolles's (1978) coherence rules, five human-written and five AI-generated texts have been analyzed using cohesive products (reference, substitution, conjunction) and coherence features (continuity, progression). The findings pointed out that ChatGPT-created texts well incorporated all explicit inferior types of cohesion devices but failed on implicit cohesion and contextual coherence in the overall construction of arguments, whereas compared to human writing style texts are more skilled and adaptive in terms of these features. Though it generates logically coherent and syntactically and lexically diverse text and explicit cohesion is excellent, implicit cohesion is very poor, and it fails to mimic human-generated texts in terms of depth, tone, and stylistic divergence in the most complex and contextualized arguments.

Sahari et al. (2024) evaluated GPT-3 versus human translators for translating figurative language. The research sample comprised four texts (two Arabic and two English) from Gharkas's (2003) book, translated by a human translator and GPT-3. Using qualitative and quantitative studies, the translations have been analyzed for accuracy, cohesion, fluency, coherence, and handling of figurative language. Findings confirmed that though GPT-3 produced generally understandable translations, it failed to capture cultural details and figurative expressions when human translators had been more accurate and natural. Nevertheless, GPT-3's translations were competitive in structure and sentence length and indicated its potential as a supplementary translation tool.

Wang et al. (2024) examined if ChatGPT could translate English poetry into contemporary Chinese using an explanation-assisted poetry machine translation (EAPMT) technique. They examined 400 bilingual poems and also discovered that despite their potential, ChatGPT's translations usually showed poor logical structure, disrupted coherence, and not enough interconnectedness, failing to render true sense of the source poems. Using monolingual poetry explanations, the EAPMT method showed enhanced preservation of the poetic flavor, line-breaking, and overall translation quality over traditional approaches.

Manystighosa & Anindya (2023) investigated the ability of ChatGPT in translating poem. Moreover, the study compared human translation with ChatGPT translation. The selected poem was nonsensical poem *Jabberwocky* by Lewis Carroll that was translated from English to Bahasa Indonesia. The study found that both human and ChatGPT translation preserved rhythm, creative adaptation, and tone. However, the results revealed that human translation was more effective in maintaining emotional nuance and phonetic alignment, while AI opted for balancing semantics with sound.

Similar to previous studies, this study also draws attention to how AI translation tools like ChatGPT cannot sufficiently capture contextual and cultural details (Alowedi & Al-Ahdal, 2023; Wang et al., 2024; Manystighosa & Anindya, 2023). This study and also the work by Wang et al. (2024) highlight ChatGPT's problems of logical structure, coherence, and interconnectedness in literary translation. Nevertheless, the current analysis differs from Wang's (2023) framework in organizing particular AI translation challenges into four areas: inability to translate connotative meaning, improper linguistic style, poor logical structure, and failure to capture cultural nuances. Moreover, this study shares similarities and differences with Manystighosa & Anindya (2023) in evaluating the translation provided by ChatGPT in translating poem. However, their study used ChatGPT to translate poem from English into Indonesia. Unlike this study that used ChatGPT to translate poem from Arabic into English, an issue that was overlooked in the previous studies. It also fills a void in the literature by focusing on the translation of cultural nuances in an Arabic poem into English from ChatGPT outputs to suggest much better translations. This research advances the field by consistently looking at how ChatGPT fails to appropriately translate cultural nuance in Arabic-English situations.

## **3. Methodology**

### **3.1 Research Design**

This study is a descriptive and qualitative research design. According to Creswell & Creswell (2017), a descriptive study is a deeper understanding of the phenomenon by gathering and analyzing detailed qualitative data. The researcher in this study focused on translating the cultural nuances of *O Night* by Gibran Khalil Gibran and analyzing them to highlight the pros and cons of AI translation compared to human translation.

### 3.2 Selection of the Poem

The selected poem is *O Night*, which is written by Gibran Khalil Gibran, who is a Lebanese-American writer, visual artist, and poet. He was also a philosopher, but he rejected the title. He was born in 1883 and died in 1931 (Naimy, 1974). He grew up in the village of Bsharri in the Mount Lebanon Mutasarrifate. In respect of his works, he wrote poetry, short stories, political essays, aphorisms, fables, and fragments of conversation (Al Tuma et al., 2021). The poem is a monologue between the poet and the night. It reflects the natural manifestations. It does not only focus on rendering the external nature but also concentrates on demonstrating the internal nature. It revolves around human nature by describing personal and emotional feelings. It reflects the impact of the night on the soul and how the night evokes feelings. The poet highlights three elements that are summarized as glorifying and speaking with the night, immersing and integrating with the night, and depicting himself with the night in terms of its dreams and characteristics. Generally speaking, the poem reflects darkness, fear, loneliness, and the importance of night in demonstrating feelings and ideas. The rationale behind selecting this novel in particular is attributed to the fact that the novel is riddled with culture-bound expressions.

### 3.3 Sample of the Study and Data Collection

The data were collected from the *O Night* poem by Gibran Khalil Gibran. The researcher purposively selected 40 culture-bound expressions from the poem. Then, she endeavors to translate without using AI. After that, an AI translation tool, namely, ChatGPT, was used to translate the culture-bound expressions in the poem. The rationale behind choosing ChatGPT in particular is attributed to the fact that it is a widely recognized AI tool that is capable of generating human-like text. Then, the researcher compared the translation provided by AI with her translation to identify the shortcomings of using ChatGPT in translating poetry.

### 3.4 Data Analysis

The collected data were analyzed based on Wang (2023) framework of AI translation scale of adequacy as shown in Table 1 below:

**Table 1 Wang (2023) AI Translation Scale of Adequacy**

Adequacy Level	Definition with Examples
<b>Adequate</b>	It means that the translation provided by AI renders the meaning, cultural nuances, and the linguistic characteristics of the source text, preserves the ideological context and the logical flow.  <b>Example:</b> Arabic: خير الكلام ما قل ودل English: <i>Brevity is the soul of wit.</i>
<b>Semi-Adequate</b>	. It means that the provided translation partially renders the meaning and the context of the source text. It might loss stylistic or cultural nuances, which affects the connotation and the clarity. <b>Example:</b> Arabic: أقلب الصفحة English: <i>Turn the page.</i> (may lack emotional nuance of "moving on")
<b>Inadequate</b>	It means that the provided AI translation is unable to render the intended connotative meaning, linguistic style, logical structure, and cultural context, which lead to misinterpretation. <b>Example:</b> Arabic: يد واحدة لا تصفق English: <i>One hand does not clap.</i> (literal translation without meaning of "teamwork is necessary")

As shown above, the data had been examined by Wang's (2023) AI Translation Scale of Adequacy, which ranks translations into three levels: adequate, inadequate, and semi-adequate. Each culture-bound expression from Gibran Khalil Gibran's *O Night* was assessed because of its ability to express the meaning, cultural nuances, and linguistic characteristics in addition to the ideological context of the source text. Translations that retained all these elements had been deemed adequate; the ones that partly conveyed the meaning or which omitted cultural or stylistic specifics were considered semi-adequate. Translations that did not achieve the desired connotation, style, rational framework, or historical context had been considered "inadequate." With this framework systematically applied, the researcher compared the translations offered by ChatGPT with her very own translations to identify AI translation strengths and weaknesses for culturally rich poetic texts.

## 4. Results and Discussion

This section presents the results of using ChatGPT in translating culture-bound expressions in *O Night* poems from Arabic into English based on Wang's framework of AI translation. The results of (40) culture-bound expressions selected from the novel are illustrated in Table 2 below:

Table 2 The Translation Provided by ChatGPT in Translating Culture-Bound Terms in *O Night*

Scale of Adequacy	Frequency	Percentage
Adequate	7	17.5
Semi-Adequate	3	7.5
Inadequate	30	75
Total	40	100%

A closer inspection of Table (2) shows that the majority of culture-bound terms that are translated using ChatGPT failed to convey the cultural nuances and the effective and emotional meaning of the poems leading to inadequate translation accounts for (30%). Followed by seven instances of culture-bound terms that are translated adequately with the percentage (17.5%). Only, three instances with the proportion (7.5%) are translated semi-adequately. It can be inferred from these results that using ChatGPT is not considered the ideal method for translating culture-bound terms since it is fraught with challenges that might distort the intended meaning.

## 5. Discussion

This section discusses the inadequacy inherited in using ChatGPT in translating *O Night* by Gibran Khalil Gibran and the recommended translation to overcome these challenges based on Wang's (2023) AI translation criteria. These challenges are classified into 4 aspects:

### 1- The Inability to Translate the Connotative Meaning

Connotative meaning in translation means the contextual and intended meaning of a word that is different from its literal meaning (Dickins, 2019). However, its meaning can be inferred according to its occurrence in the context. A close reading of the novel reveals that ChatGPT failed to capture the implicit meaning of the culture-bound terms as indicated in the following examples:

<b>1). Source Text:</b>	أَنْتَ ظِلَامٌ يُرِينَا أَنْوَارَ السَّمَاءِ وَالنَّهَارُ نَوْرٌ يَغْمُرُنَا بِظِلْمَةِ الْأَرْضِ
<b>ChatGPT Translation:</b>	You are darkness that reveals to us the lights of the heavens, While the day is light that engulfs us in the darkness of the earth
<b>Recommended Translation</b>	You are the darkness that unveils the celestial lights of the heavens, While the day is a deceptive light that cloaks us in the shadows of the earth.

The above poetic verse compares the role of the night as a source of spiritual enlightenment. It symbolizes the night with darkness to reflect the lights of the heavens with the material distractions of the day. It further shows how the light immerses us in the earth's darkness. In this verse, the poet implies that night is associated with deeper truths and introspection. It further shows how the light offers insights and clarity. On the other hand, it shows how the day blinds individuals with its surface-level charm and hides the in-depth truths of existence.

The culture-bound phrase "أَنْتَ ظِلَامٌ يُرِينَا أَنْوَارَ السَّمَاءِ وَالنَّهَارُ نَوْرٌ يَغْمُرُنَا بِظِلْمَةِ الْأَرْضِ" was translated into "You are darkness that reveals to us the lights of the heavens, While the day is light that engulfs us in the darkness of the earth". The ChatGPT translation fails to capture the connotative and implicit meaning of the verse. A possible explanation of this result could be related to the fact that ChatGPT relies on literal meaning rather than rendering the stylistic and contextual meaning of the source text (Zheng, 2023). To overcome the inadequacy of ChatGPT's translation, the researcher recommends translating the verse into "you are the darkness that unveils the celestial lights of the heavens, while the day is a deceptive light that cloaks us in the shadows of the earth". The recommended translation employs contextual adaptation to render the connotative and express meaning while maintaining the aesthetic and stylistic nuances of the source text. Moreover, the translator should post-edit the translation to guarantee that the provided translation is contextually and culturally sound.

## 2. The Use of Inappropriate Linguistic Style

It means that the provided translation does not align with the intended tone and style, which affect the usability and clarity of the translation because they lack the nuanced understanding that human translators have (Mohamed et al., 2024). For instance, AI translation tools might struggle with replicating the expressive and stylistic devices of the source text (AlKaabi et al., 2024), as indicated in example (2) below:

### 2) Source Text:

"أنت أملٌ يفتحُ بصائرنا أمام هيبة اللانهاية  
والنهار غُرورٌ يُوقِفُنَا كالعميان في عالم المقاييس والكمية."

### ChatGPT Translation:

You are hope that opens our eyes to the grandeur of infinity,  
While the day is arrogance that leaves us blind in a world of measures and quantities

### Recommended Translation

The awe-inspiring infinity and like the blind lost in a world bound by measures and quantities

The poet contrasts between night and day; Gibran symbolizes the night with hope and spiritual insights, which opens the minds to the awe of infinity. However, he depicts the day as superficial arrogance, which blinds humans with materialistic measures. The author indicates that the quite majesty of the night blinds human beings with materialistic measures and fosters reverence and deeper understanding for the infinite compared to the day's limiting and chaotic nature.

As shown in example No. (2) above, the term *هيبة اللانهاية/العميان في عالم المقاييس والكمية* was translated into *the grandeur of infinity and blind in a world of measures and quantities*. Obviously, ChatGPT failed in rendering the aesthetic and the expressive aspects of the utterance, which means the overwhelming reverence of the infinite and being metaphorically blind, trapped by the tangible and quantifiable in Arabic. Possibly, ChatGPT relied on literal and denotative meaning rather than connotative and expressive meaning. Besides, ChatGPT struggles with construing the subtleties, cultural context of language, and emotions that human translators grasp intuitively (Sahari et al., 2024). To overcome this problem, the researcher recommends translating it as *the awe-inspiring infinity and like the blind lost in a world bound by measures and quantities*. This human translation is better than ChatGPT translation in conveying connotative and expressive meaning because it uses contextual adaptation to preserve the aesthetic and stylistic nuances of the source text.

## 3. Poor Logical Structure

The majority of AI translation tools experience poor logical structure (Tomasello, 2019). This issue is often resulted in misinterpretations and inaccuracies (Altynbekova, 2020). These tools might struggle with grammatical nuances, idiomatic expressions, and context (Cheng et al., 2023). As a consequence, the provided translation sounds not only meaningless but also ambiguous (Amini et al., 2024). ChatGPT is not an exception. After using this AI tool to translate culture-bound terms in the poetry, the researcher observed that ChatGPT exhibited poor logical structure as shown in example No. (3) below:

### 3) Source Text:

"الناظرُ بألف عينٍ إلى أعماق الحياة  
المُصغي بألف أذنٍ إلى أنة الموت والعدم."

### ChatGPT Translation:

"Gazing with a thousand eyes into the depths of life,  
Listening with a thousand ears to the moans of death and oblivion."

### Recommended Human Translation

Observing with a thousand eyes the profound depths of life while attentively listening with a thousand ears to the moans of death and annihilation.

The above poetic line takes place in a poetic mediation on the night's duality and omnipresence. It portrays it as a silent observer of the profound life's mysteries as well as a compassionate listener to the life's mortality and despair. Gibran indicates that the night denotes empathy and wisdom, which perceives life's depth and wisdom with its "thousand eyes." It further hears the sorrows of life with its "thousand ears." This represents a cosmic consciousness that is beyond our comprehension.

A closer inspection of the above example shows that *الناظرُ بألف عينٍ إلى أعماق الحياة والمُصغي بألف أذنٍ إلى أنة الموت والعدم* was translated into *Gazing with a thousand eyes into the depths of life, Listening with a thousand ears to the moans of death*

and oblivion. ChatGPT used literal translation instead of capturing the contextual and metaphorical unity of the source text. This led to a poor logical structure along with a disruption of the interconnectedness and poetic coherence intended in the original (Wang et al., 2024). To counteract this problem, a contextual and stylistic understanding of translations must be given priority, as must the logical flow of ideas maintained. This may be accomplished by posting AI translations to offer expressive and culturally appropriate translation. To do so, the researcher recommends translating the verse into *Observing with a thousand eyes the profound depths of life while attentively listening with a thousand ears to the moans of death and annihilation*. In this recommended translation, the researcher employed paraphrasing to render the metaphorical and contextual unity of the source text while preserving its emotional depth and poetic coherence.

4. The Inability to Capture the Cultural Nuances

It is widely acknowledged that AI tools are unable to capture the cultural nuances in an effective manner because of their limited comprehension of the subtitles and complexities inherited in human translation (Alqahtani, 2024). This limitation is clear in aspects like AI tools that fail to convey the intended meanings and the cultural contexts behind concepts or phrases, which leads to oversimplifications or misinterpretations of the core message (Shokoohifar, 2024). In this study, the researcher observed that ChatGPT mistranslated the following culture-bound terms by mistranslating the idioms and cultural references as illustrated in examples (4) below:

4) Source Text:	بين طيّات أثوابك الزرقاء يسكب المَجْبُون أنفاسهم
ChatGPT Translation:	Between the folds of your blue garments, lovers pour out their breaths.

This quote metaphorically depicts the night as a mystical entity and nurturing. It symbolizes ‘blue robes’, which refers to the night sky. It shows how the night offers a safe and solace space for lovers to convey their deep longings and emotions. The poetic verse occurred as a part of the poetic portrayal of the night as nurturing and mystical force. It further shows how the night offers emotional and solace release to lovers and lonely individuals. The poet describes the night’s ‘blue garments’ to imply that the night is considered a comfort zone for depressed people to give them to deeply express their profound longings, passions, and emotions. It further symbolizes an emotional and spiritual sanctuary of the night. It compares the chaos and closeness of the night with the day’s distractions and confusion.

As shown in example (4) above, the poetic culture-bound phrase *بين طيّات أثوابك الزرقاء* has a contextual meaning of ‘the celestial embrace of the night sky as a nurturing and mystical entity’. Nevertheless, ChatGPT translated it as *Between the folds of your blue garments*. Obviously, ChatGPT ignored the cultural and idiomatic nuances embodied in the source text by using literal translation rather than contextual translation. It can be inferred from this result that AI translation tools like ChatGPT fail in grasping the intended metaphorical and cultural meaning crucial for conveying the richness and depth of poetic text. It further shows that AI tools require additional enhancement and training to effectively construe idiomatic and cultural expressions inherited in poetry (Farghal & Haider, 2024). To overcome this problem, the researcher suggests post-editing the source text by providing a contextual translation of the verse into *Within the embrace of your celestial blue robes, lovers release their heartfelt sighs*. This recommended translation reflects the poetic and cultural view of the night in Arabic literature as a time of reflection, emotional release, and intimacy.

5. Conclusion

Although AI has a transformative impact in several domains; including translation, however, the ability of AI to render cultural and poetic subtitles remains under scrutiny. Therefore, this addresses the challenges inherent in using ChatGPT to translate cultural nuances in Gibran Khalil Gibran’s poem *O Night* from Arabic into English. This study aims to explore the pros and cons of using ChatGPT in translating poetry. To be specific, it investigates its ability to convey the stylistic intricacies, cultural elements, and the connotative meaning of the poem compared to human translation. This study adopts Wang’s (2023) framework to evaluate the adequacy and/or inadequacy of ChatGPT translation in translation. Another aim of the study is to recommend a translation to overcome these challenges. These recommendations help improve ChatGPT’s translation to make it culturally appropriate.

The study employed a descriptive and qualitative methodology to investigate the cultural aspects of *O Night*. Therefore, 40 culture-bound expressions were purposefully identified from the poem. These expressions were translated with the help of ChatGPT and then checked with manual translations. The evaluation was done concerning Wang’s (2023) AI Translation Scale of Adequacy which compares translations based on adequacy in meaning, culture, style, and logic. This framework classifies translations into three categories: adequate, semi-adequate, and inadequate. The evaluated material underwent qualitative analysis to reveal regularities in ChatGPT’s flaws and to identify these different aspects where human translators perform better. This approach made it possible to identify the areas of similarity and difference between translations made by ChatGPT compared to human translation as well as to unravel the difficulties AI encounters when translating poetic and cultural texts.

This analysis demonstrates that ChatGPT faces considerable challenges in translating the cultural implications of *O Night*. The assessment of the adequacy of ChatGPT translations of 40 culture-bound expressions yielded a poor result that was inadequate in 75% of most of the examples and adequate in only 17.5% of the cases. Only a paltry 7.5% were classified as semi-adequate. The flaws were mostly because ChatGPT was trained only to read meaning in the literal sense and completely ignored the emotional content of the original text. Moreover, AI adopted literary translation of linguistic style which sometimes translated the poem using incorrect tone or interpretation to the stylistic and cultural context. Another challenge that is inherited in ChatGPT is a poor logical structure, which implies that ChatGPT translation is not smooth, coherent, or logical. Furthermore, ChatGPT failed to capture the cultural nuances in the majority of the examples and frequently translated them into inadequate or semi-adequate forms.

This research aims to extend the existing knowledge on the application of AI in translation by specifically assessing the ability of ChatGPT to translate culturally sensitive poetic texts. Some cultural and stylistic aspects, and collective connotations, are left beyond the visible horizon of AI capabilities as a machine translator. This piece of research presents human input when interacting with AIs in translation since AI outputs require human input and fine-tuning to fit into specific contexts. The findings also have broader implications for the development of AI translation tools, and point to a need to improve the capacity of these tools in handling cultural and thematic variations. This research could also be useful to translators, teachers, and other policymakers of AI technologies as it presents certain suggestions that could help in enhancing the precision and adequacy of AI translation.

To counter the above-mentioned challenges, the following actions are suggested in the study. AI translation tools such as ChatGPT should also enhance contextual sensitivity to aptly translate connotative meanings and cultural implications. In the same respect, AI developers should work towards refining the capacity of AI in terms of improving its ability to convey stylistic features, logical connections, and in-betweenness of translation. In this case, human input should be employed to assist post-editing activities of intelligent translation to improve the aspects that require infallibility, such as poetry. Moreover, AI models like ChatGPT should be enriched by poetic and involving texts to provide the models with a better performance in these fields. The incorporation of contextual adaptation methods into AI translation instruments may also assist in filling the gap between conceptual and idiomatic translations.

Consequently, the findings of this research are significant for both translation studies and those interested in AI. The study serves as a reminder to the practitioners of translation that even though AI tools can perform well in translation, the knowledge of the human translator is highly valuable in fine-tuning the AI translations and guaranteeing multicultural contextual fit. The study reveals fundamental challenges and suggests directions for further research for AI developers, especially in improving the cultural and stylistic aspects of natural language processing and machine learning. The study also has pedagogical implications because it highlights the topic that can be included when creating training programs for translators as well as AI developers. Finally, the study recommends that both the AI and the human translators should work hand in hand to improve the level of accuracy, as well as consider the cultural differences where necessary.

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