

Machine Translation: Solutions to Challenges in Translating Arabic Poetry into English

Asst. Lect. Marwa Muwafaq Basheer

English Department, College of Arts, Catholic University in Erbil, Kurdistan Region, Iraq.

Email: Marwa.basheer@cue.edu.krd

ARTICLE INFO

Article History:

Received: 2/10/2025

Accepted: 14/1/2026

Published: Autumn2026

Keywords: Machine

translation, Arabic

poetry, Mahmoud

Darwish, literary

translation, rhythm, and

cultural nuance.

Doi:

10.25212/lfu.qzj.11.4.53

ABSTRACT

The current study tackles the effectiveness of machine translation (MT) in translating Arabic poetry into English. It focuses on selected lines from Mahmoud Darwish's poem "على هذه الأرض ما يستحق الحياة" *On This Land, There Is That Which Makes Life Worth Living*. The aim of the study is to examine how effective MT is in translating Arabic poetry into English through pursuing three objectives: to evaluate the efficiency of MT in achieving both linguistic accuracy and poetic fidelity, to compare translations using Google Translate to those done by professional human translators, and to suggest strategies that improve translation quality. The study adopts a qualitative eclectic model based on Mona Baker's (1992) equivalence model and James Holmes's (1988) literary translation framework. While the findings unveil the effectiveness of MT in capturing the basic lexical and grammatical equivalence, it often fails to deliver metaphorical depth, cultural nuances, rhythmic patterns, and emotions. Conversely, human translations succeed in preserving the aesthetic and symbolic layers of the original text- showing a clear adaptability to stylistic and contextual challenges. Thus, the study concludes that the present systems of neural machine translation (NMT) are not fully effective for translating poetry, which accordingly stresses the indispensable role of human translators. Eventually, the study recommends using certain methods such as post-editing or human and MT

collaboration in order to link the gap between linguistic efficiency and artistic integrity.

1. Introduction

Translation is an important tool for building linguistic and cultural links between languages. It allows people from diverse backgrounds to communicate and get their ideas across. Although general or technical translation can be an easy task, literary translation is more difficult owing to the tone, style, figurative language, and cultural characteristics it contains (Hatim & Mason, 1990). Of all the literary genres, poetry requires a higher level of sensitivity to rhythm, metaphor and nuance. Especially Arabic poetry which is known for its strong and powerful imagery and that are based on intricate patterns of meaning that make the difficult to translate accurately into another language (Jones, 2011). Regardless the advances in machine translation (MT) tools such as Google Translate, they are still unable to capture cultural nuances and emotions essential to poetry (Toral & Way, 2018). This inability of MT systems forms the central research problem of the current study- creating a gap between linguistic accuracy and artistic fidelity.

2. Aim of the Study:

The aim of this study is to investigate the effectiveness of machine translation in translating Arabic poetry into English through the following objectives:

1. To compare translations produced by Google Translate with those by professional human translators.
2. To assess the translation output using Mona Baker's (1992) equivalence model and James Holmes's (1988) literary translation framework to evaluate both linguistic accuracy and poetic fidelity.
3. To identify the MT pitfalls in translating Arabic poetry and suggest strategies that improve translation quality.

3. Research Questions

The study tries to answer the following questions:

- 1- Can machine translation especially Google Translate effectively deliver the nuances of Arabic poetry when translated into English?
- 2- What is the difference between Google Translate output and professional human translations?
- 3- What are the challenges of using machine translation when handling Arabic verse, and what techniques might address these challenges?

4. Literature Review

over the past two decades, the field of machine translation (MT) has experienced major technological advances. The early systems were built on rule-based approaches, followed by statistical models that enhanced word order and lexical choice. Nevertheless, these systems had poor fluency and lacked context accountability. Unlike other systems that focus on word-for-word alignment, the emergence of Neural Machine Translation (NMT) undeniably led to a significant shift. It is an artificial neural network that process entire sentences and produce more coherent translations that capture broader syntactic and semantic patterns to enhance both fluency and accuracy (Bahdanau, Cho, & Bengio, 2015). Among all NMT tools, Google Translate is considered the most widely used because it is accessible, fast, and covers many languages. While its performance is relatively satisfactory with general or technical texts, its quality declines with literary texts, particularly poetry. As Toral and Way (2018) emphasize, NMT systems give the priority to grammatical fluency over cultural and poetic fidelity, making them less suitable for texts rich in figurative language, symbolism, and emotional depth. Therefore, MT limitation becomes more evident when it deals with Arabic poetry famous for its metaphorical expressions and cultural depth. Arabic poetry, classical or contemporary, has been long used for expressing personal and political identity. For instance, Mahmoud Darwish's work is renowned for representing freedom and resistance using religious, historical, and symbolic imagery, usually with multiple layers of meaning. Thus,

dealing with such richness requires more than word-for-word rendering. It demands deep cultural insight which is something MT systems currently lack. Over the past years, several studies have been conducted to assess the effectiveness of MT, including Google Translate, in translating Arabic poetry (Adiel, 2021). Accordingly, other studies have been employed to compare human translation to MT output of Arabic poetry. As a result, those studies showed that MT relatively succeeded in maintaining the grammatical and lexical aspects of the original text, however, it failed to capture the poetic fidelity, figurative language, and emotional resonance (Alafnan, 2025). Thus, translating poetry is considered to be a creative process. It requires not only finding equivalence in the target language, but also recreating the same effect and emotions of the original text (Lefevere, 1992). In other words, poetry translation essentially demands a balance between faithfulness and creativity. It is basically about making thoughtful decisions about tone, rhythm, form, and imagery that MT still cannot replicate effectively.

These findings prove that despite the technological advances of MT, many significant challenges are yet to be addressed. Particularly with culturally and emotionally rich texts as Arabic poetry. Thus, this study tries to address the problem of translating contemporary Arabic poetry- focusing on Mahmoud Darwish's work. The study adopts an eclectic model based on Mona Baker's equivalence model (1992) which provides a structured approach for assessing translation at lexical, grammatical, textual, and pragmatic levels and James Holmes's literary translation framework (1988) that emphasizes on the need to preserve both content and poetic form.

5. Methodology

5.1 Research Design

This study implements a qualitative comparative design to explore the strengths and limitations of machine translation (MT) in translating Arabic poetry into English. The focus is to describe and to compare between two translations of selected lines from Mahmoud Darwish's poem "على هذه الأرض ما يستحق الحياة" *On*

This Land, There Is That Which Makes Life Worth Living – one produced by Google Translate and the other by professional human translators.

5.2 Data Selection

The data consists of selected lines from Mahmoud Darwish's poem "على هذه الأرض ما يستحق الحياة" *On this land, there is that which makes life worth living*, which is published in 1986. This poem was chosen because of its wide recognition, rich metaphoric and cultural content, and its representative features of modern Arabic poetry. A purposive sampling method was used to identify lines that are metaphorically rich, culturally dense, or stylistically challenging, making them suitable for evaluating the ability of MT systems to handle literary characteristics

5.3 Translation Sources

In order to have a successful comparison, the study uses the following translation sources:

- 1- Machine Translation (MT): The researcher used Google Translate as a tool to render Arabic poetry into English without any human interference.
- 2- Human Translation: As another source for comparison, the researcher relied on famous human translators such as Saadi Simawe, 2006; Catherine Cobham; and Fady, 2007 Joudah whose translations were known for cultural and stylistic sensitivity.

5.4 Analytical Framework

In order to evaluate the quality of translation, the study adopts the following eclectic model:

- 1- *Mona Baker's Model of Equivalence (1992)*: This model is basically used to assess the translation accuracy on the lexical and grammatical level. Therefore, using this model is essential to test how successful MT is in finding the right equivalence and correct grammatical structure for the original text.

2- *James Holmes's Framework of Literary Translation (1988)*: Unlike Baker's model of equivalence, this framework supports the idea that translating poetry demands more than paying attention to the original content and structure. It requires the translator to recreate the poetic function such as aesthetic, emotional, and cultural effects. Holmes differentiates between content-focused and form-focused translation, emphasizing that effective poetic translation demands a balance of both. His view provides a tool to test whether MT systems can recreate not only the message of a poem, but its literary and artistic form.

5.5 Procedure

The researcher followed the steps below to carry out the analysis:

1. Text Segmentation: For a focused comparison, the poem was divided into individual lines or meaningful phrases for clarity.
2. Translation Extraction: Each line was translated using Google Translate and paired with a corresponding published human translation.
3. Comparative Analysis: Using Baker's and Holmes's models, each translation pair was evaluated for meaning accuracy, stylistic preservation, and cultural fidelity.
4. Categorization of Challenges: Translation issues were sorted into categories such as metaphor loss, stylistic flattening, or cultural distortion.
5. Solution Proposals: Based on identified challenges, the study suggests practical strategies including MT post-editing, context-aware training data, and human-machine collaboration.

5.6 Limitations

This study focuses on a single written poem by Mahmoud Darwish *على هذه الأرض ما يستحق الحياة* "On this land, there is that which makes life worth living." It also evaluates translations using only one MT tool (Google Translate).

6. Data Analysis

This section presents a comparative analysis of selected lines from Mahmoud Darwish's "على هذه الأرض ما يستحق الحياة" *On this land, there is that which makes life worth living*. It examines how Google Translate performs compared to published human translations. The analysis applies both Mona Baker's (1992) equivalence model that covers lexical, grammatical, textual, and pragmatic dimensions and James Holmes's (1988) literary translation framework, which focuses on the preservation of poetic form and function. Each example is presented with the Arabic original, Google Translate output, and the human translation, followed by analytical commentary.

Example 1

Arabic:

"على هذه الأرض ما يستحق الحياة"

Google Translate:

"On this earth, there is what deserves life"

Human Translation:

"On this land, there is that which makes life worth living."

(Saadi Simawe, 2006)

Analysis 1:

As it is obvious in the translation above, Google Translate produces a structurally correct sentence, the phrase "deserves life" sounds stiff and lacks idiomatic depth. Whereas Simawe's version reflects the emotional tone and poetic subtlety of the original. Therefore, and from Baker's perspective, the machine output is lexically and pragmatically weak. Also, Holmes's criteria would note the absence of poetic cadence and symbolic intensity.

Example 2

Arabic:

"شهقة تُركٍ على أرصفةٍ لا تعرفهم"

Google Translate:

"A Turkish gasp on sidewalks that do not know them".

Human Translation:

"The gasp of Turks on sidewalks that do not know them."

(*Catherine Cobham, 2009*)

Analysis 2:

The above example, Google translation is not only literal but also awkward, with "a Turkish gasp" failing to convey the alienation implied in the original. Cobham's version maintains the poetic image of estrangement and echoes Darwish's tone. Lexically, the MT version is confusing, and Holmes's model would criticize the loss of emotional power.

Example 3

Arabic:

"خوفُ الغزاةِ من الذكريات"

Google Translate:

The invaders' fear of memories.

Human Translation:

"The invaders fear memory."

(*Fady Joudah, 2007*)

Analysis 3:

Looking at example 3, one can notice that Google Translate renders the meaning correctly but lacks the poetic force. On the other hand, Joudah's concise line uses poetic minimalism to evoke a stronger rhetorical impact. According to Baker, the MT version is technically acceptable but weak at the textual level. Holmes's criteria suggest that the machine output lacks rhythm and poetic

sharpness. Check the table below that summarizes the analysis of each translation pair:

Table 1: A Comparison of Google Translate and Human Translations of Arabic Poetry

Arabic Line	Google Translate Output	Human Translation	Translation Source	Equivalenc e (Baker)	Poetic Function (Holmes)	Observation s
على هذه الأرض ما يستحق الحياة	On this earth, there is what deserves life.	On this land, there is that which makes life worth living.	Saadi Simawe (2006)	Lexical: Literal but awkward Pragmatic: Weak emotional impact	misses rhythm and nuance	Human version preserves tone, cultural identity, poetic depth
شهوة تترك على أرصفة لا تعرفهم	A Turkish gasp on sidewalks that do not know them.	The gasp of Turks on sidewalks that do not know them.	Catherine Cobham (unpublished)	Lexical: Confusing noun phrase Textual: Ambiguous meaning	Lacks clarity and cohesion	Human version retains estrangemen t and poetic imagery
خوف الغزاة من الذكريات	The invaders' fear of memories .	The invaders fear memory.	Fady Joudah (2007)	Textual: Over-explained Lexical: Slightly flat	Loses rhetorica l sharpnes s	Human version uses poetic compression for stronger emotional effect

7. Findings and Discussion

The table above clearly shows that Google Translate continuously fails to capture the poetic tone, cultural nuance, and symbolic depth. This becomes more vivid when compared to professional human translators who bring creativity and cultural awareness to their work. Therefore, the study finds that Google Translate, as a Neural Machine Translation, often fails to capture the metaphorical depth, emotional resonance, and rhythmic qualities of Mahmoud Darwish's poetry- producing literal and sometimes awkward renderings. In other words, while NMT is good at offering basic lexical substitutions, it is not effective with conveying the complex stylistic elements, cultural significance, and poetic nuances embedded in the original text. On the other hand, all human translations produced by Simawe, Cobham, and Fady show an excellent adaptation to the original intended meaning and style of Darwish's poetry. Their work successfully maintains not only the source language content, but also the emotions, figurative language, and cultural nuances of the original Arabic poetry. Therefore, this contrast between the two translations proves that MT in its current performance is unreliable when it comes to translating poetry. It also reveals that Google Translate can be used as a tool to aid but not to replace skillful human translators.

8. Conclusions

The study concludes the following:

- 1- Google Translate as a Neural Machine Translation is not totally efficient in translating Arabic poetry. Its output is always characterized of being literal or even awkward sometimes.
- 2- Professional Human translators are irreplaceable. Their work reflects deep understanding of the meaning, style, and cultural nuance of the original text.
- 3- Using a hybrid approach of human -machine collaboration is mandatory in order to maintain the original content and effect of Arabic poetry.

9. Recommendations

Taking into consideration the points mentioned above, the study recommends human collaboration with (NMT), when the latter is used to translate poetry. This collaboration can be achieved through post- editing or hybrid systems that combine technology with creativity. Furthermore, it is highly recommended that more researches should be conducted to test other types of (NMT) applications.

References

- Adiel, M.A., 2021. Automatic translation of Arabic classic poetry: Case-study of Google Translate. *International Journal of Humanities, Social Sciences and Education (IJHSSE)*, 8(8), pp.81–95.
- AlAfnan, M.A. and Alshakhs, T., 2025. Bridging linguistic and cultural nuances: A comparative study of human and AI translations of Arabic dialect poetry. *Open Access Journal of Artificial Intelligence and Machine Learning (OAJaiml)*, Kuwait.
- Baker, M., 1992. *In other words: A coursebook on translation*. London: Routledge.
- Bahdanau, D., Cho, K. and Bengio, Y., 2015. Neural machine translation by jointly learning to align and translate. In: *International Conference on Learning Representations (ICLR)*. Available at: <https://arxiv.org/abs/1409.0473> [Accessed 3 Sep. 2025].
- Darwish, M., 1986. *Ward Aqall [A Rose Less]*. Beirut: Dar al-Awda.
- Darwish, M., 2009. *A river dies of thirst* (C. Cobham, Trans.). London: Saqi Books.
- Hatim, B. and Mason, I., 1990. *Discourse and the translator*. London: Longman.
- Holmes, J.S., 1988. *Translated! Papers on literary translation and translation studies*. Amsterdam: Rodopi.
- Jones, F.R., 2011. *Poetry translating as expert action: Processes, priorities and networks*. Amsterdam: John Benjamins Publishing.
- Joudah, F. (Trans.), 2007. *The butterfly's burden* (Poems by Mahmoud Darwish). Port Townsend, WA: Copper Canyon Press.
- Lefevere, A., 1992. *Translation, rewriting, and the manipulation of literary fame*. London: Routledge.
- Simawe, S. (Trans.), 2006. On this land [Translation of Darwish poem]. In: Words Without Borders (Eds.), *Literature from the "Axis of Evil": Writing from Iran, Iraq, North Korea, and other enemy nations*, pp.268–270. New York: New Press.

Toral, A. and Way, A., 2018. What level of quality can neural machine translation attain on literary text? *Translation Quality Assessment*, 24(1), pp.1–25.

وهرگيراني ئوتوماتيكي: چاره سهره كردني كيشه كان له كاتي وهرگيراني شيعري عه ره بي بو ئينگليزي

پوخته

ئهم تويزينه وهيه كاريگهري وهرگيراني ئاميري (Machine Translation - MT) له وهرگيراني شيعري عه ره بي بو زماني ئينگليزي دهرده خات. جهخت ده خاته سهر چهن ديريپك له شيعري ناوداري مه حمود دهرويش، "على هذه الأرض ما يستحق الحياة" له سهر ئهم زهويه، شتيك هيه كه ژيان بوي شايهني ژيانه". مه بهستي سهره كي تويزينه وهيه كه ئه وهيه بزانييت تا چهن MT له وهرگيراني شيعر كاريگه ره، به تاييه تي له پرووي تواناي گهيشتن به وردبيني زمانه واني و ههسته بهستي ئه ده بي، به راورد كردني ئه نجامه كاني به به كارهيناني گووگل ترانسلهيت له گهل وهرگيراني مروفي پيشه يي، و پيشنياركردني ستراتيژيه كاني باشتركردني كواليتي وهرگيران. تويزينه وهيه كه موديليكي ئيكليكتي چونا به تي به كاردهينييت له موديلي هاوتابووني مونا به يكه ر (1992) و چوارچيوه وهرگيراني ئه ده بي جهيمس هوالمز (1988) ده گرييت. ئه نجامه كان ئه وه دهرده خه كه هه رجه نده MT ده توانييت هاوتاي به نه په تي وشه يي و پيزماني بيت، به لام زورجار له گه ياندني ژيرايي ميتافوره كان، نوانسه كه لتووريه كان، پيتمى شيعر و ههسته كان سهركه وتوو نابيت. به پيچه وانه وه، وهرگيراني مروف سهركه وتوو تره له پاراستني چينه جوانكاري و هيماكاني ده قي ره سه ن و ده كرييت باشتر گونجي بدرييت به ستايلستيك و ده ق. له كو تايبدا، تويزينه وهيه كه ئه وه دهرده خات كه سيسته مه كاني ئيستاي وهرگيراني ئاميري ده ماري (NMT) هيشتا به ته واي كاريگه ر نين بو وهرگيراني شيعر، و به م هويه جهخت ده كاته سهر گرنگي وهرگيراني مروفي. ههروه ها تويزينه وهيه كه پيشنياري ئه وه ده كات كه له كاتي وهرگيراني شيعره كاندا شيوازه وهك دواي مونتاز يان هاوكاري مروفي و MT به كاردهينييت به م مه بهسته ي كه بوشايي نيوان وردى زمانه واني و به كپارچه يي هونه ري پر بكره يته وه.

كليله وشه: وهريگيراني ئوتوماتيكي، شيعري عهري، مه حمود درويش، وهريگيراني ئه دهبي، ريتم، هيماي كهلتوري

الترجمة الآلية: حلول في مواجهة تحديات ترجمة الشعر العربي الى الانجليزية

ملخص:

تبحث الدراسة الحالية في فعالية الترجمة الآلية (MT) في ترجمة الشعر العربي إلى الإنجليزية، مع التركيز على مقاطع مختارة من قصيدة محمود درويش على هذه الأرض ما يستحق الحياة (*On This Land, There Is That Which Makes Life Worth Living*). تهدف الدراسة إلى تقييم مدى فعالية الترجمة الآلية في نقل الشعر العربي إلى الإنجليزية من خلال ثلاثة أهداف: (1) تقييم كفاءة الترجمة الآلية في تحقيق الدقة اللغوية والوفاء بالشكل الشعري، (2) مقارنة نتائج ترجمة Google Translate بالترجمات التي أعدها مترجمون بشريون محترفون، و (3) اقتراح استراتيجيات لتحسين جودة الترجمة. تعتمد الدراسة على نموذج نوعي انتقائي، مستندة إلى نموذج التكافؤ Mona Baker (1992) وإطار الترجمة الأدبية James Holmes (1988). تكشف النتائج أنه بينما تستطيع الترجمة الآلية تحقيق التكافؤ الأساسي على المستوى المعجمي والنحوي، إلا أنها غالباً ما تفشل في نقل العمق الاستعاري، والدلالات الثقافية، والأنماط الإيقاعية، والتأثير العاطفي. في المقابل، تنجح الترجمات البشرية في الحفاظ على الأبعاد الجمالية والرمزية للنص الأصلي، مما يظهر قدرة واضحة على التكيف مع التحديات الأسلوبية والسياقية. وبناءً عليه، تستنتج الدراسة أن أنظمة الترجمة الآلية العصبية الحالية (NMT) ليست فعالة بالكامل في ترجمة الشعر، مما يبرز الدور الأساسي للمترجم البشري. وأخيراً، توصي الدراسة باستخدام طرق مثل التنقيح بعد الترجمة أو التعاون بين الإنسان والآلة لسد الفجوة بين الدقة اللغوية والنزاهة الفنية. الكلمات المفتاحية: الترجمة الآلية، الشعر العربي، محمود درويش، الترجمة الأدبية، الإيقاع، الدلالات الثقافية