

Research Article

Cite this article: Elimam, F. (2024).
Undermining Aesthetics: Poetry Between
the Shortcomings of Metaphrase and the
Inadequacies of Machine Translation.
Üniversitepark Bülten, 13(1): 143-154.
<https://doi.org/10.22521/unibulletin.2024.131.10>

Received April 27, 2024

Accepted May 30, 2024

Keywords:

poetry, aesthetics, artificial intelligence,
machine translation, metaphrase

Author for correspondence:

Fatima Elimam

✉ E-mail: yusra17112018@gmail.com

✉ Post Address: Northern Border
University, College of Humanities and
Social Sciences, ARAR, Saudi Arabia

**OPEN ACCESS**

© This work is licensed under a Creative
Commons Attribution-NonCommercial 4.0
International License (CC BY-NC 4.0), where it is
permissible to download and share the work
provided it is properly cited.

Undermining Aesthetics: Poetry Between the Shortcomings of Metaphrase and the Inadequacies of Machine Translation

Fatima Elimam

Abstract

Poetry analysis remains far beyond the current machine processing capabilities, or those translators adopting a simple verbum-pro-verbo direct translation technique. Both instances would be disastrous, since poetry is, and remains, a creative human product that combines intuition, sense, and perception. Any literal rendering, or worse, a mechanical treatment of poetic elements, would damage the human mechanism inherent in this type of text. Software such as Google Translate accurately retrieves synonyms and variances of word types, yet, the problem that persists is the diction process that preserves the esthetic value of the source text in question. Whatever the efforts exerted in artificial intelligence (AI)-supported rendering of texts into other languages, poetry remains an exceptional case. In the same vein, Dryden's metaphrase remains an unconventional translation technique when associated with poetic text. This paper addresses the esthetics of poetry that are endangered by either metaphrase, or, worse, by AI-supported tools, and investigates the esthetic loss resultant from using Google Translate with poetry. Sample excerpts of poetic works by prominent English and Arabic poets are highlighted, projecting the stylistic and esthetic breakdown of the original works when rendered by either metaphrase or AI tools.

Background/purpose – This paper addresses challenges inherent in poetry translation, particularly via computational analysis or word-for-word substitution, and proposes a Poet-Assisted Machine Translation (PAMT) to mitigate inadequacies of machine rendering esthetic texts.

Materials/methods – Literature review, exploring the requirements of poetry translation, highlighting sample from three different poetry translation methods; machine translation, metaphrase, and free translation.

Results – PAMT is the only way out.

Conclusion – Metaphrase, as well as machine translation, must be avoided in cases where the special esthetic qualities of a source text, such as in poetic verse, are intended to be maintained.

1. Introduction

Klarer (1999) stressed that, “Most traditional attempts to define poetry juxtapose poetry with prose” (p. 27), highlighting the aspects of poetry that make it very different from prose form. Additionally, Klarer stated that explanations of the genre which combine poetic language with linguistic elements other than rhyme and meter do more justice to non-traditional forms such as free verse or prose poems.

Poetry is traditionally known for aspects such as meter and rhythm, having rhythmic patterns throughout the lines of verse. Since poetry is a creative type of writing, holding fast to translation rules such as fidelity, is inappropriate. Similarly, metaphrase, as a direct method of translation, deprives poetry of its distinctive aspects to produce prose, not verse. Machine translation works in a similar way to metaphrase, working to provide matches to words and expressions, that may not and are highly unlikely to result in the same poetic value.

2. Materials and Methods

This paper highlights the shortcomings of machine translation (MT) as well as metaphrase in the rendering of poetic texts. Samples of renowned poetry are translated by these means in order to highlight the failures of both MT and metaphrase in the rendering of poetry, both linguistically and esthetically. Attempting poetry translation by means of metaphrase is deemed to be as invaluable as rendering the same by any AI-supported tool. AI translation of poetry is a road that cannot be taken without endangering the esthetics and overall value of such text types.

3. Discussion

3.1. Poetry Translation Theories

Brooks (2008, p. 60) cited Dryden’s theory of translation, referring to Dryden’s simple definitions for the three kinds of poetry translation: metaphrase, as “the literal or word-for-word translation”; paraphrase, as “a kind which follows the sense of the author, rather than his precise words”; and finally imitation, which “departs from the original at the pleasure of the translator, and really constructs a new poem on the basis of the old.”

In the same source, Brook stated that Dryden rejected both metaphrase and imitation as being two extremes, with “paraphrase” considered something in between metaphrase and imitation. Since metaphrase was rejected by Dryden, then how can we consider the use of machine translation in poetry? In ordinary cases, a target text produced by a machine requires subsequent editing by human hand. According to Hutchins (1995), computer programs that produce translations are imperfect, and emphasized that poetry translation remains as, “an ideal to which no human translator can aspire; nor translations of literary texts, for the subtleties and nuances of poetry are beyond computational analysis” (p. 431). Hutchins (1995) further asserted that, “Although the ideal goal of MT systems may be to produce high-quality translation, in practice the output is usually revised (post-edited)” (p. 431). If that is the case for the translation of general texts, then attempting to translate poetry by means of a machine process seems a non-starter.

3.2. AI Tools and the Nature of Translation Problems

Machine translation, according to Hutchins (1995), refers to “computerized systems responsible for the production of translations with or without human assistance” (p. 431). Therefore, a system may need some kind of human intervention during the different stages of translation. Finally, the target text produced by a machine may also need further editing by human hand. Kadhim et al. (2013) asserted that MT or automated translation methods have been considered over the last decade as a “computational linguistic phenomenon” (p. 39). Whilst such

automated machine processes have begun to be used to translate a variety of texts, poetry still presents a difficult, if not impossible, task to achieve an accurate translation.

Regarding the question of what is a correct translation, Koehn (2012) stated that,

Given the nature of the translation problem, where everybody seems to disagree on what the right translation of a sentence is, it comes of no surprise that the methods used to obtain human judgments and rank different systems against each other is also under constant debate. (p. 1)

It appears clear that there remains significant debate on the quality of machine-translated texts and methods that utilize human judgement when comparing the and contrasts seen between translation systems.

3.3. Artificial Intelligence and Textual Analysis

Crisostomo et al. (2022) stated that, “from becoming a booming trend in the early 2000s to one of the ubiquitous methods under Industry 4.0, artificial intelligence (AI) has been essential in expediting processes and expanding communication reach in various industries” (p. 187). It was further indicated that AI helps investors to overcome language barriers by relying on automated or machine translation and in its ease of providing basic interpretation for information needed in business. In the same source, it was asserted that, “AI translation is no longer limited to the general translation of a language, but AI translations have expanded to serve specific industries like medical, e-commerce institutions, military, legal, and financial, among others” (Crisostomo et al., 2022, p. 187). Nevertheless, it is apparent that poetry cannot be listed here for a variety of reasons, such as the nature of problems encountered in rendering poetry, which range from the handling of sense to esthetics.

Highlighting the latest developments in AI-based translation, Sutskever et al. (2014, pp. 1-8, as cited in Soysal, 2023, p. 179) referred to the development of neural machine translation (NMT) models, naming “the sequence-to-sequence (Seq2Seq) model” which was described as “remarkably performing the translation of the text.” The same source went on to explain that such NMT models, “utilize deep neural networks, such as Long Short-Term Memory (LSTM) networks, to map the input sequence to a fixed-dimensional vector and decode the target sequence from that vector.”

Zhou et al. (2020, as cited in Soysal, 2023), highlighted the significant role played by the concepts of IQ (intelligence quotient) and EQ (emotional quotient) in understanding and evaluating the capabilities of AI (artificial intelligence) systems. They went on to define IQ as, “the cognitive abilities of AI, such as problem-solving, logical reasoning, and pattern recognition” (p. 183), whereas EQ pertains to the emotional and social intelligence aspects, including empathy, understanding human emotions, and effective communication.

3.4. Translation and MT Systems

In the endeavors to assign translation tasks to non-human agents, namely MT systems, Arnold et al. (1994) contemplated that, “Machine Translation started out with the hope and expectation that most of the work of translation could be handled by a system which contained all the information we find in a standard paper bilingual dictionary” (p. 10). This might be the case in terms of translating simple texts that require direct methods of limited inter-lingual semantic or lexical associations. However, when it comes to the mechanism of MT processes, the same source stated that, “correct translations suitable for immediate use would be manufactured in two simple steps. This corresponds to the view that translation is nothing more than word substitution (determined by the dictionary) and reordering (determined by reordering rules)” (Arnold et al., 1994, p. 10).

Referring to the numerous MT systems in current use today, Arnold et al. (1994) identified examples of MT including METEO, SYSTRAN, LOGOS, ALPS, ENGSPAN (and SPANAM), METAL, and

GLOBALINK. It was further stated that “the number of organizations that use MT on a daily basis is relatively small, but those that do use it benefit considerably” (Arnold et al., 1994, p. 7), pointing to the significance of MT in inter-lingual organizations. In describing the capabilities of MT, Lagoudaki (2008) identified three essential prerequisites; the ability to identify matches at the sub-sentence level, its ability to score multiple fragments found as a translation for a portion of the source segment, and then pick the best, and combination algorithms employed to insert the fragments in the correct place within the match that is then proposed.

Seemingly, the capabilities of MT are generally subject to significant constraints when it comes to poetry translation. A poem is a type of text with which the capabilities of a machine are incompatible. “The most important criterion for an automatic MT evaluation measure,” as Turian et al. (2003, p. 389) postulated, “is that it [ranks] MT systems the same way that a human judge would rank them.” In the same vein, Lagoudaki (2008) stated that, “Evaluating socio-technical systems such as MT is a complex endeavour necessitating the consideration of a number of system- and user-based quality aspects within the system’s context of use” (p. 265).

4. Computational Analysis of Poetry

Arnold et al. (1994) asserted that, “Scientifically, MT is interesting, because it is an obvious application and testing ground for many ideas in Computer Science, Artificial Intelligence, and Linguistics, and some of the most important developments in these fields have begun in MT” (p. 5). In the same respect, Arnold et al. (1994) further claimed that, “Generally, the quality of translation you can get from an MT system is very low. This makes them useless in practice” (p. 6). A shocking fact, perhaps, yet a largely expected one, since a machine remains a machine, a non-human object. Anything related to a complicated human product such as natural language, is likely to be challenging when attempted to be handled by a machine. If this is the case in terms of texts in general, then poetry is something else, considering that humans do not naturally utter poetic verse, but use their brain to purposefully and creatively fabricate such text. In the same respect, Frost (1969) stated that,

A poem, as critics since Coleridge have often pointed out, is an *organic synthesis* of words, each word being carefully chosen, if the poem is a good one, for what it can do both in its immediate context and in relation to the entire poem. (p. 12)

Highlighting the complexity of poetic works and the potential failure in handling them by means of a mechanical substitution of source language wording with target language equivalents, Frost (1969) assumed that:

Suppose for a moment that we were to take an ode by Keats, or a sonnet by Shakespeare, and for every important word in it were to substitute another English word, the closest equivalent we could find. Would the result be a replica or a facsimile of the ode or sonnet, or a substitute for it—something that would do just about as well? (p. 13)

In such a case, a word-for-word rendering of poetry would likely result in an awkward genre that would no longer be considered verse. Computerized processes are unable to analyze poetry due to the unique, special nature of poetry itself. Since poetry is a special type of text that has unique characteristics, Kadhim et al. (2013) stated that,

Another flip side of MT is that it cannot handle ambiguities that exist because it was created under the laws of systematic and formal rules of the language and certainly could not translate words based on experience, emotions, values, and mental outlook compared to human translation. (p. 48)

Kadhim et al. (2013, p. 49) further added that, “online machine translation systems are continuously undergoing development, and the outputs might be improved in the near future,” and went on to identify one field in which MT could prove useful, “to help students’ learning more effectively.” This indirectly emphasized how poetry cannot be performed by a machine since it is a complicated style of text due to its special aspects and significant esthetic qualities.

5. Examples of Machine Vs. Human Translation of Poetry

Specia et al. (2011) defined an “adequate” translation as, “translation that preserves the meaning of the input text and does not add any information to it” (p. 515). In terms of poetry translation, still this type of translation cannot be viewed as “adequate.” Metaphrase can give meaning without adding information, the same as with machine translation. However, for poetry translation, in order to achieve this adequateness, a new definition of adequacy is required. Being just an ordinary translator is not sufficient to translate poetry to the required standard. Whatever the professional level of a translator, they themselves must also possess the sense and talent of a poet, producing a target text that represents a literary masterpiece in its own right, not merely using the correct equivalent for every single lexical item in the source text. The meaning of a poem is ultimately secondary to its esthetics. Metaphrasing, or even paraphrasing, can keep the target text at the limit of semantic equivalence of the original poem, but even if a machine can generate a literal equivalence for the entered source text, (i.e., a poem), this is not the required end product.

6. Ai & Persistent Translation Challenges

To whatever level AI has improved in terms of its quality and linguistic perception, the gap is still vast between natural languages and mechanical processing of textual components in settings that go beyond the capacity of machine analysis. As clearly stated by Brown (1994), “A language is a part of a culture and a culture is a part of a language; the two are intricately interwoven so that one cannot separate the two without losing the significance of either language or culture” (p. 165). Therefore, culture in word form cannot be analyzed by a machine. Culture can be anything that pertains to the life of an individual, including the perception of the esthetics of natural language, particularly if any human cognitive process is required to analyze particular aspects of that text.

With reference to the use of AI in translation, Kaifang and Chunlei (2023, p. 58) projected that, “The academic community has incorporated artificial intelligence technologies represented by deep learning, machine learning and neural networks into translation research, which is expected to form a brand new perspective of translation research.” The same authors also emphasized that, “so far, the connotation and significance of translation research from the perspective of artificial intelligence are not clear.”

7. Proposed Procedure

This paper proposes a Poet-Assisted Machine Translation (PAMT) to analyze and recreate texts, the nature and elements of which go beyond the capacities of current AI-supported systems or software. The poetic and esthetic aspects of poetry could, however, be maintained by the proposed PAMT solution, thereby mitigating the computational failures of poetry analysis and translation could be more creatively handled.

8. Conclusion

According to Arnold et al. (1994, p. 6), “literary translation is a small proportion of the translation that has to be done, so accepting the criticism does not mean that MT is useless,” and asserted that, “one may wonder who would ever want to translate Shakespeare by machine — it is a job that human translators find challenging and rewarding, and it is not a job that MT systems have been designed for.” Sloman (1985) also emphasized that, “Some great poems demand essentially new

approaches on the reader's part, although the poems evoke instantaneous admiration" (p. xx). Among the aspects of poetry that Sloman identified were, accounting for "the pleasure" and giving due respect to "the complexity of the poet's art, and not just declare one's pleasure in discovering a new masterpiece" (p. xx).

In terms of poetry, both MT and metaphrase are likely to end with a similar product, but not one that is deemed to be poetic verse, which is why Dryden did not recommend metaphrase for the purpose of poetry translation. To metaphrase literary works is to result in a form that is different from prose. The same can be said with imitation, since it results in a new creative work that has more differences than similarities from the source text. However, whilst metaphrase is a human product, MT produces a target text that is even poorer in terms of its poetic aspects. In the same respect, Arnold et al. (1994, p. 6) postulated that, "The criticism that MT systems cannot, and will never, produce translations of great literature of any great merit is probably correct, but quite beside the point." They additionally asserted that, "translating literature requires special literary skill — it is not the kind of thing that the average professional translator normally attempts." In the same vein, Arnold et al. stated that, "The criticism that MT systems cannot translate Shakespeare is a bit like criticism of industrial robots for not being able to dance Swan Lake." Additionally, "they are not as easy to find as the reader might think, and they certainly do not show that MT is useless."

In this way, even a highly proficient and experienced human translator cannot necessarily be assumed to render poetry esthetically and creatively; not unless they also possess the skills of a talented poet. Poetry translation, thus, is confronted with various constraints that AI mechanisms remain incapable of handling in terms of its many subtleties and nuances. Since the poetic aspects of such texts challenges even human translators, it naturally precludes the advances of AI systems that only reproduce systematic analytics of human-created esthetics.

References

- Arnold, D., Balkan, L., Humphreys, R. L., Meijer, S., & Sadler, L. (1994). *Machine Translation: An Introductory Guide*. NCC Blackwell.
- Brooks, D. (2008). Dryden and Juvenal's First Satire. *Sydney Studies in English*, 5(1979), 60-83. <https://openjournals.library.sydney.edu.au/index.php/SSE/article/view/355>
- Crisostomo, M. M., Bernarte, R. P., & Ambaget, S. C. (2022). Cross-Cultural Translation Studies in the Context of Artificial Intelligence: Challenges and Response. *European Online Journal of Natural and Social Sciences: Proceedings*, 11(4s), 187-198. https://european-science.com/eojnss_proc/article/view/6709
- Frost, W. (1969). *Dryden and the Art of Translation*. Archon.
- Hutchins, J. (1995). Machine Translation: A Brief History. In E. F. K. Koerner & R. E. Asher (Eds.), *Concise history of the language sciences: From the Sumerians to the cognitivists* (pp. 431-445). Pergamon Press.
- Kadhim, K. A., Habeeb, L. S., Sapar, A. A., Hussin, Z., Ridhuan, M. M., & Abdullah, T. L. (2013). An Evaluation of Online Machine Translation of Arabic into English. *Turkish Online Journal of Educational Technology*, 12(2), 39-50. <http://www.tojet.net/articles/v12i2/1224.pdf>
- Kaifang, F., & Chunlei, W. (2023). Translation Studies in the Era of AI: Characteristics, Fields and Significance. (4), 58-67. <https://doi.org/10.32996/ijtis.2023.3.4.7x>
- Klarer, M. (1999). *An Introduction to Literary Studies*. Routledge.

- Koehn, P. (2012). Simulating Human Judgment in Machine Translation Evaluation Campaigns. In *Proceedings of the 9th International Workshop on Spoken Language Translation* (pp. 179-184). International Speech Communication Association.
- Sloman, J. (1985). The Poetics of Translation: Beyond Metaphrase, Paraphrase, and Imitation. In A. McWhir (Ed.), *Dryden: The Poetics of Translation* (pp. 3-25). University of Toronto Press. <https://doi.org/10.3138/9781487574697-003>.
- Soysal, F. (2023). Enhancing Translation Studies with Artificial Intelligence (AI): Challenges, Opportunities, and Proposals. *Karamanoğlu Mehmetbey University International Journal of Philology and Translation Studies*, 5(2), 177-191. <https://doi.org/10.55036/ufced.1402649>
- Specia, L., Hajlaoui, N., Hallett, C., & Azizet, W. (2011). Predicting Machine Translation Adequacy. In *Proceedings of Machine Translation Summit XIII* (pp. 513-520). Asia-Pacific Association for Machine Translation (AAMT).

Appendices

Appendix 1. English–Arabic Attempts

The Deserted Village by Oliver Goldsmith 1977	
Original Text	
Near yonder thorn, that lifts its head on high Where once the signpost caught the passing eye, Low lies that house where nutbrown draughts inspired, Where greybeard mirth and smiling toll retired,	
Translated by Zakher Gabriel	
ها هنا حيث قتادٌ قد زكا واستأسدا كانت اللوحة تحمل أسماء الحواري والدروب قد توارى من هنا مقصف القرية وانفض الرفاق فهنا كانت تُدار القدح الغبراء ما بين الصحاب تبعث الخفة في النفس وتذكي الطربا كانت البسمة تعلو كل وجه فيه شيبًا أو شبابًا https://www.hindawi.org/books/74704028/6/	
Google Translated	
بالقرب من هناك شوكة ترفع رأسها إلى الأعلى حيث بمجرد أن لفتت الإشارة انتباه المارة، يقع في الأسفل ذلك المنزل الذي ألهمته المسودات الجوزية، حيث تقاعد المرح ذو اللحية الرمادية والابتسام،	

Appendix 2. English–Arabic Attempts

Shall I compare thee to a summer's day? (Sonnet 18) William Shakespeare (1564-1616)	
Original Text	
Shall I compare thee to a summer's day? Thou art more lovely and more temperate. Rough winds do shake the darling buds of May, And summer's lease hath all too short a date. Sometime too hot the eye of heaven shines, And often is his gold complexion dimmed; And every fair from fair sometime declines, By chance, or nature's changing course, untrimmed; But thy eternal summer shall not fade, Nor lose possession of that fair thou ow'st, Nor shall death brag thou wand'rest in his shade, When in eternal lines to Time thou grow'st. So long as men can breathe, or eyes can see, So long lives this, and this gives life to thee.	
Translated by Fetina Elnayeb- in Khalosi, S. (1987). "The Art of Translation," as cited in (https://www.hindawi.org/books/74704028/6/)	
من ذا يقارن حسنك المغربي بصيف قد تجلّى وفنون سحرك قد بدت في ناظري أسمى وأعلى تجني الرياح العاتيات على البراعم وهي جذلى والصيف يمضي مسرعاً إذ عقده المحدود ولّى كم أشرقت عين السماء بحرّها تتلهب ولكم خبا في وجهها الذهبي نور يغرب لا بد للحسن البهي عن الجميل سيذهب فالدهر تغيير وأطوار الطبيعة قُلّب لكن صيفك سرمدي ما اعتراه ذبول لن يفقد الحسن الذي مُلّكت فهو بخيل والموت لن يزهو بظلك في حماه يجول ستعاصرين الدهر في شعري وفيك أقول ما دامت الأنفاس تصعد والعيون تحديق سيظل شعري خالداً وعليك عمراً يغدق	
Google Translated	
هل أشبهك بيوم صيفي؟	

انت أكثر جميلة وأكثر اعتدالا.
 الرياح العاتية تهز براعم شهر مايو العزيزة،
 ولا يلبث الصيف حتى يزول.
 في وقتٍ ما، تشرق عين السماء شديدة الحرارة،
 وغالبًا ما تكون بشرته الذهبية باهتة؛
 وكل معرض من المعرض يتراجع في وقت ما،
 عن طريق الصدفة، أو مسار الطبيعة المتغير، دون انقطاع؛
 لكن صيفك الأبدي لن يتلاشى،
 ولا تفقد ملكية ذلك العادل الذي أنت عليه،
 ولا يفتخر الموت وأنت تستريح في ظله،
 عندما تكون في الخطوط الأبدية للوقت الذي تنمو فيه.
 طالما أن الرجال يستطيعون التنفس، أو العيون تستطيع أن ترى،
 يدوم هذا طويلًا، وهذا يعطيك الحياة.

Appendix 3. Arabic–English Attempts

Poet(s) Unnamed in the Link
Original Texts
(1) ألا أن أخلاق الفتى كزمانه فمنهن بيض في العيون وسود وتأكلنا أيامنا فكأنما تمر بنا الساعات، وهي أسود فلا تحسدن يوماً على فضل نعمة فحسبك عاراً أن يقال حسود (2) إذا صاحبت في أيام بؤس فلا تنس المودة في الرخاء ومن يعدم أخاه على غناه فما أدى الحقيقة في الإخاء ومن جعل السخاء لأقربيه فليس بعارف طرق السخاء
Translated by Dr. Ibrahim Elmumayyaz (05-31-2006, 08:03 AM, shared by Alsuleiman, A.) https://atinternational.org/forums/forum/literary-forum/poetry/407-%D9%85%D8%AE%D8%AA%D8%A7%D8%B1%D8%A7%D8%AA-%D9%85%D9%86-%D8%A7%D9%84%D8%B4%D8%B9%D8%B1-%D8%A7%D9%84%D8%B9%D8%B1%D8%A8%D9%8A-%D8%A7%D9%84%D9%85%D8%AA%D8%B1%D8%AC%D9%85?t=262
(1) So like his Times are the ethics of Man Part black, part white they seem in others' eyes Devour us at will our waiting days can Like lions that to pounce on us plan Envy not favours a day may supply Shame if "He's envious" your reputation ran (2) If friends you make when times are hard and lean Forget not such friendships in prosperity He knows not what friendship could mean When his friend suffers dire adversity He who in giving but to kin is keen Knows not the ways of generosity.
Google Translated
(1) However, the boy's morals are like his time, some of them are white in eyes and black Our days consume us as if the hours were passing by, and they were black Do not ever be envious of the abundance of a blessing. It is considered a disgrace for you to be called envious

(2)

If you are accompanied by days of misery, do not forget the affection in prosperity
 Whoever kills his brother due to his wealth has not fulfilled the truth in brotherhood
 Whoever devotes generosity to his relatives does not know the ways of generosity

About The Contributor

Fatima Elimam, Ph.D., is an assistant professor of applied linguistics (and translation) at the Northern Border University, Saudi Arabia.

Email: yusra17112018@gmail.com

ORCID ID: <http://orcid.org/0009-0004-3628-7717>

Publisher's Note: ÜNİVERSİTEPARK Limited remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.
