

Bridging Languages: The Potential and Limitations of AI in Literary Translation—A Case Study of the English Translation of *A Pair of Peacocks Southeast Fly*

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Abstract. This study examines the use of generative artificial intelligence (AI) in literary translation, based on a case study of the English translation of the Yuefu poem *A Pair of Peacocks Southeast Fly*. It highlights the strengths of large language models (LLMs) in efficiency, word choice, narrative, and emotional interpretation. However, it also recognizes their limitations in cultural conveyance, perspective transformation, and translator subjectivity. The paper argues that while AI is a valuable tool, human translators are indispensable due to their emotional depth, expertise, and cultural sensitivity. Future efforts should focus on improving human-AI collaboration and interactive negotiation to produce higher-quality translations, promoting the global spread of Chinese culture and wisdom.

Keywords: artificial intelligence, literary translation, potential, limitations, *A Pair of Peacocks Southeast Fly*

1. Introduction

As artificial intelligence advances, particularly in natural language processing, its capabilities in literary translation are becoming increasingly evident. AI translation technology, especially generative AI large language models (LLMs) based on deep learning, has demonstrated effectiveness in processing large amounts of text data and providing rapid translation solutions (Kizilcec et al., 2020). These technologies mimic human linguistic patterns to generate fluent and grammatically correct translations, thereby challenging the traditional translation industry. Literary translation, which facilitates cross-cultural exchange, is crucial not only for transferring linguistic content but also for capturing the source culture's essence, emotional resonance, and aesthetic artistry. This process necessitates a translator's profound understanding of language, cultural sensitivity, and artistic appreciation to ensure the charm of the original work is reproduced in the target language. Historically, it has been widely acknowledged that human translators possess unique and irreplaceable advantages in handling the complexity and subtlety of literary works, particularly in capturing the emotional nuances and cultural connotations of the original text (Nord, 1997). Literary translation is hailed as 'the last bastion of human translation' (Toral and Way, 2014, p. 174), distinguished by its linguistic refinement, artistic creativity, cultural embeddedness, and societal relevance (Wang, 2023). Literary language often employs symbolism, metaphor, and polysemy, with cultural elements and emotional expressions closely tied to specific cultural backgrounds. In the context of the digital intelligence age, whether AI translation technology can be applied to this 'last bastion' of literary translation and accurately render the cultural subtleties and emotional profundity it entails has become a significant concern in academia and translation practice.

Further, the research presented by Kenny and Winters (2020) emphasizes the impact of machine translation on the translator's voice. They explored how neural machine translation (NMT) affects the presence of the translator's voice in literary texts. The study found that the translator's voice, which reflects the translator's discursive presence and creative contribution, is diminished in texts that have been post-edited after machine translation. This reduction in the translator's voice raises ethical concerns about the homogenization of styles and the loss of individual nuances that human translators bring to literary works. Their empirical study, which involved comparing post-edited machine-translated texts with independently translated texts, highlighted the significant role human translators play in preserving the authenticity and depth of literary translations. This underscores the necessity of human intervention in the translation process to maintain the integrity and richness of the original literary works (Kenny & Winters, 2020).

Research by Hu Kaibao and Li Xiaoqian (2023), using corpus research methods, analyzed DeepL's performance in translating the first part of Shakespeare's play *Coriolanus* and the first, fourth, and fifth parts of *The Merchant of Venice* from English to Chinese. Their study found that DeepL performed commendably in these translations, with accuracy and fluency rates exceeding 80%, demonstrating the potential of neural machine translation in rendering literary works across distant languages. Furthermore, the study revealed that DeepL exhibited a degree of creativity in its application of translation methods, such as addition, clarification, transformation, and perspective shifts. However, due to limitations in its algorithms and training data, AI translation systems may not fully render and reproduce the deep meanings and cultural backgrounds of the original texts, nor can they adequately capture and represent the emotional depth and complexity of the originals.

Ge Song and Wang Ning (2024) argue that literary translation requires exceptional talent and is a form of re-creation that transcends cultures and languages, necessitating the translator's personal flair and sensitivity to cultural nuances. Wang Kefei (2024) asserts that while AI translation excels in translating scientific and technical texts, it still faces limitations in creativity and cultural sensitivity when dealing with literary works.

This study examines the English translation of the Chinese classical Yuefu poem *A Pair of Peacocks Southeast Fly* as the corpus text, aiming to explore the potential and limitations of AI translation technology in literary translation. During the period from May 1st to May 25th, 2024, this study utilized two large language models (ChatGPT/Kimi) to perform foundational translations. The instructions provided to the model were designed to elicit basic translation outputs, focusing on semantic accuracy and linguistic fluency. It is important to note that the performance of LLMs can vary depending on the version of the model, the date of access, and the specific prompts used. Therefore, the findings presented in this paper are contingent upon the conditions under which the translations were generated. By comparing translations by Xu Yuanchong, a renowned Chinese translator, and AI large language models, this paper seeks to evaluate AI's proficiency in handling the intricate linguistic structures, cultural connotations, emotional nuances, and narrative elements of literary texts. It aims to ascertain the viability of AI in the practice of literary translation. The findings of this study are expected to provide new insights into the practical aspects of literary translation and contribute theoretical and pragmatic directions for refining human-AI interactive negotiation competence (HAINC) and advancing human-AI collaborative translation frameworks that integrate human expertise with AI capabilities.

2. The Potential of AI in Literary Translation

2.1. Semantic Judgment

In literary translation, the speed and efficiency of AI translation systems constitute one of their primary advantages. AI large language models (LLMs), using advanced natural language processing (NLP) technologies, can quickly process and translate substantial volumes of text. This capability is especially valuable for long and structurally complex narrative poems or novels. *A Pair of Peacocks Southeast Fly*, which comprises 1,785 Chinese characters, exemplifies the rapidity of AI translation. Both ChatGPT and Kimi can render the entire poem in English within a minute. This remarkable speed is a testament to AI's impressive computational capabilities and refined algorithms. Through training with LLMs, AI can identify and store the specific vocabulary and usage of various languages, enabling it to accurately translate common cultural terms such as '府吏' (government clerk), '媒人' (matchmaker), and '夫婿' (husband). A more specific example can be seen in the following lines.

十五弹箜篌,十六诵诗书。

At fifteen, she plays the *harp*,

At sixteen, she recites poetry and classics. (ChatGPT)

At fifteen, she plays the *Konghou* (ancient Chinese harp),

At sixteen, she recites poetry and books. (Kimi)

In the translation process, AI demonstrates notable skill in identifying '箜篌' as a traditional Chinese musical instrument. It chooses either a direct translation or transliteration supplemented with an annotation, presenting it as 'harp' and 'Konghou' (ancient Chinese harp), both of which are contextually accurate.

When faced with semantic choices, AI adeptly integrates the narrative context to ascertain the appropriate meaning. For instance, the term '阿母' in Chinese can refer to a mother, a wet nurse, or an elderly woman. AI can quickly predict the specific identity indicated by the term '阿母' within various textual contexts. For example:

府吏得闻之,堂上启阿母。

When the official hears this, he opens up to *his mother*. (ChatGPT)

Upon hearing this, the clerk tells his mother in the hall. (Kimi)

上堂拜阿母,阿母怒不止

She bows to *his mother*, but his mother's anger does not subside. (ChatGPT)

She bows to *her mother-in-law*, whose anger does not cease. (Kimi)

兰芝惭阿母:“儿实无罪过。”阿母大悲摧。

Lanzhi bows to *her mother*: “I have committed no wrongdoing.”

Her mother is deeply grieved. (ChatGPT)

Lanzhi, ashamed, replies to *her mother*, “I have committed no crime.”

Her mother is devastated. (Kimi)

In the first two examples, ‘*阿母*’ denotes Lanzhi’s mother-in-law, specifically her husband’s mother. Both LLMs recognized this reference and precisely used ‘his mother’ or ‘her mother-in-law’ in their translations. This demonstrates that, despite the polysemous nature of ‘*阿母*’, the LLMs identified her role within the narrative context, leading to accurate semantic interpretation.

This proficiency highlights that LLMs, when faced with semantic decisions, can comprehend not only the denotation of individual words but also the broader storyline and contextual elements to render appropriate semantic judgments. Such a capability is essential for translating literary works, particularly classical texts rich in cultural nuances and intricate character dynamics. The ability to navigate these complexities is a hallmark of sophisticated AI translation technology, which holds significant promise for the future of literary translation practice.

2.2. Narrative Techniques

A Pair of Peacocks Southeast Fly is a quintessential example of a documentary narrative poem within *Yuefu* folk songs. The poem is prefaced by a brief introduction delineating the historical period, geographical setting, principal characters, authorship, and temporal context. In the initial verses, “At thirteen, she could weave plain cloth; at fourteen, she learned to tailor clothes; at fifteen, she played the harp; at sixteen, she recited poetry and scriptures,” the subject’s omission is adeptly managed by LLMs. They render it as “At thirteen, she can weave fine cloth; At fourteen, she learns to sew clothes; At fifteen, she plays the harp; At sixteen, she recites poetry and classics.” (ChatGPT), directly identifying Liu Lanzhi as the central figure, initiating the storytelling from a third-person perspective. This approach establishes the narrative viewpoint for the entire poem, enabling readers to grasp the story’s backdrop and adhering to the original’s linear narrative style.

The original poem has a complete beginning, development, climax, and conclusion. AI translations maintain the narrative’s integrity, including all necessary story parts. Furthermore, when translating classical poetry, especially narrative poems with dialogues and soliloquies, the conversion between direct and indirect speech is crucial for preserving the emotional intensity and natural communication of the original work. The AI models have shown sensitivity and capability in handling these linguistic features. For example:

府吏得闻之,堂上启阿母:“儿已薄禄相,幸复得此妇...”

Upon hearing this, the clerk tells his mother in the hall: “I have a humble fate; Fortunately, I got this wife...” (Kimi)

This dialogic translation approach ensures the narrative’s fluidity, enabling readers to immerse themselves in the dynamic interplay and emotional exchanges between the characters. AI has skillfully fulfilled the criteria of linear narrative techniques in its rendition of this poem. It meticulously structures the content in a chronological sequence, safeguarding the narrative’s coherence and causality, and underscores the story’s completeness.

The shift between direct and indirect speech of AI translation reflects a profound sensitivity of LLMs to the emotional landscape and contextual nuances of the original text. Additionally, it showcases AI’s adaptability to the conventions of the target language. This dual capability provides readers with clear narrative threads and a richly textured emotional experience, bridging the cultural and temporal gap between the source material and its modern audience. The translation’s fidelity to the source while navigating the complexities of language and emotion highlights AI’s evolving role in literary translation. It underscores AI’s potential to contribute meaningfully to the field, offering new avenues for scholarly exploration and practical application in translating literary works.

2.3. Emotional Expression

A Pair of Peacocks Southeast Fly is renowned for its profound emotional depth and delicate narrative technique, recounting the tragic love story of Jiao Zhongqing and Liu Lanzhi. It is imbued with deep contemplation on love, family, loyalty, and struggle. In translating this ancient Chinese poem, AI, through its robust capabilities in language generation and comprehension, effectively conveys the emotional hues present in the original poem.

AI can accurately identify and transform emotional vocabulary during the translation process. For instance, ‘*贱妾留空房*’ is rendered as ‘left alone in an empty room’ (ChatGPT), as the word ‘*留*’ primarily evokes a sense of passivity and desolation, suggesting that Liu Lanzhi is left in the empty room out of compulsion or resignation, rather than by choice. The term ‘left alone’ aptly communicates the emotion and artistic imagery of the original text.

‘*阿母得闻之,槌床便大怒*’ is translated as ‘Hearing this, his mother becomes furious.’ where the term ‘furious’ vividly portrays the domineering and irate character of Jiao Zhongqing’s mother, making it easier for readers of the target language to perceive this character.

When translating the narrative parts of the poem, AI can grasp the rhythm of the story’s development and the fluctuations of emotion. By employing appropriate sentence structures and lexical choices, it effectively conveys the emotional essence of the original poem. For example:

君当作磐石,妾当作蒲苇,蒲苇纫如丝,磐石无转移。

You will be my rock, and I will be your reed. Reeds bend like silk threads, but rocks never waver. (ChatGPT)

The AI's translation of this verse reflects the profundity of the original's emotional expression. By likening the husband to 'my rock' and the wife to 'your reed', the translation conveys a perspective of love that is steadfast and enduringly flexible. The rock symbolizes strength and invincibility, while the reed represents flexibility and adaptability. The phrase 'Reeds bend like silk threads' communicates the wife's resilience and adaptability within the relationship, suggesting that she remains unyielding even in the face of adversity and challenges. Conversely, 'But rocks never waver' conveys the husband's unwavering and eternal commitment to his wife. The use of 'you will be' and 'I will be' establishes a relationship of mutual promise and reliance, illustrating the complementarity and balance of the couple's emotions. The metaphor of the rock and reed also conveys a strong emotional connection that transcends time and space, pointing to a more natural and enduring bond. Finally, the translation leverages the immediacy of emotion through direct metaphors like 'rock' and 'reed', enabling readers to quickly grasp the emotional imagery intended by the verse, thereby effectively communicating the original's emotional essence across cultural boundaries.

It is evident that AI translation can remain faithful to the emotional depth of the original text and, through apt metaphors and concise, powerful language, effectively convey the unwavering love and commitment between husband and wife. This approach allows the emotional expression of the original text to be fully realized in English and provides the target-language readers with a delicate emotional experience.

3. Limitations of Artificial Intelligence in Literary Translation

3.1. Expression of Cultural Connotations

Artificial Intelligence (AI), particularly large language models, has demonstrated impressive proficiency in modern linguistic processing. However, the translation of ancient Chinese texts presents these models with considerable challenges. While AI can handle basic grammatical and lexical transitions, it reveals a significant gap in understanding the cultural subtleties inherent in ancient Chinese society and the nuances of language use within that context. Consider, for example, the translations of the following verses:

贱妾留空房,相见常日稀。

With his *lowly wife*, left alone in an empty chamber,
Their meetings become increasingly rare. (ChatGPT)

As a *lowly concubine*, she is left in the empty room, seeing him only occasionally. (Kimi)
You're an official far away; I toil as *housewife* night and day. (Xu Yuanchong)

三日断五匹,大人故嫌迟。

Three days to weave five lengths of cloth,
The *master* complains it's too slow. (ChatGPT)
She weaves tirelessly into the night, cutting five bolts in three days,
Yet the *master* still complains of her slowness. (Kimi)
I've finished five rolls in three days, Yet I am blamed for my delays. (Xu Yuanchong)

These translations illustrate the deficiencies of AI in capturing cultural connotations. The term '贱妾' a modest term used by wives in ancient Chinese culture, represents not only the wife's humble self-representation but also embodies her respect and obedience to her husband and his family. This term reflects the family ethics of ancient society and the status of the wife within the household. However, two major LLMs directly translate '贱妾' as 'a lowly wife' or 'a lowly concubine', overlooking this cultural connotation. Translation is not only a linguistic transformation but also a representation of culture. The term 'lowly' in English usually carries a derogatory connotation, giving an impression of low status and insignificance. Such a translation may mislead target-language readers about the original text and thus create a negative impression of the cultural values it carries. In contrast, Xu's use of the straightforward pronoun 'I' and the term 'housewife' effectively bridges the gap in cross-cultural communication, facilitating a wider appreciation of Chinese classics overseas.

Similarly, in the translation of '大人故嫌迟', Xu did not translate '大人' word-for-word but used a passive construction 'I am blamed for my delays' to highlight the inner grievances of Liu Lanzhi. Combined with the following sentence, '妾不堪驱使,徒留无所施' (If Mother thinks I am no good, what use to stay although I would?), it is shown that he tactfully interpreted '大人' as 'Mother', taking into account the cultural backdrop and cognitive patterns of the target audience to ensure fidelity to the original text and relevance to the narrative of the ancient poem. These two LLMs, however, both directly translated it as 'master', failing to fully capture that '大人' is a specific term of respect for elders in ancient Chinese society, rather than a status or identity. This reflects that AI still lacks sensitivity and comprehension to the distinctive cultural elements.

Further examples include the translation of '新妇'. '新妇' in the late Han Dynasty was a general term for married women, not specifically referring to a newlywed wife. AI's neglect of these specific cultural connotations results in inaccurate translations.

Additionally, ‘初七及下九’ is another case in point, which should not be simply translated as ‘the seventh and ninth days’. The cultural significance of these dates is profound: ‘初七’ refers to the seventh day of the seventh lunar month, traditionally a time when women prayed for skillful hands on that evening, while ‘下九’ refers to the nineteenth day of each month, not ‘初九’ (ninth day), which was a day for women to gather and have fun in ancient China, especially in the Han Dynasty. Xu, well-versed in these cultural nuances, ingeniously translated it as ‘When maidens hold their festive day’, whereas AI simply perceived it as two discrete dates. This suggests that AI still exhibits significant shortcomings in comprehending and conveying cultural connotations, especially when dealing with terms and expressions steeped in a deep historical and cultural heritage. Its cultural acuity is notably lacking.

3.2. Narrative Perspective Shifts

The poem *A Pair of Peacocks Southeast Fly* encompasses numerous dialogues, which can be primarily categorized into ‘husband-wife dialogues’ ‘mother-son dialogues’ ‘sisters-in-law dialogues’ ‘mother-in-law and daughter-in-law dialogues’ ‘mother-daughter dialogues’ and ‘brother-sister dialogues’. Among these, the ‘husband-wife dialogues’ run through the entire text, with the plot unfolding layer by layer within these dialogues. Each segment of dialogue involves a shift in perspective, and human translators typically adjust the viewpoint flexibly according to the context and the plot development, making the translation more natural and fluent. However, AI, such as ChatGPT, is constrained by its training data and algorithms, often appearing mechanical and rigid in perspective shifts. It may fail to adjust the viewpoint flexibly in response to changes in context and the surrounding text, leading to translations that come across as awkward or unnatural in expression.

For example:

妾不堪驱使,徒留无所施。便可白公姥,及时相遣归。

The humble wife cannot bear to be driven, left with nothing to do. If you could speak to the elder lady, send me home in time. (ChatGPT)

Unable to bear the harsh treatment, she has no place here. She should inform her parents-in-law to send her back in time. (Kimi)

Will you come and to Mother say, send me back home straightaway? (Xu Yuanchong)

上堂拜阿母,阿母怒不止。“昔作女儿时,生小出野里,…”

She bows to his mother, but his mother’s anger does not subside: “When you were a girl, born in a humble village,…” (ChatGPT)

She came to his mother in the hall, who said no tender words at all. “While young, before I was a spouse, I lived but in a country house.” (Xu Yuanchong)

府吏还家去,上堂拜阿母:“…命如南山石,四体康且直!”

The clerk returns home and bows to his mother, “...My life is like the stone of the southern mountain, my body is healthy and straight!” (Kimi)

Jiao Zhongqing went home full of gloom, he went straight to his mother’s room. “...May you like hillside rock live long, with your four limbs both straight and strong!” (Xu Yuanchong)

Upon comparing the above-mentioned translation versions, it can be seen that AI has certain limitations in recognizing character roles and establishing narrative perspectives. Firstly, regarding character recognition, in the initial husband-wife dialogues, Xu’s translation ‘Will you come and to Mother say’ clearly conveys the wife’s request to her husband. This not only reflects the direct dialogue and emotional dependency between the characters but also indirectly indicates their familial status. In contrast, ChatGPT’s translation ‘If you could speak to the elder lady,’ while also depicting a spousal conversation, conflicts with the third-person narrative established in the preceding text. This illustrates that artificial intelligence lacks logical consistency and sensitivity in sorting out character relationships and role transitions.

Secondly, the setting of the narrative perspective. In the dialogue between the mother-in-law and daughter-in-law, the original text features the wife explaining her life experience to her mother-in-law. However, in the translation by ChatGPT, this narrative perspective is blurred, failing to recognize that it is the wife who is speaking. In contrast, Xu’s translation, ‘While young, before I was a spouse,’ clearly delineates this logical relationship, showcasing the clarity and logic of the narrative perspective.

In the mother-son dialogue, Kimi translates ‘命如南山石,四体康且直’ as ‘My life is like the stone of the southern mountain, my body is healthy and straight!’ This translation does not grasp that this is Jiao Zhongqing expressing his personal sorrow, despair, and the intention to commit suicide to his mother, and wishing her good health and longevity. Kimi’s translation erroneously links the concepts of ‘fate’ and ‘body’ with Jiao Zhongqing’s own state, leading to inaccuracies in the character relationships and the storyline. In contrast, Xu’s translation employs the typical structure of expressing a wish, ‘May you like’ using ‘you’ to clearly direct the wish towards the mother, facilitating comprehension for readers of the target language.

3.3. Translator Subjectivity

Poetry, as an art form highly condensed in language, rich in rhythm, and expressive in emotion, involves translation that transcends mere linguistic conversion to encompass the conveyance of cultural, emotional, and aesthetic values. The language of poetry often

possesses a unique rhythm, meter, and symbolic meaning that may be challenging to be fully reproduced in cross-linguistic transformation. Consequently, the subjectivity of the translator is crucial in the process of poetic translation; the translator functions not only as a linguistic intermediary but also as a storyteller and an emotive communicator. Translators must possess proficient linguistic skills, keen cultural perception, and rich artistic imagination to bridge the gap between different languages and cultures, thereby conveying the rhythm, emotion, and aesthetic values of poetry to the target-language readers as effectively as possible.

A Pair of Peacocks Southeast Fly, an ancient Yuefu poem, exhibits formal linguistic features in addition to its content, such as the requirement for consistent or corresponding line lengths and structures to form antithesis. For instance, in the lines ‘孔雀东南飞，五里一徘徊’，‘五里’ and ‘徘徊’ not only form an antithesis in word count but also resonate in artistic conception, depicting Lanzhi’s reluctance and attachment during parting. The poem employs a relatively free rhyming technique, with every two or four lines forming a rhyming unit, enhancing the musicality and rhythm of the poem. Additionally, ancient Chinese poetry pays attention to the harmonious combination of tonal patterns, which this poem utilizes to adjust the rhythm and charm of the lines. Repetition of characters is another common rhetorical device in *Yuefu* poetry, enhancing the expressiveness of the language. This poem uses numerous continuous and repeated words to depict the characters’ appearance, movements, and emotions, enriching the lines with imagery and euphony, thereby enhancing the reader’s experience. For instance, ‘伶俜萦苦辛’ depicts the lonely and hardworking appearance of Lan Zhi, while ‘徘徊庭树下’ eloquently captures the despair and agony that gripped Zhongqing before his suicide.

As a *Yuefu* poem with distinct prosodic features, the translation of this poem is a considerable test of the translator’s subjectivity. Large language models, which are fundamentally statistical machine learning methods, typically produce data-driven translation outputs that lack personalized and creative expression. Xu posits that translation is the creation of beauty, and poetic translation should achieve beauty in sound, meaning, and form (Xu, 2003). Beauty in sound refers to the reproduction of the source text’s phonetic qualities, including rhyme, rhythm, and other factors. Xu particularly favors the /d/ rhyme. In the 357 lines of this poem, more than 64 lines feature /d/ as the end rhyme, accounting for over one-sixth of the entire poem. Additionally, he translated the entire poem into lines with double, quadruple, or octuple repeated rhymes (Jia & Li, 2016:138). The beauty of sound is mainly reflected in rhyme and rhythm. For example, in Xu’s translation, ‘Flying southeast; At each mile, they look back and cry,’ the rhyming technique in English is utilized, with ‘fly’ and ‘cry’ forming an end rhyme, imitating the rhyming effect of the original poem.

Furthermore, Xu’s translation enhances the poem’s rhythm through parallelism and repetition. For example, in ‘鸡鸣入机织，夜夜不得息’ (At daybreak I begin to weave; At night the loom I dare not leave.), ‘At daybreak’ and ‘At night’ form a temporal parallel, while ‘I begin to weave’ and ‘I dare not leave’ form an action parallel, illustrating Lanzhi’s daily toil. Xu employs parallelism to handle the repetition in the original text. In another instance, during the scene where Lanzhi bids farewell to her family, ‘勤心养公姥，好自相扶将’ is translated as ‘Take good care of your mother old, And take good care of your household!’. By repeating ‘take good care’, Xu effectively conveys Lanzhi’s concern and reluctance to part with her family, heightening the emotional impact of the farewell.

Beauty in meaning refers to the translation conveying the artistic conception and emotions of the original poem. For example, Xu’s translation of ‘新妇初来时，小姑始扶床’ as ‘When your brother and I were wed, you came around our nuptial bed’ skillfully infuses a scene of a child holding onto the bed with vivid emotional colors. The wedding bed symbolizes the inception of the couple’s shared life, a symbol of the interweaving of love and kinship. By mentioning the wedding bed, Xu illustrates the tenderness of the newlyweds and their aspirations for the future, which starkly contrasts with their present plight. Regarding the poem’s opening line ‘孔雀东南飞’，while AI might render it as a mere directional statement, Xu employs symbolic enrichment to enhance the depth of meaning, transforming it into ‘A pair of peacocks southeast fly’. The image of peacocks flying southeast is an implicit symbol within traditional Chinese culture, where paired animals frequently denote spouses or partners, resonating with the poem’s overarching theme of marital separation. Moreover, the phrase ‘look back and cry’ not only depicts the peacocks’ reluctance to part but also, with the word ‘cry’，alludes to the story’s impending tragic conclusion. This layering of meaning and symbolism exemplifies the translator’s ability to transcend mere linguistic transfer, infusing the translation with the rich emotional and cultural resonance of the original text.

Beauty in form primarily encompasses aspects such as the length of sentences, the number of lines, the arrangement of lines with varying lengths, repetitive patterns, and well-matched antithesis. When translating this poem, Xu meticulously embodies the beauty in form of the poem, encompassing the aesthetic qualities of its form and structure. Firstly, he employs antithetical and parallel structures, such as ‘At fifteen to play music light; At sixteen to read and to write. At seventeen to you I was wed...’ to enhance the rhythm and meter of the translation, thereby recreating the musicality of the original poem in English. Secondly, he pays attention to the combination of long and short sentences in the translation, ensuring that the rhythm of the English text resonates with that of the original poem. For instance, he uses short sentences to express the urgency of emotions, like ‘At daybreak I begin to weave; At night the loom I dare not leave’. These short sentences convey the tension and busyness of Lanzhi’s daily life.

Additionally, he maintains the number of lines in the original poem, helping the English translation visually mirror the layout of the original, aiding readers in perceiving the structure of the original. Furthermore, in his translation, Xu varies the length of lines and pauses to simulate the rhythm and meter of the original poem, allowing the English translation to reflect the rhythmic beauty of the original when read aloud.

Based on the above analysis, it can be seen that while large language models can provide fluent linguistic transformations in the translation of poetry, they lack the key elements that reflect the translator's subjectivity. These elements include creativity, emotional resonance, cultural awareness, aesthetic judgment, the translator's style, and the capacity for innovation, etc. Translating poetry is a creative endeavor that demands the translator's full commitment, requiring continuous exploration between fidelity and freedom in pursuit of the highest realm of translation. AI cannot truly comprehend and convey the deep emotions of poetry, lacks profound insight into cultural differences, and is unable to engage in subjective aesthetics and strategic translation choices. Therefore, despite some explicit advantages, AI, to a large extent, cannot fully replace the subjectivity and artistry displayed by human translators in literary translation.

4. Conclusion

The exploration of artificial intelligence's role in literary translation has unveiled a complex interplay between technological prowess and the nuanced demands of poetic expression. While AI has demonstrated remarkable capabilities in information processing speed, semantic judgment, and narrative technique, its limitations in capturing the richness of cultural connotations, the intricacies of narrative perspective shifts, and the translator's subjectivity are equally apparent. The empirical analysis of AI translations compared with those of renowned translator Xu Yuanchong has highlighted the profound gap between data-driven outputs and the depth of human understanding and creativity.

As the field of literary translation stands at the crossroads of technological advancement and artistic preservation, the future lies not in the binary of replacement but in the harmony of collaboration between human and machine. In literary translation practice, it is advisable to adopt a human-AI collaborative model, utilizing the high efficiency and accuracy of AI translation technology, while integrating human translators' post-editing based on emotional experience, professional literacy, and cultural sensitivity, to more accurately and efficiently introduce the aesthetic characteristics, philosophical wisdom, and cultural values of Chinese classical literature to the world.

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