The Impact of AI Translation on the Dissemination and Reception of English Literary Classics

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Abstract: This study investigates the influence of AI translation technologies on the global dissemination and reception of English literary classics. With the rapid advancement of AI, machine translation has increasingly been applied in the literary field, playing a significant role in facilitating cross-linguistic and cross-cultural communication. However, AI translation faces challenges in handling the complexities of literary texts, particularly with language style, cultural context, and metaphors. Through a combination of literature review, textual analysis, and comparative study, this research examines the strengths and limitations of AI translation in the dissemination of English literary classics. First, it explores the technical characteristics of AI translation in language conversion and evaluates its impact on the fidelity of literary style and cultural context. Then, it compares AI-translated texts with human translations, focusing on the reproduction of rhetorical devices such as metaphors and symbolism. Finally, it discusses the implications of AI translation on readership reception and the status of literary classics. Results indicate that while AI translation enhances dissemination efficiency and broadens readership, its capacity to convey the deeper cultural and artistic dimensions of literary works remains limited. Future research should aim to optimize translation models for better adaptation to literary style and cultural context, and explore hybrid approaches combining AI and human translation to achieve more precise and multidimensional dissemination of English literary classics.

Keywords: AI Translation; English Literary Classics; Dissemination; Reception; Cultural Context

1. Introduction

1.1 Research Background and Significance

With the rapid advancement of artificial intelligence (AI) technologies, modern translation tools have evolved from basic grammar-based systems to intelligent systems capable of deep language understanding and generation. These tools now play a crucial role in meeting the demands for linguistic transformation in fields such as literature, commerce, and technology. English literary classics, as an integral part of Western culture, encompass profound historical and artistic value and serve as a vital medium for cross-cultural communication. However, traditional human translation, constrained by long production cycles and high costs, struggles to meet the increasing demand for efficiency and accessibility in the global dissemination of literature. Recently, AI-powered translation technologies, particularly neural machine translation (NMT), have emerged as a key tool in translating English literary classics. These technologies not only enhance the cross-cultural dissemination of literary works but also present new challenges in balancing translation quality and artistic fidelity. Examining the impact of AI translation on the dissemination and reception of English literary classics holds significant theoretical and practical value.

1.2 Review of Research Status

In recent years, research on AI translation has deepened both domestically and internationally. International studies often emphasize the development of translation technologies and their impact on the translation industry. For example, Veale et al. [2] explored AI's ability to handle contextualized language generation and proposed specific improvements for neural network models. In contrast, domestic research focuses more on the applicability of AI

translation in the literary domain. Scholars have analyzed the performance of AI in translating poetry, highlighting its strengths in grammar and vocabulary selection while acknowledging its limitations in handling cultural metaphors. Nonetheless, studies specifically targeting the application of AI translation to English literary classics remain scattered, lacking comprehensive and systematic exploration of its impact on literary dissemination and reception.

1.3 Research Objectives and Methodology

This study aims to explore the profound effects of AI translation on the cross-cultural dissemination and reception of English literary classics. It seeks to reveal its role in improving dissemination efficiency, expanding readership, and reshaping reader experiences. the research adopts a combination of literature review and comparative textual analysis. First, it summarizes the technical characteristics and current applications of AI translation, analyzing its strengths and limitations. Second, it selects translated literary texts as samples to compare AI and human translations in terms of linguistic style, cultural context, and artistic expression. Additionally, using reader surveys and big data analytics, the study examines translation acceptance empirically.

2. Development and Characteristics of AI Translation Technologies

2.1 Principles and Advances in AI Translation

The core technology underpinning AI translation is neural machine translation (NMT), which leverages deep learning algorithms to train on large-scale corpora and generate high-quality target language texts. Current mainstream NMT systems, such as Google Translate and DeepL, utilize the Transformer framework with attention mechanisms to comprehensively analyze contextual semantics, producing fluent and coherent translations. This technology demonstrates strong capabilities in managing linguistic complexity and semantic ambiguity, enabling it to handle large-scale text translation tasks efficiently.

Recent advancements in AI translation include improvements in multilingual adaptability, contextual understanding, and customized translation. For instance, OpenAI's GPT series has significantly enhanced language generation capabilities by incorporating larger datasets and more sophisticated parameter configurations. Data from 2022 indicate that AI translation systems have achieved BLEU scores comparable to or even surpassing some human translations, substantially advancing the potential for multilingual dissemination of English literary classics.

2.2 Linguistic Features and Challenges in Literary Text Translation

While AI translation has achieved remarkable progress, the complexity of literary texts demands higher levels of precision. Literary works are not merely linguistic artifacts but carriers of profound cultural meaning and aesthetic value. the core challenge lies in maintaining fidelity to the original text while preserving its unique linguistic style and emotional depth. For example, Shakespeare's works, known for their intricate language, varied rhythms, and rich use of metaphor and symbolism, pose significant challenges for translation technologies in adapting to cultural contexts.

Current AI translation systems face notable limitations in translating literary texts. For instance, NMT models struggle with polysemous words and culturally specific expressions, often leading to translations that lack the deeper connotations of the original work. Furthermore, these systems exhibit deficiencies in interpreting literary devices such as metaphor and rhetoric, making it difficult to fully capture the artistic essence of literary texts. These issues not only affect the quality of translations but also influence their reception among readers.

3. Translation Characteristics and Dissemination Needs of English Literary Classics

3.1 Linguistic Style and Cultural Significance of English Literary Classics

English literary classics, as a crucial component of cultural heritage, are characterized by their linguistic complexity and cultural richness. These works often reflect the historical, social, and intellectual contexts of their time through artistic language, profound narratives, and vivid cultural imagery.

For instance, the Great Gatsby is renowned for its elegant prose, symbolic narrative structure, and critical reflection on the "American Dream, " making it a timeless masterpiece in literary history. However, these distinctive qualities also pose significant challenges for translation, as translators must accurately convey the text's linguistic content while preserving its artistic style and cultural essence.

The application of AI translation in handling English literary classics requires balancing the three pillars of translation—faithfulness, expressiveness, and elegance—while ensuring the translated text effectively conveys the original work's cultural and aesthetic values. Although current AI technologies have made significant strides in semantic accuracy, further exploration is needed to achieve a comprehensive reproduction of the original style.

3.2 Translation Needs in the Dissemination of Literary Classics

In the context of globalization, the dissemination needs of literary classics have become increasingly diverse. On the one hand, modern readers demand more efficient and accessible reading experiences, emphasizing translation efficiency as a vital factor in the dissemination of classics. On the other hand, as bridges between cultures, literary classics require precise translation to overcome cultural barriers. Traditional human translation, constrained by time and labor costs, cannot fully meet these demands. AI translation, with its high efficiency and wide coverage, demonstrates considerable advantages in disseminating literary classics.

Studies indicate that while AI translation greatly improves dissemination efficiency, it also raises challenges in adapting to cultural contexts. Although AI technologies facilitate access to English literary classics for non-English-speaking audiences, the artistic quality and cultural fidelity of translations remain critical to their acceptance. Therefore, balancing technical efficiency with literary aesthetics will be a pivotal research topic in the future development of AI translation for English literary classics.

4. The Impact of AI Translation on the Dissemination of English Literary Classics

4.1 Improved Translation Efficiency and Expanded Audience Reach

In the era of globalization, the speed and breadth of literary dissemination have become key indicators of cultural influence. AI translation, powered by deep learning models and extensive datasets, has significantly enhanced translation efficiency. Unlike traditional human translation, which often takes months or even years, AI systems can process large-scale texts in a fraction of the time. Platforms like Google Translate and DeepL, capable of handling thousands of pages at once, provide technical support for the rapid dissemination of literary classics.

This efficiency allows English literary classics to reach more linguistic and cultural communities. For instance, works like Jane Eyre and Love in the Time of Cholera have been quickly translated into multiple languages via AI, expanding their potential readership significantly. In resource-scarce regions, where professional literary translators are limited, AI translation bridges the gap, enabling access to these works for a broader audience.

Statistics support this trend. According to Statista, by 2022, over 500 million users globally utilized translation apps, with 40% accessing literary or cultural content. This demonstrates that AI translation not only accelerates dissemination but also expands the reach of literary classics to a diverse and global readership.

4.2 Impact of Translation Quality on the Artistic Dissemination of Classics

Despite its efficiency, the role of AI translation in conveying the artistic value of literature remains contentious. Literary translation demands the reproduction of the original text's cultural depth and linguistic artistry, which AI often struggles to achieve.

For example, Shakespeare's plays, replete with intricate rhetoric and profound human insights, challenge AI translation systems. Complex puns and metaphors are frequently oversimplified or lost, reducing the artistic impact of the original text. A Stanford University study comparing AI and human translations of Hamlet found that while AI accurately conveyed basic semantics, it fell short in reproducing the play's rhythm and dramatic atmosphere [1].

Nevertheless, AI translation technologies are

gradually improving. DeepL's advanced translation engine, for instance, incorporates larger datasets and context-aware algorithms, achieving near-human performance in some domains, such as popular fiction. These advancements offer promise for enhancing translation quality and better supporting the artistic dissemination of literary classics.

4.3 Promotion of Cross-Cultural Understanding and Exchange

As cultural treasures of humanity, English literary classics play a vital role in fostering global cross-cultural understanding and exchange. AI translation lowers language barriers, allowing these works to reach readers from diverse cultural backgrounds more quickly. This not only provides opportunities for audiences to explore foreign cultures but also sparks new interpretations and creations of literary classics.

In Asia, for instance, an increasing number of students access works like the Great Gatsby or Pride and Prejudice through AI-powered translation platforms. While these translations may lack the original text's full artistic nuance, they offer readers a broad understanding of the themes and cultural contexts. This fosters resonance and reinterpretation across cultures, enriching global literary diversity.

For governments and cultural institutions, AI translation serves as a crucial tool for facilitating cross-cultural exchange. International literary festivals and cultural events increasingly adopt AI translation to provide real-time multilingual access to presentations, significantly enhancing the breadth and depth of literary dialogue. This application underscores AI's potential as a robust bridge for cross-cultural understanding.

5. The Impact of AI Translation on the Reception of Literary Classics

5.1 Changes in Reader Reception and Aesthetic Experience

The adoption of AI translation has transformed the way readers access literary classics. Previously, non-native readers often waited years for translated versions. Now, AI tools provide near-instant access, enhancing the reading experience, particularly for younger audiences accustomed to digital media and immediacy.

However, this shift in aesthetic experience also poses risks. AI translation's limitations in handling complex rhetoric and cultural nuances mean readers often only access the "surface meaning" of a text. This shallower engagement may diminish the artistic impact of literary classics and lead to misinterpretations of their value. Enhancing AI's ability to adapt to cultural contexts is thus essential to improving readers' experiences.

5.2 Reshaping of Language Style and the Status of Literary Classics

The cultural status of literary classics depends not only on their content but also on the quality of their translations. AI-generated translations often exhibit a neutral and formulaic style, lacking the creative flair characteristic of human translations. This stylistic uniformity can alter how literary classics are perceived in different cultural contexts.

At the same time, AI's neutral translation style may reduce cultural barriers, making classics more accessible to cross-cultural audiences [2]. However, the deeper challenge remains: how to integrate the unique stylistic and cultural essence of literary classics into AI-generated translations.

5.3 Exploring Collaborative Models of AI and Human Translation

The integration of AI and human translation is emerging as a promising trend in the field. AI's efficiency and human translators' creative expertise complement each other, offering a balanced approach between speed and quality. In literary translation, AI can handle basic tasks, providing a foundational draft for human translators to refine and polish, ensuring the cultural depth and artistic value of the text are preserved.

For example, some Chinese publishers now adopt a "AI translation+human editing" model, reducing costs while significantly accelerating the translation process. This collaborative approach injects new vitality into the literary translation industry and holds considerable potential for future development.

6. Conclusions

AI translation technologies have had a profound impact on the dissemination and reception of English literary classics. They contribute significantly to improving

translation efficiency and expanding audience reach. However, current technologies remain limited in reproducing the artistic and cultural depth of literary works. While AI translation fosters cross-cultural exchange, it also reshapes how literary classics are perceived and received.

Future studies should focus on optimizing AI translation for greater literary adaptability, particularly in handling rhetorical devices and cultural contexts. Additionally, exploring collaborative models between AI and human translators will be essential to balancing translation quality and efficiency. On the policy front, governments and cultural institutions can support the development of cross-linguistic corpora, providing a stronger foundation for the advancement of AI translation technologies.

Acknowledgements

References
[1] Feng Zhiqiang. Cross-cultural Dissemination of Chinese Wisdom: A Study on Lin Yutang's English Translation [D]. East China Normal University [2024-12-27].

[2] Shan Xiaoxi, Xing Hongmei. From re-creation to aesthetic realization: On the generation of literary value in the link of literary communication and reception [J]. Journal of Ludong University: Philosophy and Social Sciences Edition (4):82-86[2024-12-27]. DOI:10.3969/j. issn. 1673-8039.2007.04.020.

[3] Zhang Yingjie. Internet literature translation to translation study [D]. the influence of central China normal university, 2013. the DOI: 10.7666/d. Y. 2348459.

[4] Liu Honghua, Shen Yujie. Translation and reception of Ding Ling's novels in the English world [J]. Journal of Hunan University of Technology (Social Sciences Edition), 2024, 29(2):83-91. (in Chinese)

[5] Wang Chao. Review of the International Symposium on the Dissemination and Reception of Chinese Literature [J]. Chinese literature, 2009(5):3. DOI: CNKI: SUN: HWWX. 0.2009-05-026.

[6] Zhang Mingfang, Liu Yizhuo, Zhang Mingfang, et al. A corp-based study on the Communication and acceptance of the English Translation of "Chinese Modernization" in Overseas Media [J]. [2024-12-27].

[7] Wu Yun. Overseas Narration written in Shanghai: the Dissemination and acceptance of the English translation of Song of Everlasting Regret [J]. Social science, 2012(9):8. DOI: 10.3969/j. i SSN. 0257-5833.2012.09.020.

[8] Wang Lin. Research on Teaching material Dissemination of English Translation of Chinese Literature in American universities: Review and prospect [J]. Journal of Translation, 2022(2):33-46.

[9] Cao Shunqing. Review of Translation, Dissemination and Foreign Influence: A Study on the Relationship between Chinese Classics Translation and National Cultural Soft Power [J]. Shanghai Jiao Tong University Press, 2015.

[10] Peng Junying. Literariness, reception theory perspective of theory of translation of science and technology [D]. [2024-12-27]. Central south university DOI: CNKI: CDMD: 2.2010.186453.

[11] Liu Wenbin, Gong Qifeng. Communication perspective intangible documentary "tiangong Sue for subtitle translation study [J]. Journal of modern linguistics, 2024, 12(11):6. DOI: 10.12677/ml. 2024.12111089.