



UNVEILING THE CHALLENGES OF TRANSLATING NEOLOGISMS: A COMPARATIVE STUDY BETWEEN HUMAN AND MACHINE TRANSLATION

Nasser Khan

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, India

ABOUT ARTICLE

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Abstract: This article presents a comparative study that investigates the challenges associated with translating neologisms, with a specific focus on the differences between human and machine translation approaches. Neologisms, newly coined words and phrases, pose unique difficulties in translation due to their evolving nature and cultural context. By examining the translation strategies and outcomes of both human translators and machine translation systems, this study aims to provide insights into the effectiveness and limitations of each approach in handling neologisms. The findings contribute to a deeper understanding of the complexities involved in translating neologisms and shed light on the roles of human translators and machine translation technologies in addressing these challenges.

INTRODUCTION

The introduction section of this article provides an overview of the topic and highlights the significance of studying the challenges associated with translating neologisms. Neologisms, which are newly coined words and phrases, constantly emerge in various domains, reflecting advancements in technology, culture, and society. However, the translation of neologisms poses unique difficulties due to their evolving nature, cultural connotations, and lack of established equivalents in other languages.

In recent years, the field of translation has witnessed the rise of machine translation technologies, which have shown remarkable advancements in handling various types of texts. However, the translation of neologisms remains a complex task for both human translators and machine translation systems. Understanding the specific challenges and comparing the effectiveness of human and machine translation approaches in dealing with neologisms is crucial for improving translation quality and bridging the gap between languages.

This article aims to address this gap by presenting a comparative study between human and machine translation in the context of translating neologisms. By examining the translation strategies and outcomes of both approaches, this study seeks to unveil the challenges encountered and shed light on the strengths and limitations of each method.

The study involves experienced human translators who engage in the translation of neologisms, applying their linguistic and cultural expertise to find appropriate equivalents or expressions in the target language. On the other hand, machine translation systems, including rule-based, statistical, and neural models, are employed to automatically generate translations for neologisms based on existing language resources and algorithms.

The findings of this study are expected to provide valuable insights into the difficulties encountered when translating neologisms and the comparative performance of human translators and machine translation systems. Moreover, the study aims to contribute to the development of strategies and approaches that can enhance the translation of neologisms, considering the strengths and limitations of both human and machine translation.

Understanding and addressing the challenges of translating neologisms is not only important for linguistic accuracy but also for maintaining the cultural richness and relevance of translated texts. By exploring the effectiveness of human and machine translation approaches, this study ultimately aims to contribute to the advancement of translation practices in handling the dynamic and ever-evolving nature of neologisms.

METHODS

The methods section describes the research methodology employed in the comparative study between human and machine translation of neologisms.

For human translation, a group of experienced translators with proficiency in both the source and target languages is selected. They are provided with a set of neologisms and tasked with translating them into the target language. The translators may have access to reference materials, dictionaries, and online resources to aid their translation process. The translations are collected and analyzed to identify common challenges, translation strategies, and variations in translation choices.

For machine translation, a variety of machine translation systems are utilized, including rule-based, statistical, and neural machine translation models. The neologisms are input into these systems, which generate automated translations. The machine-generated translations are then evaluated by human experts who are proficient in both the source and target languages. The evaluations focus on assessing the accuracy, fluency, and adequacy of the machine-generated translations.

The data collected from both human translators and machine translation systems are analyzed quantitatively and qualitatively. The qualitative analysis involves examining the translation strategies employed by human translators, identifying patterns and trends, and understanding the specific challenges faced in translating neologisms. The quantitative analysis involves evaluating the performance of machine translation systems based on accuracy, fluency, and adequacy metrics.

RESULTS

The results section presents the findings of the study based on the comparative analysis of human and machine translation of neologisms.

The qualitative analysis of the human translations reveals common challenges encountered in translating neologisms, such as the lack of established equivalents, cultural nuances, and contextual

factors. It also highlights the strategies employed by human translators to overcome these challenges, such as adapting the neologism, using descriptive terms, or borrowing from related concepts.

The evaluation of machine-generated translations provides insights into the performance of machine translation systems in handling neologisms. The results indicate varying degrees of accuracy, fluency, and adequacy. Some neologisms may be accurately translated, while others may result in inaccurate or nonsensical translations. The evaluations help identify the limitations of machine translation systems in capturing the semantic and cultural nuances associated with neologisms.

The comparative analysis of human and machine translation outcomes allows for a deeper understanding of the strengths and limitations of each approach in translating neologisms. It provides insights into the unique abilities of human translators to adapt and creatively handle neologisms, leveraging their linguistic and cultural knowledge. At the same time, it highlights the potential of machine translation systems to generate translations quickly, but with limitations in accurately capturing the complexities of neologisms.

The results of this study contribute to a comprehensive understanding of the challenges involved in translating neologisms and the comparative performance of human translators and machine translation systems. This knowledge can inform translation practices and the development of tools and resources to enhance the translation of neologisms in the future.

DISCUSSION

The discussion section of the article analyzes and interprets the results of the comparative study on translating neologisms, focusing on the differences between human and machine translation approaches.

The findings indicate that translating neologisms poses significant challenges for both human translators and machine translation systems. Human translators exhibit the ability to adapt and creatively handle neologisms, leveraging their linguistic and cultural knowledge to find suitable equivalents or expressions in the target language. They employ various strategies, such as borrowing from related concepts, using descriptive terms, or creating new terms, to effectively translate neologisms. However, human translation is time-consuming and relies heavily on the expertise and subjectivity of the individual translator.

On the other hand, machine translation systems demonstrate the potential to generate translations quickly. However, they face limitations in accurately capturing the semantic and cultural nuances associated with neologisms. The study reveals that machine-generated translations may be inconsistent in terms of accuracy, fluency, and adequacy. While some neologisms are translated correctly, others may result in inaccurate or nonsensical translations due to the lack of context or the absence of established equivalents in the training data.

The discussion explores the implications of these findings for translation practices. It emphasizes the importance of human translators' role in handling neologisms, as they possess the linguistic and cultural knowledge necessary to understand and adapt to the dynamic nature of these terms. Human translators can provide a nuanced understanding of the context and cultural connotations associated with neologisms, ensuring accurate and meaningful translations.

However, the discussion also acknowledges the potential of machine translation systems to complement human translation efforts. Machine translation can serve as a valuable resource, providing quick and initial translations that can be further refined by human translators. It highlights the need for

continued advancements in machine translation technology to improve the accuracy and adequacy of translations, particularly in handling neologisms.

CONCLUSION

In conclusion, this study sheds light on the challenges of translating neologisms and provides a comparative analysis of human and machine translation approaches. The findings underscore the complexities involved in translating neologisms, which arise from their evolving nature, cultural connotations, and lack of established equivalents in other languages.

The study highlights the strengths of human translators in adapting and creatively handling neologisms, leveraging their linguistic and cultural expertise. It also recognizes the potential of machine translation systems to generate translations quickly, although they face limitations in accurately capturing the nuances of neologisms.

The results of this study contribute to the development of strategies and approaches for translating neologisms. It emphasizes the importance of collaborative efforts between human translators and machine translation technologies to enhance the translation quality and address the challenges associated with neologisms.

Overall, this comparative study provides valuable insights into the challenges of translating neologisms and offers a foundation for further research and advancements in the field of translation, aiming to improve the accuracy and effectiveness of translating these dynamic linguistic phenomena.

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