CHAPTER 2

A Genre-Based Quality Evaluation of Chinese-English Translation by Online Machine Translation Systems

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Abstract

The past decades have witnessed remarkable progress in machine translation (MT) quality, sparking a heated debate within and beyond academia about whether human translators will be replaced by MT systems. This case study conducts a genre-based manual quality evaluation of Chinese-to-English translations produced by Google Translate, Baidu Translate, Sogou Translate, Youdao Translate, and human translators. The findings reveal that the quality of online machine translation output remains incomparable to that of human translation across expressive, informative, and vocative genres. Sogou Translate excels in expressive and informative genres but requires significant improvements in fidelity and comprehensibility for expressive genres, as well as in fidelity and genre function reproducibility for informative genres. For vocative genres, the quality of online machine translation varies across the four

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optimization to narrow the quality gap and reach parity with human translation. Given that the key to high-quality human translation lies in the ability to translate between the lines and capture the deeper semantic and cultural nuances of the source text, we recommend that the research and development teams of these online machine translation systems leverage advanced artificial intelligence technologies to develop AI-assisted machine translation training systems. By incorporating techniques such as deep learning, these systems can be trained to better understand and process complex semantic structures, such as Chinese idioms, four-character structures, and culture-loaded words. This enhances their comprehensibility and ability to reproduce genre functions.

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