Appendix

There is no specific appendix in this article

Abstract

**Background:** The study investigates the impact of machine translation (MT), machine translation post-editing (MTPE), and human translation (HT) on creativity in translation and the reading experience.

**Methodology:** An experiment was conducted where a fictional story was translated using the three modes and evaluated for creativity. 88 Catalan readers randomly read the translations and completed a survey.

**Key Findings:** HT scored highest in creativity, narrative engagement, and translation acceptance. MT scored lowest in all tested variables.

**Conclusion:** The involvement of professional translators, especially in unaided human translation, results in the highest creativity, which may enhance readers' narrative engagement and acceptance of translated literary works.

Introduction

**Context:** The rapid development of machine translation and AI technologies poses challenges to the translation industry, especially in literary translation.

**Research Aim:** The study aims to quantify creativity in translation under different modes and explore differences in the reading experience.

**Literature Review:** Reviews previous research on creativity in translation, machine translation, and its application in literary translation.

Materials & Methods

**Source Text:** A fictional story titled "Murder in the Mall" with 2,277 words was selected as the source text.

**Translation Process:** The source text was translated using MT, MTPE, and HT modes. The MTPE version was post-edited by professional translators using a post-editing tool.

**Assessing Creativity:** An adapted Bayer-Hohenwarter model was used to quantify creativity in the translations, considering both acceptability and novelty.

**Assessing Reading Experience:** Data on narrative engagement, enjoyment, and translation acceptance were collected from 88 Catalan readers through an online survey.

Results

**Creativity Analysis:** HT scored higher than MTPE and MT in creativity, with MT scoring the lowest. MTPE scored highest in accuracy, while HT scored highest in fluency.

Reading Experience Analysis: HT scored highest in narrative engagement, enjoyment, and translation acceptance, with MT scoring the lowest. MTPE scored slightly higher than HT in enjoyment, but the difference was not significant.

Discussion

Relationship between Creativity and Reading Experience: The study hypothesizes that creativity in translation may enhance readers' narrative engagement and acceptance. The results support this hypothesis, showing that HT translations scored highest in both creativity and the reading experience.

Application of Machine Translation in Literary Translation: While MT scored lowest in creativity and the reading experience, the study suggests that MT may still be adequate for basic communication needs, especially in translating certain types of literary works.

Future Research: Recommends further exploration of creativity and the reading experience in different language pairs, literary genres, and styles, as well as improvements to the methods for quantifying creativity.