

# A Comparative Analysis of Information Addition in Human and Machine Translation: Centered on Han Kang's *The Vegetarian*

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## Abstract

With the integration of generative AI models, such as Large Language Model (LLM) like ChatGPT, into the machine translation market, the quality of machine translation has improved remarkably. This has recently sparked interest in the question of whether machine translation can be applied to literary translation. Within this broader context, this study serves as an initial phase in a multi-stage project aimed at examining stylistic differences between human translation and machine translation. Specifically, it focuses on identifying differences in the addition of information between these two translation methods. Addition was chosen as the subject of analysis among various translation strategies because it often reflects the translator's intent to enhance either the intentionality of the source text author or the acceptability for the target text audience. Investigating what and how machine translation adds or omits certain elements based on intent is considered meaningful. For the analysis of human translation, the study employs *The Vegetarian* (2007) by Nobel Prize-winning author Han Kang, along with its Chinese and German translations. For the analysis of machine translation, translations of the text into Chinese and German generated by GPT-4o were selected. The research adopts both quantitative and qualitative methods. Quantitatively, it examines lexical metrics such as the Number of Different Word (NDW), Total Number of Word (TNW), and Type-Token Ratio (TTR). Qualitatively, it explores the pragmatic features, cultural contexts, and other layers of addition bias in both human and machine translations. By objectifying the quantitative dimensions embedded in qualitative judgments and interpretations, this study aims to scientifically analyze and expand comparative research between human and machine translation. Ultimately, it is expected to contribute to the advancement of research in this field.

## Keywords

Human Translation, Machine Translation (MT), Literary Translation, Information Addition, Translator's Intention, Quantitative Analysis, Qualitative Analysis, *The Vegetarian*