

# Exploring the enhancement of translator's profile in cognitive processing: a process- and product-oriented comparison between translation and paraphrasing

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## Abstract

The unique bilingual profiles of translators and interpreters have gained increasing attention in recent years. Much existing research has centered on how intensive interpreting experience may impact language processing and production. Such studies have unveiled a picture of interpreters displaying stronger connections in language representation, increased efficiency in language processing, and better abilities in cognitive control (Dong, 2023), all of which are considered integral components of the interpreter's profile. However, written translation, another unique type of bilingual experience, has been relegated to the periphery of scholarly focus. Empirical studies comparing the cognitive control abilities of translators and general bilinguals have been scarce, yielding inconclusive findings. This ambiguity could be attributable to the challenge of differentiating translator-specific advantage from the broader bilingual advantage on general cognitive tasks (Babcock et al., 2017).

Therefore, the current study made an attempt to explore the potential translator advantage with a focus on the enhancement of the translator's cognitive processing abilities in specific language mediation tasks, by comparing translators of varying expertise levels in inter-lingual translation and intra-lingual paraphrasing. The fundamental distinction between translation and paraphrasing lies in the necessity for frequent cross-language switching. As such, comparing these two tasks allows us to discern specific cognitive demands involved in translation that exceed those required by general monolingual communication tasks. Moreover, we employ a comparative analysis among translators with different expertise levels as an alternative way to investigate how intensive experience of translation practice can change the cognitive processing of language tasks. Our study included 20 translation trainees and 10 professionals who performed English-Chinese and Chinese-English translations, as well as English and Chinese paraphrasing. Eye-tracking and linguistic complexity analysis were used to reveal the cognitive processing in these four tasks. The results will be discussed in the sharing. This study represents an initial exploration to identify the cognitive demands unique to translation compared to paraphrasing, and how translation experience contributes to the strengthening of cognitive abilities associated with these demands, thereby shaping the translation profile. Our efforts aim to deepen the understanding of the distinctive bilingual profiles of translators and provide valuable insights for translation training.

## References

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