The influence of structural priming in German-to-Dutch translation: a multi-methods study.

KEYWORDS: Structural Priming; Translation Studies; Bilingualism; Voice Alternation; Multi-methods Research.

Structural priming—the tendency to repeat recently processed syntactic structures—has been widely studied in psycholinguistics (Pickering & Ferreira, 2008; Gries & Kootstra, 2017) and, more recently, has also been extended to translation studies (Maier et al., 2017; De Sutter et al., 2023; Jacob et al., 2024). However, research on structural priming in translation remains in its early stages, and key methodological and theoretical issues persist. Corpus studies are criticised for their inability to conclusively prove priming effects (Branigan et al., 1995), while controlled experiments lack ecological validity (Gries, 2005), underscoring the need for methodological integration. Additionally, conflicting results suggest trained translators may resist priming more than untrained bilinguals, but no study directly compares them.

This research investigates whether and to what extent structural priming occurs in German-to-Dutch translation, focusing on voice alternation (active vs. passive). It examines whether translators are influenced by source-text voice structure and whether translation training modulates this effect. Since *agentless passives* constitute most passives and their direct alternants are *generalized actives*—active sentences with nonspecific subjects— (Weiner & Labov, 1983), our investigation focuses on these constructions. To bridge the methodological divide, we combine a corpus study with an experiment. Additionally, we address the gap in previous research by comparing bilinguals without translation training to translation students, examining whether they differ in susceptibility to structural priming.

Our corpus study analyzes InterCorp (V16UD; Boková et al., 2021), focusing on a German-to-Dutch subcorpus of agentless passives and passivizable generalized actives. Each instance is annotated for Dutch voice, German voice, and additional predictors (e.g., genre, VP complexity, syntactic weight, person, animacy, and definiteness of the constituents). By including the 'German voice' predictor, we assess whether the source-text structure systematically influences the target-text structure—an essential step in identifying potential priming effects. To further investigate this influence, we compare translated and non-translated Dutch by analysing an original Dutch subcorpus of agentless passives and passivizable generalized actives. We expect that, while linguistic constraints will function similarly in both datasets, the distribution of voice constructions will differ, with translated Dutch more closely aligning with German source structures, reflecting priming effects.

To complement the corpus study, we conduct an experiment capturing real-time translation behaviour (since corpus data reflect only the final translation and cannot definitively establish priming effects). The experiment aims to involve 100 participants—50 German-Dutch bilinguals and 50 translation students— who translate German sentences into Dutch. Each sentence appears on screen for a brief, controlled duration before disappearing, ensuring translation choices reflect participants' mental representations and providing clearer evidence of priming. Building on the need for direct comparisons between bilinguals with and without

translation training, we expect both groups to show priming effects, but trained translators to rely less on source-text structures due to their expertise.

To allow direct comparison between real-time and published translations, the experimental stimuli are original corpus sentences, and the corpus-based results inform the experiment by ensuring significant predictors are controlled. This methodological integration strengthens the study by capturing priming effects in controlled conditions while also evaluating ecological validity, advancing our understanding of translation processes.

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