GENDER RESOLUTION IN GOOGLE TRANSLATE AND CHATGPT: A DESCRIPTIVE CROSS-LINGUISTIC ANALYSIS

Author **Ana-Maria Oprea**
University of Alba Iulia, Romania , anamaria.oprea.sdf23@uab.ro *ORCID: 0009-0006-5572-8228*

Abstract:

This study presents a descriptive cross-linguistic analysis of gender resolution patterns in two widely used machine translation systems, Google Translate and ChatGPT. Using a controlled challenge-set methodology, the analysis examines how each system assigns grammatical gender when translating gender-ambiguous source sentences into five typologically diverse target languages.

The test set comprises 175 constructed sentences designed to probe linguistic environments where gender resolution is known to vary, including occupational nouns, pronoun ambiguity, adjective-based descriptions, grammatical agreement, epicene nouns, prestige-related terms, and translations from a gender-neutral source language. Translation outputs were manually coded and analysed for distributional patterns across systems and languages.

The results document a recurrent tendency toward masculine default forms in gender-ambiguous contexts across both systems, with variation depending on target language and linguistic parameter. While ChatGPT more frequently provides alternative gendered renderings, its primary outputs show distributional patterns comparable to those observed in Google Translate. Cross-linguistic comparison suggests that typological features appear to influence how gender is resolved but do not eliminate default patterns.

This study is descriptive in scope and reports observed translation outputs under specific testing conditions. It does not aim to establish causal explanations or statistically generalisable claims about underlying system mechanisms beyond the tested sentence sets. Findings are limited to the tested sentence sets, systems, and time of evaluation and are not intended to support causal or generalisable claims about system design.

Keywords: *Gender bias; Machine translation; Translation studies; Cross-linguistic analysis; Controlled evaluation.*