

## Replacing one bias with another? The gender star form in German

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Gender-inclusive language, especially the ‘gender star’ form, has gained prominence in the German-speaking world. The gender star form is meant to eliminate male bias in German role nouns and to represent genders beyond the binary (Schunack & Binanzer, 2022). It is formed by attaching the suffix *–\*in* to masculine role nouns, e.g. *Lehrer\*in* ‘teacher (of any gender)’ (Völkening, 2022). While studies suggest increased female representation with gender star forms, findings also point towards a female bias and, hence, limited representation of non-binary individuals (Körner et al., 2023; Zacharski & Ferstl, 2023). The present study aims to provide novel insight into the comprehension of gender star forms to inform the field as well as language users in general by employing the framework of discriminative learning.

Analysing a 1.3 million-sentence corpus, semantic vectors for different types of role nouns were computed using naive discriminative learning (Baayen et al., 2011). The semantic vectors then entered an implementation of linear discriminative learning to simulate the comprehension process (Baayen et al., 2019). From this simulation, measures on the forms’ comprehension were extracted.

Cosine similarities indicate that the comprehended semantics of gender star forms are significantly closer to specific feminines than to specific masculines, suggesting a female bias; the opposite was found for generic masculines, confirming previous findings of a masculine bias. The extracted measures showed significant effects in predicting reaction times of generic masculines and gender star forms taken from Körner et al. (2022), i.e., the measures were successfully validated against behavioural data.

The present results demonstrate that the comprehension of gender star forms is without a male but potentially with a female bias and, thus, with limited representation of non-binary individuals. These findings allow a re-interpretation of previous behavioural results, offer more nuanced interpretations of future data, and inform everyday language use.

### References

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