## Gendered language and the mental lexicon: Computational insights

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Gendered word-forms differ not only in their social connotations but also in how they are mentally represented and processed. This talk explores how computational models of the mental lexicon can shed light on these differences. I will introduce approaches from distributional semantics, which represent word meanings as vectors in a semantic space (cf. Harris, 1954), and from discriminative learning, which models how form-meaning mappings are learned and processed in the mental lexicon (Baayen et al., 2019). Together, these methods allow us to simulate and analyse how gendered word-forms – such as specific and generic masculines or gender-star forms in German – differ in their semantic representations and processing. Through examples from recent studies, I will illustrate how computational modelling helps us understand biases in language not as comprehension errors, but as reflections of the linguistic input that shapes our mental lexicon.

## Literatur

- Baayen, R. H., Chuang, Y.-Y., Shafaei-Bajestan, E., & Blevins, J. P. (2019). The discriminative lexicon: A unified computational model for the lexicon and lexical processing in comprehension and production grounded not in (de)composition but in linear discriminative learning. *Complexity*, 2019, 4895891. https://doi.org/10.1155/2019/4895891
- Harris, Z. S. (1954). Distributional structure. *WORD*, 10(2-3), 146-162. https://doi.org/10.1080/00437956.1954.11659520