

## **An exemplar-based approach to semi-productivity**

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In Dutch and German, word-final obstruents are realized as voiceless (compare Dutch han[t], han[d]en, 'hand, hands'), a phenomenon often referred to as final devoicing. Final devoicing is a semi-productive process, in that it combines productivity with many exceptions. The productivity of final devoicing is apparent from the fact that speakers are in remarkable agreement about whether the final obstruents of unseen words alternate with respect to voicing (Ernestus & Baayen, *Language*, 2003). Final devoicing is semi-productive in the sense that there are many words that behave exceptionally. Thus, speakers may use dub[t]e instead of dub[d]e, or juich[d]e instead of juich[t]e.

In my presentation, I will first review the experimental data addressing the processing of final devoicing. I will then review a range of probabilistic models that all perform with very similar degrees of success: analogical modeling of language (AML), nearest neighbor machine learning (TiMBL), stochastic optimality theory, minimal generalization learning, and mixed-effects logistic regression. I will argue that all these modeling approaches are, from a statistical perspective, very similar and merely differ in their computational implementation. Their statistical equivalence raises the question of what computational architectures might be more plausible from a cognitive point of view. I will defend the hypothesis that, at least at the level of morphology, models building on lazy exemplar based learning are preferable compared to greedy abstractionist models.