

## Variable Dental Suffixation and the Representation of Competing Morphological Paradigms in Alemannic

Niklas Grüninger<sup>1</sup>

<sup>1</sup> Research Training Group 2700 Dynamics and Stability of Linguistic Representations, University of Marburg, Germany

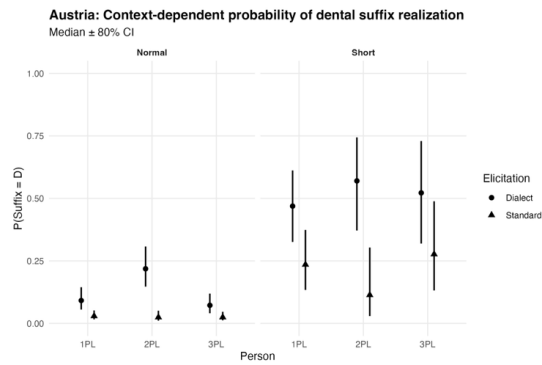
**Background:** The Alemannic dialects spoken in Germany, Switzerland, and Austria display significant internal variation, particularly in verbal morphology. A well-documented distinction between Eastern and Western Alemannic is the verb suffix denoting the three plural forms: Eastern varieties typically use a dental suffix (-ed/-et/-ent), while Western varieties prefer -e [1–3]. These typologies, however, primarily describe verb-second (V2) contexts. In verb-initial (V1) contexts, where subject pronouns follow the verb, dental suffixes are often altered or omitted through epenthesis or erasure, depending on dialect-specific phonological rules to achieve CV-structures through cliticization and resyllabification across word boundaries. Especially the group of irregular short verbs (e.g., *go*, *cho*, *lo*) with the plural suffix -n(d) shows high variability in suffixation across contexts [4].

**Hypothesis:** Instead of treating this variability as optional phonological alternation, we investigate the implications variable dental suffixation has on the organization of morphological paradigms in mental representation. We hypothesize that suffix variation reflects the coexistence of competing, paradigm-like morphological patterns whose distribution is sensitive to phonotactic and functional factors. We operationalize paradigm competition as systematic, context-dependent differences in the probability of suffix realization that cannot be reduced to phonological conditioning alone.

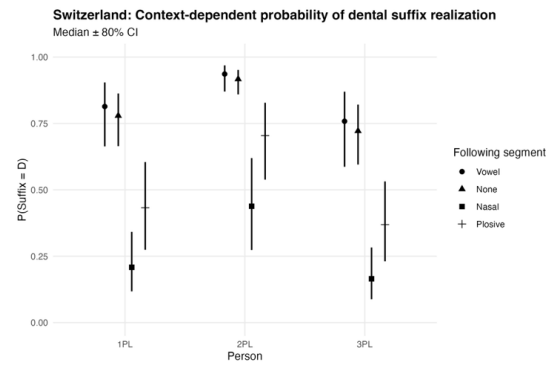
**Methods:** To explore this hypothesis, we draw on the trilingual child corpus from the LAVA project (DFG project *Language Acquisition across Varieties in the Alemannic Area*), 130 hours of speech data from LEKI (*Longitudinalkorpus Eltern-Kind-Interaktion*) [5], and free adult production data from recordings of interactions between adults and children in comparable naturalistic settings (recorded by the families themselves). We model suffix realization using Bayesian multilevel categorical models (brms), estimating context-conditioned posterior predicted probabilities of competing suffixes as functions of person, inflection class, and register, and including phonological predictors to assess whether morphological factors explain variation beyond phonological conditioning. Data from adult speech serve as an empirical basis for identifying systematic distributional patterns in suffix realization and for determining whether variation clusters are consistent with paradigm competition rather than free alternation.

**Results:** Suffix realization in different Alemannic-speaking regions shows systematic, context-dependent distributions. In Austrian data (Fig. 1), the predicted probability of dental suffix realization varies systematically across person and inflection class, consistent with strong morphological conditioning. Alemannic short verbs favor dental suffix realization more strongly than normal inflection classes across all persons; the second person plural in particular shows higher predicted probabilities than the other persons. These morphological effects are far less notable in Swiss data. In contrast, Swiss data show stronger conditioning by phonological context (Fig. 2), with following segments having a substantial effect on suffix probabilities. Nasals reduce the predicted probability of dental suffixation in Switzerland, but not in Austria. This contrast suggests that the relative weight of morphological and phonological conditioning differs across regions.

**Discussion:** By combining corpus evidence with acquisition data and probabilistic modeling, this study contributes to debates about how morphologically variable forms are represented and stabilized in the mental lexicon, and how distributional patterns differ across regions. The results provide evidence that variation is systematically organized and context-sensitive, which is compatible with models of competing morphological paradigms. Future research will investigate whether such context-sensitive variation can be modeled within distributional learning frameworks such as *Naïve Discriminative Learning* (NDL) and *Linear Discriminative Learning* (LDL).



**Figure 1:** Predicted probability of dental suffix realization in Austrian Alemannic by person and inflection class.



**Figure 2:** Predicted probability of dental suffix realization in Swiss Alemannic by following segment.

## References

- [1] Schallert, O. (2023). Morphologie des Vorarlberger Alemannischen: eine Übersicht. *Montfort*, 75(1), 101–121.
- [2] Streck, T. (2019). Alemannisch in Deutschland. In J. Herrgen & J. E. Schmidt (Eds.), *Deutsch: Sprache und raum. ein internationales handbuch der sprachvariation* (pp. 206–245, Vol. 4). De Gruyter Mouton. <https://doi.org/10.1515/9783110261295-008>
- [3] Rabanus, S. (2008). *Morphologisches Minimum*. Franz Steiner Verlag. <https://doi.org/10.25162/9783515095167>
- [4] Nübling, D. (1995). Kurzverben in germanischen Sprachen : unterschiedliche Wege - gleiche Ziele. *Zeitschrift für Dialektologie und Linguistik*, 62(2), 127–154. [http://www.germanistik.uni-mainz.de/Dateien/Nuebling\\_1995b.PDF](http://www.germanistik.uni-mainz.de/Dateien/Nuebling_1995b.PDF)
- [5] Pfeiffer, M., & Anna, M. (2021). Longitudinalkorpus Eltern-Kind-Interaktion (LEKI).