

The distribution of aggregated syntactic construction types compared with other linguistic levels - A dialectometrical analysis of Swiss German dialects

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Although there is a good availability of Swiss German dialect data, very few works have looked at them from an aggregated perspective (e.g. Kelle 2001) and none has considered syntactic data in comparison with data from other linguistic levels.

As an interdisciplinary working group, composed of linguists and geographers, we apply dialectometrical methods to two different data sets of Swiss German dialects. The first is a digitized subset of the Swiss German Dialect Atlas (Sprachatlas der deutschen Schweiz SDS), which consists of phonetical, morphological and lexical data. The second originates from the Syntactic Atlas of Swiss German Dialects (SADS), collected in the early 2000s by the University of Zurich.

Our contribution focuses on the following research questions:

- 1) How do the areal distributions of aggregated phonetical, morphological, lexical and syntactical phenomena of German-speaking Switzerland differ?
- 2) Which linguistic levels mainly determine the dialectal landscape of German-speaking Switzerland? Are there individual phenomena that correlate particularly well with the aggregated maps?

In the presentation, we will describe the data preprocessing and analysis carried out, as well as the results obtained. In particular, the methodological challenges of integrating the two different data sources to enable their comparison will be discussed. These challenges included creating a common spatial reference frame for the survey sites, as well as reducing the SADS data (which has multiple respondents per site) to the single-respondent structure of the SDS. The dialectometrical data analysis is then carried out by generating linguistic distance tables, followed by statistical similarity analyses, correlation and factor analyses. Furthermore, parameter maps, as well as maps created by multidimensional scaling and hierarchical clustering, are generated and compared. The software used includes VDM from the University of Salzburg, RuG/L04 and Gabmap from the University of Groningen, and Python scripts created to transform the data into the required structure.