

# Cross-Serial Dependencies and Similar Syntactic Structures in the Saarland Dialect

B.Sc. Ben Posner, Dr. Lucia Donatelli

March 31, 2021

Cross-serial dependencies in natural languages are structures where the dependency links of two groups of words are crossed in some way. For example the Swiss-German subordinate clause (1) has *the house* as an argument of *paint* while *Hans* is an argument of *help* (the colours mark dependencies between the verbs and the NPs). Therefore the dependency links are crossed. Because Swiss-German can have a principally unbounded number of crossed dependencies and the objects of the verbs are always marked by their case, Swiss-German can not be modelled by a context-free grammar (Shieber, 1985). An example of such a cross-serial verb-end cluster in the Saarland dialect would be (2). One can see all the dependency arrows being crossed. Dutch (Bresnan et al., 1982) and Luxembourgish (Zwart, 2005) are two other languages known to have cross-serial dependencies. Standard German always has to have the verbs at the end of a subordinate clause to be in the opposite order of the objects preceding them and therefore never has crossing-dependencies. Other German dialects like Swabian and some forms of Bavarian can have verb orders which do not have classical crossed dependencies, but differ from the standard nonetheless (Zwart, 2005). In those dialects the least embedded verb can cross its dependencies with all other verbs by appearing first after the object cluster, but the other verbs occur in the order that is typical for High-German (similar to Example 3). Note that only the first arrow is crossed with the others and the blue and green arrow do not interact, just like in a typical Standard German verb-end cluster.

In my Bachelor's thesis I conducted a study to investigate the existence of cross-serial dependencies and similar structures in the Saarland dialects. The results of the study indicate that both main dialects of the Saarland region are more accepting of non-standard word orders. Both, cross-serial dependencies and the Bavarian/Swabian word orders were accepted more readily in the Saarland region than by a control group of Standard German speakers.

In a follow up study to this Bachelor's thesis we want to explore a few more aspects of the problem:

Do speakers of other German dialects (Luxembourgish, Zürich Swiss German, Swabian, Bavarian) rate the non-standard word orders in a similar range as the speakers of the Saarland dialects? Using the findings by Kasper and Pheiff (2018), we should be able to use Standard German stimuli for most of the different dialectal regions. The original study in the Bachelor's thesis used recorded stimuli, which is not feasible for a broader more heterogeneous audience.

Do dialect speakers of the Saarland region and possibly other dialect speakers accept different word orders as well as the ones looked at in the original study? If not, can those structures be interpreted by the participants at all? More structures being accepted would indicate that general scrambling of the verbs in verb-end clusters is acceptable in the dialect.

Including Luxembourgish participants would be especially interesting, since the transition from the extreme boundaries of Moselle Franconian inside Germany to Luxembourgish should be rather soft.

- (1) ...mer **em Hans** **es Huus** **hãlfed** **aastriche**.  
 ...we Hans-DAT the house-ACC helped-1PL paint-INF

...mer **em Hans** **es Huus** **hãlfed** **aastriche**

”...we helped Hans paint the house.”

- (2) ...mir **die Kinner** **em Hans** **es Haus** **losse** **hãlfe** **anstreiche**.  
 ...we-NOM the children-ACC Hans-DAT the house-ACC let-1PL help-INF paint-INF

...mir **die Kinner** **em Hans** **es Haus** **losse** **hãlfe** **anstreiche**

”...we let the children help Hans paint the house.”

- (3) ...mir **die Kinner** **em Hans** **es Haus** **losse** **anstreiche** **hãlfe**.  
 ...we-NOM the children-ACC Hans-DAT the house-ACC let-1PL paint-INF help-INF

...mir **die Kinner** **em Hans** **es Haus** **losse** **anstreiche** **hãlfe**

”...we let the children help Hans paint the house.”

## 1 References

- Bresnan, J., Kaplan, R. M., Peters, S., and Zaenen, A. (1982). Cross-serial dependencies in dutch. In *The formal complexity of natural language*, pages 286–319. Springer.
- Kasper, S. and Pheiff, J. (2018). Standarddeutsche oder dialektalisierte stimuli? zum einfluss der stimulusform auf die ergebnisse indirekter dialekt syntaktischer erhebungen/standard german or dialectalized stimuli? on the influence of the stimulus form on the results of indirect elicitations of dialect-syntactic data. *Zeitschrift für Dialektologie und Linguistik*, pages 129–164.
- Shieber, S. (1985). Evidence against the context-freeness of natural language. *Linguist Philos*, 8:342–351.
- Zwart, J.-W. (2005). Continental west-germanic languages. In *The Oxford handbook of comparative syntax*. Oxford University Press.