## Morphological complexity meets sociolinguistics: A typological approach

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In recent years there has been a growing interest in exploring whether sociolinguistic factors might affect linguistic patterns across languages (Kusters 2003; Trudgill 2011; Lupyan and Dale 2010). One of the main hypotheses in this line of research is that the complexity of linguistic patterns may be adapted to cognitive biases manifest in particular types of social contexts, especially to the degree a community's language is acquired extensively by outside adult learners. For instance, the more adult learners there are in the speech community learning its language as a second language, the greater the likelihood is for the community's language to become easier, more transparent and more regular. On the other hand, communities in which fewer adults learn its language as a second language may favor the maintenance and even the development of linguistic structures that are difficult for adult learners, such as irregularity and morphological complexity. Recent cross-linguistic research on the complexity of case systems provides initial evidence for these hypotheses (Bentz and Winter 2013).

One of the parameters of interest in the recent discussions has been the morphological complexity of verbs. Case studies have shown that the number of morphological categories expressed on the verb, better known as the degree of synthesis, tends to decrease historically as a result of the language being learned by a large group of adult second language learners (Kusters 2003). On the other hand, increased relative isolation of a speaker population may lead to an increase in synthesis (DeLancey 2014). It has been further noted that polysynthetic languages — languages with the highest degrees of synthesis — tend to be spoken by relatively small and non-industrialized tribal communities (Trugill, to appear). Evidence from second language research seems to support these findings, showing that verbal inflections pose problems for adult learners but less so in child acquisition (see Parodi et al. 2004 and references there).

In my talk I explore whether typological distributions of morphological complexity may have been affected by different sociolinguistic contexts. For the measure of morphological complexity I focus on the degree of inflectional synthesis of the verb using data from Bickel and Nichols (2013) in the *World Atlas of Language Structures*. For the sociolinguistic contexts I review and explore three different parameters: 1. number of speakers in the language community, 2. proportion of second language learners in the language community and 3. proportion of smaller neighboring languages. The data on the sociolinguistic parameters comes mostly from the *Ethnologue* (Lewis et al. 2013). Initial results based on linear mixed effects modeling suggest that at least the first two parameters would seem to interact with morphological complexity.

I further evaluate these results and their reliability from methodological and qualitative perspectives. The development of suitable sociolinguistic parameters is still in its infancy in typology and especially the quality of sociolinguistic taxonomies and the data sources may affect the results more than has been admitted in recent quantitative-typological works. I also discuss some counterexamples and mixed effects modeling in language universals research. As a conclusion, the statistical results remain preliminary and call for further research employing more detailed analyses.

## References:

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