<u>ZEFIS</u>

EINLADUNG ZUM KOLLOQUIUM

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Grammar and Complexity: Constructions, complexity and word order variation

This talk is concerned with how grammatical complexity might explain the form of a grammar. I focus on word order variation, and consider how different factors that enter into determining the formal complexity of a grammar can shed light on why and how the grammars of related languages (or dialects) differ from one another. I argue that one type of complexity resides in the correspondence between syntactic form and conceptual structure interpretation, and that within this domain there are independent dimensions that contribute to complexity. Evidence for complexity, I suggest, is linguistic change, which leads to variation. The reduction of complexity on several dimensions leads to differential changes even in closely related language varieties, due to the fact that they are represented in distinct (but possibly interacting) social networks.

The empirical data concerns Continental West Germanic verb clusters. I review evidence that suggests that derivational accounts of word order do not afford explanations, only

descriptions. As an alternative, I argue for CONSTRUCTIONS as the correct level of analysis of such phenomena. On the constructional view, each word order alternative is a distinct construction that is related to the others in virtue of expressing the same interpretation. The constructions are not derivationally related, although they may be historically related.

The question arises, what are the linguistic factors that distinguish among alternatives, so that some are widely attested and others are rare or non-existent? The answer I propose appeals to the relative competitiveness of constructional alternatives in a social network, formulated in terms of their formal and processing complexity relative to one another. I illustrate through a computational simulation how constructional alternatives are equally likely to take hold in a population, other things being equal. But if there is a strong bias against a given constructional alternative, it can persist only under special circumstances, e.g. it acquires a distinctive function and thereby becomes a distinct construction, or it exists in an isolated subpopulation. Multiple and conflicting biases give rise to more complex situations, where change proceeds cyclically.

The biases in the case of ordering in verb clusters are the following. (1) There is a Scope Bias: Alignment of scope and linear order may facilitate one aspect of the computation of CS representation. In the case of the verb clusters, this bias promotes the ordering of AUX before V (1-2). (2) There is a Dependency Bias: Interpretation of the main verb and its dependents is facilitated when there are no intervening verbs. This bias favors V before AUX (2-1), and 3-2-1, 3-1-2 and 2-1-3 in three-verb clusters. The rarity of 2-3-1 and 2-1-3 is a consequence of the fact that both are less competitive, i.e. more complex, than the alternatives, on three measures: they do not maximize scope/order alignment, they do not completely minimize dependency length, and they violate harmonic branching.

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