Ingo Reich, Eva Horch and Tyll Robin Lemke

Information Density and Fragments in German

This project investigates antecedentless (overtly) non-sentential utterances in German with propositional content and illocutionary force, known as fragments in the literature (Morgan, 1973). Examples are Zwei Stück Zucker? (‘Two pieces of sugar?’) or the more idiomatic Ab ins Bett! (‘Off to bed!’).

Given a suitable context, the fragment Zwei Stück Zucker? conveys essentially the same message as its sentential counterpart Möchtest du zwei Stück Zucker?. It does so, however, by way of non-sentential and reduced form. This project investigates the hypothesis that the choice of a more dense encoding in actual language use is, to a considerable extent, motivated by information theoretic principles: In a predictive context, the information conveyed by möchtest du decreases and so does the average information density of the sentential utterance. What is more, the information conveyed by the utterance is not evenly distributed over the sentence, but there are troughs at möchtest and du, which fall below a critical lower bound, set by the optimal channel capacity (UID). The desire to avoid such peaks and troughs may thus be taken to be one of the crucial motivations for the use of fragments. This is tested by conducting corpus research and on- and offline experiments.

Since, as Jaeger and Levy (2007) point out, information theoretic principles only operate within the limits of grammar, another focus of the project lies on additional grammatical and functional constraints on the form and use of fragments and their interaction with information theoretic principles. In the first phase of the project, special attention will be dedicated to the question of what a possible fragment is, and whether there are any interesting text type and register dependencies. This is tested by conducting corpus research and offline experiments (collecting gradual native speaker judgements).