The disambiguating role of prosody in relative clauses

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I will address the following puzzle: In the syntactic literature on relative clauses, it is tacitly or explicitly admitted that users of a language share some implicit knowledge about the relationship between prosody and syntax. As a result, overt prosodic phrasing should help speakers to make choices about syntactic attachment. In the literature on the processing of prosody, however, it is commonly observed that speakers do not always use prosody to produce or comprehend alternative meanings of a syntactically ambiguous phrase (Allbritton et al. 1996, Lehiste, 1973). A view shared by many is that boundaries or pitch accents can resolve ambiguities in which the surface bracketing of a sentence differs across interpretations, but cannot resolve ambiguities in which they do not, as in the sentence Flying airplanes can be dangerous. The recent 'audience design' hypothesis (Snedeker and Trueswell 2003) proposes that speakers only produce disambiguating prosody when needed for communication. In the ambiguous sentence *Tap the frog with the flower*, speakers only produce the necessary prosodic boundary in situations where the ambiguity had to be resolved, but see Schafer et al. (2000) and Kraljic & Brennan (2003) for different results in similar experiments.

New experiments will be reported: In production experiments, Schubö et al. (2014) investigated whether speakers of German produced disambiguating prosody for restrictive and non-restrictive relative clauses, both in situations in which they were aware of the ambiguity and in which they were not. In perception experiments, Gryllia et al. (2014) investigated the use of pitch accents for choosing the right antecedent for a relative clause that can attach high or low. Both experiments confirmed that speakers use prosodic cues in special circumstances only, in agreement with the audience design hypothesis.

In the last part of the talk, some elements for solving the puzzle will be provided, focusing on two aspects of prosody. On the one hand, prosody is part of grammar, and as such, obeys interface and well-formedness constraints. It is this component which leads linguists to expect disambiguation by prosody. On the other hand, prosody uses only limited phonetic correlates, with many different functions and not always perfectly realized in everyday communication. This is the part weakening the disambiguating role of prosody.

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