

## Phonetics and Phonology of intonational variation

This paper proposes a two-dimensional pitch accent model that quantifies the variation of individual tonal categories cross-dialectally. At the same time, it allows for a phonetically based distinction between tonal categories within a dialect or language. Studies on the alignment of pitch accents have shown that tonal targets are invariantly aligned with the segmental string (e.g. Arvaniti & Ladd 2000), and the alignment of one and the same tonal category differs across languages and language varieties (e.g. Atterer & Ladd 2004). Moreover, F0-excursion of an accent differs across language varieties as well (Kügler 2004). A combination of these two dimensions covers salient intonational properties of language varieties. From a phonological point of view, this model allows to distinguish between tonal categories within a language variety: if these features overlap between theoretically assumed tonal categories, the model would predict only one tonal category, i.e. phonetic variation. If, on the other hand, these features form two distinct areas, the model would predict two distinct tonal categories.

The model is based on an acoustic study of intonation of the Southern German variety of Swabian and the Middle German variety of Upper Saxon. Speech data were obtained from map task dialogues. Eight subjects per dialect participated in this study resulting in a total of eight map task dialogues. Every subject functioned once as the instruction giver and once as the instruction receiver in the map task game. For this study, subjects were chosen who speak the salient local variety of the respective dialect. The intonational variation across these language varieties will be presented here. The variation will be accounted for in terms of the two-dimensional model of pitch accent realisation.

### References:

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- Kügler, F. (2004) Variation in falling pitch accents in Upper Saxon German: Phonetics or Phonology? Paper presented at the 26<sup>th</sup> annual meeting of the German Linguistics Society DGfS, Mainz, Germany, 25<sup>th</sup>-27<sup>th</sup> February 2004.