

Tonal Association and Derived Nuclear Accents

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In this talk I shall first review work on secondary association of phrase accents as proposed in Grice, Ladd and Arvaniti (2000) and consolidated in subsequent work on a variety of languages. In particular, I shall explore the possibility of phrase accent tones associating with the nuclear syllable, leading to derived bitonal nuclear pitch accents.

I shall then discuss the distribution of nuclear accents with a downstepped H* tone component and argue that it is downstep, rather than one particular pitch accent category, which is crucial for the marking of certain aspects of information structure, in particular degrees of givenness and the extent of focus projection.

For a H* tone in a nuclear accent to be downstepped, a previous H tone is required within the same phrase, so that the 'step down' can take place. In original autosegmental-metrical theory of Pierrehumbert (1980) and Beckman & Pierrehumbert (1986), this previous H tone had to be part of a prenuclear bitonal pitch accent. However, it has since been argued that the H can be realised as a leading H tone - making the nuclear pitch accent H+!H*, or, somewhat more rarely, as a H initial boundary tone, %H (Gussenhoven 2004). I shall show that three patterns – H* !H*, H+!H* and %H !H* – may alternate, indicating that it is the *relation* between the two H tones which is the marker of pragmatic information, not a pitch accent *type*. This alternation lends itself best to an analysis where there is one downstep mechanism only, instead of two (Grice 1995, Gussenhoven 2004).

Since the existence of a H+!H* pitch accent is controversial (Rathke & Harrington 2006), I shall provide preliminary evidence from a pitch scaling experiment that the second tone of what I am referring to as H+!H* is actually downstepped, and not simply low. I shall also present arguments for a treatment of H+!H* as a derived category: Just as bitonal pitch accents arise from the secondary association of phrase accents to the nuclear syllable, the leading H tone of H+!H* arises from a H tone in the representation which combines with the nuclear accent tone to make a bitonal pitch accent. This appears to be an optional association, especially in cases where there is a prenuclear metrically stressed syllable which can bear a H* prenuclear accent. If this accent type is indeed derived, then some of the arguments against it – especially those relating to the implications for the number of combinations of tones into new pitch accent types – are less compelling. Furthermore, the application of one downstep rule at the level of the phrase is more easily accommodated.

Although data will primarily be taken from German, the implications for the analysis are more general.

Beckman, M. E. & J. Pierrehumbert (1986). Intonational Structure in English and Japanese, *Phonology Yearbook*, 3, 255-309.

Grice, M. (1995b). Leading tones and downstep in English, *Phonology*, 12.2, 183-233.

Gussenhoven, C. (2004). *The Phonology of Tone and Intonation*, Cambridge: CUP.

Pierrehumbert, J. (1980). *The Phonetics and Phonology of English Intonation*. Ph. D. thesis, MIT.

Rathke, T. and J. Harrington (2006). The Variability of Accent Peaks in Standard German, presented at Labphon 10, Paris.