Revisiting intonational pitch accents in Swedish – Evidence from lexical accent neutralisation

The West Germanic and other European languages exhibit a multiple paradigmatic contrast of intonational pitch accents, such as H*, L*+H, H+L* etc., which are used, among others, to "signal various shades of information status" (Gussenhoven 2004). In the case of Swedish, however, intonation models have so far recognised a single type of intonational pitch accent only, known as the focal accent or H- in the Lund model (Bruce 1977, 2005; Bruce and Granström 1993). This assumed simplicity of the intonation system is typically explained by the fact that Swedish, besides the focal accent, also has a lexical pitch accent contrast, which may be represented as H+L* (accent I) vs. H*+L (accent II). However, an alternative explanation is provided by the observation that hardly any different "shades of information status" have been treated systematically for Swedish yet, and hence the simplicity of Swedish intonation models may be an artefact of the research tradition. In fact, some recent studies, most notably House (2005), have indicated that Swedish intonation shares more features with e.g. German intonation (cf. House 2005; Kohler 2005) than traditionally assumed. The goal of this contribution is to further develop a revised, more complete understanding of Standard Swedish intonation, by investigating more varied pragmatic contexts.

Two studies, a production and a perception experiment, are presented. In the production study, confirmative utterances were elicited and compared to utterances rendering new information in nine speakers of Standard Swedish. In total, 180 utterances were recorded where both the lexical accent (accent I vs. accent II) and the pragmatic category (new information vs. confirmation) were varied systematically. A main result was that another type of pitch accent, an early peak, is preferred by speakers in a confirmation, as compared to H- in a new-information statement, a situation comparable to e.g. German. At a first sight, this early peak might seem to be adequately modelled as a so-called non-focal accent, i.e. simply as a lack of the H-. This account would regard the observed early peak as solely determined by the lexical accent of Swedish. However, the results also showed that in about 23% of the test utterances with an accent II target word, speakers did not produce the typical expected accent II pattern (H*+L), but rather an accent I-like H+L*. It is argued that this word accent neutralisation is easier accounted for when the observed early peak in confirmations is analysed as the realisation of an intonational, rather than a lexical pitch accent only, which may be represented as H+L- in a Lund model transcription. Hence, this analysis implies that also Swedish has a paradigmatic contrast of intonational pitch accents (H- vs. H+L-).

Furthermore, a possible reason for the observed neutralisation is discussed, including both a precondition and a motivation. First, a precondition for the neutralisation is probably the fact that the functional load of the Swedish word accents is rather low, which is even more the case in a confirmation, where the accented word is given in the discourse. Second, a motivation for the neutralisation might be a perceptual enhancement of the intonational contrast between the H- and the proposed H+L-. This assumption is based on the hypothesis that a prototypical accent II realisation of H+L- is perceptually similar to a prototypical accent I realisation of H-, since both are characterised by a high pitch within the stressed syllable. This proposal is tested in the second study, which comprises a perception experiment involving reaction time measurements from 20 subjects. The study applies a mismatch paradigm, combing four pitch pattern types (prototypical accent I and accent II realisations of both H- and H+L-) with both accent I and accent II test words. The results suggest (a) that a neutralised word accent does not seem to cause any processing difficulties, and (b) that the proposed explanation of the neutralisation in terms of an intonational contrast enhancement is perceptually plausible. That is, the observed word accent neutralisation provides further evidence for the analysis of the early peak found in confirmations as an intonational pitch accent.
References


