Prenuclear pitch accents and peak alignment in Derry~Londonderry English.

Antoin Eoin Rodgers
Phonetics and Speech Laboratory, Trinity College Dublin
rodgeran@tcd.ie

One distinctive feature of Northern Irish English is the prevalence of rising tones in nuclear accents across sentence modes (Jarman & Cruttenden 1976; McElholm 1986; Grabe 2004). Rising pre-nuclear pitch accents (PNAs) have also been observed (Grabe et al. 2005). The research presented follows the Autosegmental-Metrical approach (Ladd 2008) and focuses on PNAs of speakers from Derry~Londonderry, the second-largest urban area in Northern Ireland, and forms part of a larger study into voice quality and intonation in the city.

Provisional observations showed PNAs to be more varied than nuclear accents in terms of phonological structure (H*~L*H) and phonetic realisation. More detailed analysis aimed to identify where the tonal targets are anchored and how stable they are.

Speakers (3F, 3M) were recorded in pairs and read 5 repetitions of target phrases embedded in short dialogues. All phrases had the potential for one PNA, and were varied systematically for anacrusis and number of unstressed syllables. Three subsets of phrases contained identical foot structures with varying word boundaries. Intonation patterns were assessed by the author and another trained phonetician. Occurrences of L*H and H* accents were correlated against the number of unstressed syllables in the foot as well as the number of syllables in anacrusis. The alignment of tonal targets in PNAs was also analysed.

In L*H PNAs, the L tone is anchored within the lexically stressed syllable, as expected. For some speakers, the peak is mostly anchored within the final syllable of the lexical word regardless of the number of unstressed syllables in the foot. H* PNAs are more common when there is less anacrusis or fewer unstressed syllables. For some speakers, H* occurs when there are fewer unstressed syllables in the lexical word regardless of foot structure. In general, the peak of the H* is achieved in a similar location to the peak of L*H tunes.

These findings suggest that among the speakers analysed, peak location in PNAs is quite predictable regardless of phonological tune. L*H appears to be realised as a phonologically distinct H* due to backward segmental pressure. Results also indicate that lexical structure and foot structure influence the alignment of PNA peaks, but may be speaker dependent. As this research is ongoing, a clearer picture should emerge as sample size increases.

References

Grabe, E., 2004. Intonational Variation in Urban Dialects of English Spoken in the British Isles. In P. Gilles & J. Peters, eds. *Regional Variation in Intonation*. Tuebingen: Niemeyer, pp. 9–31.

Grabe, E., Kochanski, G. & Coleman, J., 2005. The intonation of native accent varieties in the British Isles: potential for miscommunication? *English pronunciation models: a changing scene*, pp.311–337.

Jarman, E. & Cruttenden, A., 1976. Belfast intonation and the myth of the fall. *Journal of the International Phonetic Association*, 6(1), pp.4–12.

Ladd, R.D., 2008. *Intonational Phonology*, Cambridge: Cambridge University Press.

McElholm, D.D., 1986. Intonation in Derry English. In H. Kirkwood, ed. *Studies in intonation. Occasional Papers in Linguistics and Language Learning*. Colraine: New University of Ulster, pp. 1–58.