

Belfast and Glasgow English ‘rises’: Are there phonological distinctions between them?

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Is there a phonological distinction between statement and question intonation in Glasgow and Belfast English, when both varieties use Nuclear ‘rises’ on statements *and* questions (Cruttenden, 1997; Ladd, 2008)? How about between the two varieties themselves, which until now, have not been systematically compared?

The expected contour shape is that of a Nuclear ‘rise-plateau-slump’, with a rise on the main-stressed syllable followed by a leveling off and sometimes a final fall. Autosegmental-Metrical (AM) analyses of these ‘rises’ have been problematic (see Ladd, 2008: 128ff). A key assumption is that there is no final/boundary rise (H%) in either of these varieties. Thus, the Tones and Break Indices (ToBI) system (Beckman & Ayers Elam 1997) would transcribe the Glasgow/Belfast pattern in the same way as the very different U.S. ‘stylised low rise’ (Ladd, 2008: 128ff; Mayo et al., 1997). The Intonational Variation in English (IViE) system (Slater 2008) allows an alternative three-way boundary tone distinction (H%, 0% (level), L%) (Grabe, 1998), but it is unclear whether these Belfast and Glasgow make such a phonological distinction (see Lowry 1997: 23).

Results from a new experiment directly comparing Belfast and Glasgow ‘rises’ suggest that within each variety, questions and statements are systematically distinguished only through gradient expansions of pitch range in questions. Thus the difference between them does not involve the choice of phonologically distinct tones.

However, there is a clear difference between Belfast and Glasgow in the choice of boundary tone at the end of the Intonational Phrase (IP). In Glasgow, there is the ‘rise-plateau-slump’ pattern with a clearly low boundary (L%). In Belfast, by contrast, the pitch tends to rise continuously to reach H%. Along with additional differences in the Alignment of the L and H components of the ‘rises’ with respect to the Nuclear syllable, I argue that Belfast and Glasgow ‘rises’ are phonologically distinct from each other. Interestingly though, the Belfast ‘rises’ may not in fact be distinct from the phenomenon of High Rising Terminals (HRTs)/ ‘Uptalk’ in other English varieties, contrary to some existing views (e.g. Ladd, 2008: 127). This raises the further issue of whether Belfast and Glasgow ‘rises’ actually share a common origin.

References

- Beckman, M. & G. Ayers Elam. 1997. Guidelines for ToBI labelling. Version 3. Unpublished ms., Ohio State University.
- Cruttenden, A. 1997. *Intonation*, 2nd edn. Cambridge: CUP.
- Grabe, E. 1998. *Comparative intonational phonology: English and German*. MPI Series 7. Wageningen: Ponsen et Looien.
- Ladd, D.R. 2008. *Intonational phonology*, 2nd edn. Cambridge: CUP.
- Lowry, O. 1997. Intonation patterns in Northern Irish English. University of Cambridge MPhil thesis.
- Mayo, C., M. Aylett and D.R. Ladd. 1997. Prosodic transcription of Glasgow English: An evaluation study. *Proceedings of the ESCA Workshop on Intonation: Theory, Models and Applications*. 231-4.
- Slater, A. 2008. The IViE Corpus: English intonation in the British Isles. <http://www.phon.ox.ac.uk/files/apps/IViE/index.php> (May 2010).