

The role and sources of individual variability in the production and processing of prominence and intonation

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Abstract

The studies I will present in this talk deal with the posited phonological contrast between H* and L+H* in English: based on Pierrehumbert (1980), it is generally accepted that H* is a high accent said to indicate that the accented item is new in discourse, while L+H* is a rising accent that has a corrective or contrastive function. Despite widespread acceptance of this analysis, the empirical evidence for the contrast is slim, while some researchers (most notably Ladd 2008) dispute its existence altogether; a comparable contrast does not feature in British accounts of English intonation either. The present research sheds light on the reasons for these discrepancies, by examining both production data from British English unscripted speech and perception data, which link the processing of the two accents to the participants' levels of empathy, musicality, and autistic-like traits. By analysing the production data separately for phonetic realization and pragmatic function, we show that Pierrehumbert's original analysis holds only partially for British English: in the present corpus, the accents indicating new information were falling rather than high, while L+H*s were used both to mark contrast and highlight unexpected information, though the extent to which speakers used L+H* for these purposes depended on individual style. This optionality did not apply to the same extent to corrective accents which were typically L+H*s. In terms of perception, the extent to which participants attended to the differences between the accents depended on individual traits: highly empathetic individuals were more sensitive to the function of the accents, while individuals with high musicality or more autistic-like traits were more sensitive to F0 shape. As a result of these differences, individual speakers may learn different grammars such that for some the two accents form a phonological contrast, while for others they do not. Taken together these results point to the fallacy of trying to connect intonation categories with very narrow pragmatic functions and indicate that a better understanding of how phonological categories are formed can be gained by paying closer attention to individual differences and their sources. Finally, since the conclusions about how the accents are perceived are based on prominence ratings, the results bear on our understanding of prominence as well.

Bio

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