A Cross-Style Investigation of Individual Differences in Disfluency Behaviour in Two British Accents

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Disfluency features such as filled and silent pauses, repetitions, prolongations and self-initiated interruptions offer much scope for individual variation since they are related to a combination of physical, psychological and social- demands in the planning and execution of speech, yet there is little research assessing the suitability of such features for forensic phonetic analysis. In McDougall and Duckworth (2017) we analysed the disfluency features produced by 20 male speakers of Standard Southern British English (SSBE) aged 18-25 years from the *DyViS* corpus (Nolan et al. 2009) undertaking a simulated police interview task, and proposed TOFFA, 'Taxonomy of Fluency features for Forensic Analysis' to provide a framework for the analysis of individual speakers' disfluency behavior. Our results showed speakers displaying extensive individual differences in their rates of production of various disfluency feature types, and in the selection of features adopted.

For forensic casework, the phonetician needs to know whether patterns observed in accent X also apply in accent Y, when data on accent X only is available, but the perpetrator and suspect recordings requiring comparison are in accent Y. Since the two recordings will typically involve different speaking styles, knowledge of the extent to which individuals are consistent across styles is also required. Towards investigating the first of these issues, McDougall, Duckworth and Hudson (2015) presents disfluency data comparing SSBE with York English for interview-style speech. The present study extends this work to examine the two accents across two speaking styles.

Disfluency profiles are determined for 20 SSBE speakers from *DyViS* in interview and telephone call speaking styles. These are compared with the equivalent data for 20 male speakers from the *YorViS* database which contains the same tasks as DyViS, for male speakers of York English, aged 18-25 years. Speech data are transcribed orthographically in *Praat*, with disfluency features annotated using TOFFA. Rates of occurrence of each disfluency feature are calculated for each speaker in each speaking style. Preliminary results for SSBE show relatively consistent disfluency patterns within individuals across styles. Disfluency patterns in interview-style differ somewhat between SSBE and York English for certain disfluency features; for example, filled pauses (especially *er*) occur more frequently in SSBE than York English. Comparison of the two accents for telephone call style is underway. Implications of the findings for forensic speaker comparison will be discussed.

References

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