

Varieties on the Margins: Individual Speech Patterns and Perceptual Evaluations

Amanda Cardoso¹, Erez Levon², Devyani Sharma², Dominic Watt³ and Yang Ye⁴

¹ University of British Columbia, ² Queen Mary University of London, ³ University of York, ⁴ University of Greenwich

Public attitudes toward varieties of English have been widely studied (e.g. Giles 1971, Bishop et al. 2005). These studies generally rely on a relatively small speaker (or speech) sample to represent varieties. However, individuals differ with respect to the use or frequency of use of specific phonological features (e.g. Renn & Terry 2009) and certain non-standard features are more salient than others (e.g. Levon & Fox 2014). Therefore, individual differences in speech patterns are likely to have an effect on perceptual evaluations, which is often not investigated (but see, e.g., Montgomery & Moore 2018; Cardoso et al. 2019). Furthermore, perceptual evaluations have tended to focus on well-known and easily-identifiable varieties. The current paper looks at how individual speech patterns relate to perceptual evaluations with a number of UK varieties on the margins.

Stimuli consisted of five UK accents (two male native speakers each): Received Pronunciation (RP), Estuary English (EE), Multicultural London English (MLE), General Northern English (GNE), Urban West Yorkshire English (UWYE). Four of these have generally not been included in language attitude studies. Each speaker was recorded reading scripted answers to two questions (approximately 30s each). Four dialect density measures (DDM) were calculated for each speaker and each question to estimate the difference from standard British English. Forty-four non-standard phonological features (e.g. /l/-vocalisation) were identified across the stimuli and coded for by two researchers. Features were coded in two ways: presence vs. absence (unweighted), and salience of feature (weighted). The first two DDMs are unweighted and weighted counts of the number of features in the stimuli. The second two DDMs are proportions, which are calculated by taking the total number of features produced (unweighted and weighted) divided by all possible instances where the features could have occurred.

Data were collected from 80 UK listeners using an online survey. Listeners were asked to rate the strength of the speaker's accent and evaluate the speaker according to seven traits (e.g. professional, friendly) on a 5-point Likert scale. Mean ratings are calculated for each speaker by each question. Correlation coefficients between the listener mean ratings and the DDMs are calculated using Pearson correlation in R (R Core Team 2019).

Findings suggest that some of the listeners' evaluations are correlated with the four DDM measures. Strength of accent is strongly positively correlated with all of the DDMs ($r=0.60$ to $r=0.83$). The weighted counts of features showed the strongest correlation with the strength of accent ratings (Figure 1), which suggests that both the number of non-standard features and the salience of those features influences evaluations. Ratings of professionalism is negatively correlated with all of the DDMs ($r=0.74$ to $r=0.80$). In other words, the more non-standard features an individual uses the less professional they are rated (Figure 2). Furthermore, ratings do not neatly correspond to accent groups, but rather, correspond to differences in the use of non-standard features in the stimuli. For example, stimuli that have more non-standard features are consistently rated as less professional within a speaker. Ratings for friendliness, reliability, and pleasantness do not correlate with the DDMs.

Individual differences in speech patterns, including within-speaker variation, influences perceptual evaluations of speakers. Given this, an increase in the use of non-standard

phonological features could impact an individual's evaluation in situations like job interviews. The current paper discusses results from a wider project which further explores the extent to which a speaker's accent affects access to elite professions.

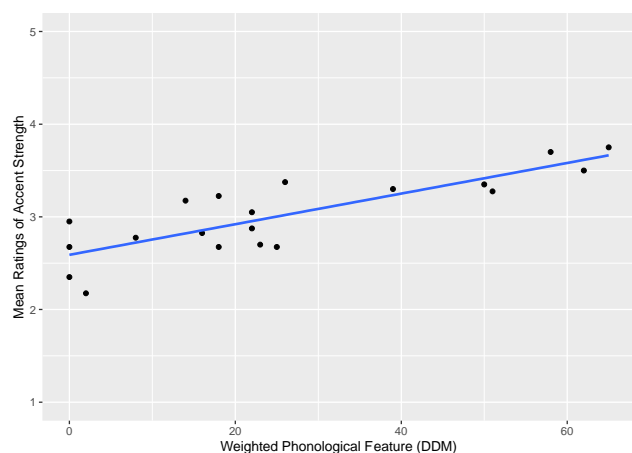


Figure 1: Correlation between mean listener ratings for perceived strength of accent and weighted total of non-standard phonological features

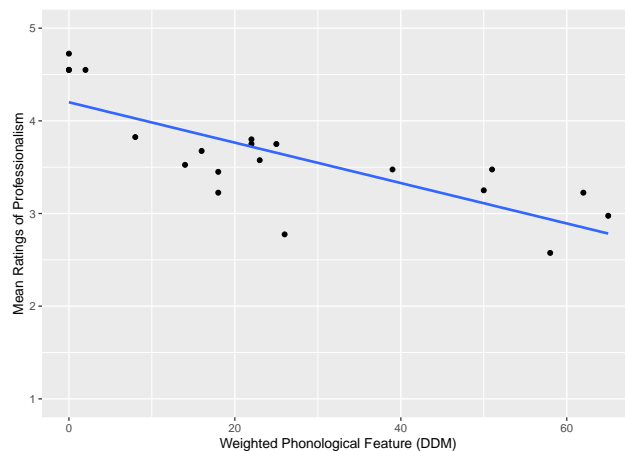


Figure 2: Correlation between mean listener ratings for professionalism and weighted total of non-standard phonological features

References

Bishop, H., Coupland, N., Garrett, P. 2005. Conceptual accent evaluation: Thirty years of accent prejudice in the UK. *Acta Linguistica Hafniensia* 37, 131–154.

Cardoso, A., Levon, E., Sharma, D., Watt, D., Ye, Y. 2019. Inter-speaker variation and the evaluation of British English accents in employment contexts. In Calhoun, S., Escudero, P., Tabain, M., & Warren, P. (eds.) *Proceedings of the 19th International Congress of Phonetic Sciences*, Melbourne, Australia, 1615–1619.

Giles, H. 1971. Ethnocentrism and the evaluation of accented speech. *British Journal of Social and Clinical Psychology* 10, 187–188.

Montgomery, C., Moore, E.F. 2018. Evaluating S(c)illy Voices: The effects of salience, stereotypes, and co-present language variables on real-time reactions to regional speech. *Language* 94(3), 629–661.

Levon, E., Fox, S. 2014. Social Salience and the Sociolinguistic Monitor: A Case Study of ING and TH-fronting in Britain. *Journal of English Linguistics* 42(3), 185–217.

R Core Team. 2019. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. URL: <https://www.R-project.org/>.

Renn, J., Terry, J.M. 2009. Operationalizing style: Quantifying style shift in the speech of African American adolescents. *American Speech* 84, 367–390.