

The effects of accent and visual cues on speech accommodation in Hong Kong English

Justin J. H. Lo¹, Ben Gibb-Reid², and Grace Wenling Cao²

¹Linguistics and English Language, Lancaster University, UK

j.h.lo@lancaster.ac.uk

²Department of Language and Linguistic Science, University of York, UK

ben.gibb-reid@york.ac.uk

²Department of Linguistics and Modern Languages, Chinese University of Hong Kong, Hong Kong

gracecao@cuhk.edu.hk

Keywords: Accommodation; Intraspeaker variability; Modality

Speakers systematically adapt aspects of speech production in different contexts and when talking to different interlocutors. Linguistic-phonetic features which undergo a high degree of stylistic variation, including accommodation, may become less useful for forensic voice comparison, due to their high within-speaker variability. The outcome of accommodation, be it convergence, maintenance or divergence, is influenced by numerous factors, including the speaker's attitudes towards the interlocutor (Giles et al., 1991) and the perceptual salience of the feature (MacLeod 2014). The interactional situation may also play a role: Compared to casual, everyday interactions, speakers may more likely show phonetic divergence from their interlocutor in more formal scenarios, such as police interviews, where asymmetric power dynamics are involved (Earnshaw, 2021). Our perception of the interlocutor not only draws from information derived from the voice (e.g., accent), but also incorporates visual cues (e.g., ethnicity) where available. Cues from the audio and visual modalities, however, may conflict with preconceived associations between the voice heard and the social categories or characteristics of the speaker it belongs to. This kind of mismatch between expectation and reality has been found to impact speech perception (e.g., Kutlu et al., 2022; McGowan, 2015), but it is yet unclear how it may in turn modulate speech accommodation in production. This may be relevant for analysis of forensic audio, where audio-only (e.g., telephone conversations) and audiovisual (e.g., police interviews) interactions are commonly compared against each other. To this end, we present an ongoing study that explores the relationship between a speaker's knowledge of their interlocutor's social background and their accommodatory response. Specifically, we are interested in how the availability of visual information about the interlocutor influences phonetic accommodation.

We conducted a speech production experiment in which participants conduct informal, semi-structured conversations with different interlocutors. Each pair first engages in a telephone conversation (audio-only), during which information about the interlocutor's ethnicity is withheld, followed by face-to-face interaction (audiovisual). Our participants are five male speakers of Hong Kong English (HKE), who grew up in Hong Kong and recently moved to York, UK. Each participant interacts with four different male interlocutors: a white speaker of Standard Southern British English (SSBE); an ethnically Chinese speaker of SSBE; a white speaker of Yorkshire English (YE); and an ethnically South Asian speaker of YE. To examine how HKE speakers vary across interlocutors and interaction modalities, our initial acoustic analysis focuses on two groups of vowels that are cross-varietally distinct (/a/, /ɑ:/ and /ʌ/) or common (/u:/).

We expect convergence towards both SSBE and YE speakers in the phone conversation, with a greater degree of convergence towards SSBE due to its overt prestige. In face-to-face interaction, we further expect that speakers will diverge in the way they accommodate to interlocutors of different ethnicities speaking the same accent. To shed further light on the participants' behaviour in production, we are also probing this community's attitudes towards different varieties of English through a verbal guise experiment. We will present preliminary findings and discuss their implications for forensic voice comparison.

References

- Earnshaw, K. (2021). Examining the implications of speech accommodation for forensic speaker comparison casework: A case study of the West Yorkshire FACE vowel. *Journal of Phonetics*, 87, 101062.
- Giles, H., Coupland, H., & Coupland, J. (1991). Accommodation theory: Communication, context, and consequence. In H. Giles, J. Coupland, & N. Coupland (Eds), *Contexts of accommodation: Developments in applied sociolinguistics* (pp. 1–68). Cambridge University Press.
- Kutlu, E., Tiv, M., Wulff, S., & Titone, D. (2022). Does race impact speech perception? An account of accented speech in two different multilingual locales. *Cognitive Research: Principles and Implications*, 7, Article 7.
- MacLeod, B. (2014). Investigating the effects of perceptual salience and regional dialect on phonetic accommodation in Spanish. In M.-H. Côté, & E. Mathieu (Eds), *Variation within and across Romance languages: Selected papers from the 41st Linguistic Symposium on Romance Languages (LSRL), Ottawa, 5–7 May 2011* (pp. 351–378). John Benjamins.
- McGowan, K. B. (2015). Social expectation improves speech perception in noise. *Language and Speech*, 58(4), 502–521.