Processing regional accent variation: Real-time and reaction time measures.

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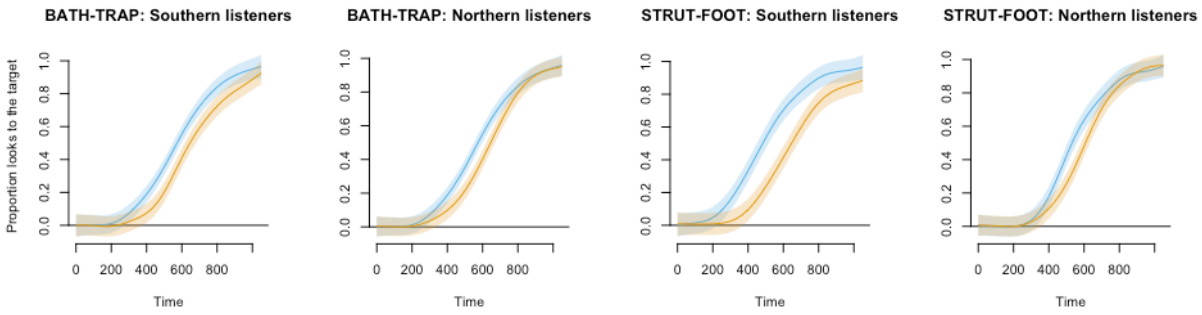
When listening to a familiar accent, perceived speaker characteristics influence lexical access (e.g., Koops et al. 2008), arguably facilitating processing. Previous work used pictures or words to cue a specific indexical category (e.g., age, region) explicitly. Our first study used eye-tracking to investigate whether brief exposure to accent-specific phonetic features influences the time course of spoken word recognition. Our second study used a web-based word recognition task to examine whether a similar effect would be captured in reaction times (ongoing data collection). In both experiments, we tested listeners' recognition of words containing the TRAP-BATH and FOOT-STRUT lexical sets, known for distinguishing northern and southern varieties of British English. Southern Standard British English (SSBE) contrasts TRAP [æ] and BATH [ɑː], FOOT [ʊ] and STRUT [ʌ]; whilst many Leeds English speakers (LE) typically realise TRAP/BATH as [æ] and FOOT/STRUT as [ʊ].

The audio stimuli were naturally produced words recorded by 2 LE and 2 SSBE speakers. Words were embedded in the carrier phrase "I'm asking you to access ____" (cf. Evans and Iverson 2004), which included both BATH (*asking*) and TRAP (*access*) sets. Therefore, SSBE was cued by the TRAP-BATH contrast, whilst LE lacked this contrast. Forty-one English monolinguals (24 northern, 17 southern) completed the eye-tracking task. Generalized additive mixed models (GAMMs) were used to examine the effect of speaker's accent (LE, SSBE) and listener group (northern, southern) on looks to the target words as a function of time.

Results show that both listener groups looked at the target significantly earlier when listening to SSBE, being able to use the vowel distinction in TRAP-BATH and FOOT-STRUT sets to discard the competitor word faster. In other words, even though the contrasts were not part of the northern listeners' native repertoire, both groups used the information available in the speech signal to facilitate processing.



References

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Koops, C., Gentry, E., & Pantos, A. (2008). The effect of perceived speaker age on the perception of PIN and PEN vowels in Houston, Texas. *UPWPL*, *14*.