

When speakers move to a new region, they typically modify their speech to facilitate communication or to better fit in with their community. Although the majority of this evidence comes from monolingual speakers (e.g., Evans & Iverson, 2007), recent studies have found that experience with regional accents improved second language (L2) learners' awareness and identification of regional variables (e.g., Lee et al., 2022; Ringer-Hilfinger, 2012). However, it remains unclear whether increased exposure facilitates comprehension and whether this effect interacts with individual's attention control ability. This study investigates native Mandarin speakers' comprehension and recognition of English regional accents and whether this interacts with experiential and cognitive factors, in particular length of residency (LoR), L2 proficiency and attention control.

Method: thirty native Mandarin listeners (24 F) with a range of LoRs in Lancaster (4 to 84 months) completed a battery of tasks online; (1) a sentence transcription task, (2) an accent recognition task, and (3) attention control tests (Stroop Squared, Flanker Squared, and Simon Squared; Burgoyne et al., 2023). They also completed an English proficiency test (Oxford Quick Placement Test) and a language background questionnaire. In the sentence transcription task, participants transcribed 144 sentences in four noise conditions (+3 dB, 0 dB, -3 dB SNR and quiet) in three accents (12 speakers: 2 male and 2 female speakers per accent): Standard Southern British English (SSBE, the standard variety participants learned back home), General Northern English (GNE, a levelled north of England variety containing fewer local features, likely to be used in the university community) and Lancashire (LAN, the local regional variety). Sentences were selected from the Non-Native Speech Recognition (NNSR) sentences (Stringer & Iverson, 2020) to contain a range of regional accent features. In the accent recognition task, participants listened to a short passage produced by the same speakers. They stated whether they thought the speaker was from Lancaster, the north or the south of England, and specified which features led to their choice (cf. Tomé Lourido & Evans, 2021).

Results: overall, the results demonstrated an implicit effect of experience on L2 learners' comprehension of British English, but not an explicit effect on their recognition. As expected, transcription accuracy decreased as the noise level increased in the sentence transcription task and participants with higher L2 proficiency performed better. Surprisingly, transcription accuracy was highest for LAN, followed by SSBE and GNE. A mixed model analysis showed that LAN was significantly more intelligible than SSBE in the -3 dB condition ($p < 0.05$), and participants benefited from longer LoR in terms of accuracy for LAN and SSBE, though not for GNE ($p < 0.05$). However, participants found it difficult to recognise northern English accents. Those with higher proficiency and shorter LoR were better at recognising SSBE. Although recognition of LAN speakers improved with longer LoR, participants could not reliably differentiate LAN from GNE speakers. Finally, individual differences in attention control did not play a role in either transcription or recognition accuracy.

References

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