

The development of urban speech varieties across childhood: a longitudinal study

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Previous work has shown that children initially acquire speech variation patterns that reflect their caregivers [1]. With experience in school, they begin to sound more like their peers and by early adolescence show distinct speech patterns shaped by social factors such as peer group, class and ethnicity [2,3]. However, most existing studies focus either on the early years or on adolescents, and have been conducted in relatively homogeneous, largely monolingual communities. As a result, we know little about how speech patterns develop across childhood in highly diverse urban environments, including when and how new patterns emerge as children move through primary school. In urban centres such as London, the ambient environment is complex: the speech children encounter at home and in school can include a wide range of accents and languages. The acquisition of urban speech varieties such as Multicultural London English (MLE) appears to behave differently as a result: Cheshire et al. [2] argue that, unlike non-contact situations, young children in London reject caregiver and local adult models earlier than children growing up in less diverse settings. In the present study, we build on this work by tracking children's English speech trajectories in an East London primary school. We ask: Is there initially minimal home influence for London children? How do children navigate the varieties available to them? How early does social differentiation (class, gender etc) emerge?

Starting at the beginning of primary school, we are recording 43 children from the same school every six months until the end of primary school. To date, children have been recorded at four time points over two years. The sample reflects the school population and local East London community, with children from a range of social class and ethnic backgrounds. Two cohorts are followed in parallel: (1) children in the first year of primary school ($n = 21$, ages 4–5) and (2) children in the third year ($n = 22$, ages 6–7). Speech is elicited using child-friendly activities (picture naming, spot-the-difference, free play) targeting vowels and consonants that vary across London English accents (e.g. Multicultural London English, London Asian English, Standard London English). Caregivers were recorded producing the same target sounds and completed a questionnaire on language/accent exposure, family structure and indicators of social class. Recordings were transcribed and diarised using WhisperX and force-aligned with the Montreal Forced Aligner using a customised pretrained acoustic model. Analyses to date focus on PRICE, GOAT, FACE and coda /l/ over the first two timepoints. Diphthongs were analysed acoustically, with F1 and F2 extracted at onset and trajectory points using FastTrack. Coda /l/ was auditorily coded for realisation type (clear, dark, vocalised).

Initial analyses reveal high individual variability at school entry (Time 1). For coda /l/, younger children show closer alignment with caregiver production, with /l/ realisation reflecting the variety spoken at home (e.g. clear /l/ in South Asian and African heritage families), consistent with previous findings from East London [4]. By Time 2, social patterning begins to emerge for the younger cohort, with working-class children showing reduced variability and predominantly vocalised /l/. In contrast, older children already display class- and ethnically patterned coda /l/ productions at Time 1. For diphthongs, an MLE-like realisation of FACE is present at school entry. GOAT shows early alignment with caregiver production, such that children whose primary caregivers produce a backed GOAT also show backed realisations. For PRICE, gender differences are evident for older children at Time 1 and emerge for younger children by Time 2, with girls showing longer vowel trajectories. We will present findings from additional time points, using longitudinal modelling to characterise fine-grained developmental trajectories and how variation is modulated by social factors.

References

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