

**The production of coronal stops in English-Punjabi bilinguals:  
Cross-linguistic transfer and inter-generational transmission**

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Recent research has documented the emergence of contact varieties in the UK, which are hypothesised to emerge from contact between English and one or more immigrant languages (e.g. Cheshire et al. 2011; Wormald 2016). However, the precise dynamics of cross-linguistic phonetic influence are not well understood within many of these contexts. For example, coronal stops in British Asian English are often produced with a retroflex or retracted quality, which may represent transfer from the retroflex coronals of Punjabi (Heselwood & McChrystal 2000; Alam & Stuart-Smith 2011; Kirkham 2011; Alam 2015). Despite this, there is little documentation of how the sound systems of Punjabi and English interact within the same speakers, or how the host and heritage language vary across generations. This study addresses this gap by investigating the development and transmission of a contact variety in a community of English and Punjabi speakers in the UK.

Audio recordings were carried out with 15 English-Punjabi bilinguals in Blackburn, an English town with a large South Asian population. Speakers were grouped according to generational status, with children, parents and grandparents from the same families. A series of words in English and Punjabi were elicited via a production task, and acoustic analysis was conducted on the coronal stops in each language, including voice-onset time, burst intensity, and spectral analysis. These data were then analysed using linear mixed-effects modelling.

The results show considerable differences in English coronal stops across successive generations, as well as generational differences in Punjabi stops. For instance, younger children produce more monolingual-like realisations of English stops across spectral and temporal dimensions when compared with their parents and grandparents, while the children's Punjabi stops also show greater within-group variability. The results are discussed in terms of heritage language acquisition and intergenerational transmission, as well as the implications of these factors for the development of contact varieties.

**References**

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