

Even Americans pre-aspirate

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This paper focuses on a phenomenon known as pre-aspiration, which can be defined a period of (primarily) glottal friction found in the sequences of sonorants and phonetically voiceless obstruents, as in *hit* [h^ht], *hat* [h^ht], *hiss* [h^hs], *cash* [k^hʃ]. In particular, our study considers the following three questions. 1. Is pre-aspiration attested in American English? 2. Is it sensitive to region? 3. Is it sensitive to production tasks associated with different formality levels? Recently, pre-aspiration has been reported in North American English [2, 9] and Australian English [20]. As yet, however, there are no systematic studies of pre-aspiration in these accents, with [2, 9] providing only incidental reports. Our analyses of American English confirm that pre-aspiration is a feature of American English, with rates of application reaching between 0-17%, depending on the region and the task in question.

Tokens with fortis obstruents were extracted from the *NSPC* database [1], including four conditions: spontaneous speech (“spont”), read passage (“gold”), sentence data (“hpsin”), and words in isolation (“cvc”). Four dialects have been analysed so far: the Mid-Atlantic, Midland, New England, and North regions; each represented by 5 female and 5 male speakers ($N = 40$). This yielded 10,948 tokens. The inclusion of several production tasks is novel here: other pre-aspiration studies focus on a single condition such as wordlist data only, or sociolinguistic interviews only. This makes a direct comparison of pre-aspiration across different accents problematic. Indeed, across the four dialects, we find that the more formal the production task, the more frequently pre-aspiration applies (Fig. 1). On the whole, the Midland region patterns differently from the other regions, with less pre-aspiration in the more formal tasks, but – surprisingly – *most* pre-aspiration in the spontaneous data.

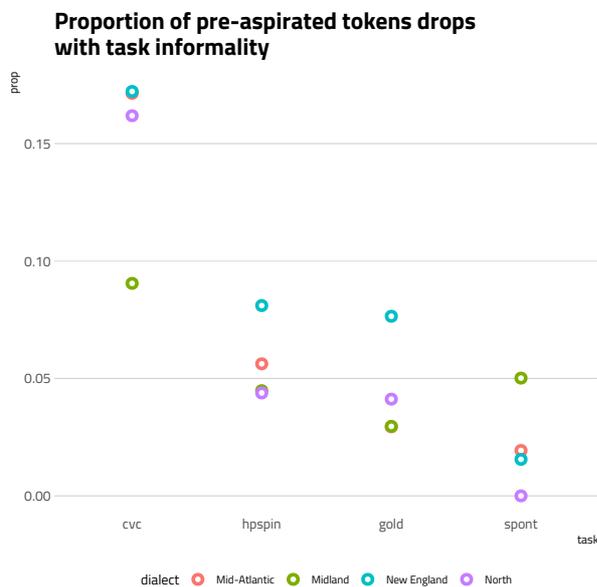


Fig. 1. Pre-aspiration frequency (%) by task and dialect.

These results raise the question of to what extent the reports of pre-aspiration based on formal tasks (e.g. [4-14, 16-20] reflect the rate of application of the phenomenon in spontaneous speech in the varieties in question. Could it be the case that pre-aspiration is an example of a stable variable in most varieties of English, being more frequent in more formal settings? In addition, the fact that we do find pre-aspiration in the four American dialects begs the question of just how old pre-aspiration is in English. It was first observed in L1 English in 1999 by [3] in Tyneside English. Since then, pre-aspiration has been systematically observed in a number of British English accents ([4-6, 7-11, 13-16, 21]. [3]’s study of Tyneside pre-aspiration and [7]’s study of Aberystwyth English pre-aspiration are the only studies offering apparent-time evidence, and they both suggest that pre-aspiration has been on the rise in the respective varieties in the latter half of the 20th century and/or the 21st century. Two scenarios suggest themselves: 1. pre-aspiration innovated in different areas independently; 2. the phenomenon was present in English prior to the colonisation period, which would also fit in well with pre-aspiration being found in Celtic and Scandinavian languages (e.g. [12, 16-19]).

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