"Chrump's on Chwitter"? A first look at expanding affrication of English /t/
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The Modern English /t/ phoneme has many allophones, resulting from numerous phonological processes, including several of affrication (Ogden 2009, p. 110). This presentation serves three purposes regarding a heretofore undescribed extension of *t-affrication*. It documents the current change in progress, advances a phonological reason/source for the change, and serves as a notice for others to look out for speech productions of the change in their local (or virtually local) varieties of English.

We start by describing a sound change of varieties of English whose voiceless alveolar stop /t/ undergoes processes of palatalization, rounding, and affrication when coming before labio-velar approximant /w/, resulting in a palato-alveolar affricate [tʃ] (1).

1) a. *Twitter* [ˈtʃwɪ.ɾɹ̩] b. *between* [bɨ.ˈtʃwiːn] c. *twenty* [ˈtʃwɛ.ni]

In this first documentation, we present examples drawn from publicly available speech production over the past year. These examples of various speakers affricating and not affricating /tw/ sequences provide the initial data to map the process across North American English varieties. As of the current data, the centre of innovation lies in the Mid-Atlantic region of the United States, between Washington D.C. and New York City.

Next, we provide phonological motivation for these new cases of *tw-affrication* in English by noting the similarity to previously attested cases of *t-affrication* before another English approximant: /ɹ/ (Sung 2013; 2).

2) a. *tree* [tʃɹi] b. *Trudeau* [tʃɹu.ˈdoʊ] c. *Trump* [tʃɹʌːmp]

These pre-existing cases of syllable-initial t-affrication, especially the acoustic cues of aspiration noise and lip-rounding in sequence before /ɹ/, give an impetus for speakers/listeners to reanalyze these separate contexts as a single generalized context: before approximants. Once the speaker/listener makes this analysis, they would then extend it to other /t/+approximant sequences. (N.B.: /t/ and /d/ do not appear in onset with /l, j/; Davis & Hammond 1995.) Therefore, we predict that tw-affrication only occurs among speakers who also affricate /t/ before /ɹ/ into [tʃɹ], or more narrowly: [tʃʷɹ̥ʷ]; cf. /tw/ → [tʃʷw̥].

Examining the role of lip rounding more broadly among these same speakers, we find similar cases of palatalization of /s/ in tautosyllabic clusters prior to both /ɹ/ and /w/, the latter of which being an analogous expansion from the former: /sw/ → [ʃʷw] :: /sɹ/ → [ʃʷɹ̥ʷ]. We then explore potential cross-dialectal influence as an additional source of rounding cues among these similar segments in the linguistic environment and input of these English speakers, leading to more rounding in their output.

Lastly, this presentation acts as a call to ears to listeners of English across Canada, North America, and the world. We suspect that t-affrication before /w/ occurs more broadly among speakers of English today, but goes unnoticed as it seamlessly maps onto the /t/ phoneme. Thus we ask that linguists and listeners, now made aware of this sound change in progress, keep an open ear to productions of it!

References

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