

Australian English voice onset time and Lebanese-Australian ethnic identity

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Sociophonetic research on English has shown that VOT can vary as a function of ethnicity (e.g., Kirkham, 2011; Nagy & Kochetov, 2013). Despite Australia's highly ethno-culturally diverse society, research into ethno-cultural varieties of Australian English (AusE), and research on AusE stop VOT are limited. Thus, as part of a larger sociophonetic study of AusE and Lebanese-Australian identity (the first in Melbourne), we focus here on VOT.

Following Hoffman & Walker (2010) we approach ethnic identity quantitatively. Participants (15 women and 15 men) completed a 35-item questionnaire, from which we derive an *ethnic orientation and identity (EOI) index*—a higher index suggests stronger identification with the heritage ethnic group ($M = 3.1$, $\min = 1.7$, $\max = 4.4$). Participants are all native speakers of AusE with Lebanese heritage and, for this study, produced three repetitions of 92 citation-form words with word-initial, stop consonants /b, d, g, p, t, k/ in stressed syllable-initial position. Segmentation was aided by the AutoVOT system, which measures positive VOT only (Keshet, Sonderegger, & Knowles, 2014).

Acoustic durational analysis was carried out on 7,081 tokens of positive VOT. As expected, VOT patterns with phonological voicing (VOICED $M = 16.0$ ms, VOICELESS $M = 68.7$ ms). VOT also varies according to POA ($p < .05$), but, contrary to the findings of classic studies (e.g., studies reviewed in Abramson & Whalen, 2017), our results for VOICELESS stops show alveolars have the longest VOT, followed by velars and bilabials, suggesting AusE VOT may pattern like Southern British English, as described by Docherty (1992). Furthermore, VOICELESS stop VOT interacts with EOI in opposite directions according to speaker gender—as EOI increases, women's stops become more aspirated at each POA, but for men VOT decreases as EOI increases. This is interesting sociolinguistically, given that ethnic identity has gendered manifestations in other language varieties (Fought, 2006).

This study provides preliminary insights into VOT patterning in AusE; we show that VOT is deployed to index gradient Lebanese-Australian ethnic identity in AusE as a function of strength of ethnic identity, and interactively with speaker gender.

References

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