Exploring Asian North American (ANA) English: A YouTube Corpus-based Approach

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Perception: "Sounding Asian"

Some listeners can correctly identify some local "Asian American" speakers at rates above chance

(Hanna, 1997; Newman & Wu, 2011; Wong & Babel, 2017; Cheng & Cho, 2021)



Figure 2. Histogram showing each judge group's score on the Asian American identification test by percentage. (For Asian American judges, n = 30, $\mu = 67\%$, $\sigma = 11\%$. For white judges, n = 30, $\mu = 63\%$, $\sigma = 10\%$.)

Bauman (2016):

- Members of Asian American-interest sorority in New Jersey (mid-Atlantic region)
- Some phonetic features interpreted to index local panethnic Asian identity:
 - o Backed /oʊ/
 - Monophthongal /oʊ/
 - Lower vowel durational variability ("syllable-timed rhythm")

Production: ANA Ethnolinguistic Markers

- No consistent differences found across ethnic/racial groups (Newman & Wu, 2011)
 - E.g., Chinese and Korean American women did not differ from other ethnic groups in vocalic durational variability

- Variation across specific ANA ethnic groups (Cheng et al., 2016)
 - E.g., In California, Korean Americans retracted /ου/ while Chinese Americans fronted /ου/

Research Objective

- Exploratory study to extend previous studies of ANA ethnolinguistic variation
- Clustering analysis on several ANAassociated phonetic features from a sample Asian American-identified YouTubers

Predictions

Feature	Prediction	
/oʊ/-backing	Fronted (higher F2) White Americans Americans	Asian Americans Korean Americans
/oʊ/-monoph- thongization	Diphthongal (more formant movement)	Asian Americans Monophthongal (less formant movement)
Prosodic rhythm	<pre>'Stress-timed' (more variable vowel durations)</pre> White Korean Americans Americans	Chinese Americans Asian Americans (less variable vowel durations)

Bauman (2016); Hall-Lew (2009); Cheng et al. (2016); Jeon (2017); A. Cheng (2020); D'Onofrio & Van Hofswegen (2020); Newman & Wu (2011); Zipp & Staicov (2016)

17 speakers (14 ANA, 3 non-ANA)

- All grew up in California, and present as women
- Identified mainly via Asian American topic videos or general Q&A/Get to Know Me tag videos
- Where possible, speech samples came from videos on Asian American topics

Code	Ethnicity	n
chi	Chinese American	4
kor	Korean American	5
eas	Other East Asian	2
viet	Vietnamese American	3
non	Non-Asian American	3

Methods: Data collection and processing



Feature	Measure
/oʊ/-backing	Norm. F2 difference (nBacking) : difference in /oʊ/ F2 from mean /i/ F2 (higher = more back)
/oʊ/-monoph- thongization	Norm. Euclidean distance (nED) : ED of F1+F2 values at ~25% and ~75%, divided by token duration (in seconds) (lower = more monophthongal)
Prosodic rhythm	Norm. pairwise variability index (nPVI): Average (median) duration difference between pairs of consecutive vowels, divided by mean pair duration (lower = less dur. variability)

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Results: Score Distributions by Ethnicity



Results: Hierarchical Clustering Analysis



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 All 3 non-ANA speakers (in A & D) have average scores, and relatively fronted /ov/

 All speakers with extreme scores are ANAs, and have relatively backed /ou/

Future Steps

- Examine more speakers and features
- Gather perceptual judgment/ ethnic identification data

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