Participants

- Southern California
- Portland
- Midwest
- The Americas and the Caribbean
- The Pacific
- Singapore
- The Netherlands
- Australia
- Vietnam
- English/Tamil, Japanese, Spanish, Tagalog

Background

- Advancement of STRUT to a position just above TRAP is also mentioned by (Hagiwara, 1997).
- The movement of STRUT is the least mentioned feature of the CVS, but is interesting in the current data. Hinton et al mention, but don’t investigate the fronting of STRUT.

Fronting of STRUT:

- Low Vowels – backing and merger:
- Merger of back vowels before /l/:
  - Raising of TRAP before nasals is reported to be lowering, when not pre-/n/ to the point that KIT is even in height with FACE. Retraction of TRAP is very strong in Vietnamese.

Methods

- Statistical analysis and graphing was done in the R statistical environment.
- All statistical analysis and graphing was done in the R statistical environment.

Analysis & Normalization:

- Results were analyzed using R statistical software. The data from each speaker was treated as an individual factor in the analysis. The mean values for each speaker were calculated for each variable. The analysis involved a two-way ANOVA, with sex, ethnicity, and age as factors. There were no significant differences (TukeyHSD), goodness of fit (lm), and linear regression using Rbrul (Ezra, 2013).

Conclusions

- No significant differences were found for any vowel.

Authors

- Cory Holland
- University of California, Davis