The relationship between foreign accent impact and its "thickness"

Makaila Groves (Faculty Advisors: Naomi Gurevich, CSD & Talia Bugel, ILCS)
Purdue University Fort Wayne

INTRODUCTION

- Understanding the impact of sociolinguistic and sociocultural power differentials will empower clinicians and educators to provide ethical, culturally aware, services to individuals with wide backgrounds of cultural and linguistic diversity.
- Accent modification: Need to go beyond a listener's perception of accent thickness. Need *speaker's* perception:
  - How, when, & to what extent does a foreign accent impact a speaker?
- **Hypothesis**: Power differentials among language varieties influence the relationship between accent thickness and its impact, and this relationship is context/situation-specific.

LITERATURE REVIEW & RATIONALE

- Languages are not equal in power.
  - This power status is context-dependent.
  - Stigmatized language ➜ stigmatized accent.
- Language attitudes influence the perception of accentedness & intelligibility (Gurevich & Bugel, 2023) resulting in greater bias against certain accents (e.g., Hutchinson et al., 2019; Yi et al., 2014, 2013; Zheng & Samuel, 2017).
- Calvet's 1999 *gravitational model* of world languages was previously adapted for varieties of Spanish (Bugel & Santos, 2010; Bugel, 2012).
  - More prestigious > closer to center of gravity; less prestigious > more peripheral.
  - Prestige is recognized by peripheral speakers (who can strategically adopt desirable features).
- Adapting to impact of foreign accents in target language & perceived prestige or stigma of influencing language:
  - Prestige/power of an influencing language (IL: source of foreign accent) compared to the target language (TL) will impact the speakers.
  - The "thickness" on one's accent will have differing consequences for speakers depending on the status of their IL.

METHODS

- A Qualtrics (2022) survey (Purdue University IRB-2021-1744) was part of the qualitative assessment stage of developing an *Accent Impact Index* (Gurevich & Bugel, 2023).
  - This Index is a psychosocial tool to support client-reported outcomes of accent modification intervention.
  - Responses were analyzed to assess the magnitude of impact (negative and positive) as a function of perceived accent thickness.
  - Quantitative analysis: Likert-scale responses were coded for "Thickness Count" (out of a max of 77) and Positive, Negative, and Neutral impact across multiple contexts and situations.
  - Qualitative analysis: Open-ended questions were categorized by the sentiments or opinions they expressed.

RESULTS

Descriptive Statistics

- N=43 adults. No personal information was requested except the influencing languages (ILs) and the Target languages (TLs).

Influencing Languages (IL) in our Data

Target Languages (TL) in our Data
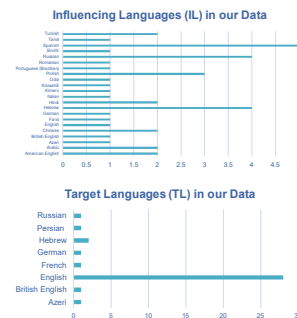
Quantitative Analysis

- Although most participants patterned close to the line showing a high correlation between thickness and negative impact, some had disproportionate negative impact vis-a-vis others with similar thickness scores, and a few had disproportionately reduced negative impact.


Negative Impact of Accent Thickness
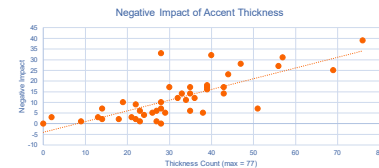
- Additional details for some outliers:
  - High Negative Impact (NI) for mid Thickness Count (TC)
    - TC 28, NI 33: IL is Turkish, TL is German.
    - TC 40, NI 32: IL is Chinese, TL is English.
    - TC 47, NI 28: IL is Italian, TL is English.
  - Low NI for higher than mid TC
    - TC 51, NI 7: IL is Russian, TL is English.

RESULTS (cont.)

Quantitative Analysis (Cont)

- No direct relationship between positive impact and (reduced) accent thickness.
- No inverse relationship between positive and negative impacts.

Positive Impact of Accent Thickness

Relationship of Negative and Positive Impacts
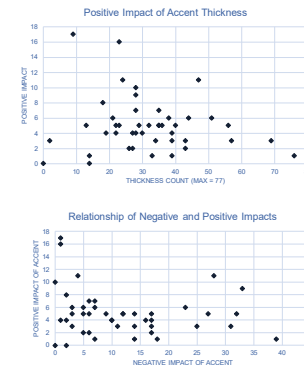
Qualitative Analysis

Open-ended responses (*n*=25) provided an additional insight into the psychosocial aspects of foreign accented speakers.

- 92% expressed the sentiment that their accents mark them as different (foreign, not local, not native).
- 28% expressed the sentiment that their accent leads to a bias against them (including racism or xenophobia).
- 20% expressed the sentiment that their accent leads to physical or emotional consequences (e.g., stuttering, vulnerability, isolation).
- 20% discussed strategic compensation either to hide or mask their accent or how their accent helps them avoid being judged regarding usage of specific dialects (e.g., "class" in the UK).
- 24% expressed that their accent shows they are worldly, multilingual, interesting.

DISCUSSION

- For most perceived thickness was directly proportional to negative impact; exceptions were related to the status of one's IL.
- Positive impact was **not** inversely proportional to negative impact supports hypothesis (impact is context/situation-specific).
  - Positive impact of one's accent depends on the language's status in one's community and daily life.
  - It is wrong to assume that the thicker one's accent is, the more it impacts their lives in exclusively negative ways.
- Gravitational Model: Proximity of an IL to the center of gravity may be desirable to avoid negative impact of foreign accent; but belonging to a peripheral community may have positive impact.
- **Speakers may seek control, not elimination, of their accent.**

Limitations

- Small N with limited TLs (primarily English) gave limited access to power differentials.
- English as TL is overrepresented, and ILs with extreme power diff from the TL are underrepresented.
- Data mined from an online survey > no external assessment of accent thickness.
- No information was collected about speakers' communities which can influence power differentials.
- Variables depend on speaker's perception
  - Of impact & thickness
  - So cannot be thought of as fully independent

REFERENCES

Bugel, T. (2012). Buenas y no tan buenas variedades del español: Opiniones y actitudes en Montevideo y Buenos Aires. *Revista Internacional de Lingüística Iberoamericana, 10*(1), 83-107.

Bugel, T. and Santos H. S. (2010). Attitudes and representations of Spanish and the spread of the language industries in Brazil. *Language Policy, 9*, 143-170.

Calvet, L. (1999). *Pour une écologie des langues du monde*. Plon.

Gurevich, N. and Bugel, T. (2023). The linguistics of accentedness: How phonetics, phonology, and sociolinguistic considerations impact clinical intervention of accent modification. In Gurevich N. and Grindrod, C. (Eds.) *Clinical Applications of Linguistics to Speech-Language Pathology: A Guide for Clinicians*. Routledge. https://doi.org/10.4324/9781003045519-13

Hutchinson, A., Weirick, J., Ahn, S., & Dmitrieva, O. (2019). Language attitudes affect perceived intelligibility, proficiency, and accentedness of non-native speech. *Proceedings of the 19th International Congress of Phonetic Sciences.*

Qualtrics. (2022). *Qualtrics software*. http://www.qualtrics.com

Yi, H. G., Phelps, J. E., Smiljanic, R., & Chandrasekaran, B. (2013). Reduced efficiency of audiovisual integration for nonnative speech. *Journal of the Acoustical Society of America, 134*(5), EI387–EI393. https://doi.org/10.1121/1.4822320

Yi, H. G., Smiljanic, R., & Chandrasekaran, B. (2014). The neural processing of foreign accented speech and its relationship to listener bias. *Frontiers in Human Neuroscience, 8*(768). https://doi.org/10.3389/fnhum.2014.00768

Zheng, Y., & Samuel, A. G. (2017). Does seeing an Asian face make speech sound more accented? *Attention, Perception, & Psychophysics, 79*(6), 1841–1859. https://doi.org/10.3758/s13414-017-1329-2