

CULTURALLY INCLUSIVE EDUCATION
FOR THE **SPEECH SCIENCES**

ALLOPHONIC VARIATIONS
IN ENGLISH: LAB



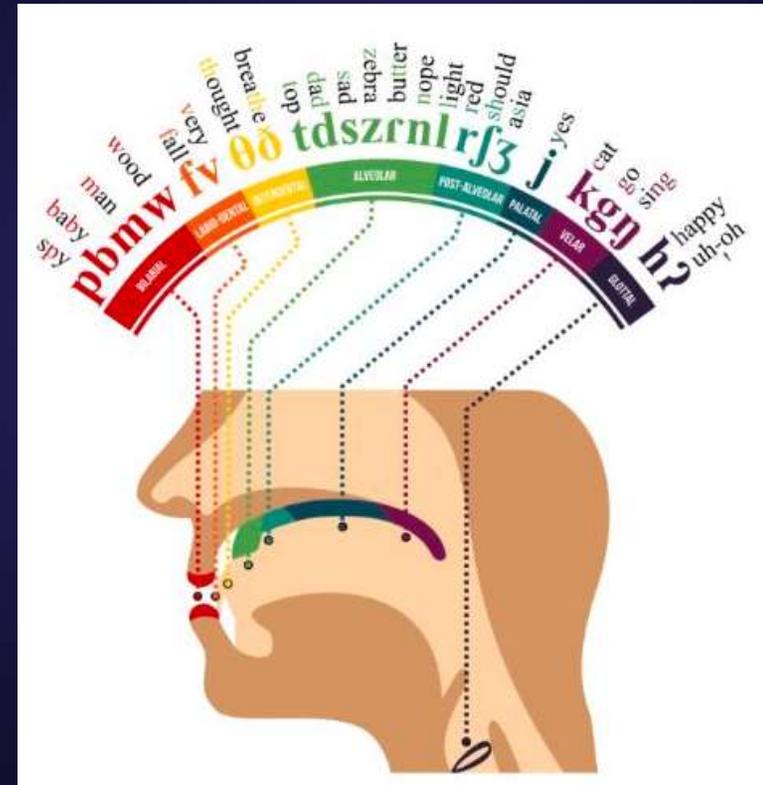
OBJECTIVES

Students will...

- Provide examples of allophones in American English.
- Explain how articulatory differences create allophones across languages.
- Discuss perceived stigma and biases against non-native English speakers.
- Discuss the benefits and drawbacks of accent modification therapy.

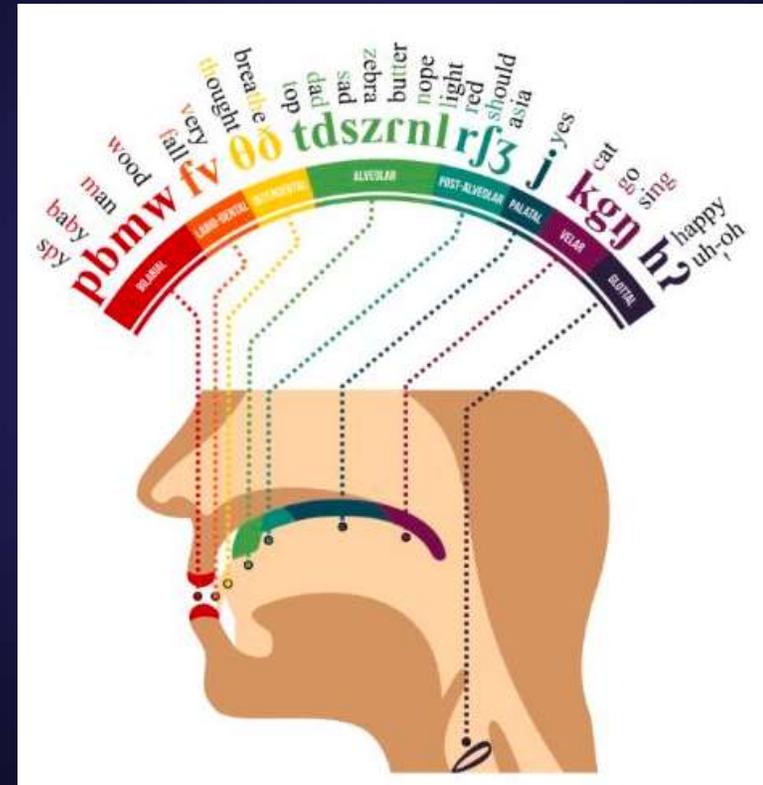
Why are there allophones?

- Phoneme articulation changes based on...
 - ?
 - ?
 - ?



Examples of Allophones in American English

- /t/: voiceless, alveolar, plosive (stop)
 - [tʰ]
 - [t̚]
 - [ɾ]



Visualizing Articulatory Differences

- What are the benefits and drawbacks of each technology?

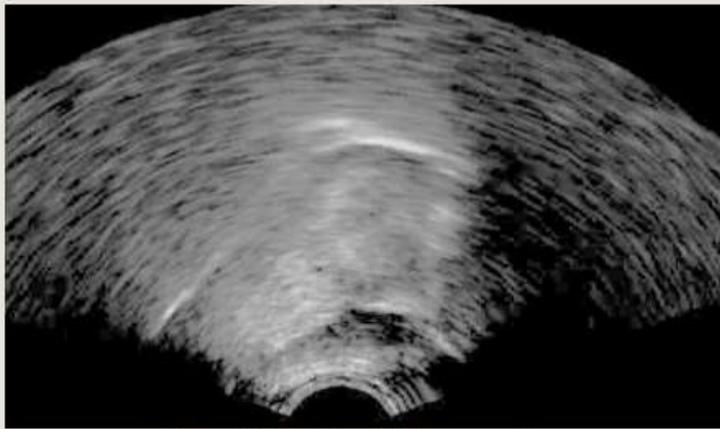


Figure 1: UTI midsagittal tongue surface

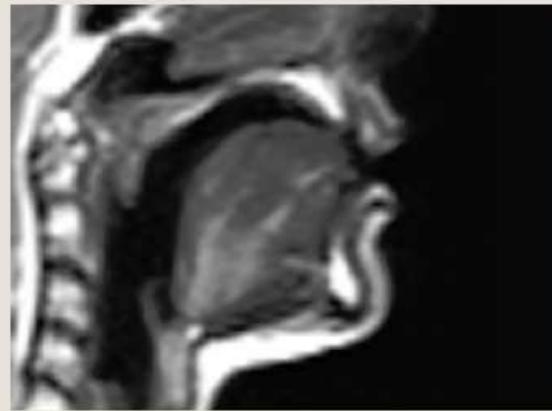


Figure 2: MRI scan of the vocal tract showing midsagittal tongue surface

<https://www.seeingspeech.ac.uk/mri-and-uti/>

Seeing Differences

- Go to the website and watch the ultrasound videos of bunched and retroflexed /ɹ/
- Describe the trajectories
- What tongue position do you think you use?



<https://www.seeingpeech.ac.uk/r-and-l-in-english/?type=r>



Everyone has an accent

<https://www.dynamicdialects.ac.uk/accent-map/>



- What are reasons people seek services?
- What are the benefits of services?
- What are the drawbacks of services?

“r” in non-native speakers

How is “r” different for native, bilingual, and second-language English learners?

How do variations in production impact intelligibility?



References and Resources

- ASHA. [n.d.] “Accent Modification [Practice Portal].” Retrieved October 15, 2022 from <https://www.asha.org/practice-portal/professional-issues/accent-modification/>
- Stuart-Smith, J., & Lawson, E. “Seeing Speech.” University of Glasgow.
 - <https://www.seeingspeech.ac.uk/mri-and-uti/>
 - <https://www.seeingspeech.ac.uk/r-and-l-in-english/?type=r>
- Stuart-Smith, J., & Lawson, E. “Dynamic Dialects.” University of Glasgow.
 - <https://www.dynamicdialects.ac.uk/accent-map/>