

Intro & Stops, Fricatives

Ling 201 Discussion Section, meeting 1
2/9/2024
Cerys Hughes

Welcome!

Ling 201

Section AA: Fridays 11:15-2:05 Hasbrouck 107

Section AB: Fridays 1:25-2:15 Hasbrouck 107

Introductions



Admin info

- Office hours: 11am - 1pm Wednesday
 - ILC 431E
 - or Zoom (just let me know)
- Website: ceryshughes.github.io/ling201sp24
- email: ceryshughes@umass.edu
 - I don't usually look at email outside of 10am-6pm M-F
 - If you haven't gotten a response in more than 48 hours, send a follow up!
 - Please feel free to email any questions!

Admin info

- If you're feeling sick, please stay home and rest!
 - Not taking attendance
 - Let me know at least an hour before discussion if you're sick but would like to participate via Zoom
- This is a **discussion** section, so don't be shy about interrupting to ask for clarification! Or to let me know if I start talking too fast, the font on the screen is too small, etc.

Admin info

- Reminder: Assignment 1 will be available Monday 2/12
- Due 2/21
- Transcribing using IPA

Articulatory Phonetics Review

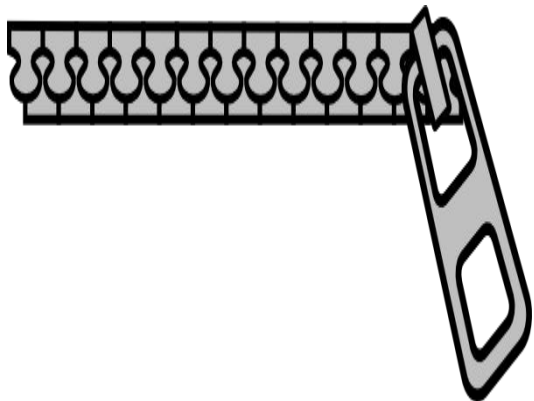
Questions?

Consonant descriptions

1. Voiced or voiceless
2. Place of articulation
3. Manner of articulation
4. Nasal or non-nasal

Voicing: Are the vocal folds vibrating?

“zip”



voiced alveolar fricative

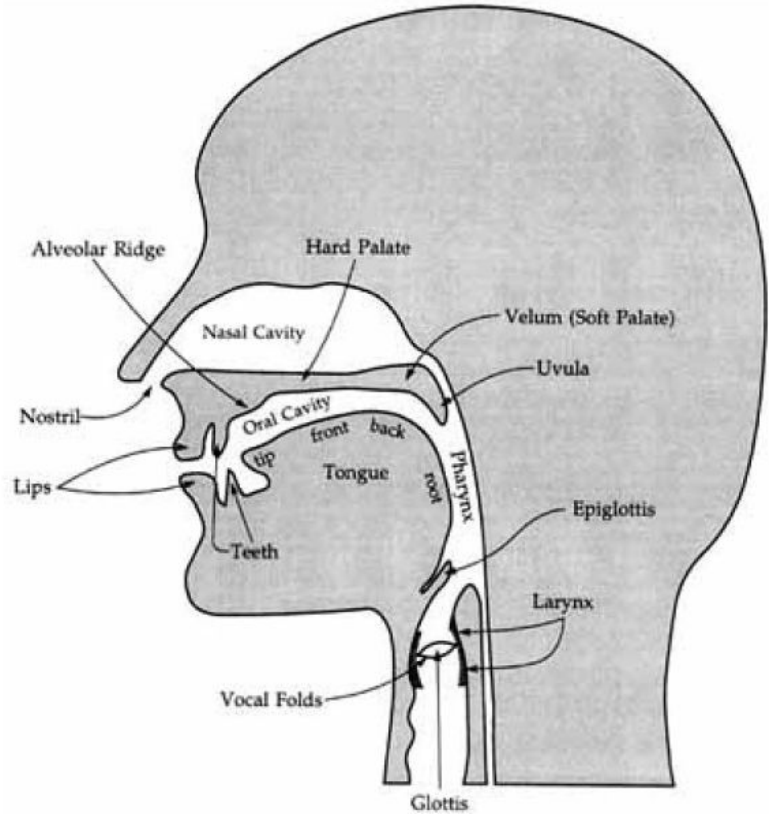
“sip”



voiceless alveolar fricative

Place of articulation

Where in your mouth is there a constriction?



[p] vs [t] vs [k]

[p]

voiceless

Place: bilabial

Manner: stop

[MRI video](#)

[t]

voiceless

Place: alveolar

Manner: stop

[MRI video](#)

[k]

voiceless

Place: velar

Manner: stop

[MRI video](#)

Manner of articulation

How narrow is the constriction in your mouth?

Manner: Stops vs fricatives

Stops: **complete** constriction (blockage)

e.g. [t] - voiceless alveolar **stop**

Fricatives: a lot of airflow + very **narrow** constriction = turbulence and noise

e.g. [s] - voiceless alveolar **fricative**

Balloon fricative

(this balloon analogy is a just joke to help you visualize what's happening in fricatives! you don't need to worry about it for class!)

[p] vs [ɸ]

[p]

voiceless

Place: bilabial

Manner: stop

[MRI video](#)

[ɸ]

voiceless

Place: bilabial

Manner: fricative

[MRI video](#)

[p] vs [t] vs [ɸ]

[p]

voiceless

Place: bilabial

Manner: stop

[MRI video](#)

[t]

voiceless

Place: alveolar

Manner: stop

[MRI video](#)

[ɸ]

voiceless

Place: bilabial

Manner: fricative

[MRI video](#)

Nasal vs non-nasal

[d]

voiced

Place: alveolar

Manner: stop

Non-nasal

[MRI video](#)

[n]

voiced

Place: alveolar

Manner: stop

Nasal

[MRI video](#)

Useful link from course materials

Useful link: <https://incl.pl/sammy/>

IPA symbols for some (non-nasal) stops!

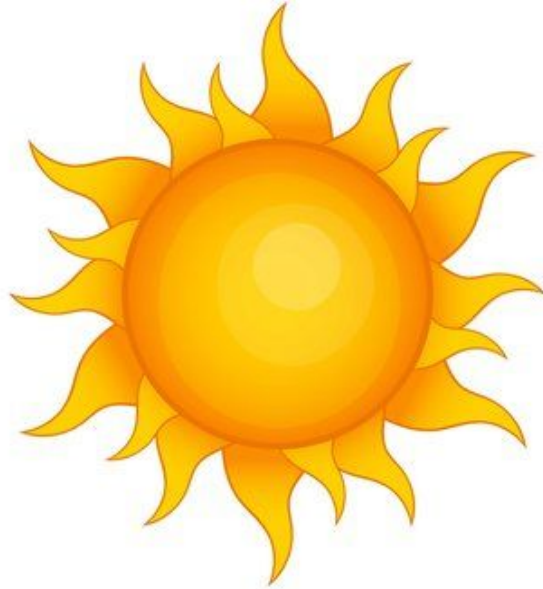
- bilabial stops: [p],[b]
- alveolar stops: [t],[d]
- velar stops: [k],[g]
 - glottal stop: [ʔ]

IPA symbols for some fricatives!

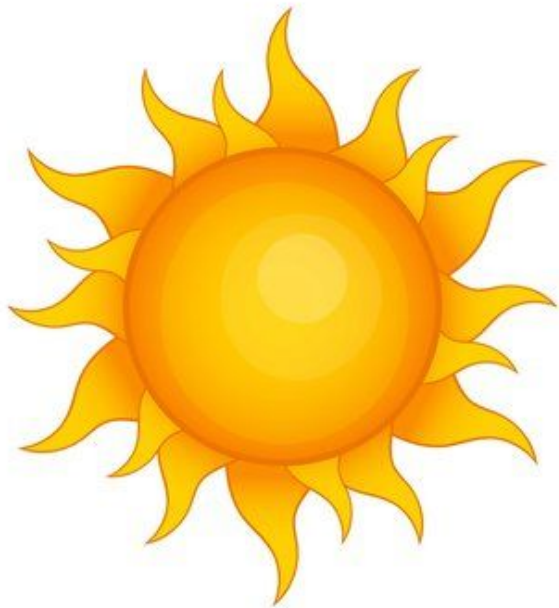
- bilabial fricatives: [ɸ], [β]
- labiodental fricatives: [f], [v]
- dental fricatives: [θ], [ð]
- alveolar fricatives: [s], [z]
- postalveolar fricatives: [ʃ], [ʒ]
- glottal fricative: [h]

Let's practice IPA transcriptions!

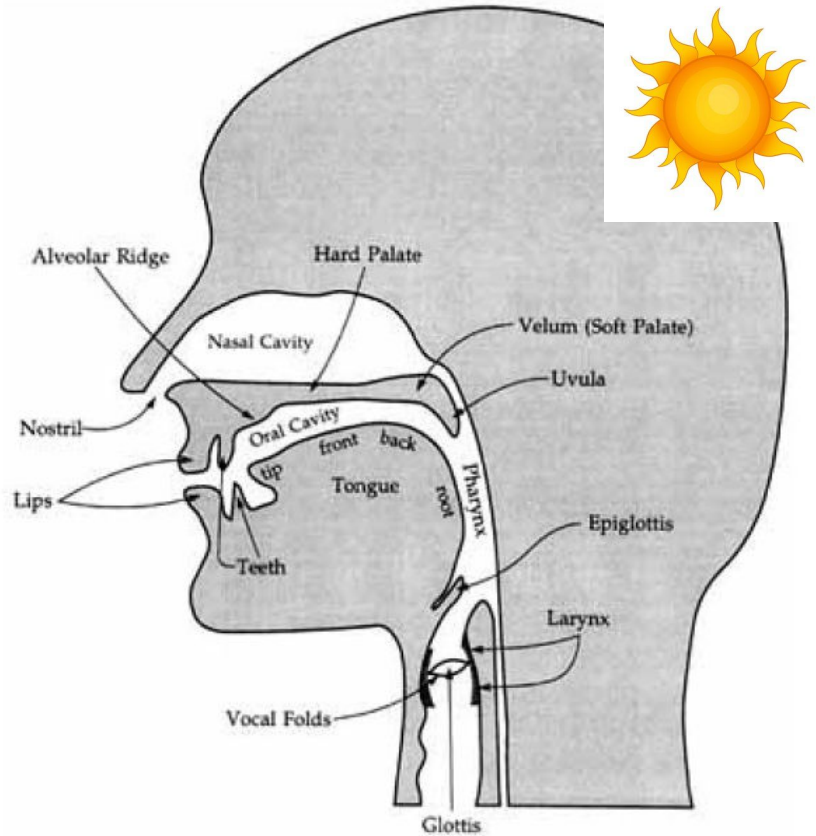
Let's transcribe the first phone we hear when we say the word for:



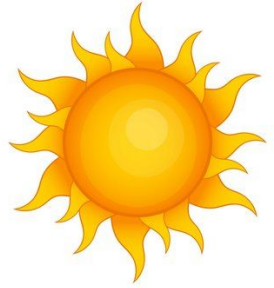
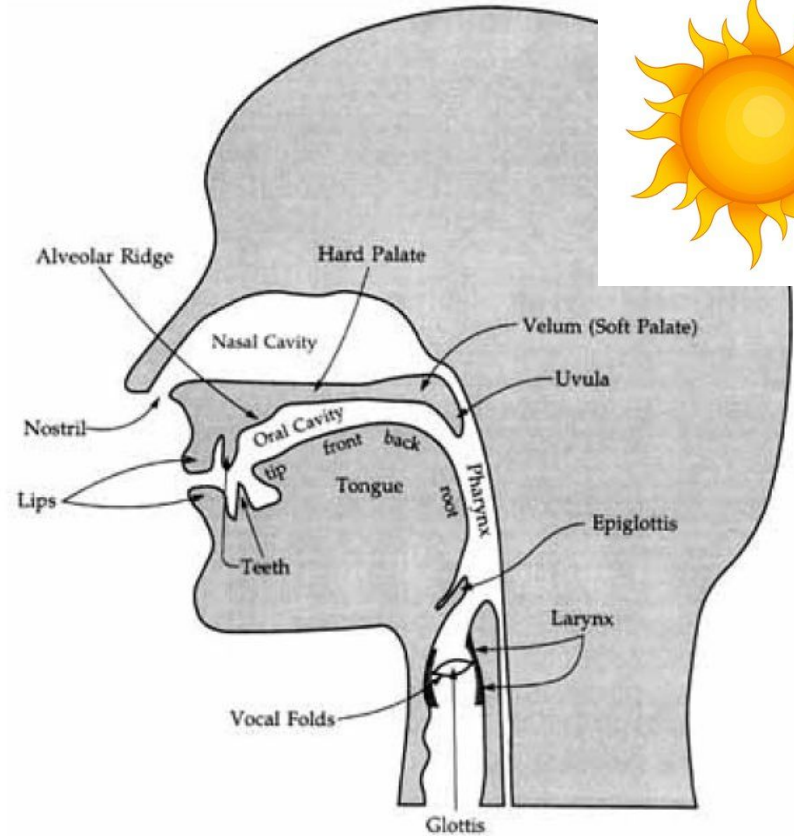
- First phone's manner of articulation?
- {stop or fricative}
 - Fricative



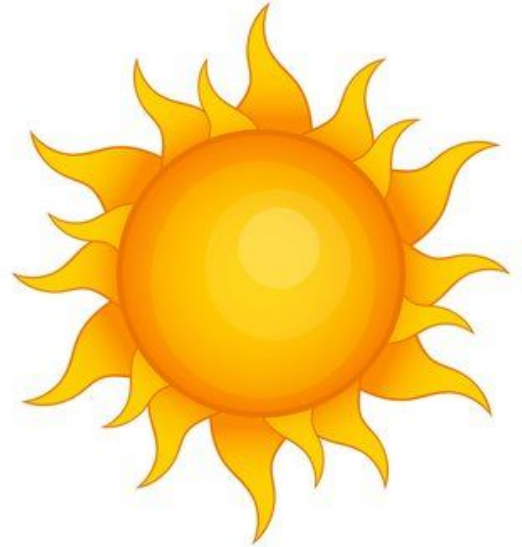
First phone's place of articulation?
{Bilabial,
labiodental,
dental,
alveolar,
postalveolar,
velar,
or glottal}



- First phone's place of articulation?
 - Alveolar



- Is the first phone voiced or voiceless?
 - Voiceless



Putting it all together

- Voicing: Voiceless
- Place of articulation: Alveolar
- Manner of articulation: Fricative
- (Not nasal)

<https://seeingspeech.ac.uk/ipa-charts/?chart=1&datatype=4&speaker=1#location=115>

What's the IPA symbol for this phone?

[s]

Practice (and questions?)

What phones are at the beginning of the word when your neighbor says these?

1. shun

2. soon

3. sugar

What phones are at the beginning of the word when your neighbor says these?

1. shun: [ʃ] voiceless postalveolar non-nasal fricative
2. soon: [s] voiceless alveolar non-nasal fricative
3. sugar: [ʃ] voiceless postalveolar non-nasal fricative

What phones are at the beginning of the word when your neighbor says these?

4. knight

5. name

What phones are at the beginning of the word when your neighbor says these?

4. knight: [n] voiced alveolar nasal stop

5. name: [n] voiced alveolar nasal stop

Tip: ignore English orthography/spelling!

Which stops or fricatives do you hear when your neighbor says these?

6. gloves

7. laugh

Which stops or fricatives do you hear when your neighbor says these?

1. gloves

- a. [g] voiced velar non-nasal stop
- b. [z] voiced alveolar non-nasal fricative

2. laugh

- a. [f] voiceless labiodental non-nasal fricative

Which stops or fricatives do you hear when your neighbor says these?

8. castle

9. math

10. choir

11. steam

Which stops or fricatives do you hear when your neighbor says these?

8. castle: [k], [s]

9. math: [θ]

10. choir: [k]

11. steam: [s],[t]

Which stops or fricatives do you hear when your neighbor says these?

12. of

13. phantom

14. frame

Which stops or fricatives do you hear when your neighbor says these?

12. of: [v]

13. phantom: [f]

14. frame: [f]

Which stops or fricatives do you hear when your neighbor says these?

15. debt

16. genre

Which stops or fricatives do you hear when your neighbor says these?

15. debt: [d], [t]

16. genre: [ʒ]

Which stops or fricatives do you hear when your neighbor says these?

16. smith

17. this

Which stops or fricatives do you hear when your neighbor says these?

16. smith: [s], [θ]

17. this: [ð], [s]

More practice

page

ballet

gain

gnome

More practice

page: [p], [dʒ]

ballet: [b]

gain: [g], [n]

gnome: [n]

Bonus: [f] and [ɸ]

In class, we briefly talked about how:

- a lot of us struggled to hear the difference between [f] and [ɸ]
- the sounds your brain can easily tell apart depend on the language(s) you speak

Bonus: [f] and [ɸ]

Ewe:

[é fá] means ‘he was cold’

[é **ɸ** á] means ‘he polished’

http://archive.phonetics.ucla.edu/Language/EWE/ewe_word-list_000001.wav

Takeway: The difference between [f] and [ɸ] is important in some languages and not others!

Bonus: [f] and [ɸ]

- Don't worry about this “how [f] vs [ɸ] behave in different languages” stuff for now - we'll talk about that when we get to phonology!
- For now, just know that [f] is labiodental (lip+teeth) and [ɸ] bilabial (both lips)

Bonus 2: Extra Transcription Practice

Transcribe the phones (that we've covered so far) in this song!

<https://www.youtube.com/watch?v=ZGsjpuUrKGc>

**Have a nice
weekend!**

