

# Intro & Stops, Fricatives

Ling 201 Discussion Section, meeting 1

2/9/2024

Cerys Hughes

# Welcome!

Ling 201

Section AA: Fridays 11:15-12:05 Hasbrouck 107

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

# Plan for today

1. Introductions
2. Admin info
3. Review stops, fricatives, and nasals
4. Practice transcribing stops, fricatives, nasals in IPA

# Introductions



# Admin info

- Office hours: 11am - 1pm Wednesday
  - ILC 431E
  - or Zoom (just let me know)
- Website: [ceryshughes.github.io/ling201sp24](https://ceryshughes.github.io/ling201sp24)
- email: [ceryshughes@umass.edu](mailto: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
  - Kyle will be covering the rest of the phones you'll need in lecture this coming week

# Articulatory Phonetics Review



**Questions?**

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

1. knight

2. name

3. think

4. fame

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

1. knight: [n] voiced alveolar nasal stop

2. name: [n] voiced alveolar nasal stop

3. think: [θ] voiceless dental non-nasal fricative

4. fame: [f] voiceless labiodental non-nasal fricative

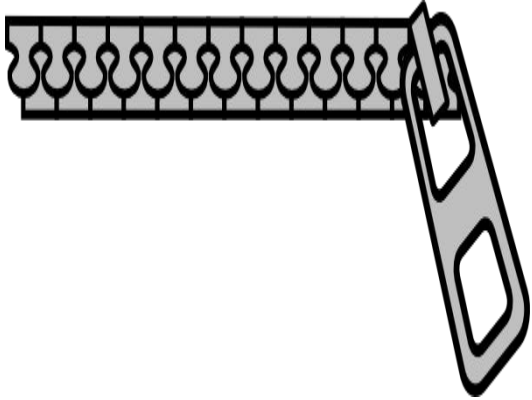
Tip: ignore English orthography/spelling!

# 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

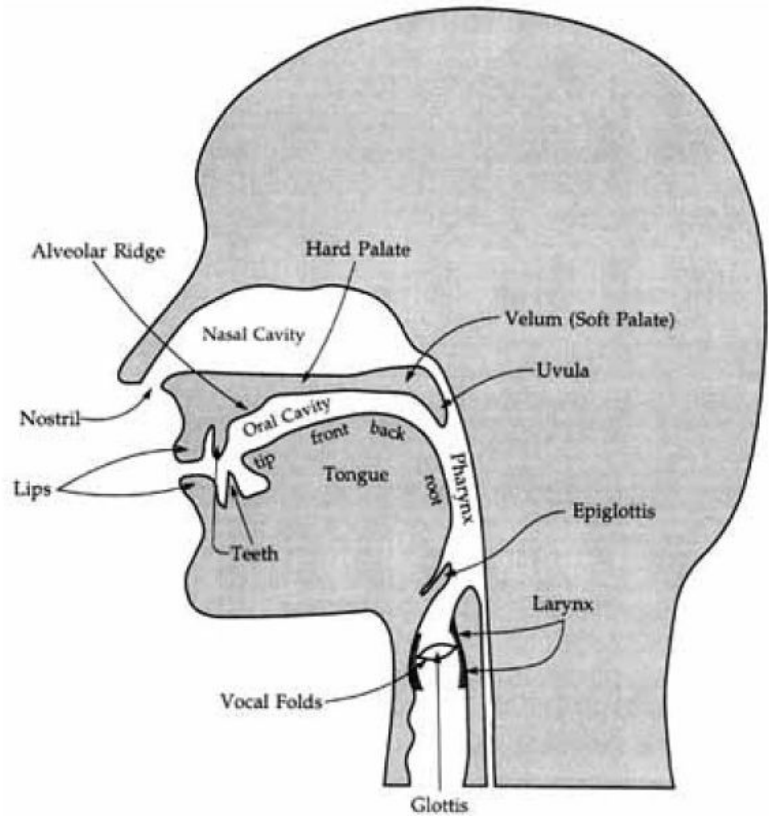
“sip”



**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/>

Also feel your nose vibrating for nasal phones, unlike non-nasal phones!

## IPA symbols for some (non-nasal) stops!

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

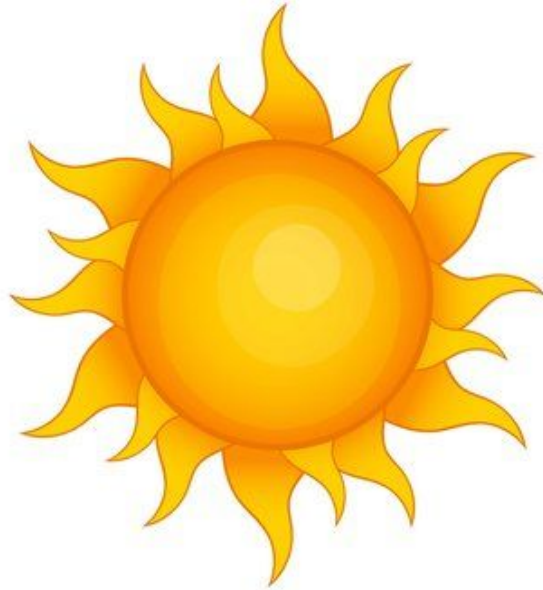
## IPA symbols for some fricatives!

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

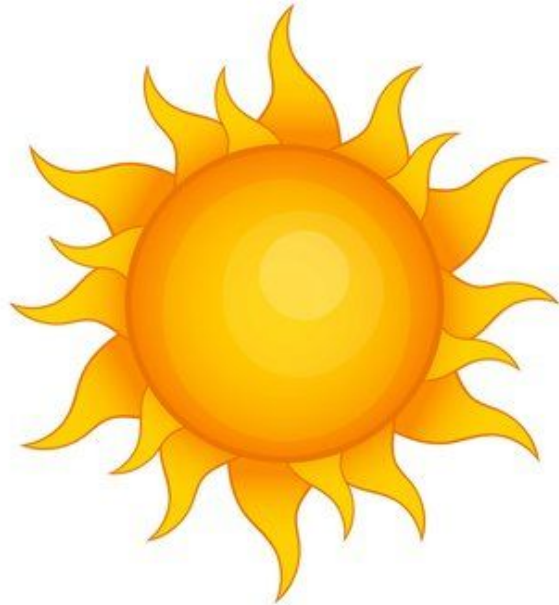
**Let's try some IPA transcriptions!**



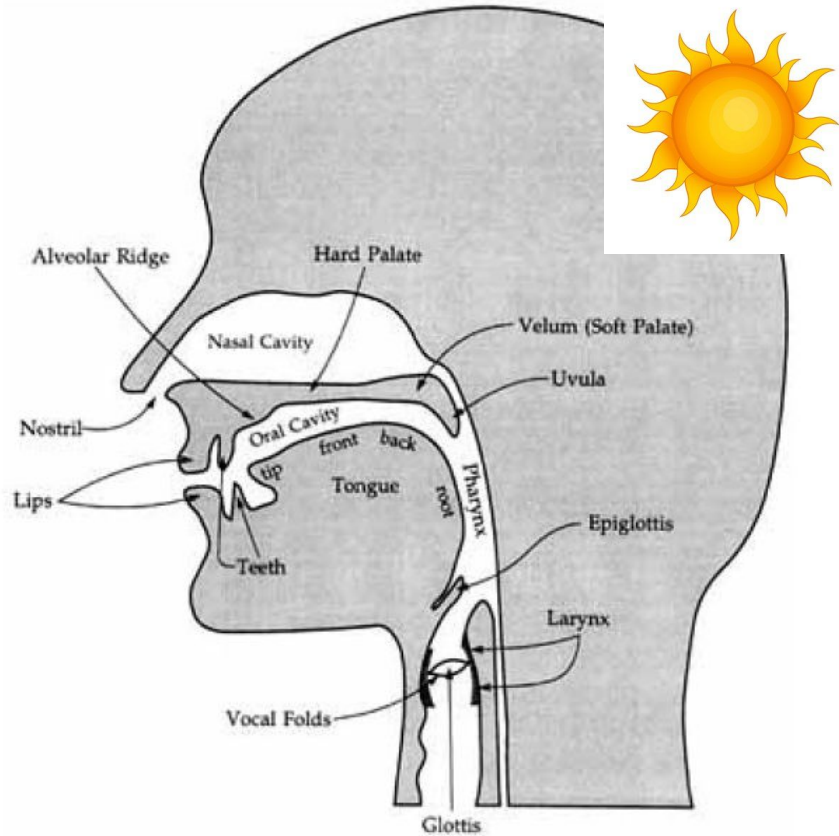
**Let's transcribe the first phone we hear when we say the English word for:**



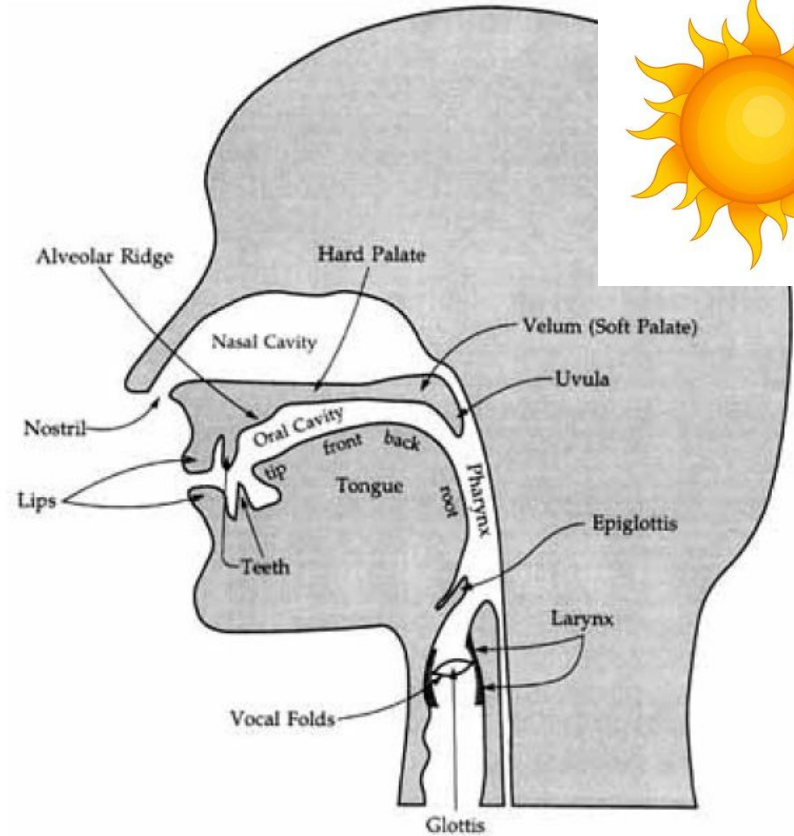
- First phone's manner of articulation?
- {stop or fricative}
  - Fricative



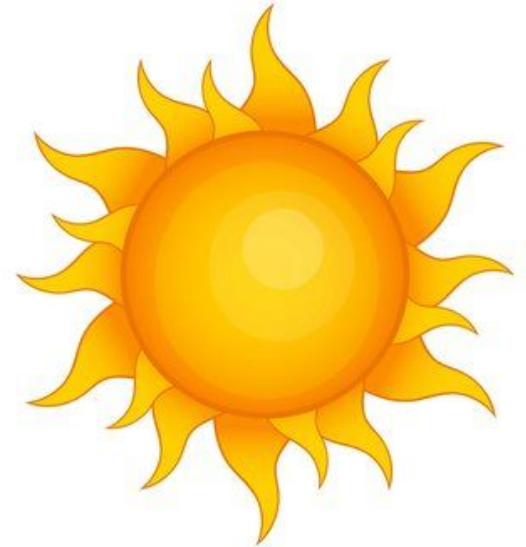
First phone's place of articulation?  
{Bilabial,  
labiodental,  
dental,  
alveolar,  
postalveolar,  
velar,  
or glottal}



- 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

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], [d̥]

ballet: [b]

gain: [g], [n]

gnome: [n]

**Have a nice  
weekend!**



## 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 phones 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](http://archive.phonetics.ucla.edu/Language/EWE/ewe_word-list_000001.wav)

Takeaway: 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>