

# LIGN 110 Section 25202 Week 2

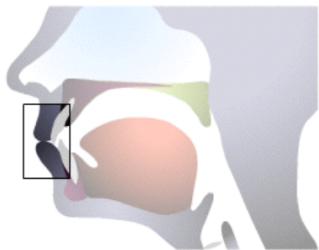
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# Place of articulation practices

## Bilabials

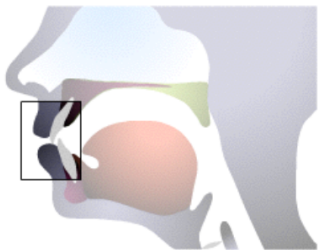


/p, b, m, (w)/

- How are they produced: Make a full closure/approximation at the lips, and release the closure.
- What is their place of articulation: Bilabial
- What are the active and passive articulators: Active: lower lip; Passive: upper lip (though it sometimes moves a bit as well)

# Place of articulation practices

## Labio-dental

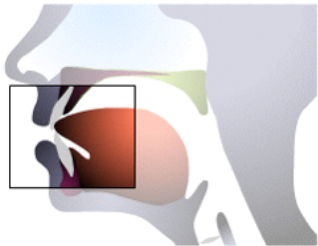


/f, v/

- How are they produced: Bring lower lip against upper teeth.
- What is their place of articulation: Labio-dental
- What are the active and passive articulators: Active: Lower lip; Passive: upper teeth

# Place of articulation practices

## (Inter-)Dental

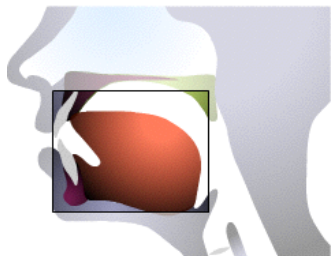


/θ, ð/

- How are they produced: Tip of the tongue is near or just barely touching the rear surface of the teeth.
- What is their place of articulation: (Inter-)Dental
- What are the active and passive articulators: Active: tongue tip; Passive: teeth

# Place of articulation practices

## Alveolar

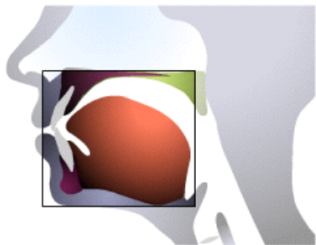


/t, d, s, z, n, l, ɹ, r/

- How are they produced:  
Place/Approximate tongue tip against the alveolar ridge (the hard region behind the upper teeth)
- What is their place of articulation:  
Alveolar
- What are the active and passive articulators: Active: tongue tip; Passive: alveolar ridge

# Place of articulation practices

## Post-alveolar

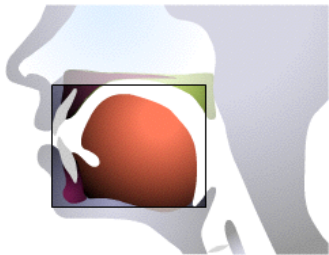


/ʃ, ʒ, tʃ, dʒ/

- How are they produced:  
Place/Approximate tongue blade  
against the back of alveolar ridge
- What is their place of articulation:  
Post-alveolar
- What are the active and passive articulators: Active: tongue blade;  
Passive: back of alveolar ridge

# Place of articulation practices

## Palatal

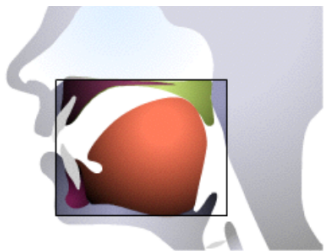


/j/

- How are they produced:  
Approximate the front of tongue against the hard palate
- What is their place of articulation:  
Palatal
- What are the active and passive articulators: Active: front of tongue; Passive: hard palate

# Place of articulation practices

## Velar



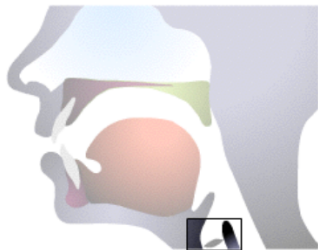
/k, g, ŋ, (w)/

- How are they produced:  
Place/Approximate the back of tongue against the velum
- What is their place of articulation:  
Velar
- What are the active and passive articulators: Active: back of tongue; Passive: velum
- Note that /w/ has two places of articulation: bilabial and velar. It is denoted as "labial-velar" in the textbook.



# Place of articulation practices

## Glottal



/h, ʔ/

- How are they produced:  
/h/: keep the vocal folds apart and push air out.  
/ʔ/: hold the vocal folds tightly together so that no air escapes
- What is their place of articulation:  
Velar
- What are the active and passive articulators: Active: vocal folds

## Exercises

Which of the following words in American English involves **velum** as the passive articulator for a consonant?

- A. type
- B. **doctor**
- C. ship
- D. sad

## Exercises

Which of the following words in American English involves **tongue front** as the active articulator for a consonant?

- A. feel
- B. year
- C. shake
- D. front

## Exercises

Which of the following words in American English does **NOT** involve **tongue tip** as the active articulator for a consonant?

- A. **bush**
- B. yes
- C. thought
- D. shift

# Voicing

## What is the difference between voiced and voiceless sounds

- Put your hand on your throat (where vocal folds are)
- Produce a /s/ sound and hold it long
- Produce a /z/ sound and hold it long
- You can feel vibration of your vocal folds for voiced sounds

## More Foyz games!

In the game of Foyz, all voiceless phonemes are replaced by their voiced counterparts, and all voiced phonemes are replaced by their voiceless counterparts. If there is no voicing counterpart to an English phoneme, it remains as is. Which of the following has correct replacement?

- A. /ð/ for "thee"
- B. /z/ and /t<sup>h</sup>/ for "stay"
- C. /ð/ and /z/ for "choose"
- D. /z/ and /d/ for "subtle"

## More Foyz games!

Please transcribe the following words in the game of Foyz?

- 1.rise /ɹajs/
- 2.television /'dɛl əfɪʃən/
- 3.supermarket /'zʊbəɹmɑɹɡɪd/
- 4.mattress /'mæɾɹɪz/
- 5.laptop /'læbdɑb/
- 6.rabbit /'ɹæpɪd/
- 7.backpack /'pægbæg/

# Phoneme vs. allophone

## Common English allophones

- Voiceless stops are aspirated before stressed vowels:
  - cat [k<sup>h</sup>æt]
- Voice stops are not aspirated elsewhere:
  - when they are before unstressed vowels: cassette [kə'set]
  - when they are after /s/: sky [skaj]
  - when they are after vowels: shake [ʃejk]
- Exercises: Please write the allophonic transcription of the following words
  1. topic ['t<sup>h</sup>apɪk]
  2. still [stɪl̥t̚]



# Phoneme vs. allophone

## Common English allophones

- /t, d/ → [t̪, d̪] before [ɹ]
  - e.g. drive /draɪv/ → [d̪raɪv]
- /l/ velarization: /l/ → [ɫ] in syllable-final position
  - e.g. feel /fi:l/ → [fiɫ]
- /t/ tapping: /t/ → [ɾ] between two vowels, the first of which is stressed
  - battle /'bætəl/ → ['bæɾət]
- /t/ → [ʔ] between a stressed vowel and a syllabic [ŋ]
  - button /'bʌtŋ/ → ['bʌʔŋ]

# Phoneme vs. allophone practice

Please transcribe the following words using the following allophonic rules.

- /t, d/ → [t̪, d̪] before [ɹ]
- /l/ velarization: /l/ → [ɫ] in syllable-final position
- /t/ tapping: /t/ → [ɾ] between two vowels, the first of which is stressed
- /t/ → [ʔ] between a stressed vowel and a syllabic [ŋ]

## Transcription practice

1. tree [t̪ri:]
2. writer ['ɹɪtə]
3. rider ['ɹɪdə]
4. eaten [iˈt̪ɛn]
5. guilt [gɪɫt]

# Phoneme vs. allophone

## More English allophones

- Devoicing: Voiced stops are devoiced word-initially  
/b, d, g/ → [b̥, d̥, g̥] word-initially
  - e.g. bet /bɛt/ → [b̥ɛt]
- Dental assimilation: /t, d, n/ → [t̪, d̪, n̪] before dental
  - e.g. tenth /tɛnθ/ → [t̪ʰɛn̪θ]
- Unrealized stop: Stops are unreleased at syllable final position or before another consonant  
/p, b, t, d, k, g/ → [p̚, t̚, k̚] at syllable-final position or before another consonant
  - e.g. bet /bɛt/ → [b̚ɛ̃]
  - e.g. adopt /ə'dʌpt/ → [ə'dʌp̚t̚]

# Phoneme vs. allophone practice

Please transcribe the following words using the following allophonic rules

- Devoicing: Voiced stops are devoiced word-initially  
/b, d, g/ → [b̥, d̥, g̥] word-initially
- Dental assimilation: /t, d, n/ → [t̪, d̪, n̪] before dental
- Unrealized stop: Stops are unreleased at syllable final position or before another consonant  
/p, b, t, d, k, g/ → [p̚, t̚, k̚] at syllable-final position or before another consonant

## Transcription practice

1. stop [stap̚]
2. width [wɪd̪θ]
3. balloon [bə'lun]
4. begged [bɛg̚d]