

LIGN 110 Section 25202 Week 5

Yuan Chai

University of California San Diego

11/02/2020

- Questions on lecture materials, quizzes, homework, final project?
- Reminder: Quiz Week 5 due on Nov. 5; Wordlist due on Nov. 5; Homework 2 due on Nov. 12
- Sound files can be found under <https://yuanucsd.github.io/website/lign110fall2020.html>

Review of place of articulation

- column: passive articulator
- row: active articulator

	upper lip	teeth	alveolar ridge	back of alveolar ridge	hard palate	velum	uvula	pharyngeal wall	NA
lower lip	bilabial	labiodental							
tip	dental		alveolar	retroflex					
blade				postalveolar					
front					palatal				
back						velar			
root							uvular	pharyngeal	
epiglottis								epiglottal	
vocal folds									glottal

Review of manner of articulation

Nasals, Trills, Taps and Flaps, Lateral fricatives,
Approximants, and Lateral approximants

CONSONANTS (PULMONIC)

© 2015 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap		ⱱ	ɾ			ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative			ɬ ɮ								
Approximant		ʋ	ɹ			ɻ	j	ɰ			
Lateral approximant			l			ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

Review of manner of articulation

Factors for manner of articulation

- **Oral or Nasal:** Oral is assumed if unspecified; For nasals, stop is assumed.
 - Oral means the velum is raised; Nasal means the velum is lowered.
- **Central or lateral:** Central is assumed if unspecified
 - Central means the air is released through the center of tongue; Lateral means that air is released through the side of tongue.
- **Degree of stricture (constriction):**
 - Complete constriction → No constriction
Stop » Fricative » Approximant » Vowel
- **Others:** Trill and tap/flap

Review of manner of articulation

Factors for manner of articulation

- **Oral or Nasal:** Oral is assumed if unspecified; For nasals, stop is assumed.
- **Central or lateral:** Central is assumed if unspecified
- **Degree of stricture (constriction):**
 - Complete constriction → No constriction
Stop » Fricative » Approximant » Vowel
- **Others:** Trill and tap/flap

Examples

- [m]: Labiodental nasal (central) (stop)
- [ɮ]: Voiced alveolar (oral) lateral fricative

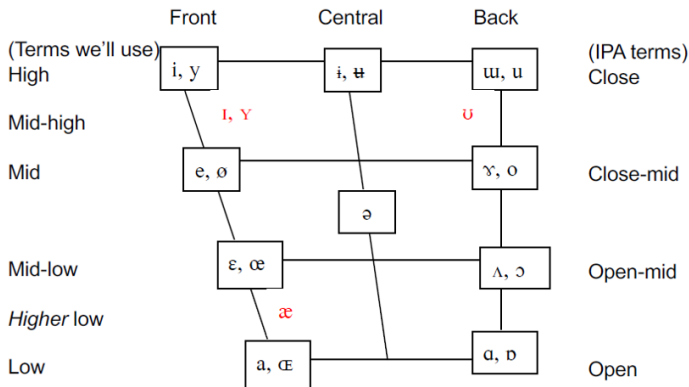
Review of manner of articulation

Diacritics

- [ɟ̞] = [j̞]: lowered voiced palatal fricative = palatal approximant
- [ɟ̠] = [j̠]: raised voiced palatal fricative = palatal stop
- Note
 - Lowered stop = fricative; Lowered fricative = approximant; Lowered approximant = vowel
 - Raised vowel = approximant; Raised approximant = fricative; Raised fricative = stop
 - If there is a symbol for the corresponding place and manner of articulation, we use that symbol directly. If there is not a symbol representing that a specific symbol, we use lowering [̞] or raising [̠]; advanced [̟], retracted [̡] diacritics to indicate that symbol.

More about this week

How to name vowels



- On each vertical line, the ones on the left are unrounded; the ones on the right are rounded;
- [ʊ] is rounded;
- [æ] is unrounded

More about this week

How to name vowels

- (diacritic) Height frontness rounding vowel
- [i]: high front unrounded vowel
- [e]: long mid front unrounded vowel
- [ə]: mid central unrounded vowel
- [ʊ]: breathy mid-high back rounded vowel
- [æ]: higher low unrounded vowel
- [a]: low front unrounded vowel

Review of place of articulation

Exercise

Which of the following sounds has tongue tip as the active articulator?

- A. [ɭ]: retroflex lateral approximant; tongue tip
- B. [ʃ]: voiceless post-alveolar fricative; tongue blade
- C. [υ]: labial-dental approximant; lower lip
- D. [ɲ]: palatal nasal; tongue front

Review of place of articulation

Exercise

Which of the following sounds is NOT an approximant?

- A. [β̞]: bilabial approximant
- B. [ɭ]: velar lateral approximant
- C. [ɪ̯] = [j]; is the corresponding glide for [i]
- D. [ɟ̞] = [ɟ]; lowered stop = fricative
- E. [ɰ̞] = [ɰ]; is the corresponding glide for [ʷ]

Review of place of articulation

Exercise: naming consonants

- Example: (diacritics) (phonation type) voiced/voiceless (aspirated) place (ejective/implosive) manner (including clicks) [ɽ]: (modal) voiceless (unaspirated) pharyngeal (pulmonic egressive) fricative → voiceless pharyngeal fricative

1. [ʀ]: voiced uvular trill
2. [ɬ]: voiceless alveolar lateral fricative
3. [β]: bilabial approximant
4. [ɺ]: retroflex nasal
5. [t̪]: voiceless laminal-dental stop

Review of place of articulation

Exercise: transcription

1. Sound 1 [t̪aka]

- Is the initial consonant voiced or voiceless?
- What is the initial consonant's place of articulation?
- What is its manner of articulation?

2. Sound 2 [d̪al]

- Is the initial consonant voiced or voiceless?
- What is the initial consonant's place of articulation?
- What is its manner of articulation?

3. Sound 3 [t̪o]

- Is the initial consonant voiced or voiceless?
- What is the initial consonant's place of articulation?
- What is its manner of articulation?

Review of place of articulation

Exercise: production

- Textbook p.227, Exercise 4
- Textbook p.227, Exercise 7
- Textbook p.228, Exercise 11