#### LIGN 110 Section 25202 Week 4

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- •Questions on lecture materials, quizzes, homework, final project?
- •Reminder: Quiz Week 4 due on Oct. 29
- •Sound files can be found under https:// yuanucsd.github.io/website/lign110fall2020.html

## Labial, coronal, and dorsal sounds

		coronal							dorsal														
	Bilat	oial	Labio	dental	Dei	ıtal	Alveolar I		Postalveolar		Retr	Retroflex		Palatal		Velar		Uvular		Pharyngeal		Glottal	
Plosive	p	b					t	d			t	d	С	Ŧ	k	g	q	G			3		
Nasal		m		ŋ				n				η		ŋ		ŋ		N					
Trill		В						r										R					
Tap or Flap				V				ſ				r											
Fricative	ф	β	f	v	θ	ð	S	Z	ſ	3	ş	Z,	ç	j	Х	γ	χ	R	ħ	ſ	h	ĥ	
Lateral fricative							ł	з															
Approximant				υ				Ţ				ŀ		j		щ							
Lateral approximant								1				l		λ		L							
S	Symbols to the right in a all are voiced, to the left are voiceless. Shyded areas denote articulations judged impossible.													ノ									

3

#### Labial, coronal, and dorsal sounds

- Labial: bilabial, labiodental, (lingual-labials); involving one or both lips
- Coronal: Dental, Alveolar, Postalveolar, Retroflex
  - •Alveolar sounds can become dental by adding dental diacritics e.g.  $[\underline{t}]$
  - Apical: produced with tongue tip e.g. voiceless apical-alveolar stop: [t]
  - •Laminal: produced with tongue blade e.g. voiceless laminal-alveolar stop:  $[\underline{t}]$
  - There can be apical vs. laminal distinction in dental and alveolar position.
- Dorsal: Palatal, Velar, Uvular, Pharyngeal, Glottal

#### Labial, coronal, and dorsal sounds

- •Advanced tongue root: [t]
- •Retracted tongue root: [t]

## Practicing non-English consonants

•Refer to
https://www.internationalphoneticassociation.org/
IPAcharts/inter\_chart\_2018/IPA\_2018.html

- Bilabial fricatives
- ·Labiodental nasal, flap, approximant
- Alveolar labial fricative
- Retroflex
- ·Palatal stops, nasal, fricatives, lateral approximant
- •Velar fricative, approximant, lateral approximant
- •Uvular nasal, trill, fricative
- Pharyngeal fricatives
- Glottal fricatives

#### Double articulation

- •[w]: labial-velar approximant
- •[m]: voiceless labial-velar fricative
- •[kp]: voiceless labial-velar stop
- •[gb]: voiced labial-velar stop
- •[ŋ͡m]: labial-velar nasal
- Note: Double articulation consists of two sounds that are of same voicing, same manner of articulation, same nasality, but different place of articulation
- Note: For affricates, the two sounds connected by a tie bar are not produced simultaneously. The two sounds should be of same voicing, place of articulation, and nasality, but of different manner of articulation.

7

## Exercise: naming consonants

- •(phonation type) voiced/voiceless (aspirated) place (ejective/implosive) manner (including clicks) [S]: (modal) voiceless (unaspirated) pharyngeal (pulmonic egressive) fricative
- Assumptions:
  - Modal phonation is assumed for voiced sounds
  - Unaspirated is assumed
  - Pulmonic egressive is assumed
  - Stops, fricatives, affricates, clicks need to specify voicing;
     Nasals, trills, approximants, taps/flaps are assumed to be voiced.

## Exercise: naming consonants

egressive) fricative

- Example: (phonation type) voiced/voiceless (aspirated) place (ejective/implosive) manner (including clicks)
   [S]: (modal) voiceless (unaspirated) pharyngeal (pulmonic
- 1.[kx]
- 2.[h]
- 3.[ŋO]
- **4**.[۶]
- 5.[b<sup>f</sup>]
- 6.[k]
- 7.[n]

## Exercise: transcription

- 1.Sound 1
- 2.Sound 2
- 3. Sound 3
- 4.Sound 4
- 5.Sound 5

### Exercise: production

- 1.[εβε] "the Ewe language"
- 2.[çe'mi] "chemistry (German)"
- 3.[atha] "glue (Bengali)"
- 4.[bawx] "bell (German)"
- 5.[dye] "day (Georgian)"
- 6.[ħa] "song (Ewe)"

#### Exercise

Which of the following sounds are possible?

- A. Voiced glottalic stop
- •B. Voiced glottalic fricative
- •C. Voiceless pharyngeal nasal
- •D. Voiced pharyngeal nasal

#### More about this week

#### Manner of articulation

- Manner of articulation refers to the degree and manner of constriction in oral and nasal cavity
- $\begin{tabular}{ll} \bullet Complete constriction \\ Stop ** Fricative ** Approximant ** Vowel \\ \end{tabular}$