Teaching Fellow: Jack Isaac Rabinovitch
jrabinovitch@g.harvard.edu

Discussion Section A: Mondays 10:30–11:30 AM, 2 Arrow St Room 420
Section B: Tuesdays 12:00–1:00 PM, 2 Arrow St Room 408
Office Hours: Mondays 2:30–3:30 PM, 2 Arrow St Room 423

Discussion Handout 3

2023 Feb 13/14

(1) Today's Schedule:
   a. Exercises Identifying Consonants
   b. Airflow Mechanisms
   c. Open Floor (Homework and Section Questions)

Consonant Pictionary

Three volunteers will draw a midsaggital diagram representing a certain sound, and other students guess the sound it is supposed to represent.

Airflow Mechanisms

(2) Flow Direction
   a. Egressive: compression causes high pressure; exhalation (if pulmonic)
   b. Ingressive: rarefaction causes low pressure; inhalation (if pulmonic)

(3)

	Pulmonic	Glottalic	Velaric
Pressure Source	Lungs	Larynx	Velum and Tongue
Egressive Version	'Typical' sounds	Ejectives	(Velaric egressive)
Ingressive Version	(Pulmonic ingressive)	Implosives	Clicks

(4) Airflow Mechanisms
   a. Pulmonic Egressive: 'Typical' sounds, known to exist in all spoken languages. Lungs constrict, and air is forced through the throat into the mouth.
   b. Pulmonic Ingressives: Generally paralinguistic; 'inwards hiss', 'inhaled affirmative'. Lungs expand, and air is forced from outside of the mouth into the lungs.
   c. Glottalic Egressive: Ejectives; the glottis closes, larynx raises to create high pressure between glottis and oral obstruction, oral obstruction is released with higher pressure before larynx lowers and glottis opens.
   d. Glottalic Ingressive: Implosives; larynx lowers to create low pressure between glottis and oral obstruction, oral obstruction is released airflow into the mouth due to the low pressure within the mouth.

e. Velaric Egressives: Generally paralinguistic; 'French dismissal'. The back of the tongue makes full contact with the velum and another obstruction further towards the opening of the mouth is made, the tongue is positioned to squeeze the cavity of air to cause high pressure, the obstruction is released.

f. Velaric Ingressives: Clicks; The back of the tongue makes full contact with the velum and another obstruction further towards the opening of the mouth is made, the tongue is positioned to expand (suck) the cavity of air to cause low pressure, the obstruction is released.

Consonant Naming

The general format for consonant naming is first representing the phonation type, then place of articulation, then manner of articulation (including airflow mechanism if relevant). Sometimes, if some aspect of the consonant is implied by another, you do not need to include it (for instance, all implosives are stops, so it may not be necessary to include them), or there may be a 'default' (for instance, 'unaspirated' is generally implied unless the consonant is labelled 'aspirated').

(5)

Phonation Type	Place of Articulation	Manner of Articulation
Voiced	Bilabial	Fricative
Voiceless (Unaspirated)	Interdental	Approximant
Voiceless Aspirated	Epiglottal	Prenasalized Affricate
Creaky	Labio-velar	Implosive (Stop)
. . .	Palatal	Click
	. . .	. . .

If there are more than one places of articulation, make sure to mention them (including for clicks)!

In pairs, give the names for the following segments:

(6)
a. /t͡ɕʰ/
b. /ⁿd̪͡ð/
c. /ʎ/
d. /ɢ̥/
e. /ʊ/
f. /q͡!/
g. /ɱ/