Handout 5: Consonants

Terminology

- **consonant place**: where in the vocal tract a consonant is made.
- **consonant manner**: how a consonant is made.
- **consonant phonation**: how the vocal folds affect a sound.

Notes

Consonant **manner** refers to what sort of obstruction a consonant sound involves.

- **obstruents**: consonants made with significant vocal tract obstruction.
  - **stop** (or **plosive**): a sound involving total obstruction, followed by a noisy release.
  - **fricative**: a sound made with continuous, noisy airflow through an obstruction.
  - **affricate**: a sound that begins as a stop, then is released into a fricative.
- **sonorants** (or **resonants**): consonants made with little vocal tract obstruction.
  - **nasal**: a sound made with full obstruction in the mouth, but with air flowing freely through the nose.
  - **approximant**: a consonant made with very little obstruction.
    - **liquid**: an r-like or l-like sound.
    - **glide**: a vowel-like consonant.

These English and SENĆOŦEN words begin with consonants of various manners:

- **stops**: tubby, purity, collect  
  TÁN ‘mother’, DILEM ‘sing’, ĖOSEN ‘star’
- **fricatives**: shine, feel, honey, sob  
  ŇOŦEN ‘mouth’, ŠOPT ‘whistle’, ŊON ‘cry’
- **affricates**: challenge, justice  
  ĖK ‘big’, JÁWI ‘dish’, TAKT ‘long’
- **nasals**: needy, mermaid  
  NOS ‘fat’, ŇEŦSEN ‘nose’, MELK ‘uvula’
- **liquids**: lucky, rubber  
  LELEJ ‘yellow’
- **glides**: yummy, Wilbur  
  YEYOSEN ‘play’, WEXES ‘frog’

Consonant **place** refers to where in the vocal tract a consonant is made.

- **bilabial**: made by bringing the lips together.
- **labiodental**: made by bringing the lower lip toward the upper teeth.
- **interdental**: made with the tongue tip between the teeth.
- **alveolar**: made with the tongue tip against the **alveolar ridge**, behind the upper teeth.
- **postalveolar**: made by pressing the tongue just behind the alveolar ridge.
- **palatal**: made by pressing the tongue against the **hard palate**.
- **velar**: made by pressing the tongue against the velum, or **soft palate**.
- **uvular**: made by pressing the tongue against the uvula, a dangling flap of skin.
- **glottal**: made by closing the glottis—that is, the opening between the vocal folds.
These *mid-sagittal diagrams* illustrate various consonant places, using IPA symbols:

![IPA symbols for consonants]

Consonants are also distinguished by *phonation*—that is, what the *larynx* is doing.

- **larynx**: the organ that protects the windpipe, and contains the vocal folds.
- **vocal folds (or vocal cords)**: flaps of skin at the larynx that produce phonation.
- **glottis**: the space between the vocal folds.
- **phonation (or state of the glottis)**: how the vocal folds affect a sound.
  - **voiceless**: made with the vocal folds at rest.
  - **voiced**: made with the vocal folds vibrating, as in singing.
  - **aspirated**: made with the vocal folds stiff and apart, as in [h].
  - **glottalized**: made by bringing the vocal folds together, as in [ʔ].
    - **ejective**: a stop consonant whose glottalization causes a stronger release.
    - **creaky voice**: a type of phonation in which the vocal folds are brought together, but not fully closed, resulting in a creaky sound.

In English, stops, affricates, and fricatives can be **voiceless** or **voiced**:

- **voiceless stops**:  p t tʃ k  
- **voiced stops**:  b d dʒ g  
- **voiceless fricatives**:  f θ s ʃ  
- **voiced fricatives**:  v ɬ z ʒ

In SENĆOTEN, stops and affricates can be **voiceless** or **glottalized**:

- **voiceless stops**:  P T Ć C Ć K Č
- **glottalized (ejective) stops**:  B T D T J Q K Č

SENĆOTEN *sonorants* (that is, *nasals*, *liquids*, and *glides*) can be glottalized too. This is pronounced either as an accompanying glottal stop [ʔ], or as creaky voice:

- **plain sonorants**:  M N L Y W N  
- **glottalized sonorants**:  ,M or M, ,N or N, ,L or L, ,Y or Y, ,W or W, ,N or N,