Describing Consonants

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Places of Articulation

→ where sounds are produced (related to the organs of speech)

**Labial**

→ the lips are the primary articulators

- *bilabial sounds*: /p, b, m/
- *labiodental sounds*: /f, v/

**Interdental**

→ the tongue is inserted between the upper teeth and lower teeth.

e.g. /θ, ð/
→ the tongue tip or the blade is raised to the alveolar ridge
e.g. /t, d, n, l, r, s, z/

→ the tongue blade is raised to the back part of the alveolar ridge
e.g. /ʃ, ʒ, tʃ, dʒ/
Palatal

→ the front part of the tongue is raised to a point on the hard palate just behind the alveolar ridge
e.g. /j/

Velar

→ raising the back of the tongue to the soft palate or velum
e.g. /k/ → voiceless, oral, velar
/g/ → voiced, oral, velar
/η/ → voiced, nasal, velar
Glottal

→ the vocal cords are the primary articulators

e.g. /h/

Retroflex

→ the tongue tip is curled to touch the back of the alveolar ridge (not commonly used in English)

try to say these words: row, rye, ray
Pharyngeal

→ articulated with the root of the tongue against the pharynx

Uvular

→ articulated with the back of the tongue against or near the uvula, that is, further back in the mouth than velar consonants
Manner of Articulation

→ describes how the sounds are produced (related to the airstream)

- stops
- fricatives
- affricates
- liquid
- glides
Stops

• the sounds are stopped completely in the oral cavity for a brief period
  e.g. /p, b, t, d, k, g/ → the oral stops
  /m, n, η/ → the nasal stops

• Oral stops are also called “PLOSIVES” because the air that is blocked in the mouth ‘explodes’ when the closure is released.
Fricatives

- the airstream is not completely stopped but is obstructed from flowing freely.
  e.g. /s, z, ʃ, ʒ, θ, ð, ʃ, ʒ/

- The air passage, however, is very narrow causing friction (turbulence)
Affricates

- the sounds are produced by a stop closure followed immediately by a slow release (of the closure characteristic of a fricative)

  e.g. /tʃ, dʒ/
Liquid

- There is some obstruction of the airstream in the mouth but not enough to cause any real friction

  e.g. l (usually called as lateral)
  r (usually called approximant)
Glides

- there is little or no obstruction of the airstream in the mouth

e.g. /j, w/
A stop is composed of three phases

- Closure
- Hold (the passage of air from the lungs is blocked)
- Release – the difference in air pressure between the area behind the closure and the atmosphere results in a small explosion
What consonant pair is this?
That’s right! /p/, /b/
And this?
/k/, /g/
What is the difference between these two slides?
In the first (/b/, /p/) the passage of air to the nose is blocked by the raised velum, in the second this passage is open, giving us a nasal. What consonant is it?
It’s /m/
Let’s look at other positions – in the alveolar position we have /t/ and /d/, and the nasal /n/:
In a similar way at the velum we have /k/ and /g/, and the nasal /η/
Fricatives

- Are created by forming a constriction through which air from the lungs may pass, but not freely.
- This lack of freedom causes audible turbulence, or friction, hence the name fricative.
- As for stops they may be voiceless or voiced.
What fricative pair is represented here?
That’s right - /f/, and /v/
And here?
This is the post-alveolar pair /s/ and /z/. Note that a small shift of the tongue from the /s/, /z/ position directs the flow of air onto the alveolar ridge.
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Practice

- Analyse the consonants in the word *fricative*

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