The Production of Speech

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The organs of speech

- Parts of the body which produce the sounds of language
- Three groups of organs (trunk, throat, and head):
  - the respiratory system
  - the phonatory system
  - the articulatory system
- The importance of the ear
  - Auditory feedback
The pulmonic air-stream mechanism

- Air-stream mechanism
  - Egressive air-stream
  - Ingressive air-stream

- The pulmonic air-stream mechanism
  - lungs
  - respiratory muscles
The larynx

- The pulmonic air stream passes through the wind-pipe or trachea, at the top of which is the larynx.

- In the larynx:
  - The vocal cords
  - The glottis
The glottis

- Four states of the glottis:
  - open glottis (‘breath state’)
  - glottis in vibration (‘voice state’. Vocal cords in contact.)
  - narrowed glottis (‘whisper state’)
  - closed glottis (The airstream is completely interrupted. Coughs, hiccups, ‘glottal stop’)


The velum

- Raised velum $\rightarrow$ *velic closure*.

- Lowered velum $\rightarrow$ air by both mouth and nose.
The velaric air-stream mechanism

When the initiator is the closure of the tongue against the velum

- Velaric egressive mechanism
- Velaric ingressive mechanism
  - *Clicks*