

Revision of material

What is speech? (cont.)

- Speech involves remarkably complex activity and precise control:

- control of airflow through vocal organs (10:1 exhalation to inhalation ratio is possible)
- control of vocal fold vibration (can reach 1000 vibrations per second)
- timing of intricate movements of speech organs
- rapid decoding by ear of sound waves passing through the air
- precise and rapid recreation in our brains of the message intended by the speaker
- feedback loop to the speaker

Sounds are minimal units of speech, another term used for individual sound is segment

- Two kinds of sounds:

vowels [i, a, u] and consonants [p, t, k, m]

- There are no more than 200-300 different speech sounds across the world languages
- Particular languages select from the stock of humanly possible sounds and order them differently
- Some sounds are very common and are found in all or almost all languages, e.g. [p, t, k, s, m, n, i]

Record a speech sample and try to cut it into individual segments very hard!

cf. experience of listening to foreign language that you do not know

- Speech is continuous and variable
- Movements of articulators are also smooth and continuous rather than disjointed

The smallest “chunk” of speech that can be pronounced in a fairly natural way is a syllable

- Every syllable

- consists of at least one sound

- has one prominent part, usually a vowel

- Types of syllables: e.g.:

V, CV, VC, CVC, CCV, CCCV, VCC, VCCC, CVCC, etc.

- Words consist of syllables, they can be monosyllabic (one syllable) or polysyllabic (more than one syllable)
- Languages have different restrictions on how syllables

and words are formed, e.g. Zulu is a CV language