Lecture 3:
Chapter 4: The sounds of language

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Recap

- Language vs. other communicative systems
- Universal characteristics of language
  - Displacement
  - Arbitrariness
  - Productivity
  - Cultural transmission
  - Duality
They have a new seagh

Would you understand this?

seagh → chef

How did he come up with this spelling?

- Take the 1st sound of the word ‘sure’,
- the middle sound of the word ‘dead’,
- and the final sound of the word ‘laugh’
Remember: the sounds of spoken English do not necessarily match up with letters of written English.

How to solve this?

One solution is to produce a separate alphabet with symbols that represent sounds.

The phonetic alphabet
Phonetics: the general study of the characteristics of speech sounds

Articulatory Phonetics
- The study of how speech sounds are made

Acoustic phonetics
- Physical properties of speech as sound waves in the air

Auditory phonetics
- The perception, via the air, of speech sounds
Consonants & Vowels

Sounds

Consonants
- Obstruction of airflow

Vowels
- Free flow of air
Consonants

Consonants are classified by answering three questions.

1. Voicing
2. Place of articulation
3. Manner of articulation
Voiced and voiceless sounds (+v & -ve)

Air pushed → lungs → trachea → larynx
Voiced and voiceless sounds

- Vocal cords are spread apart → air from lungs passes between them unimpeded (no vibration) (-v)
- Vocal cords are drawn together → air from lungs repeatedly pushes them apart as it passes through (vibration) (+v)

Try it!
- Z-Z-Z-Z-Z
- V-V-V-V
- S-S-S-S
- F-F-F-F
Places of articulation - English

- Bilabials [b, p, m, w]
- Labiodentals [f, v]
- Dentals [θ, ð]
- Alveolars [s, z, n]
- Palato-alveolar [ʃ, ʒ]
- Palatals [j]
- Velars [k, g]
- Glottals [h]
Bilabials

- Sounds formed using both upper & lower lips.

  e.g.
  - \textit{pat} $\rightarrow$ [p]
  - \textit{bat} $\rightarrow$ [b]
  - \textit{mat} $\rightarrow$ [m]
  - \textit{way/ walk/ world} $\rightarrow$ [w]
Labiodentals

- upper teeth + lower lip
  - fat/ safe $\rightarrow [f]$
  - vat/ save $\rightarrow [v]$

Q: How about... cough & photo?

A: Despite the spelling differences
  - cough/ photo $\rightarrow [f]$
Dentals

- By the tongue tip behind the upper front teeth
  e.g.
    - thin/ bath/ three teeth → [θ] (theta)
    - the/ there/ then/ thus/ feather/ bathe → [ð] (eth)

- Interdentals = tongue tip between upper & lower teeth
Alveolars

- Front part of tongue on the alveolar ridge
- **Alveolar ridge** = the rough ridge immediately behind & above the upper teeth.
Alveolars

e.g.
- top $[t]$
- dip $[d]$
- sit $[s]$
- zoo $[z]$
- nut $[n]$
- lap/ lit $[l]$
- right/ write $[r]$
Alveolars

- bus [s]
- buzz [z]

Q: How about ‘raise’?

A: [z]

OK.. How about..

- knot
- not
- [n]
Palatals/ Alveopalatals

- Tongue + palate

  e.g. (-v)

  - shout [ʃ]
  - child [tʃ]
  - shoe-brush [ʃ]
  - church [tʃ]
Palatals/ Alveopalatals

- [ʒ] – not very common in English
  e.g. treasure/ pleasure/ rouge

- [dʒ]
  e.g. joke/ gem
  George
  judge

- [j]
  you/ yet

Despite differences in spelling
Velars

- Back of the tongue + soft palate (velum)
- [k]
  - kill/ kid
  - cold/car
  - cook/ kick/ coke
- [g]
  - go/ gun/give
  - bag/ mug
  - plague
Velars

- The velum can be lowered to allow air to flow through the nasal cavity.
- [ŋ] (angma)
- In written English this letter is normally spelled as ‘ng’

Examples:
- sing
- sang
- tongue
- ringing
- bang
Glottals

- No active use of the tongue and other parts of the mouth.
- The glottis (space between vocal cords & larynx)
- The glottis is open
- [h]

E.g.
- have/ house
- who/ whose
# Consonants Chart

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<thead>
<tr>
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<th>Bilabial</th>
<th>Labiodental</th>
<th>Dental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
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<td>Fricatives</td>
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</table>
Limitation of the chart

- Plz read p. 35
Homework: P. 40/ Q: 1, 2, & 3

😊😊😊 Thank you 😊😊😊