PHONETICS OF ENGLISH

PHONEME
ALLOPHONE
DISTRIBUTION
DISTINCTIVE FEATURES

LECTURE 3

Recap

- Speech organs
- Speech production, hearing, perception
- Teaching pronunciation – methods and techniques

Overview

Phonemes and allophones

Types of distribution of speech sounds:
1. Complementary distribution
2. Contrastive distribution
3. Free variation

Minimal pair test

Distinctive features

PHONEME

- Phoneme – an abstract unit of the language system; phonemes contrast, i.e. they distinguish one word from another, they are the smallest distinguishing unit
  e.g. /t/ and /d/, town vs. down
- Formal definition: **A phoneme is the smallest contrastive unit in the sound system of a language**. (SIL glossary of linguistic terms)

PHONEME VS. PHONES

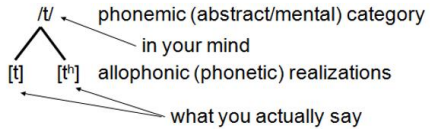
- Phones are the instances or realisations of phonemes in the actual utterances. Phonemes are abstract, i.e. mental units, phones are their physical realisations
- the words "matter" and "madder" consist of distinct *phonemes*; in AmE, both are pronounced almost identically, which means that their *phones* are the same, or at least very similar.

ALLOPHONES

- The different phones which are the realisations of a phoneme are called the allophones of that phoneme
- Allophones are the various pronunciations of a single phoneme
  e.g. pot [p^h] and spot [p]
- **Phoneme** is thus a group of sound-variants; whenever we pronounce it, we use an **allophone**, one of the variants from the group

PHONEMES AND ALLOPHONES

- For representing phonemes we use slashes /p/
- For representing allophones we use square brackets [p^h]



Another example

Phoneme /l/ in:

like [l] and in ***pill*** [ɬ]

Is realised as two different allophones.
The l in *pill* is velarised (dark l),
which means that the back of the tongue is raised against the velum.
The l of *like* does not have this quality.

PHONETIC ENVIRONMENT

- The pronunciation of a phoneme depends on the surrounding sounds, i.e. the sounds around it.
- The nearby sounds around a phoneme are the **phonetic environment** of that phoneme.
- E.g. in the word pat /pæt /, p and t are the environment for æ.

- Allophones of a single phoneme are not constrastive with each other.
- If sounds contrast, they belong to different phonemes. Phonemes are **in contrastive distribution**. In that case, there is a change in the meaning.

- Allophones are in:

1. **Complementary distribution**
2. **Free variation** - a rare phenomenon of two sounds occurring in the same environment without a change in meaning and without it being considered incorrect by native speakers – examples: the word *economics* may be pronounced with /i/ or /ɛ/ in the first syllable

Complementary distribution

'Complement': that which completes, e.g. complementary angles in maths

- two phones are in complementary distribution if they do not occur in the same environment
- for instance, [l] and [ɬ] – they do not occur in the same environment

- How do we know if the two sounds are in complementary distribution (allophones of the same phoneme) or in contrastive distribution (two distinct phonemes)?

WE PERFORM THE MINIMAL PAIR TEST.

MINIMAL PAIRS

- To check if two sounds are contrastive we perform the minimal pair test.
- A minimal pair is two words which
  - have the same number of sounds
  - differ in just one sound
  - have different meanings.

E.g. *bean* /biːn/ vs. *mean* /miːn/, *mud* /mʌd/ vs. *thud* /θʌd/

Thus, /b/ and /m/ are contrastive; so are /m/ and /θ/

DISTINCTIVE FEATURES

- Features, i.e. characteristics which distinguish one phoneme from another, i.e. they make them distinct
- They are binary – either the sounds have them or not, i.e. + or –
- We can describe sounds through distinctive features, i.e. as a group or bundle of such features
- Example: voicing is a distinctive feature in English, /p/ vs. /b/

Distinctive Features

	/ p /	/ b /	/m/
Consonantal	+	+	+
Stop (=plosive)	+	+	–
Continuant	–	–	–
Labial	+	+	+
Voiced	–	+	+
Nasal	–	–	+

Study questions

1. Define *phoneme.*
2. Define *allophones.* Provide an example.
3. What is the *phonetic environment*?
4. What are *minimal pairs*? Provide an example.
5. What is *complementary distribution*?
6. What is *contrastive distribution*?
7. How do we know if two sounds are in complementary or contrastive distribution?
8. What is the third type of sound distribution? Define it.
9. What is a *distinctive feature*?
10. What do we use distinctive features for?
11. Distinctive features are binary – what does that mean?