Lecture 3

- Phonemes
- Allophones
- Symbols
 - Phonemic symbols
 - Phonetic symbols
- Transcriptions
 - Broad / Phonemic transcription
 - Narrow / Phonetic transcription
- Rules for English allophones

Phonemes

- A phoneme is the smallest segment of sound which can distinguish two words.
- Take the words 'pit' and 'bit'. These differ only in their initial sound. 'pit' begins with /p/ and 'bit' begins with /b/. This is the smallest amount by which these two words could differ and still remain distinct forms. Any smaller subdivision would be impossible because English doesn't subdivide /p/ or /b/. Therefore, /p/ and /b/ are considered two phonemes.
- Other examples:

Minimal pairs

- Pair of words such as 'pit' and 'bit', 'pit' and 'pet', 'back' and 'bag' which differ by only one phoneme in identical environment are known as minimal pairs.
- More examples:

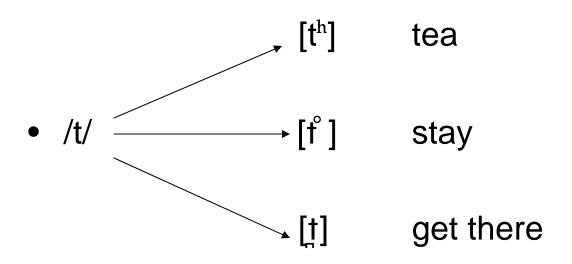
 One way to identify the phonemes of any language is to look for minimal pairs.

Phonemes

- There are 44 phonemes in English. They can be divided into two types: consonants (24) and vowels (20).
- Each phoneme is meaningless in isolation. It becomes meaningful only when it is combined with other phonemes.
- Phonemes form a set of abstract units that can be used for writing down a language systemmatically and unambiguously.
- Reasons: A letter can be represented by different sounds.
- A phoneme can be represented by different letters or combinations of letters.

Allophones

- Allophones are the variants of phonems that occur in speech.
- Reasons: the way a phoneme is pronounced is conditioned by the sounds around it or by its position in the word. For example: /t/



Phonemes vs. Allophones

- The crucial distinction between phonemes and allophones is that substituting one phoneme for another will result in a word with a different meaning (that's why phonemes can be defined as meaning-distinguishing sounds) as well as a different pronunciation, but substituting allophones only results in a different pronunciation of the same words.
- E.g.

Symbols

- **Phonemic symbols**: are symbols for phonemes. The number of phonemic symbols must be exactly the same as the number of phonemes we decide to exist in the language. In RP (BBC English), there are 44 phonemic symbols.
- Phonetic symbols: are symbols for allophones.
 They are used to give an accurate label to an allophone of a phoneme or to represent sounds more accurately.
 Phonetic symbols usually make use of diacritics.

Phonemic / broad transcription

 A phonemic transcription is a transcription in which each phoneme is represented by one phonemic symbol. In other words, in a phonemic transcription, every speech sound must be identified as one of the phonemes and written down with an appropriate symbol.

• E.g.:

 A phonemic transcription does not show a great deal of phonetic detail and is usually placed between slanting lines.

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Phonetic / narrow transcription

 A phonetic transcription is a transcription which contains a lot of information about the exact quality of the sounds. It shows more phonetic detail such as aspiration, length, nasalisation ..., by using a wide variety of symbols and in many cases diacritics.
 e.g.

- In a phonetic transcription, the symbols are used to represent precise phonetic values, not just to represent phonemes.
- A phonetic transcription is usually put between square brackets.

Rules for English consonant allophones

Initial voiceless stops are aspirated. [h]

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e.g. pie tea key
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2. Voiceless stops are unaspirated after /s/ at the beginning of a syllable. [°]

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e.g. stay
sky
speak
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