

Sounds in context:

- Phonology: we defined it as ‘... the study of the mental organization of a systematic representation of sounds in a language. Therefore, in Phonology, we must bother about
- Units of organization:
 - Biggest: *syllables*, metrical feet, words
 - Middle: *segments* (phonemes and allophones)
 - Smallest: *features*

So, as a Phonologist, our job would be to find out the system by which languages allow to combine sounds together to form these units.

One thing that we must have noticed that there are hundreds of possible speech sounds in the languages of the world.

The IPA chart can easily demonstrate that to us. However, we know that each language only uses a few of those sounds.

And when a Phonologist works on the system of sound of a language, what interests him/her the most is the *kinds of contrast* that language has at the level of sounds .

We also learned that sounds contrast when their presence in the context bring difference in the meanings of the word.

Minimal pairs

A pair of words which differ minimally with regard to the change of the sound.

These minimal difference can be spotted at three places of a word:

Initial

pin-bin

medial

put-pit

final

pɛt̚-pɛd̚

Learn more about the minimal pair on your own 😊

When we find a pair of words that differ in only one sound, and that means different things, such contrast of sounds is called 'minimal pairs'.

The above mentioned pairs of sound where sounds differ minimally is also said to be in ‘contrastive distribution’.

This procedure is adopted to find out the basic sound patterns or the basic phonemic inventories. In lay man’s terminology, the procedure allows us to find out the total number of ‘phonemes’ in a language.

However, one has to be very careful in terms of making quick judgment. For example:

- [pæd] [bæd] *minimal pair*
- Mean different things: /p/ and /b/ contrast
- [pæt] [pæt^h] *not minimal pair*
- Mean the same thing: [t] and [t^h] do not contrast

Crucial concept 1: Phoneme

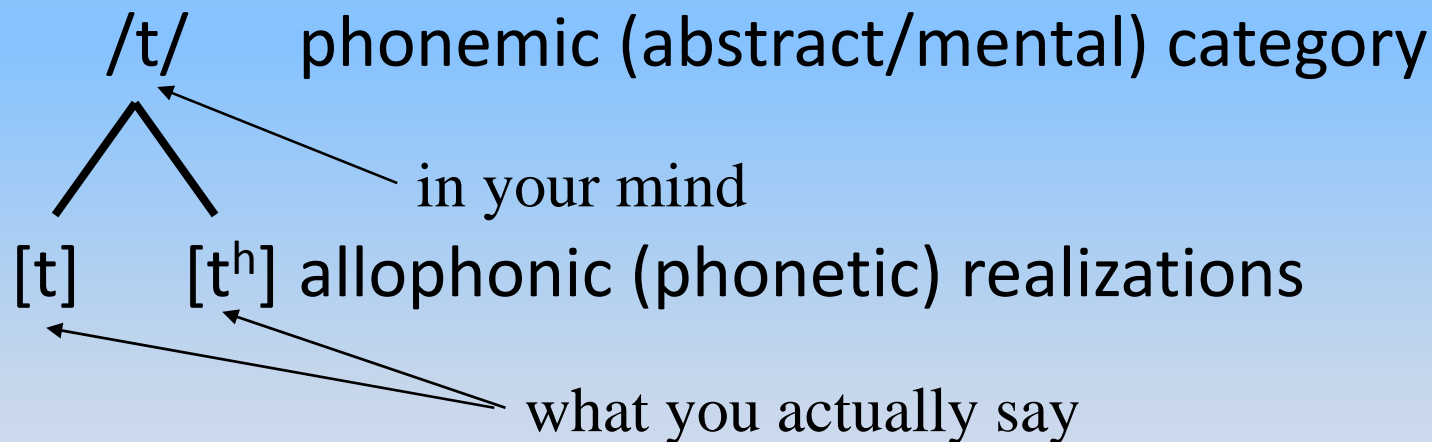
- When two sounds contrast they are part of different *phonemes*.
 - /p/ and /b/ are different phonemes
- Phonemes are abstract mental units that represent sounds.
- Be careful! Phonemes are *not* sounds themselves, they are mental units representing sounds!!!

Crucial Concept 2: Allophones

- Phonetic forms that don't contrast (make a difference in meaning) are called *allophones*
 - [t] and [t^h] are allophones of the phoneme /t/
- Allophones are the various pronunciations of a phoneme.

Phonemes & Allophones

- Phonemes are written between / / brackets
- Allophones are written between [] brackets



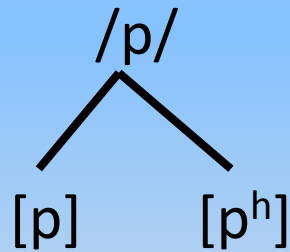
'tip' of tongue

't^hip' of tongue

Language Specificity

- The status as a phoneme is a language specific matter

- English



'pin' 'p^hin'

Hindi



'pəɪ' = a moment

'p^həɪ' = a fruit or result

Sounds in context

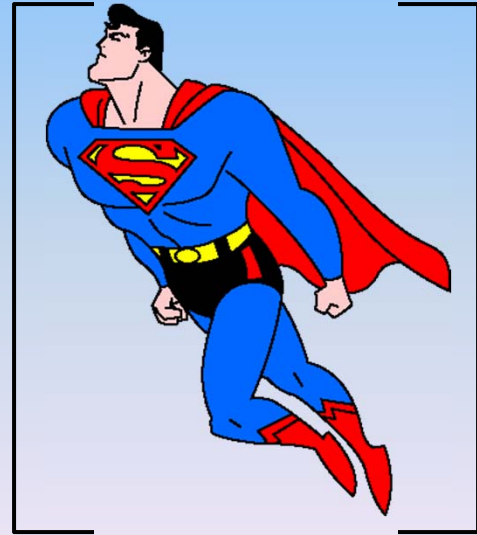
- The pronunciation of a phoneme is often determined by the other sounds around it.
- The nearby sounds around a phoneme are called the *environment* of that phoneme.
- E.g. in the word [pet], [p__t] is the environment for the [e].

Crucial concept 3: Complementary Distribution

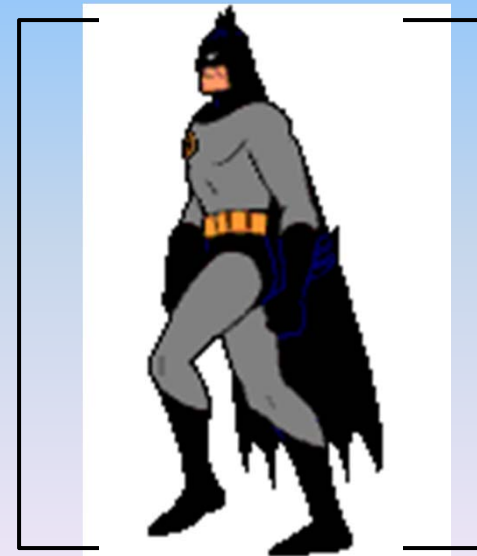
- When two phones are mutually exclusive, i.e., they appear in *different environments*
 - [skæn] [k^hæn] *[sp^hæt]
 - [spul] [p^hul] *[sp^hul]
- [p^h] and [p] are in **complementary distribution** (which means they are allophones of the same phoneme).
- When sounds are in complementary distribution, we can predict as to where we get each of these sounds, meaning we know the environment.



The mental
concept of
“supermanhood”
(phoneme)



In complementary distribution: never seen in the
same place at the same time. Allophones!



NOT in complementary distribution: can both be present at the same time: phones of *different* phonemes

Free variation

- If variation is not associated with positioning, and is rather unpredictable, such variation is called *free variation* or *random variation*.
- One type of random variation that we encounter is when we compare different realizations of one and the same phoneme by various speakers of a language.
- It differs from complementary distribution because it is context-free and it differs from phonemic variation because it is not contrastive.

Free variation

- To give an example, if a person pronounces the word *rock* as either [rɒk] or [rɒk^h], then we talk about free variation.
- We can have a different type of free variation when we deal with realizations of different phonemes in the same context without a change of meaning.
- E.g.: /i:/ and /e/ in the respective pronunciations of *economics*: /i:kənɒmɪks/ vs. /ekənɒmɪks/;
- or /e/ and /eɪ/ in the respective pronunciations of *again* /əgen/ vs. /əgeɪn/.