Tags: #flashcards #notes #LING220
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International Phonetic Alphabet (IPA)

Phonology I

What is phonology?

- Focus on patterns
- Patterns of sounds
- Mental grammar
- How speakers mentally represent language
- "Phonology is a lot like math/chemistry, where we have systems that help us parse data"

Phones = sounds, any kind of sound to be categorized

Natural Classes

Groups (classes) of sounds that behave a certain way (naturally)
Sounds that follow a pattern

Named natural classes

- Obstruents = obstruct air = stops, fricatives, affricates
- Sonorants = don't restrict air as much = glides, nasals, liquids
    - Vowels could count but usually we are just looking at consonants
- Labials = lips = bilabial, labiodental
- Sibilants = hissy sounds = alveolar + post-alveolar fricatives + affricates

How to form a natural class

Find a pattern that fits all sounds in your data
Might need to revise as additional data is collected
How do you know what doesn't fit in the natural class?
→ The natural class is formed based on patterns in speech, how speakers of a language use certain sounds

Environment

Sounds around whatever sound you are studying
Sounds are affected by their surrounding sounds
Can be words, sounds, syllables nearby
For LING220, focusing on the sound directly before and the sound directly after; the immediate environment

Tables

Used to look at environment
Ex. want to look at the diphthong [a ɪ]
[baɪt] = "bite"
[baɪ] = "buy"
[aɪ] = "eye"
Table will look like

[a ɪ]
b___t
b___#
#___#

Formatting: the [a ɪ] should be centered above the underscores
represents silence

Minimal Pairs

Two words where all sounds are the same except one
Only one sound changes but the whole meaning of the word changes
[bæt] "bat"
[kæt] "cat"
This is a minimal pair for [b] and [k]

Distribution

Grouping together sounds

Example of distribution

In Spanish:
[peto] "bat"
[peɾo] "cat"
Minimal pair for [t] and [ɾ] in Spanish

In English
[ɹ a ɹɪɾəɹ] "writer"
[ɹ a ɪ t əɹ] "writer"
This is not a minimal pair, even though the [t] and [ɾ] are interchanged, there is no difference in meaning
This is contrastive distribution; the two sounds are different, but speakers of the language do not distinguish them and can use them interchangeably

Types of distribution

1. Contrastive distribution
    - Two different sounds, but doesn't matter to speakers
    - Not distinguished in mental grammar
2. Complementary distribution
    - The two sounds are happening in different environments, and we can find a pattern in when speakers use one or the other.
3. Free variation
    - No minimal pairs in vocab AND no contrast in speaker's mind
    - Neither contrastive nor complementary
    - Will not see many examples of this in class

See Phonology II - Phonemes for more explanation on contrastive vs. complementary distribution using allophones and phonemes

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Flashcards

- Obstruents::obstruct air = stops, fricatives, affricates
- Sonorants::don't restrict air as much = glides, nasals, liquids
- Labials::lips = bilabial, labiodental
- Sibilants::"hissy" sounds = alveolar + post-alveolar fricatives + affricates

Related Topics

- Next: Phonology II - Phonemes