PHONETICS
SUPRASEGMENTAL FEATURES

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Linguistics 101
Segmental vs. Suprasegmental Features

1. Segmental vs. Suprasegmental Features

2. Length

3. Pitch
   - Intonation
   - Tone

4. Stress

5. Summary
Segmental vs. Suprasegmental Features

- Segmental features are (generally) easy to determine in isolation.
- Suprasegmental features are relative and determined across segments.
- Single suprasegmental features may occur over a single segment or a sequence of segments.
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**Notes**
Length

- The length of individual phones may differ.
- The length of a phone may depend on pragmatic reasons, phonetic reasons, or phonemic reasons (i.e. to distinguish words).
In English, vowels preceding voiced consonants are longer than vowels preceding voiceless consonants:

- bead > beat
- bag > back

When identical phones end up adjacent to each other, they may be pronounced as a single, long sound:

- two plus seven > two plus eight
- ghos(t)s → [guuss]
In some languages, changing the length of a phone can change a word’s meaning.

**Korean (older generation)**

- [mal] ‘horse’
- [maːl] ‘speech’
- [nun] ‘eye’
- [nuːn] ‘snow’

**Czech**

- [bit] ‘apartment’
- [biːt] ‘to be’
- [dal] ‘gave’
- [daːl] ‘further’

**Question**

In English, some vowels are pronounced longer than others. Why is this not **distinctive**?
## Segmental vs. Suprasegmental Features

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### Notes

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All speakers have different average pitch.*
A speaker’s pitch may be culturally (and situationally) influenced.*
Pitch as part of language includes both intonation and tone.

*These facts are not related to ‘language’ proper, though sociolinguists and anthropologists may study these
Intonation

- pitch as it operates over phrases and sentences
- does not distinguish individual words
- plays a role in determining utterance meaning
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EDGE TONES

- occur at the end of phrases (including sentences).
- shape the meaning in various ways
- aid in processing sentence structure

(1) a. You got an A on the test.
   b. You got an A on the test?
   c. You got an A on the test, a C on the homework, and a B on the quiz.

(2) a. Yes. (answer)
   b. Yes? (guessing)
   c. Yes. (‘What do you want?’)
   d. Yes. (‘I see...’ said evilly)
Pitch Accent

- refers to the use of pitch used to give prominence to a word
- used in English to focus words

(3)  a. Who kissed Peter?
    b. MARY kissed Peter.

(4)  a. Who did Mary kiss?
    b. Mary kissed PETER.

(5)  a. What did Mary do to Peter?
    b. Mary KISSED Peter.

note that ‘pitch accent’ may also be used to describe a type of distinctive use of tone over a syllable
Tone

- pitch operating over syllables to distinguish words
- found in ‘tone languages’
- tones can be *level* or *contour*
- tone languages may use both types of tones, or just one
### Segmental vs. Suprasegmental Features

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### Intonation

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### Notes
Cantonese Tones

- Cantonese (spoken in and around Hong Kong) has six tones
- Cantonese has both level and contour tones

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<tr>
<th>Pronunciation</th>
<th>Meaning</th>
<th>Tone</th>
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<tr>
<td>[ 'ysi ]</td>
<td>‘poem’</td>
<td>53</td>
</tr>
<tr>
<td>[ -ysi ]</td>
<td>‘to try’</td>
<td>33</td>
</tr>
<tr>
<td>[ -ysi ]</td>
<td>‘matter’</td>
<td>22</td>
</tr>
<tr>
<td>[ -ysi ]</td>
<td>‘time’</td>
<td>11</td>
</tr>
<tr>
<td>[ ysi ]</td>
<td>‘to cause’</td>
<td>45</td>
</tr>
<tr>
<td>[ ysi ]</td>
<td>‘city’</td>
<td>13</td>
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Notes
Stress refers to prominence due to increased amplitude, pitch, and length.

Stress placement may be predictable or unpredictable.

Predictable stress need not be memorized with words.

Languages frequently have some predictable and some non-predictable stress.
In Czech, stress always falls on the first syllable.
In Polish, stress falls on the penultimate syllable.
Non-predictable Stress Placement

- In Dutch, stress placement is sometimes distinctive:
  - vóórkomen 'to occur', voorkómen 'to prevent'
- In English, stress is sometime non-predictable, sometimes predictable.
  - stress placement on words must be memorized: convoy, convey, magazine
  - distinguishes some nouns from verbs: insult vs insult
  - affixes affect stress in regular ways: communicate → communication, implicate → implication
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All languages make use of segmental and suprasegmental features.
All languages use at least segmental features distinctively.
Some languages use suprasegmental features distinctively.