LNGT0101
Introduction to Linguistics

Lecture #13
Oct 29th, 2015

Announcements

• HW3 is due today: 8pm by email or as hard copy in today’s class.

• Any final questions on the homework?

• Language Matters tomorrow (Thursday) at 4:30-5:30, Axinn 219.

Presentations for Monday

• An article on California accent.

• An article on America’s ugliest accent tournament.

Thoughts?

Turkish

1. İt şoldu. ‘I bought meat.’
2. İt öldü. ‘He bought meat.’
3. Mekkup yazdım. ‘I wrote a letter.’
4. Mekkup yazdım. ‘He wrote a letter.’
5. Mekkup yazdım. ‘The letter is beautiful.’

6. Eti ahş. ‘I bought the meat.’
7. Eti pahalı. ‘Meat is expensive.’
8. Eti pahalı. ‘The meat is expensive.’
9. ‘Eti pahalı. ‘The meat is expensive.’
10. Mekkup gitmez. ‘The letter is beautiful.’

Today’s agenda

• Vowels.
• Phonetic transcription.
• Coarticulation processes.
Summary from last class

- Phonetics is the study of sounds in human language.
- Spelling is not always reliable to represent pronunciation. Phoneticians invented the IPA, therefore.
- Human sounds come in two categories: consonants and vowels.
- Consonants are described in terms of three features: place of articulation, manner of articulation, and voicing.

American English consonants

**TABLE 5.1** Some Phonetic Symbols for American English Consonants

<table>
<thead>
<tr>
<th>Place</th>
<th>Bilabial</th>
<th>Labiodental</th>
<th>Interdental</th>
<th>Alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>p</td>
<td>b</td>
<td>t</td>
<td>k</td>
<td>h</td>
<td>g</td>
<td>j</td>
</tr>
<tr>
<td>Fricatives</td>
<td>f</td>
<td>θ</td>
<td>s</td>
<td>z</td>
<td>h</td>
<td>θ</td>
<td>j</td>
</tr>
<tr>
<td>Affricates</td>
<td>x</td>
<td>θ</td>
<td>θ</td>
<td>θ</td>
<td>θ</td>
<td>θ</td>
<td>θ</td>
</tr>
<tr>
<td>Glides</td>
<td>m</td>
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<td>m</td>
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<td>m</td>
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<td>m</td>
</tr>
<tr>
<td>Liquids</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
<td>n</td>
</tr>
</tbody>
</table>

A note on fricatives and affricates

- Acoustically, fricatives and affricates can be divided into two types based on their relative loudness. The noisier ones are called *stridents* (aka as *sibilants*): [s], [z], [ʃ], [ʒ], and [ʃ], whereas the quieter ones are called ([θ] and ([ð]) are *nonstridents*.

Aspiration of voiceless stops in English

- In English, the voiceless stops are produced with an extra puff of air when occurring initially. Compare your pronunciation of the [p], [t], and [k] sounds in both words in each of the following pair:
  - pan vs. span
  - tar vs. star
  - cool vs. school

Aspiration of voiceless stops in English

- The voiceless stops in the first words are characterized as “aspirated” sounds, which distinguish them from the *unaspirated* voiceless stops that do not occur initially.
- In phonetic transcription, we indicate this difference in aspiration by superscripting the aspirated sound with [ʰ], e.g., *pit* [pʰit]; *spit* [spʰit].
Vowels

- Vowels are distinguished from consonants in that the passage through which the air travels is never so narrow as to obstruct the free flow of the airstream.

- It’s hard, however, to characterize vowels according to the same features that we have used in characterizing consonants. Why?

Parameters for vowel articulation

- Vowels are described in terms of four features:
  
  (a) **Tongue height**: High, Mid, and Low
  (b) **Which part of the tongue is involved**: Front, Central, and Back
  (c) **Lip rounding**: Rounded and Unrounded
  (d) **Tenseness or laxness of the vocal tract**: Tense and Lax

American English vowels

![Classification of American English vowels](image)

A note on symbol discrepancy

- Take notice: The [a] in your textbook is the [ɑ] on the IPA chart. So, don’t get confused.

Diphthongs

- Two vowels may combine together to form a **diphthong**. Examples of diphthongs in American English are given below:

  - [ai] as in *die*  
  - [au] as in *now*  
  - [ɔɪ] as in *toy*

- Note that the vowels in *bait* and *boat* are also typically pronounced as diphthongs, and are therefore frequently transcribed as [eɪ] and [ou], respectively.
American English vowels

- [http://www.uiowa.edu/~acadtech/phonetics/#](http://www.uiowa.edu/~acadtech/phonetics/#)

Nasalization of vowels

- Vowels can be either oral or nasal.
- In English, nasal vowels typically occur before nasal consonants. Compare, for example, the vowel in *bat* and *ban*. In transcription, the diacritic [~] is placed over the vowel to indicate that it is a nasalized vowel, as in *ban* [bæn] and *boom* [bʊm].

Do you speak American?


Northern Cities Vowel Shift

- [http://www.uiowa.edu/~acadtech/phonetics/#](http://www.uiowa.edu/~acadtech/phonetics/#)

Transcription

- Phonetic transcription is a representation of the pronunciation of a word using IPA symbols. It is typically given between [ ].
- Transcription could be broad, in which case a minimal amount of phonetic detail is given, or narrow, in which case more detailed phonetic differences are provided (e.g., aspiration of voiceless stops and nasalization of vowels).

*Figure 15.5 The Northern Cities Shift*

First, the [æ] in words like and was raised and diphthongized to become [ə]. Then, the [ə], as in aid, dass, pop, and hot, was lowered to become closer to [æ]. The [i], as in did, was raised and became more like [ei]. The [i], as in kid, was backed, which in turn pushed the [æ], as in aid, farther back. In parallel with the backing of [i], [i] as in led, also moved back.  

*From O’Grady et al 2005, p. 341.*
Broad vs. Narrow Phonetic Transcription

<table>
<thead>
<tr>
<th>Word</th>
<th>Broad Transcription</th>
<th>Narrow Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>?</td>
<td>[jɛɪm]</td>
<td>[jɪm]</td>
</tr>
<tr>
<td>?</td>
<td>[lɛktʃə] or [lɛkʃə]</td>
<td>[lɛktʃə] or [lɛkʃə]</td>
</tr>
<tr>
<td>?</td>
<td>[saʊndz]</td>
<td>[saʊndz]</td>
</tr>
<tr>
<td>?</td>
<td>[fæntəks]</td>
<td>[fæntəks]</td>
</tr>
<tr>
<td>?</td>
<td>[tʌŋg]</td>
<td>[tʰʌŋg]</td>
</tr>
</tbody>
</table>

Transcribing sentences

Broad: [nom tʃɔmski iz e lɪŋgwist hu tɪfəz æt ɛm ai tɪ]

Narrow: [nɔm tʃɔmski iz a lɪŋgwist hu tʰɪfəz æt ɛm ai tʰi]

How to type transcriptions in IPA

- [Link to an interactive chart to insert IPA symbols.]

- This is quite useful for phonetic transcription exercises.

Notes on phonetic symbols

- A couple of things to note about the difference between the IPA chart and your textbook.
- First, the IPA symbol for American English ‘r’ is [ɹ], but your book uses regular [r] (which is the symbol for the trill in the IPA).
- Second, the book uses [a] for the low back vowel in words like ‘hot,’ while the symbol for this sound on the IPA chart is [ɔ]. (The IPA [a] is actually the British sound in ‘fast.’)
- For consistency, let’s all use the IPA symbols!

Transcription exercises

- In groups of 3/4, work on the transcription exercises on the handout. Do the first ten words in each exercise.

Next class agenda

- Coarticulation.
- Syllable structure.