Phonetics Part II

Vowels, diphthongs and other scary things

Vowels

• Height of the tongue body
• Backness/Frontness of the tongue body
• Rounding of the lips
• Tenseness of gesture

High, Mid, Low

[ij]  [ej]  [æ]

fMRIs courtesy of Diana Archangeli
Front/Back
(also note lip rounding!)

\[ [ij] \quad [u] \]

fMRIs courtesy of Diana Archangeli

Central
\[ [A] \text{ and } [\varnothing] \]

fMRIs courtesy of Diana Archangeli

Tense/Lax

\[ [ij] \quad [i] \]

fMRIs courtesy of Diana Archangeli
American English Vowels

What do I really have to know?!

- You need to know what all the terms mean
- You need to know all the IPA characters for English.

Describing Vowels

- Height + Front/Back + Tense/Lax + Rounding
- [ej] mid front tense unrounded diphthong
- [u] high back tense rounded vowel
Diphthongs

[aj] ‘bite’

Diphthongs

[ɔj] ‘boy’

Diphthongs

[aw] ‘about’
Summary

• Vowels
  • Tongue height
  • Tongue backness
  • Tenseness
  • Lip rounding
• Diphthongs: sequences of vowels