



UCL

Phonetics II: Vowels

Reading: FRH Ch. 5

PLIN0006: Introduction to Language



Vowels

Vowels are **classified** according to four factors:

- 1) Tenseness (if it matters)
- 2) Tongue Height
- 3) Tongue Backness
- 4) Lip Rounding

Tongue Height and Backness

[ɑ] father, palm, sergeant, heart

[e] gate, bait, great, they, eight*

[i] beet, key, be, believe, serene

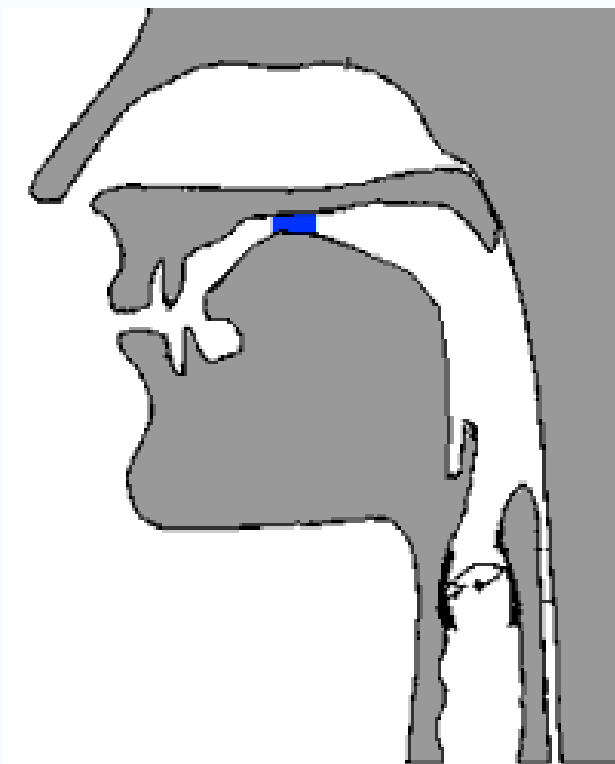
[o] coat, go, grow, over, own*

[u] boot, lute, who, two, Lou

*For most speakers of Southern British English these words have diphthongs. It might help to pretend you're from Yorkshire or America.

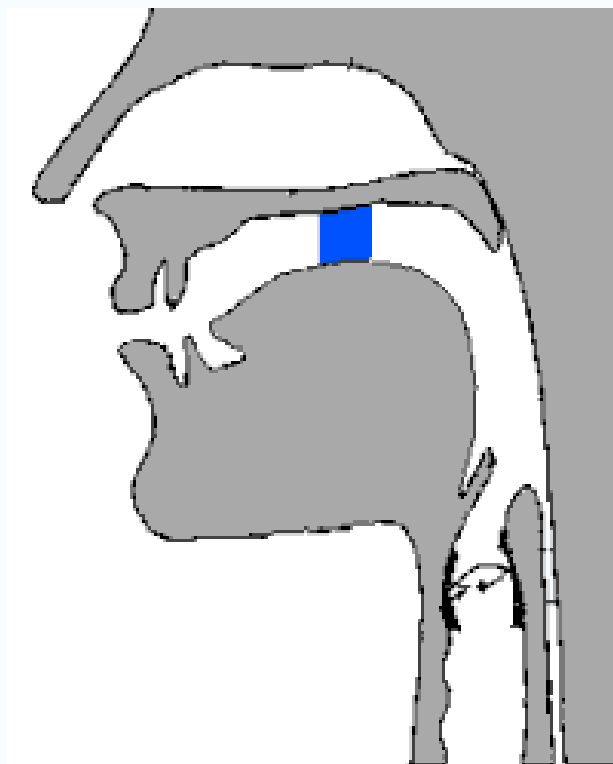
Tongue Height

Close/High

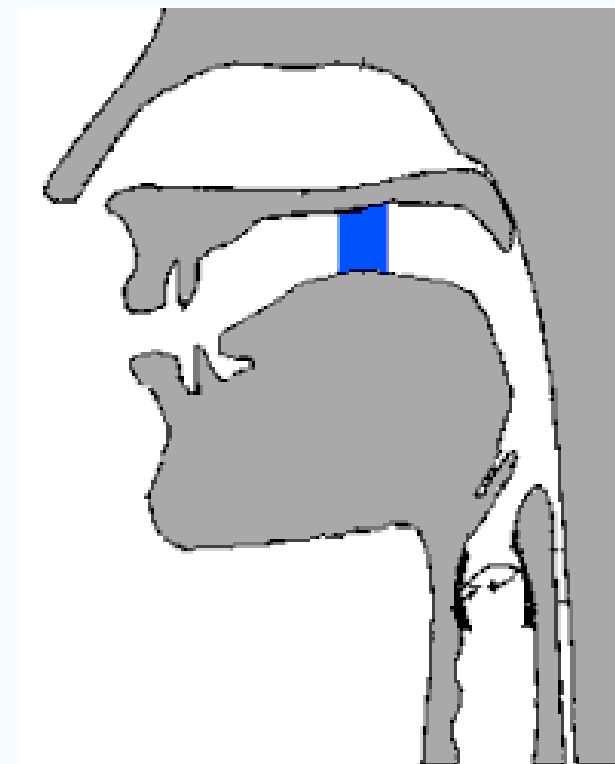


[i, u]

Mid



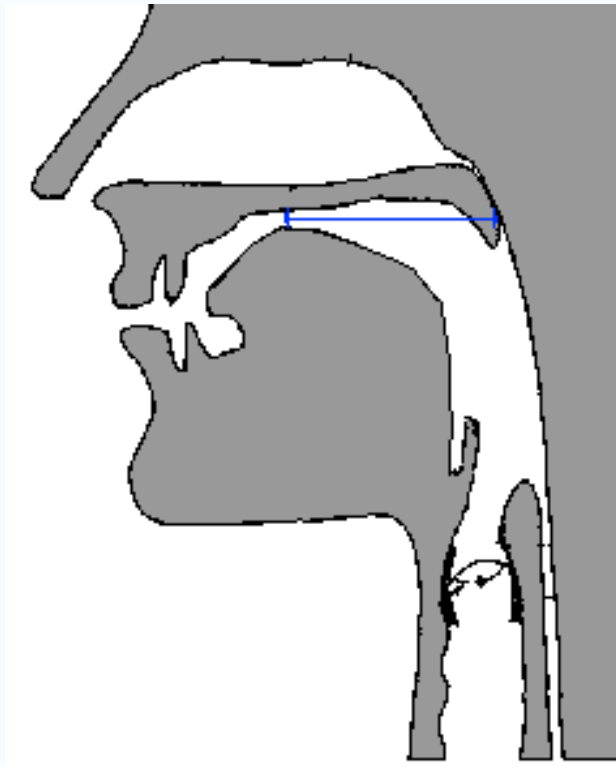
[e, o]



[a]

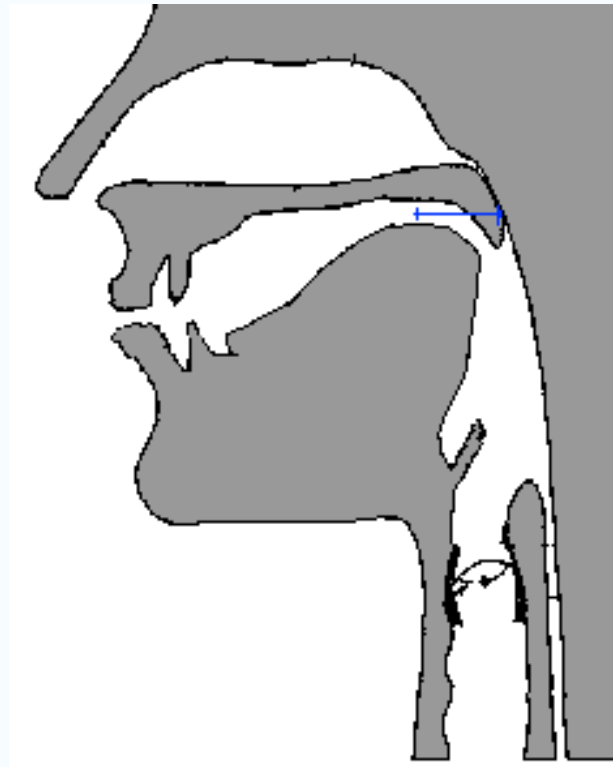
Tongue Backness

Front



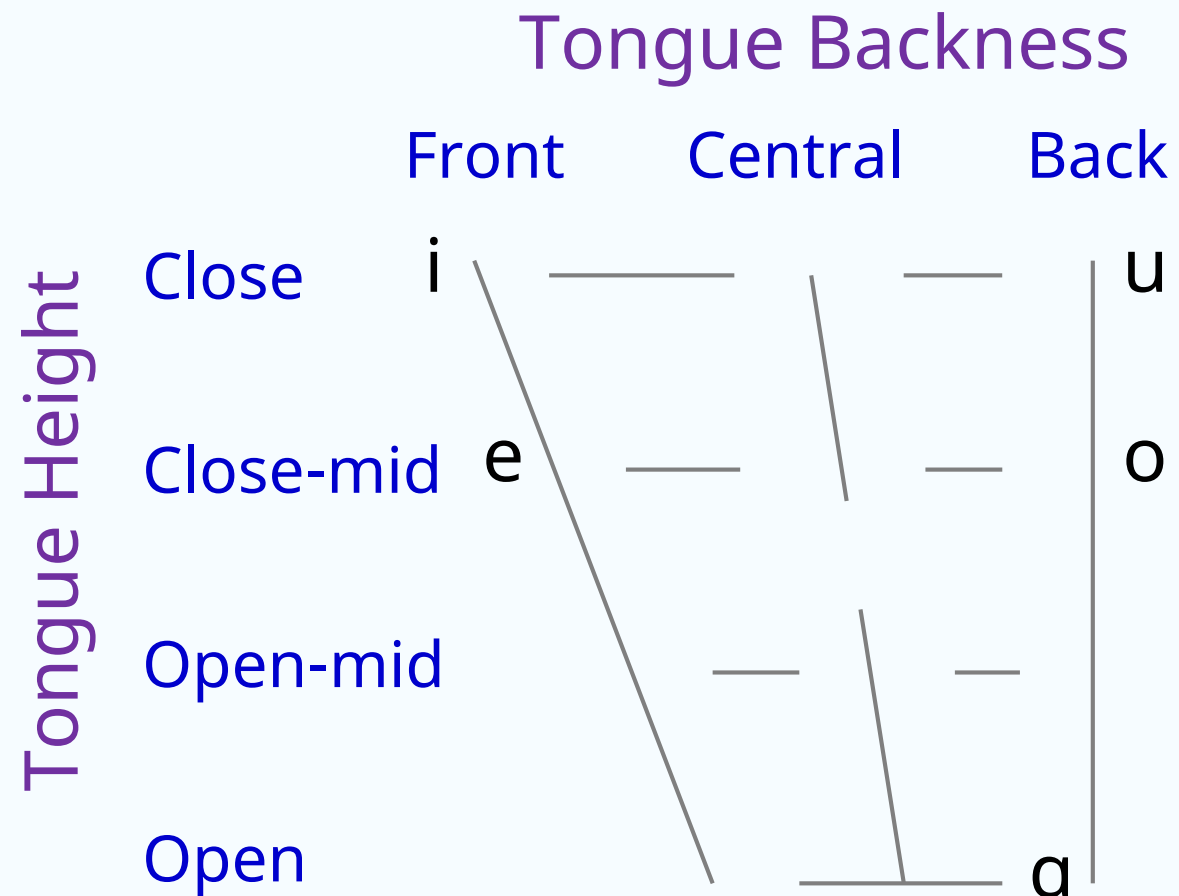
[i, e]

Back



[u, o, a]

English Vowels in the IPA



Tenseness and Laxness

[u] boot, lute, who, Lou

[ʊ] put, foot, butcher, could

[i] beet, key, be, serene

[ɪ] bit, consist, injury, bin

[e] gate, bait, great, they, eight

[ɛ] bet, says, guest, dead

[o] coat, go, grow, over, own

[ɔ] caught, stalk, core, saw

Tense: [u, i, e, o]
↓ ↓ ↓ ↓
Lax: [ʊ, ɪ, ɛ, ɔ]

More English Lax Vowels

[ɑ] father, palm, sergeant, heart

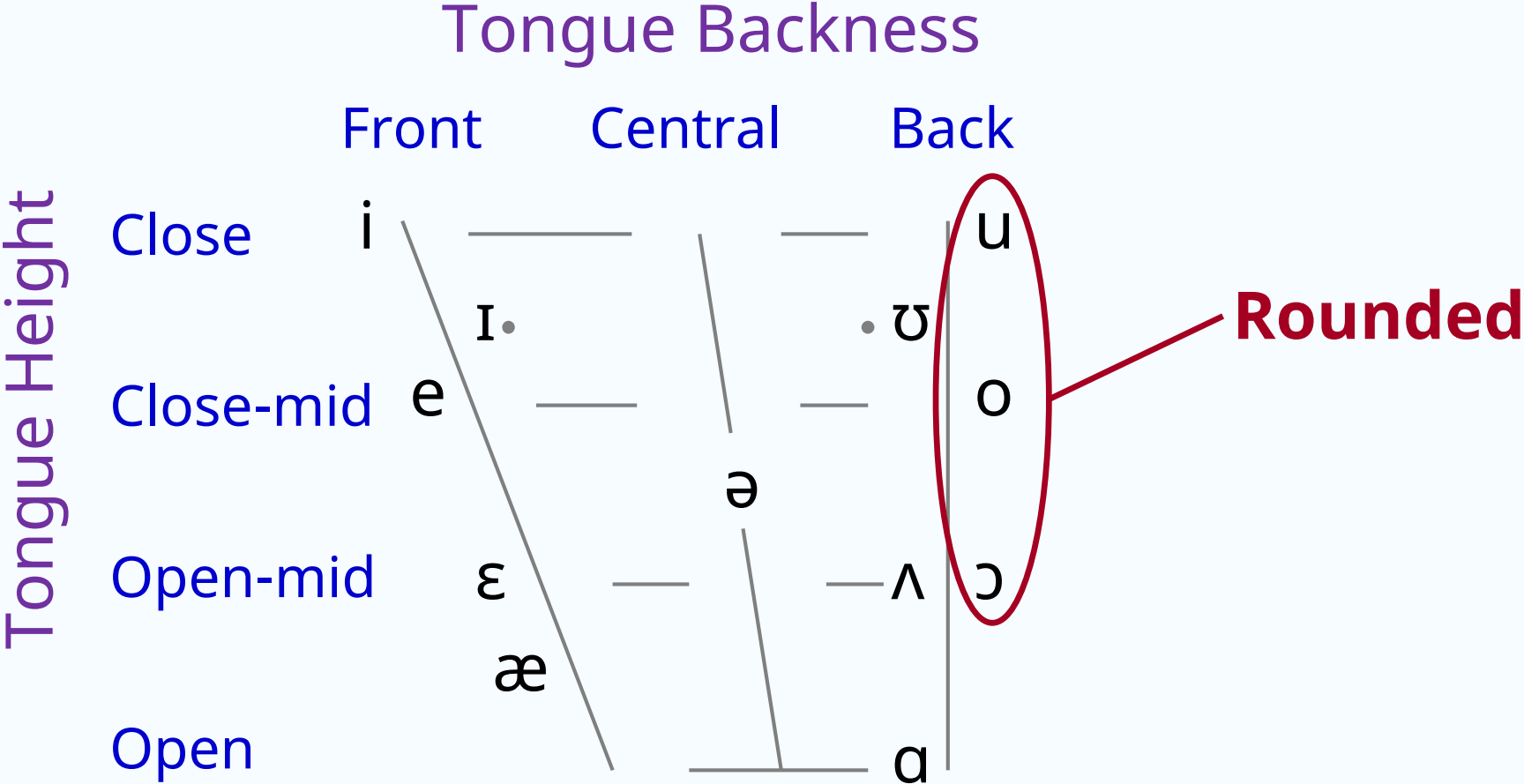
[æ] pan, act, cat, abbey

[ʌ] cut, among, oven, cover

[ə] sofa, alone, suppose, bird

The vowel [ə] is called **schwa**.

The Vowels of English



Some other sounds and features

- Sounds:

- Diphthongs: [eɪ, aʊ, aɪ, ...]
- Affricates: [tʃ, dʒ, ...]
- Alveolar flap: [ɾ] (e.g. in *American English butter*)

- Suprasegmental features:

- Stress: ['kɒntɹɑst] (*noun*) vs [kən'tɹɑst] (*verb*)
- Nasalisation: Fr. *bon* [bɔ̃] 'good'
- Aspiration: [p^h, t^h, k^h, ...]
- Vowel length: [iː, ɔː, uː, ...]

Grouping Sounds into Natural Classes (part 1)

- Sounds can be grouped on the basis of shared traits:
 - Natural classes may be large or small
 - Large: Consonants
 - Small: Voiced oral stops (= [b, d, g])

Grouping Sounds into Natural Classes (part 2)

Natural classes are very valuable. They offer insight into:

- What it means to know a language
- How children acquire this knowledge
- They enable the linguist to formulate simple and elegant accounts of various linguistic phenomena
(as we'll see next week!)

Summary

➤ Transcription:

- We saw why transcription must be unambiguous and international.

➤ Articulation:

- We saw how individual speech sounds are produced

➤ Classification:

- We discussed how sounds can be grouped and why this is important for science.
- We will see next week that this plays an important role in understanding language