Analyzing Phonological Data

English Data for Vowel Nazalization
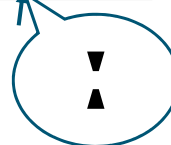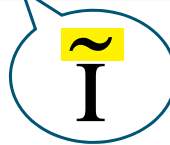
non-nazalized vowels	nazalized vowels
[bæt] (bat)	[bæ̃n] (ban)
[gɑt] (got)	[gɑ̃n] (gone)
[bɛt] (bet)	[bɛ̃n] (Ben)
[lɑk] (lock)	[lɑ̃ŋ] (long)
[rɪp] (rip)	[rɪ̃m] (rim)
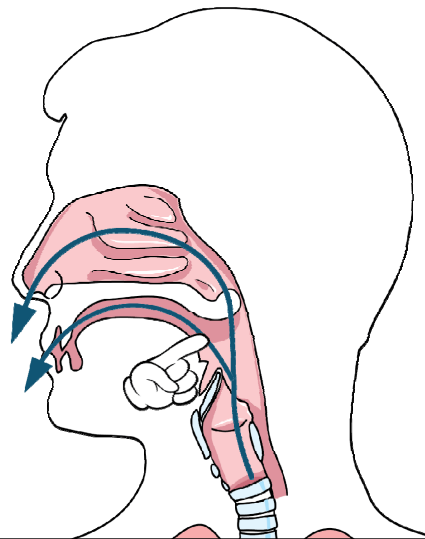
Head: LifeArt Super Anatomy Collections 1-9. Williams & Wilkins 1998;
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English Data for Vowel Length

non-nazalized vowels	nazalized vowels	non-nasalized long vowels
[bæt] (bat)	[bæ̃n] (ban)	[bæːd] (bad)
[gɑt] (got)	[gɑ̃n] (gone)	[gɑːd] (god)
[bɛt] (bet)	[bɛ̃n] (Ben)	[bɛːd] (bed)
[mʌk] (muck)		[mʌːg] (mug)
[lɑk] (lock)	[lɑ̃ŋ] (long)	[lɑːg] (log)
[rɪp] (rip)	[rɪ̃m] (rim)	[rɪːb] (rib)

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English Vowel Allophones

[æ] [æː] [æ̃]

[ɑ] [ɑː] [ɑ̃]

[ɛ] [ɛː] [ɛ̃]

[ʌ] [ʌː] [ʌ̃]

[ɪ] [ɪː] [ɪ̃]

etc…

i.e., V, Vː, Ṽ

/V/   [Vː] /____[voice]

         [V] /____[nasal]

         [V] / elsewhere

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Vowel Length in Yap

Yap has minimal pairs.

/ɪ/, /ɪː/, /u/, /uː/, /e/, /eː/ are phonemes in Yap.

[θɪs] (to topple)	[θɪːs] (a post)
[pul] (to gather)	[puːl] (moon)
[ʔer] (near you)	[ʔeːr] (lagoon part)

i.e., [V], [V:]
/V/, /V:/

Vowel Length in Korean

Korean has minimal pairs

And it has near-minimal pairs

/i/, /iː/, /e/, /eː/, /u/, /uː/ are phonemes in Korean

[il] (day)	[iːls] (word)
[seda] (to count)	[seːda] (strong)
[kul] (near you)	[kuːl] (tunnel)

i.e., [V], [V:]
/V/, /V:/

Hand: Noedelhap/iStock/Thinkstock