

English sounds

John Goldsmith

September 27, 2011

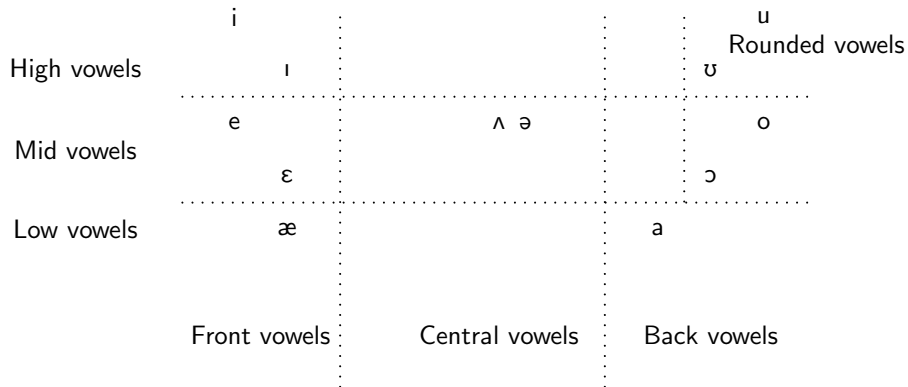
Short vowels			Long vowels		
pit	ɪ	[ɪ]	by	ī	[aj]
pet	ě	[ɛ]	Pete	ē	[ij]
pat	ǣ	[æ]	pate	ā	[ej]

Short vowels			Long vowels		
put	ʊ	[ʊ]	boot	oʊ	[uɔ]
putt	ʊ	[ʌ]	bound	ou	[æʊ]
bought	ɔ	[ɔ]	boat	o	[ow]
pot	ɒ	[ɑ]			

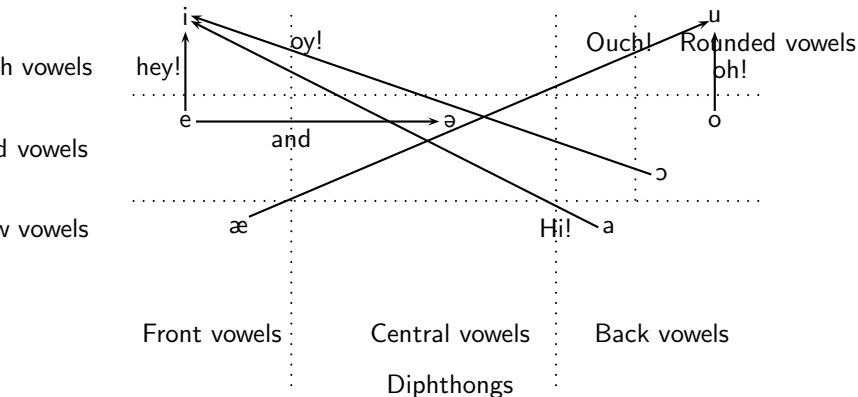
American	h—d	h—	b—d	h—t	k—d
ij	heed	he	bead	heat	keyed
ɪ	hid		bid	hit	kid
ej	hayed	hay	bayed	hate	Cade
ɛ	head		bed		
æ	had		bad	hat	cad
a	hod	ha!	bod	hot	cod
ɔ	hawed	haw	bawd	haughty	cawed
ʊ	hood				could
ow	hoed	hoe	abode	Hoat	code
uw	who'd	who	booed	hoot	cood
ʌ	Hudd		bud	hut	cud
ɝ	herd	her	bird	hurt	curd
aj	hide	high	bide	height	
æw		how	bowed		cowed
ɔj		ahoy	Boyd	Hoyt	
u**		here	beard		
eɪ**		hair	bared		cared
ju	hued	hue			cued

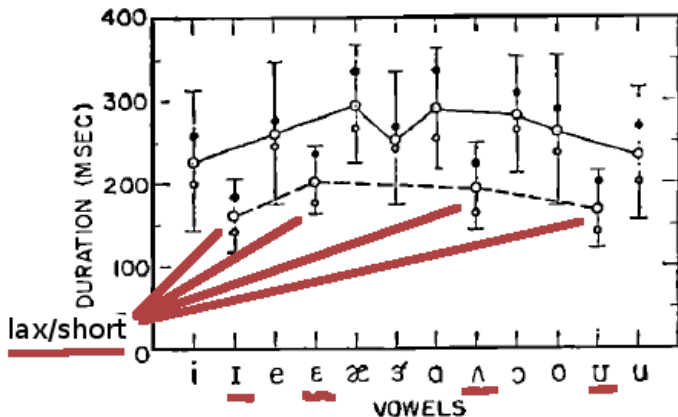
From Ladefoged, but modified a bit

English vowel space



Diphthongs: motion in vowel space

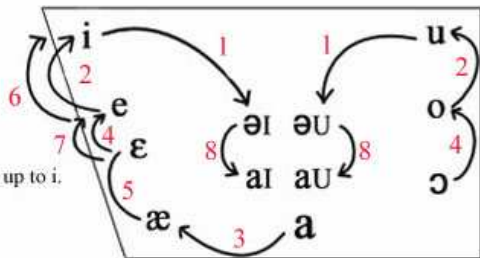




Arthur House (1960) On vowel duration in English (*JASA*). The large unfilled circles are means for each vowel in 14 contexts spoken by 3 subjects. The upper terminus of each vertical bar shows the average vowel duration in voiced contexts; the lower terminus is for voiceless contexts. The filled circle on each vertical bar shows the average vowel duration in fricative environments; the small unfilled circle is for stop environments. Lower line is lax vowels, the solid is the others.

The Great Vowel Shift (GVS)

- Step 1: i and u drop and become $\text{ɐ}i$ and $\text{ɐ}u$
- Step 2: e and o move up, becoming i and u
- Step 3: a moves forward to æ
- Step 4: ɛ becomes e, ɔ becomes o
- Step 5: æ moves up to ɛ
- Step 6: e moves up to i
- Step 7: ɛ moves up to e
- Step 8: $\text{ɐ}i$ and $\text{ɐ}u$ drop to ai and au

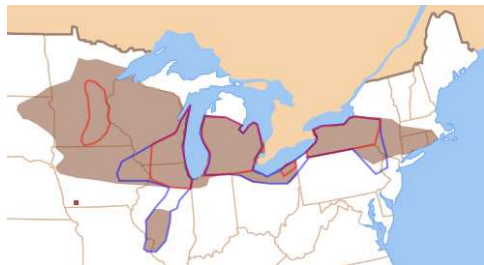


From facweb.furman.edu/~mmenzer/gvs/what.htm

1300	1400		1500	1600	1700	1800	present
driven	i:	ii	ei	ɛi	ʌi	ai	
house	u:	ʊw	ow	ɔw	ʌw	aw	
feet	e:		i:				
fool	o:		u:				
beat	ɛ:				e:	i:	
foal	ɔ:				o:		əu
take	a:		æ:	ɛ:	e:	ei	
sail	ai		æi	ɛi	e:	ei	
law	aw		ɒw	ɒ:		ɔ:	

This nice graphic based on material from Raymond Hickey, at www-uni-due.de, on Studying The History of English.

Northern Cities Vowel Shift



The region of the NCVS

Northern Cities Vowel Shift

