

English consonants, IPA

	Bilabial		Labio-dental		Dental		Alveolar		Post-alveolar		Retroflex		Palatal		Velar		Uvular		Glottal	
Plosive	p	b			[t̪]	[d̪]	t	d							k	g			[ʔ]	
Aspirated plosive	[pʰ]						[tʰ]								[kʰ]					
Affricate									t͡ʃ	d͡ʒ										
Fricative			f	v	θ	ð	s	z	ʃ	ʒ					[x]				h	[ɦ]
Nasal		m				[ŋ̪]		n								ŋ		[ɴ]		
Tap								r												
Approximant	ɱ	w						ɹ				[ɻ]		j						
Lateral approximant						[l̪]		l												

- Where symbols appear in pairs, the one to the right represents a voiced consonant.
- Where symbols appear singly, they are placed to the left within their column if they represent a voiceless consonant, and to the right if they represent voiced.
- Symbols enclosed in brackets represent non-phonemic consonants.
- Blacked-out cells indicate sounds judged to be impossible.
- Symbols in the bilabial column with the light blue coloring of the velar column, [ɱ] and [w], are **velarized** bilabial approximants.

- The uvular nasal [ɴ] is a variant pronunciation of the phoneme /l/.
- The dental/alveolar/postalveolar “super-column” indicates that unless otherwise specified (i.e. the fricatives row), English’s phonemic inventory will include sounds in only one of the subcolumns. The phonemes are written using the alveolar symbols, and further specified as dental or postalveolar using appropriate diacritics.
- The alveolar (“bunched”) [ɹ] and the retroflex [ɻ] are both in use, and neither has a greater claim to be considered the default allophone. I have chosen to mark the retroflex [ɻ] as phonemic.

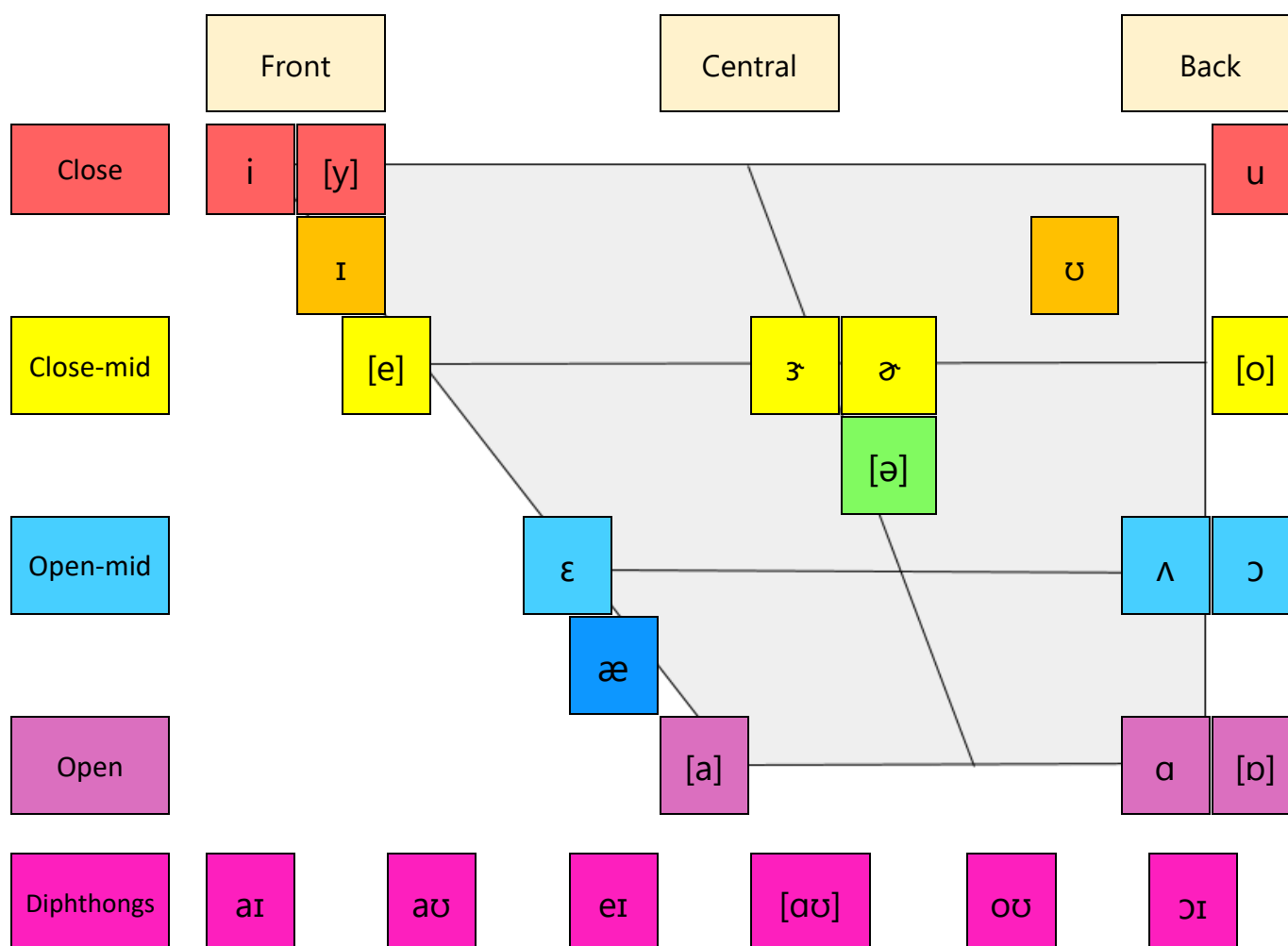


English consonants, Phonics

	Bilabial		Labio-dental		Dental		Alveolar		Post-alveolar		Retroflex		Palatal		Velar		Uvular		Glottal	
Plosive	p	b			(t)	(d)	t	d							k	g			(Ø)	
Aspirated plosive	(p)						(t)								(k)					
Affricate									ch	j										
Fricative			f	v	th	<u>th</u>	s	z	sh	zh					(h)				h	(h)
Nasal		m				(n)		n								ng		(l)		
Tap								(t, d)												
Approximant	wh	w						r				(r)		y						
Lateral approximant						(l)		l, (l)												

- Symbols enclosed in parenthesis represent non-phonemic consonants.

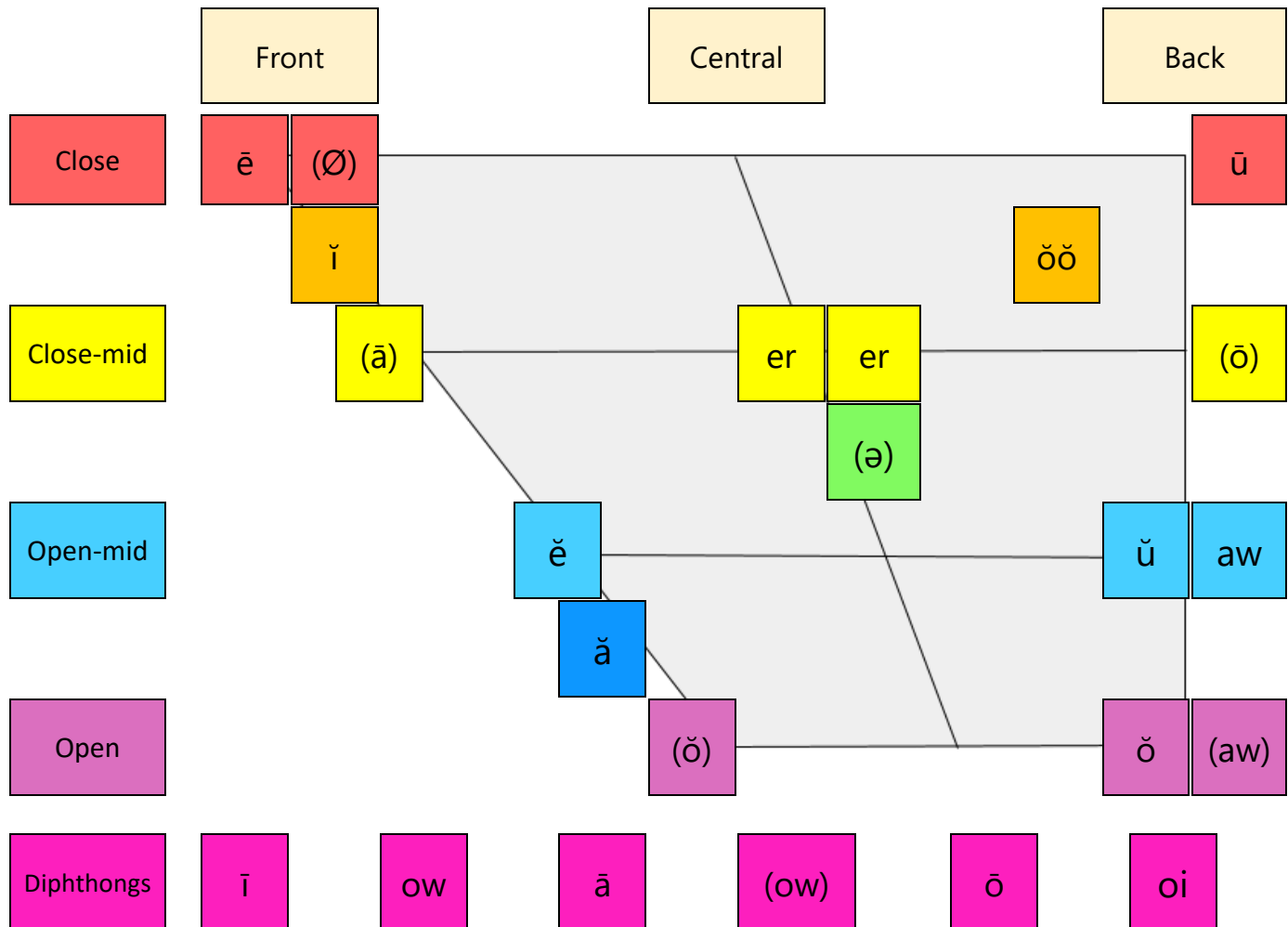
English vowels, IPA



- Where symbols appear in pairs, the one to the right represents a rounded vowel.
- Where symbols appear singly, the front vowels and [a] are unrounded; the close and close-mid back vowels are open.
- Traditional analysis have /e/ and /o/ a phonemes, with [eɪ] and [oʊ] as their primary realization. I have chosen to show the diphthongs as phonemic, and the monophthongs to be dialectal variants.
- Special note on /ɔ/ and /ɑ/: Dialects with the "low-back merger" have only /ɑ/, or possibly /a/. Dialects without it have one of [a,ɑ], and one of [ɒ,ɔ].
- Special note on front [a] and back [ɑ]: Both pronunciations are in use, but the dialects I'm familiar with have only one phoneme in this space. The choice of marking [a] as non-phonemic is arbitrary.
- A similar situation holds with the diphthongs [aʊ] and [ɔʊ], but here I've chosen to mark [aʊ] as non-phonemic.



English vowels, Phonics



- Symbols enclosed in parentheses represent non-phonemic vowels.
- Symbols with a macron diacritic (e.g. “ā”) are called “long” vowels: long A, long E, etc.
- Symbols with a breve diacritic (e.g. “ě”) are called “short” vowels: short A, short E, etc.
- “ə” is called schwa, as in IPA.
- Two-character symbols (e.g. “aw”) are called digraphs. Sometimes they are incorrectly called diphthongs. In fact, some diphthongs are represented by digraphs (such as “oi”), but others are represented by single characters (such as “ī”, which is called “long I” and is sometimes not recognized as a diphthong).