

Introduction to English Linguistics

2: Phonetics and Phonology

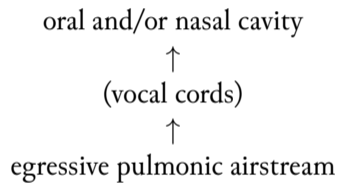


P. S. Langeslag

Phonetics

articulatory	describes the production of speech
acoustic	describes the physical properties of speech
auditory	describes the reception of speech

Articulatory Phonetics



Speech Tract and Articulators

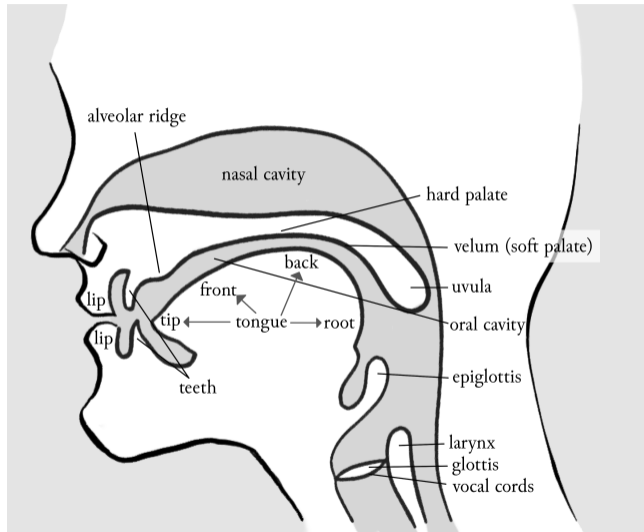


Figure: Supplied by Joost Eijkholt; do not reproduce without express permission

IPA Consonants

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2020)

CONSONANTS (PULMONIC)

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	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap		ⱱ	ɾ			ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative			ɬ ɮ								
Approximant		ʋ	ɹ			ɻ	j	ɰ			
Lateral approximant			l			ɭ	ʎ	ʟ			

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

Figure: CC-BY-SA International Phonetic Association

IPA Vowels

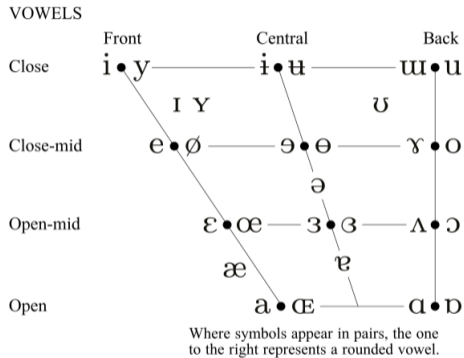


Figure: CC-BY-SA International Phonetic Association

Phonemics Terminology

phone	any speech sound, regardless of its status within a language's phonological system
phoneme	the smallest meaning-distinguishing unit of a specified language
allophone	one possible realization of a phoneme

Notation

Unit	Notation	Purpose
graphemic transcription	<keener>	Written communication
phonemic transcription	/'ki:nə/	Specifying the general pronunciation of a speech sequence at the phonemic, meaning-distinguishing level (may include accent and vowel length)
phonetic transcription	['ci:nə]	Specifying a specific realization of a speech sequence as produced by a speaker or group of speakers at the allophonic level

The Description of Consonants

Descriptor	Possible Values
Voicing	Voiced; voiceless
Place of articulation	Bilabial; labiodental; dental; alveolar; postalveolar; palatal; velar; glottal (retroflex; uvular; pharyngeal)
Manner of articulation	Stop/plosive; fricative; affricate; nasal; approximant (i.e. semivowel or liquid)

Stops (Plosives)

/p/	voiceless	bilabial
/b/	voiced	bilabial
/t/	voiceless	alveolar
/d/	voiced	alveolar
/k/	voiceless	velar
/g/	voiced	velar
[ʔ]	voiceless	glottal

Fricatives

/f/	voiceless	labiodental
/v/	voiced	labiodental
/θ/	voiceless	dental
/ð/	voiced	dental
/s/	voiceless	alveolar
/z/	voiced	alveolar
/ʃ/	voiceless	postalveolar
/ʒ/	voiced	postalveolar
/h/	voiceless	glottal

Nasals

/m/	bilabial
/n/	alveolar
/ŋ/	velar

Affricates

/tʃ/	voiceless	postalveolar
/dʒ/	voiced	postalveolar

Definitions to Supplement Mair 1/2

- Consonant** Phonetically, a sound produced with a marked constriction of the airflow in the speech tract; phonologically, a sound that normally occurs in the syllable boundary, rarely in its nucleus.
- Vowel** Phonetically, a speech sound produced without a marked constriction of the speech tract; phonologically, a speech sound found only as the nucleus of a syllable
- Semivowel** A sound that serves as a consonant phonologically but that has phonetic qualities like those of a vowel: /j, w/
- Liquid** Groups together /l, r/ for their shared phonological characteristics

Continuants

/w/	bilabial	semivowel
/j/	palatal	semivowel
/r/*	postalveolar	liquid
/l/		lateral liquid

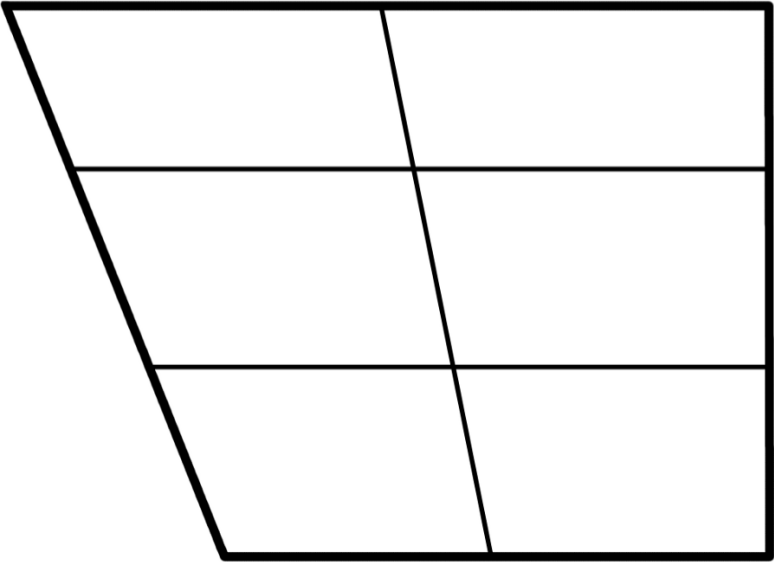
* More accurately [ɹ] (postalveolar approximant).

[r] is the alveolar trill as in Italian, Dutch, Czech, Scots, Max Raabe, etc.

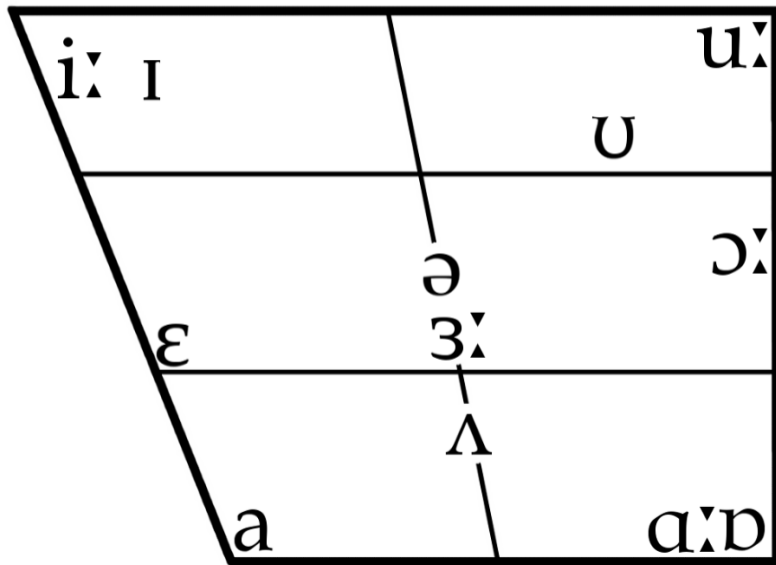
The Description of Vowels

Descriptor	Possible Values
Frontness	Front; Central; Back
Openness	Close; Close-mid; Open-mid; Open

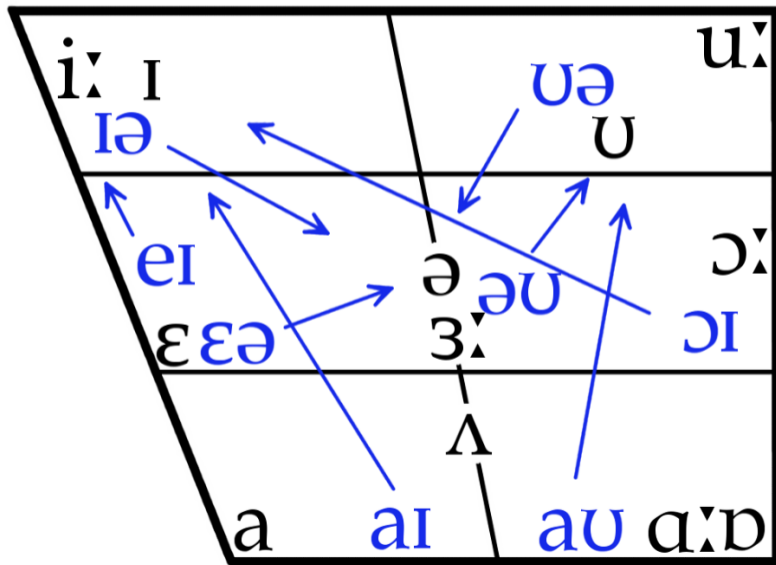
Vowel Diagram



RP Vowel Diagram



RP Vowel Diagram with Diphthongs



Conventional Variants

Because dialects change over time, even textbooks focusing on RP vary in their phoneme inventory:

Sound	<i>OED</i>	Mair	Barber
<i>hat</i>	/hat/	/hæt/	/hæt/
<i>bed</i>	/bɛd/	/bed/	/bed/
<i>bird</i>	/bɜ:d/	/bɜ:d/	/bɜ:d/

When doing your homework, please use *OED*'s notation for British pronunciation (oed.com) as your reference standard.

Minimal Pairs

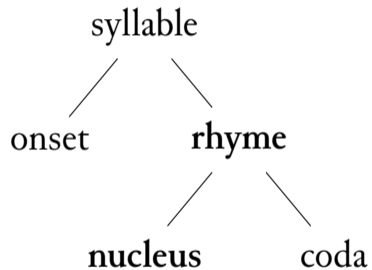
/b/ and /p/	bit	pit
/ɪ/ and /i:/	bid	bead
/d/ and /t/	bid	bit

Definitions to Supplement Mair 2/2

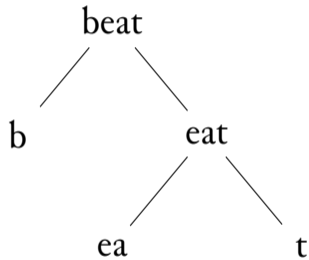
- Nucleus** The core and only mandatory part of a syllable, normally occupied by a vowel
- Onset** The optional opening consonant or consonant cluster of a syllable (*Anlaut*)
- Coda** The optional concluding consonant or consonant cluster of a syllable (*Auslaut*)
- Rhyme** The nucleus and coda of a syllable, i.e. typically the vowel and any following consonants

(Mair p. 30 introduces these concepts on a phrasal level only, in spite of the mistaken cross-reference on p. 21.)

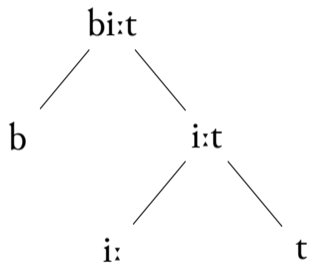
Syllable Structure



Syllable Structure



Syllable Structure



Bibliography

“International Phonetic Association.” <https://www.internationalphoneticassociation.org/>.

Mair, Christian. *English Linguistics: An Introduction*. 4th ed. bachelor-wissen. Tübingen: Narr Francke Attempto, 2022.