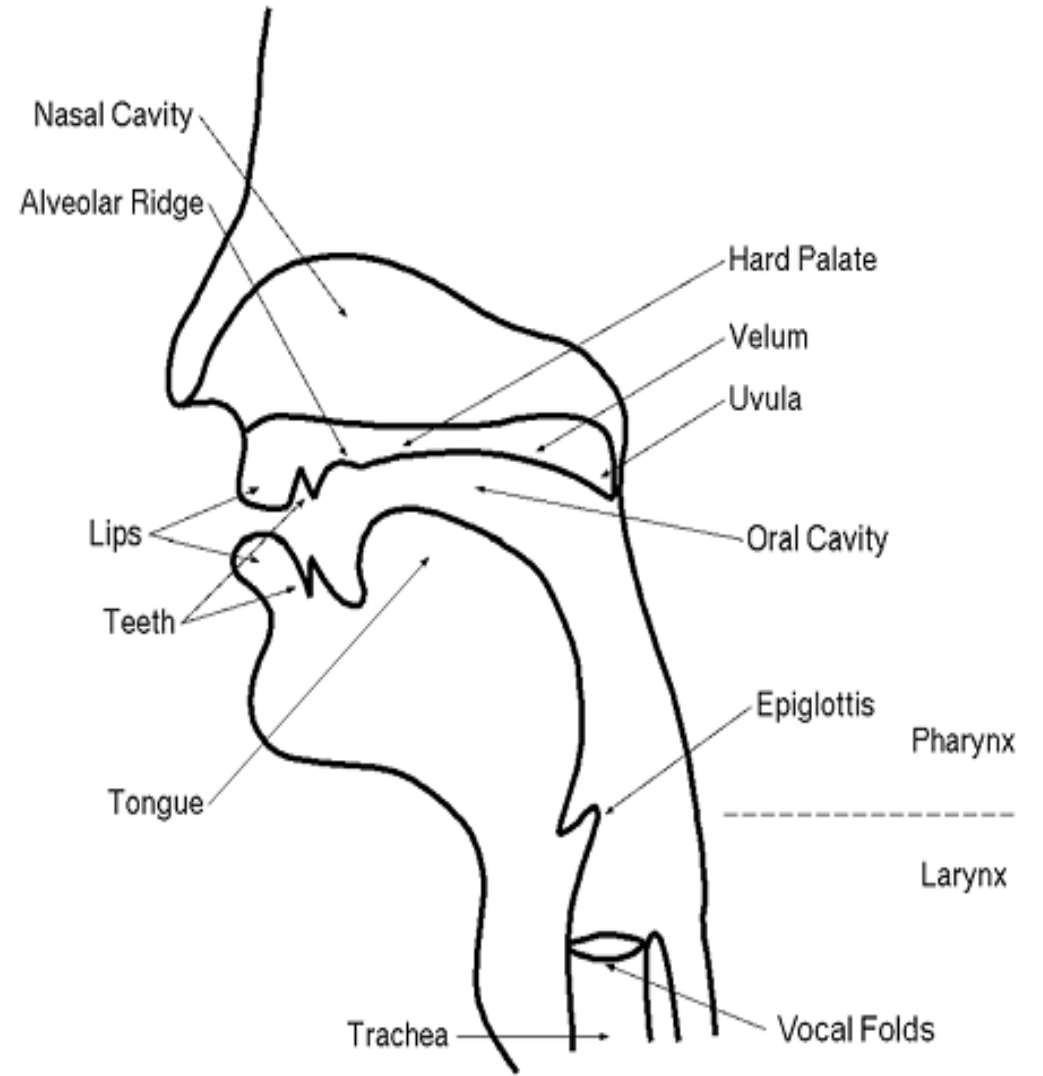
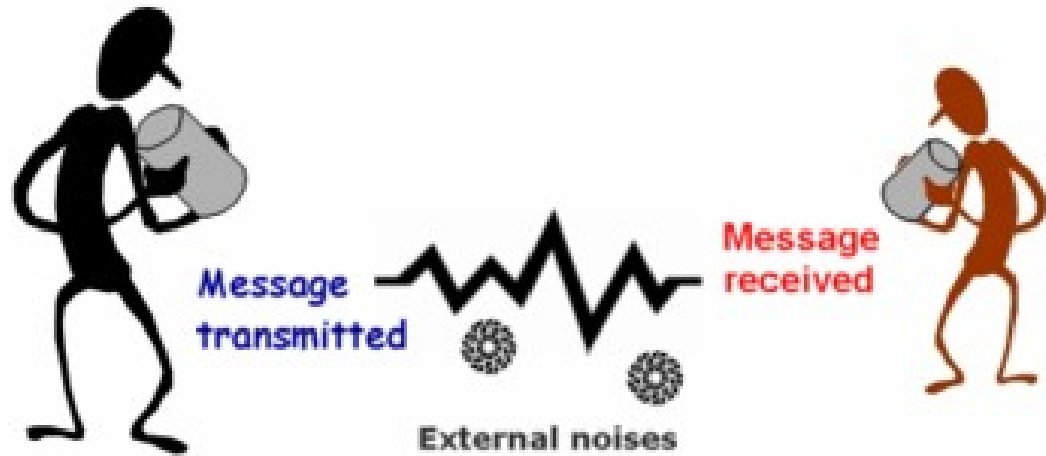


recap

THE IPA AND THE SOUNDS OF LANGUAGE

phonetics



THE INTERNATIONAL PHONETIC ALPHABET (revised to 2020)

CONSONANTS (PULMONIC)

© 2020 IPA

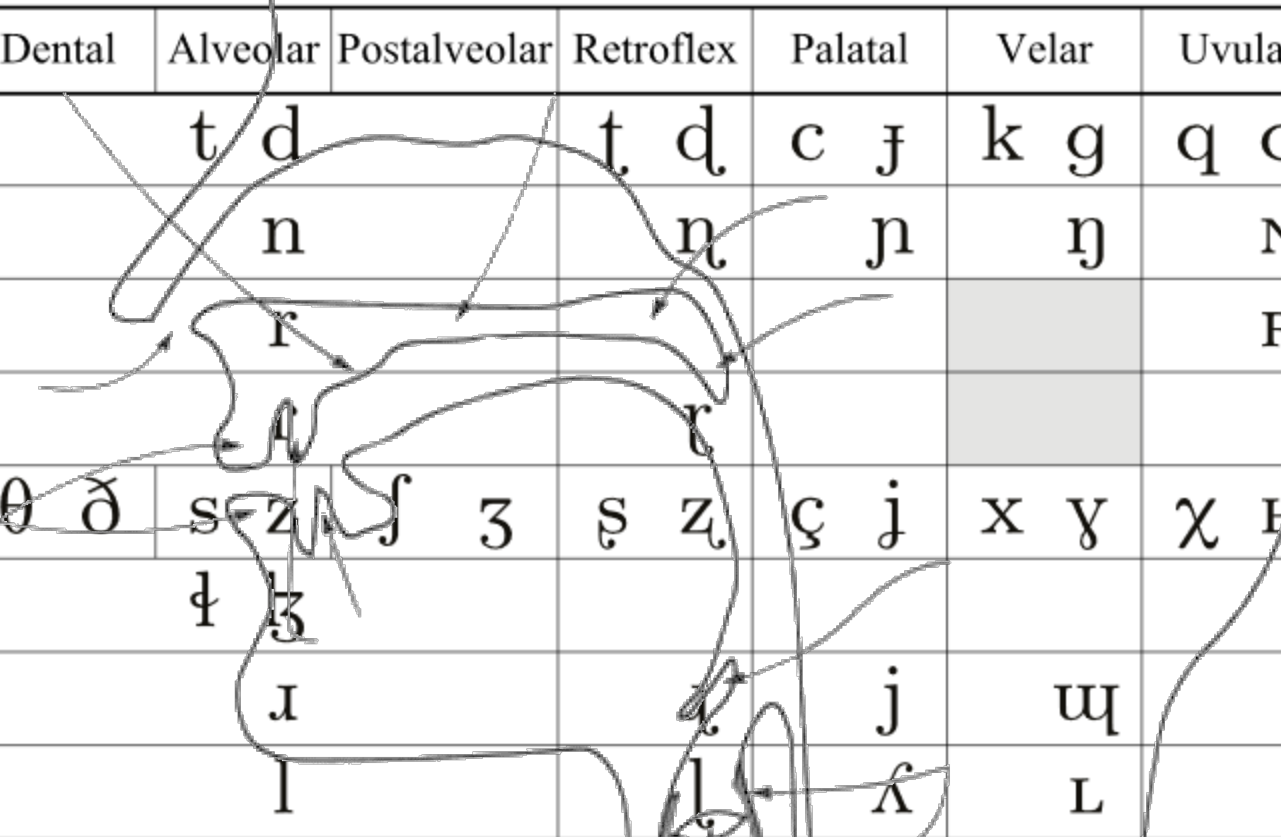
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant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

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2020)

CONSONANTS (PULMONIC)

© 2020 IPA



	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			ʀ					ʀ		
Tap or Flap				ɾ							
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			j	ɰ			
Lateral approximant				l			ʎ	ʟ			

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THE INTERNATIONAL PHONETIC ALPHABET (revised to 2020)

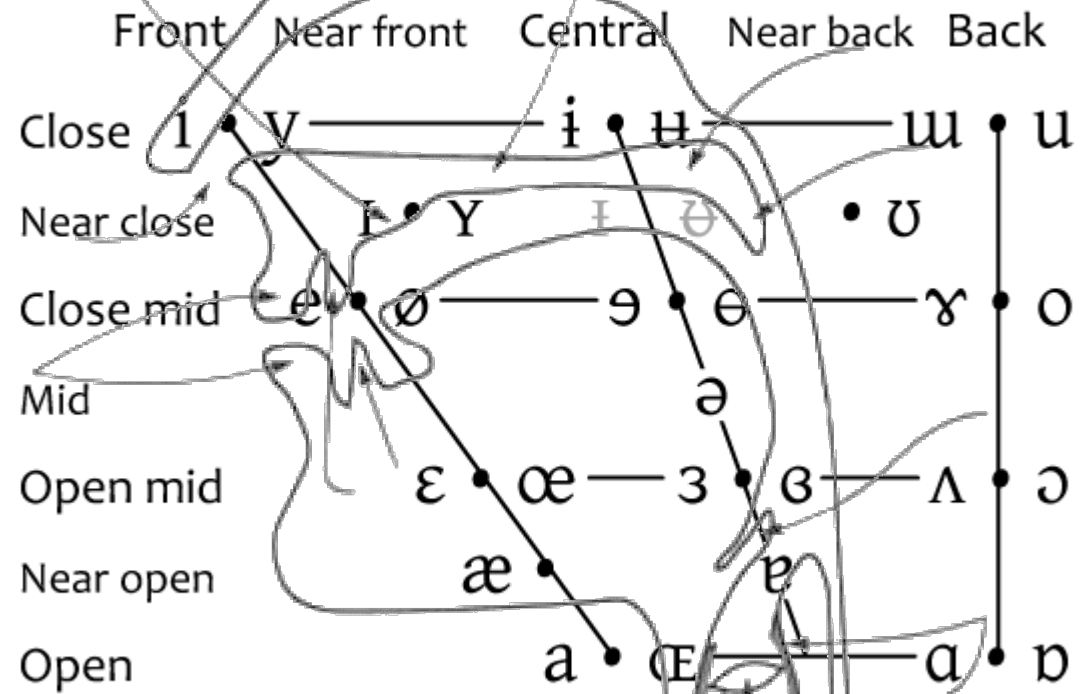
CONSONANTS (PULMONIC)

© 2020 IPA

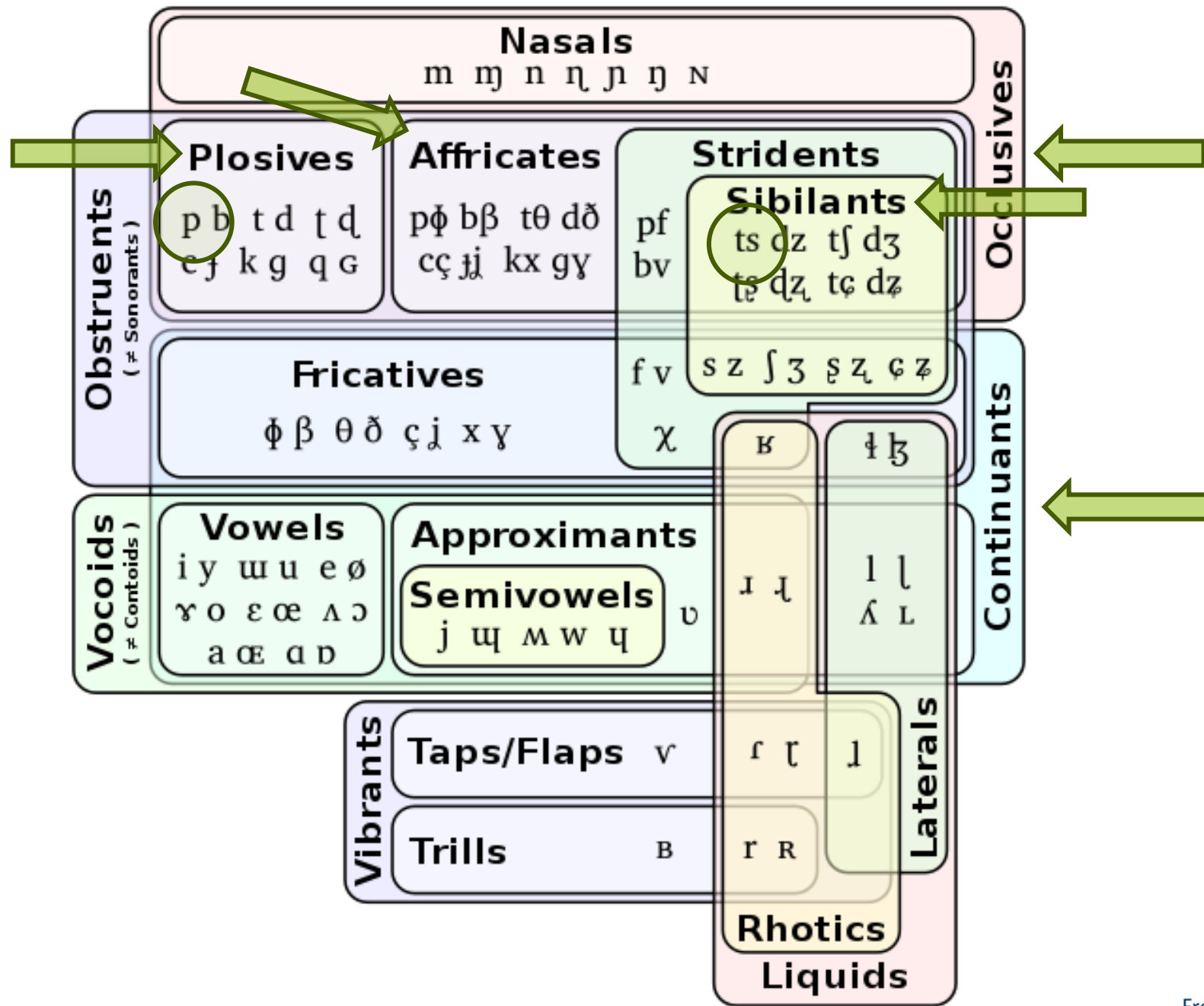
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
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Tap or Flap		ⱱ		ɾ		ɽ					
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Lateral 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.

vowels



Vowels at right & left of bullets are rounded & unrounded.



What are sound categories good for?

pre-vocalic position

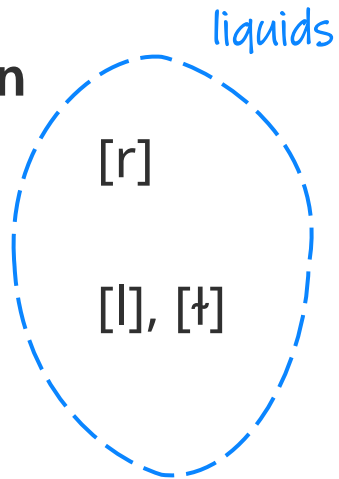
troll
[trəʊl]

laugh
[la:f]

post-vocalic position

lord
[lɔ:d]

fall
[fa:l]



スリル
su-ri-ru
'thrill'



Japanese
らりるれろ



English
"L"



English
"R"

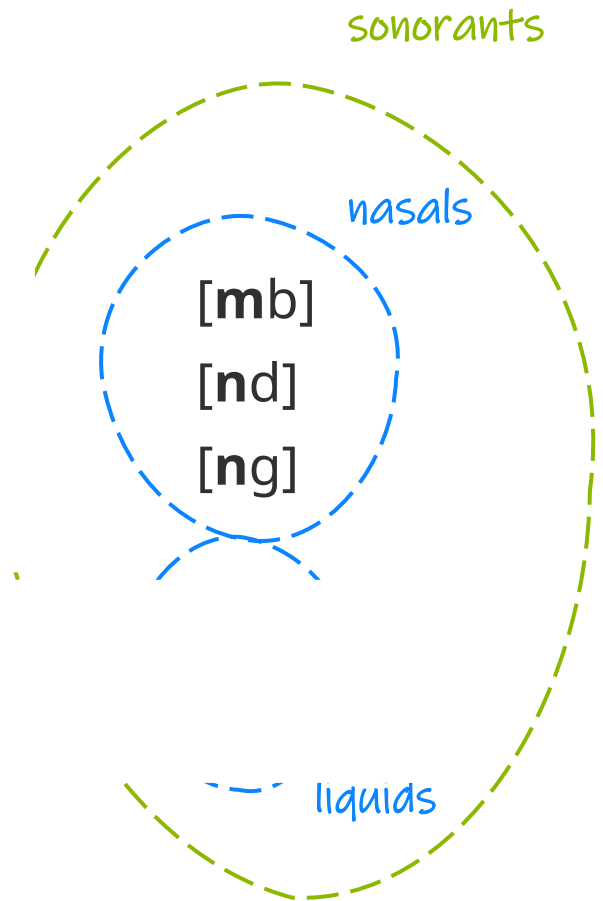
What are sound categories good for?

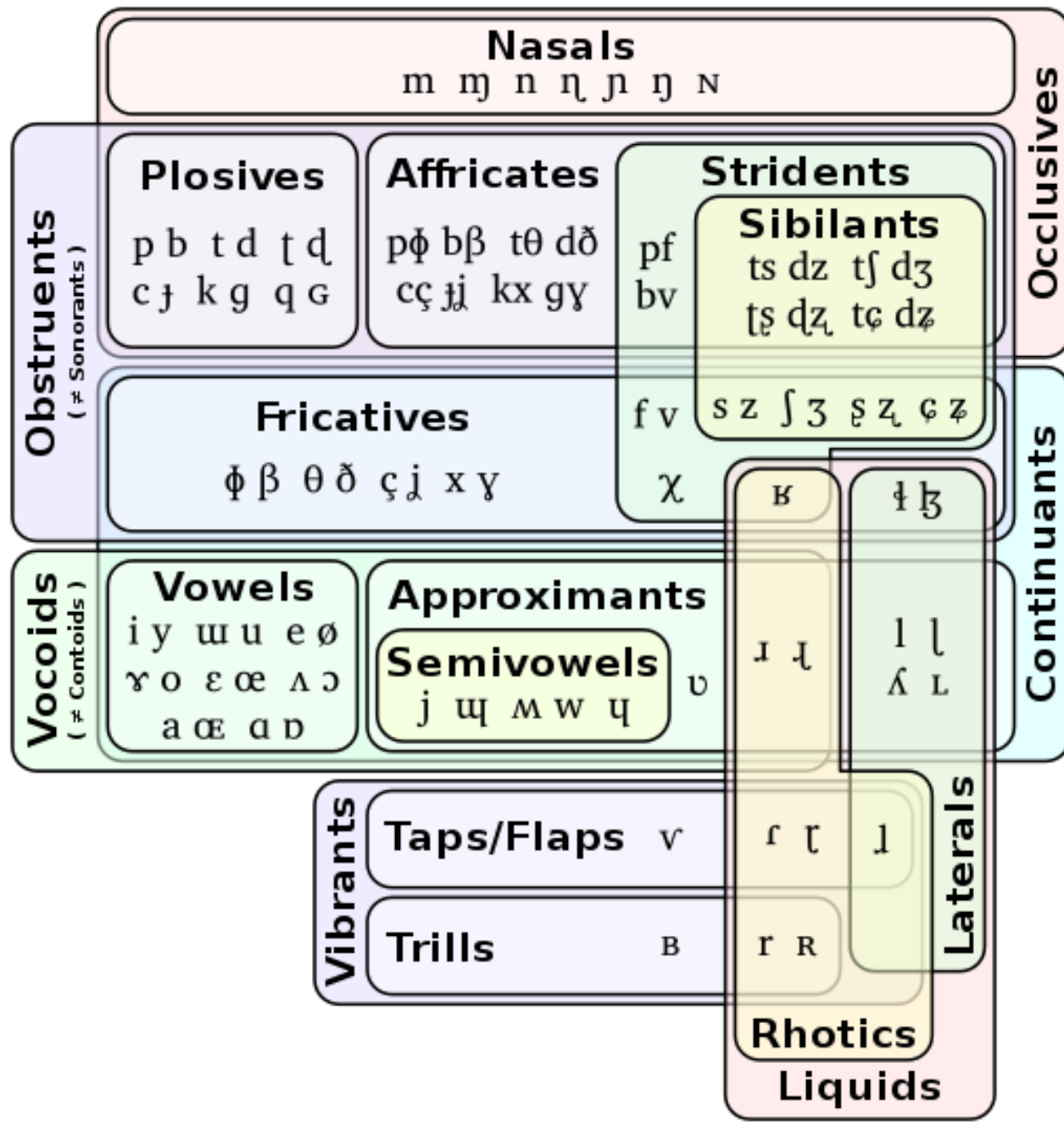
present

climban

findan

singan





Differing transcription practices? Use the IPA!

The sounds of English (RP); IPA transcription; pertinent letters in bold print

IPA symbol	example	IPA symbol	example
a. [p]	pie	b. [i:]	beat
[t]	tidy	[ɪ]	bit
[k]	kite	[e]	bed
[b]	buy	[æ]	bad
[d]	die	[ɜ:]	bird
[g]	guest	[ə]	along
[m]	mighty	[ʌ]	cut
[n]	night	[u:]	boot
[ŋ]	king	[ʊ]	book
[f]	fight	[ɔ:]	bought
[v]	van	[ɒ]	what
[θ]	think	[ɑ:]	bath
[ð]	they		
[s]	see	c. [eɪ]	day
[z]	zero	[aɪ]	buy
[ʃ]	shine	[ɔɪ]	boy
[ʒ]	vision	[əʊ]	boat
[h]	hide	[aʊ]	how
[w]	white	[ɪə]	here
[l]	light	[eə]	hair
[ɹ]	ride	[ʊə]	tour
[j]	young		
[tʃ]	church		
[dʒ]	George		

The sounds of General American; American transcription conventions
pertinent letters in bold print

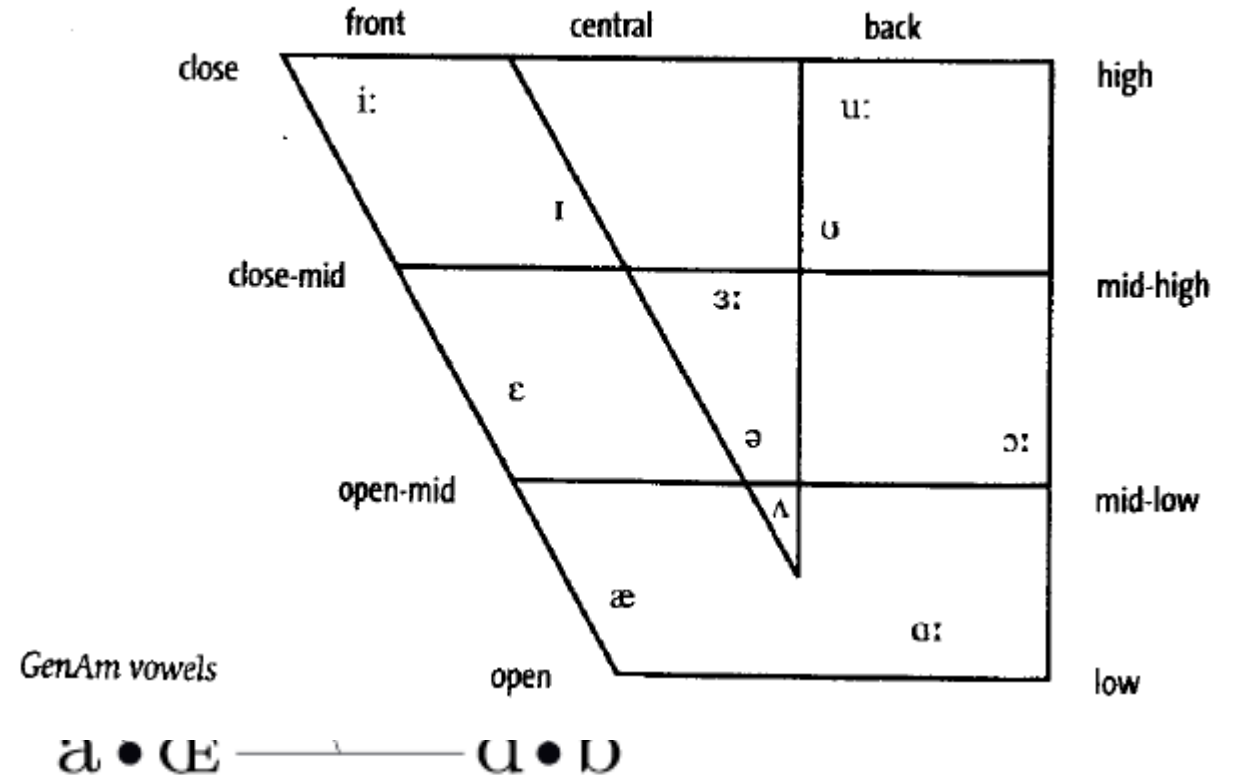
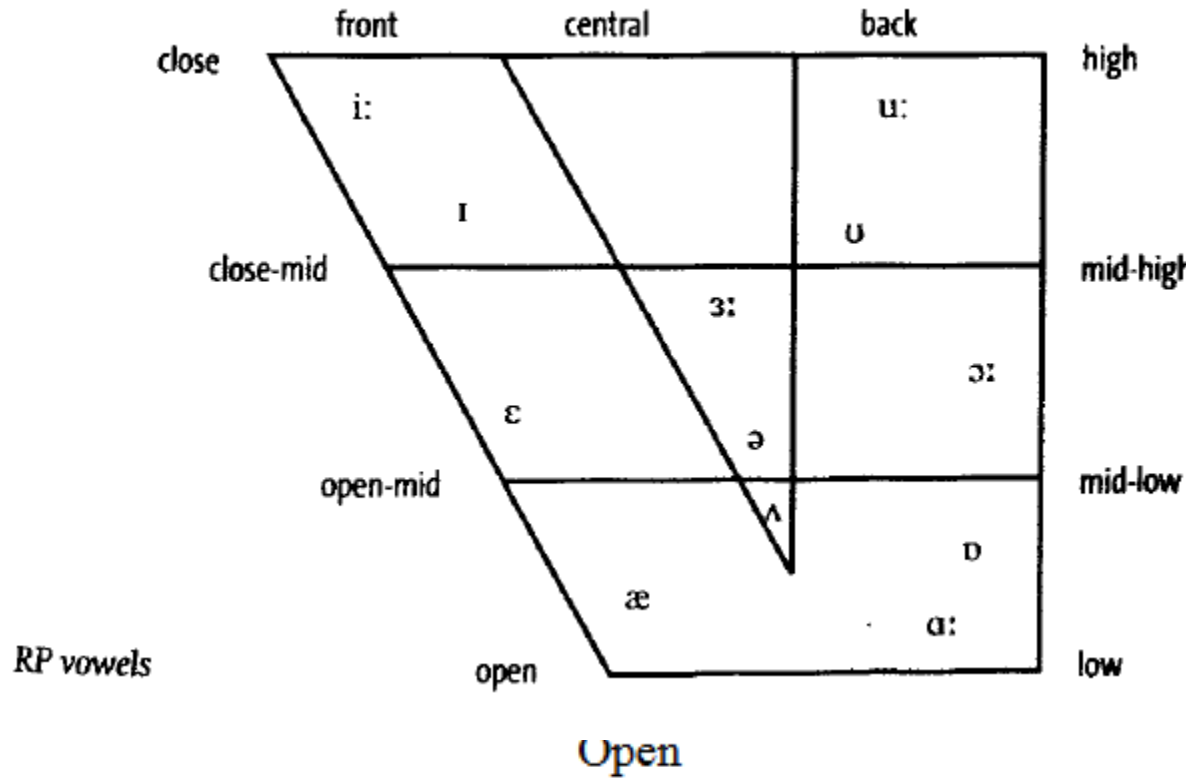
phonetic symbol	example	phonetic symbol	example
a. [p]	pie	b. [i]	beat
[t]	tidy	[ɪ]	bit
[k]	kite	[e]	late
[b]	buy	[ɛ]	bed
[d]	die	[æ]	bad
[g]	guest	[ə]	along
[m]	mighty	[ʌ]	cut
[n]	night	[ʊ]	book
[ŋ]	king	[o]	boat
[f]	fight	[ɔ]	bought
[v]	van	[ɑ]	what, father
[θ]	think		
[ð]	the	[aɪ]	buy
[s]	see	[ɔɪ]	boy
[z]	zero	[aʊ]	how
[ʃ]	shine		
[ʒ]	vision		
[h]	hide		
[w]	white		
[l]	light		
[r]	ride		
[j]	young		
[tʃ]	church		
[dʒ]	George		

using phonetic knowledge

VOWEL SYSTEMS

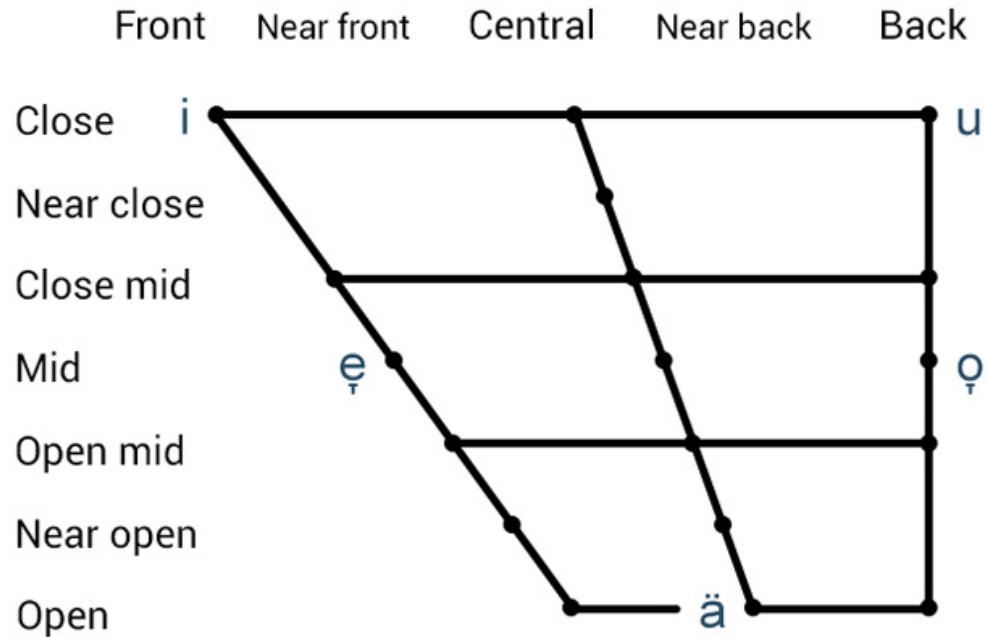
English and other languages

VOWELS

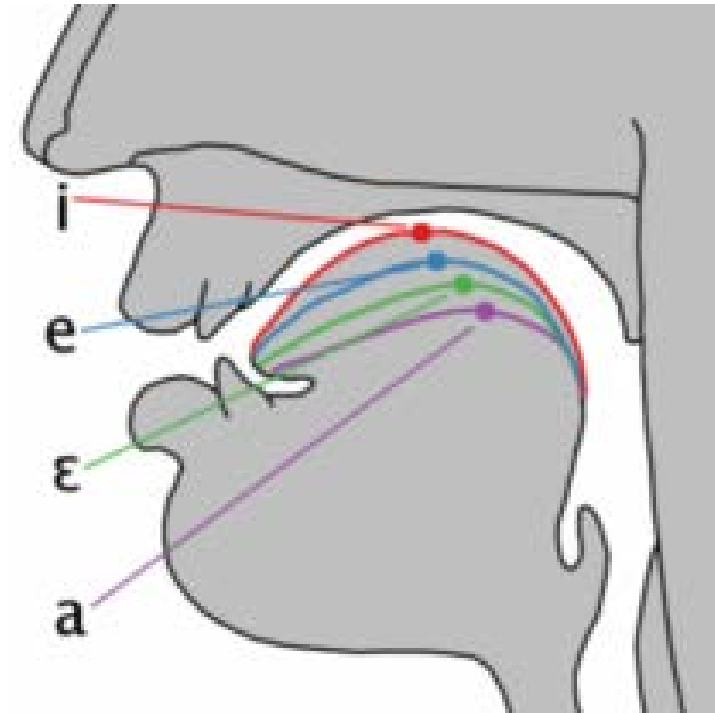


Where symbols appear in pairs, the one to the right represents a rounded vowel.

English and other languages

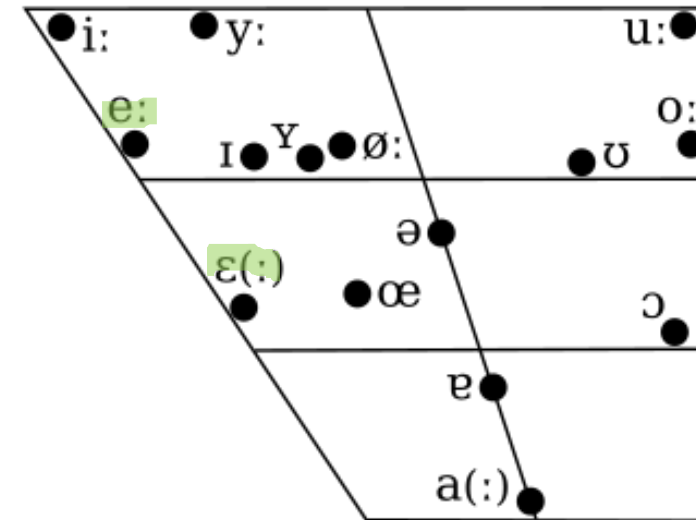
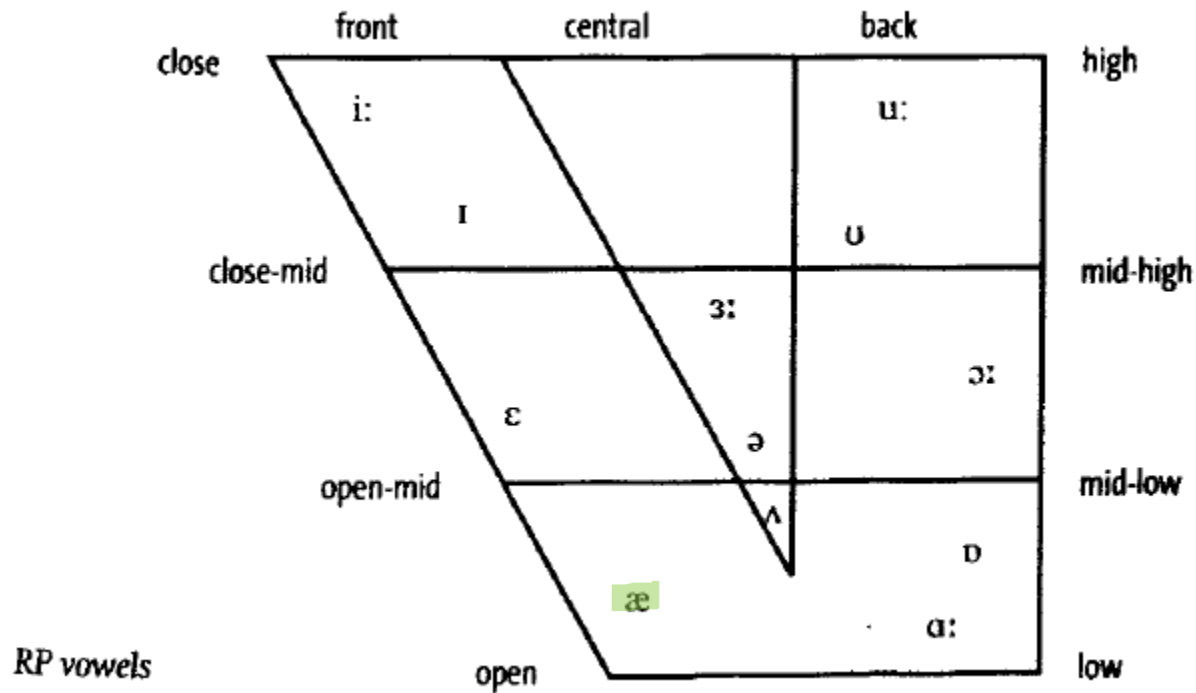


the monophthongs of Spanish; Marc,
<http://www.learnlanguagesonyourown.com/how-to-learn-Spanish-on-your-own.html>;



the monophthongs of standard German; Dudenredaktion,
Kleiner & Knöbl 2015:34

English and other languages



Bieswanger & Becker 2010: 56-57; adapted from Meyer 2005:96-97

the monophthongs of standard German; Dudenredaktion, Kleiner & Knöbl 2015:34

using phonetic knowledge

CONSONANTS

phonetics and grammar

violet
[vɪəliət] **t**
[-voice]

violets
[vɪəliəts]

lilly
[lɪli] **l**
[+voice]

lillies
[lɪli:z]

apple
[æpəl] **l**
[+voice]

apples
[æpəlz]

rose
[rəʊz] **z**
[+sibilant]

roses
[rəʊzɪz]

sibilants: [s], [z], [ʃ], [ʒ], ...



phonetics and pronunciation

Kuchen
[ku:**x**ŋ]

[**x**]

voiceless velar fricative

gucken
[kʊ**k**ŋ]

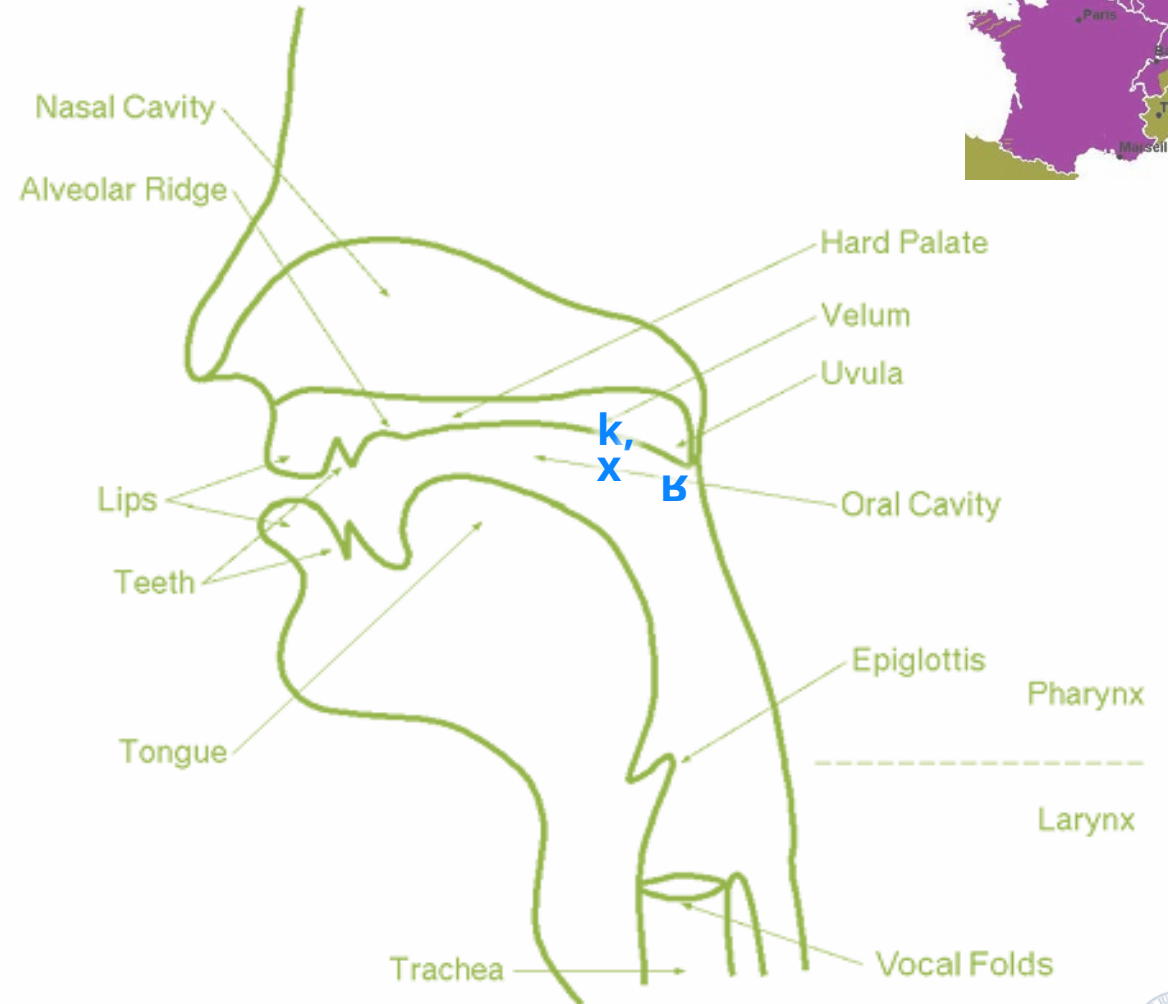
[**k**]

voiceless velar plosive

Kuren
[ku:**ʁ**ən]

[**ʁ**]

voiced uvular fricative



Critical period? Be flexible!

“[A]ny human, child or adult, can learn to pronounce all of these [speech] sounds, even the ones that do not usually occur in their native languages.” (Bieswanger & Becker 2010: 40)