Phonetics 2.2 (Optional): Non-English Sounds

April 15, 2020

Non-English sounds

You don't need to memorize any non-English sounds for this class.

But, here are some ways that non-English sounds can be realized:

Non-English sounds

Consonants:

Remember that we define consonants in terms of voicing, place, manner, (centrality), (nasality)

Non-English sounds

All English sounds are **pulmonic**, meaning they involve air flowing outward from the lungs through the vocal tract.

Non-English sounds

Other pulmonic manners of articulation:

Trill: Active articulator is held in place and airstream causes it to vibrate

Tap/flap: (To the extent that [ɾ] isn't a contrastive phoneme of English)

Non-English sounds

Non-pulmonic manners of articulation:

Ejectives: A stop closure is formed in the vocal tract. The glottis (gap between vocal folds) is closed and the glottis raised, building up positive pressure behind the stop closure. The closure is then released.

Implosives: Stop closure formed and closed glottis moves down, creating negative pressure in the vocal tract before the closure is released.

Clicks: A stop closure is formed in the vocal tract and then the back of the tongue is moved to create negative pressure in the vocal tract. Then, stop closure is released.

Non-English sounds

Places of articulation:

Dental: (To the extent different from interdental.)

Retroflex: Tongue tip curled up behind alveolar ridge

Uvular: Constriction between back of tongue and uvula

Pharyngeal: Constriction between back of tongue and pharynx (≈ back wall of mouth)

And more! (alveolo-palatal, epiglottal...)

Non-English sounds

nasal consonants in other languages:
Essentially, in different places (e.g. uvular)

lateral consonants in other languages:
Can combine with other manners (e.g. fricative)

Non-English sounds

Vowels:

Essentially any combination of height, backness, rounding is possible

Rounding can contrast vowels with the same height/backness

ex.
German *ie*: [i], high front unrounded
German *ü*: [y], high front rounded

Non-English sounds

Vowels can also be *nasalized*...

...= velum lowered so air escapes through the oral *and* nasal cavities.

Like in French *France* - [ɑ̃]

Non-English sounds

Another variable: **phonation**

The vowels we produce in English usually have "normal" (*modal*) voicing.

Vowels in other languages can also be *breathy* [a̤]...

...or *creaky* [a̰].

A link with these three examples (a lot of detail here, but I'm just posting for you to listen to the audio on the webpage):

https://www.ims.uni-stuttgart.de/institut/arbeitsgruppen/ehemalig/ep-dogil/EGG/page10.htm

Non-English sounds

We can actually have these phonation types in English, too.

But, in English they're considered different styles of producing a vowel...

...rather than their own separate sounds.

NB: """"vocal fry""""" = creaky voice!

Non-English sounds

More info:

https://www.internationalphoneticassociation.org/sites/default/files/IPA_Kiel_2015.pdf

Non-English sounds

CONSONANTS (PULMONIC) © 2015 IPA

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k g	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.

Non-English sounds

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ʘ Bilabial	ɓ Bilabial	’ Examples:
ǀ Dental	ɗ Dental/alveolar	pʼ Bilabial
ǃ (Post)alveolar	ʄ Palatal	tʼ Dental/alveolar
ǂ Palatoalveolar	ɠ Velar	kʼ Velar
ǁ Alveolar lateral	ʛ Uvular	sʼ Alveolar fricative

OTHER SYMBOLS

ʍ Voiceless labial-velar fricative

w Voiced labial-velar approximant

ɥ Voiced labial-palatal approximant

ʜ Voiceless epiglottal fricative

ʢ Voiced epiglottal fricative

ʡ Epiglottal plosive

ɕ ʑ Alveolo-palatal fricatives

ɺ Voiced alveolar lateral flap

ʃ͡x Simultaneous ʃ and x

Non-English sounds