# THE INTERNATIONAL PHONETIC ALPHABET (revised to 2018)

#### CONSONANTS (PULMONIC)

© 2018 IPA

001100111111	- (																					
	Bila	abial	Labio	dental	Dei	ntal	Alveo	olar	Postalv	eolar	Retro	oflex	Pal	atal	Ve	lar	Uv	ular	Phary	ngeal	Glo	ttal
Plosive	р	b					t	$\overline{\mathrm{d}}$			t	d	С	J	k	g	q	G			3	
Nasal		m		ŋ				n				η		ŋ		ŋ		N				
Trill		В						r										$\mathbf{R}$				
Tap or Flap				$\mathbf{V}$				ſ				τ										
Fricative	ф	β	f	V	θ	ð	S	${f z}$	ſ	3	ş	Z,	ç	j	X	γ	χ	R	ħ	?	h	h
Lateral fricative							ł	৳														
Approximant				υ				J				J		j		щ						
Lateral approximant								1				l		Λ		L						

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

#### CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
O Bilabial	6 Bilabial	examples:
Dental	d Dental/alveolar	p' Bilabial
! (Post)alveolar	f Palatal	t' Dental/alveolar
‡ Palatoalveolar	g Velar	k' Velar
Alveolar lateral	<b>G</b> Uvular	S' Alveolar fricative

## OTHER SYMBOLS

 $\mathbf{M}$  Voiceless labial-velar fricative

W Voiced labial-velar approximant

U Voiced labial-palatal approximant

H Voiceless epiglottal fricative

 $\mathbf{f}$  Voiced epiglottal fricative

 ${\it 2}$  Epiglottal plosive

€ Z Alveolo-palatal fricatives

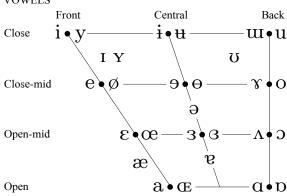
J Voiced alveolar lateral flap

 $\int \int Simultaneous \int \int Simultaneous \int \int Simultaneous \int \int Simultaneous \int Simultane$ 

Affricates and double articulations can be represented by two symbols

joined by a tie bar if necessary.

#### VOWELS



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

## SUPRASEGMENTALS

- Primary stress found tisen
  Secondary stress
  Long EX
- ▼ Half-long e
- Extra-short  $\overset{\smile}{\mathbf{e}}$
- Minor (foot) group
- Major (intonation) group

  Syllable break \_i.ækt
- Linking (absence of a break)

# TONES AND WORD ACCENTS LEVEL CONTOUR

ĕ	or 7 Extra	$\check{e}$ or $\bigwedge$ Rising
é	† High	$\hat{\mathrm{e}}$ $\vee$ Falling
$\bar{\mathbf{e}}$	- Mid	ĕ ¹ High rising
è	☐ Low	è ⊿ Low rising
ë		
<b>\</b>	Downstep	Global rise
$\uparrow$	Upstep	, Global fall

# DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. $\mathring{\eta}$

0	Voiceless	ů ď	Breathy voiced b. a. Dental t d.
_	Voiced	ş ţ	$_{\sim}$ Creaky voiced $\stackrel{b}{\mathbb{D}}$ $\stackrel{a}{\mathbb{D}}$ Apical $\stackrel{t}{\mathbb{D}}$ $\stackrel{d}{\mathbb{D}}$
h	Aspirated	$t^{ m h} \ d^{ m h}$	Linguolabial $\stackrel{t}{\sim}$ $\stackrel{d}{\sim}$ Laminal $\stackrel{t}{\sim}$ $\stackrel{d}{\sim}$
)	More rounded	Ş	$^{\mathrm{w}}$ Labialized $t^{\mathrm{w}}$ $d^{\mathrm{w}}$ $\tilde{e}$ Nasalized $\tilde{e}$
C	Less rounded	ç	$^{ m j}$ Palatalized $t^{ m j}$ $d^{ m j}$ $^{ m n}$ Nasal release $d^{ m r}$
+	Advanced	ų	$^{\gamma}$ Velarized $\mathbf{t}^{\gamma}$ $d^{\gamma}$ $^{l}$ Lateral release $d^{l}$
	Retracted	e	$^{\Gamma}$ Pharyngealized $ t^{\Gamma}  d^{\Gamma}$ No audible release $ d^{\Gamma} $
	Centralized	ë	~ Velarized or pharyngealized }
×	Mid-centralized	ě	Raised $\underbrace{\mathbf{P}}_{\mathbf{I}}$ ( $\underbrace{\mathbf{J}}_{\mathbf{I}}$ = voiced alveolar fricative)
	Syllabic	ņ	Lowered $earrow P$ ( $earrow P$ = voiced bilabial approximant)
^	Non-syllabic	ĕ	Advanced Tongue Root $\stackrel{\bullet}{\mathbf{q}}$
1	Rhoticity	or ar	Retracted Tongue Root $\stackrel{\longleftarrow}{E}$