## THE INTERNATIONAL PHONETIC ALPHABET (revised to 2018)

#### CONSONANTS (PULMONIC)

	· ·		· · ·								-									-		
	Bila	abial	Labio	dental	Der	ntal	Alve	olar	Postaly	veolar	Retr	oflex	Pal	atal	Ve	lar	Uv	ular	Phary	ngeal	Glo	ttal
Plosive	р	b					t	d			t	d	С	J	k	g	q	G			2	
Nasal		m		ŋ				n				η		ր		ŋ		Ν				
Trill		в						r										$\mathbf{R}$				
Tap or Flap				$\mathbf{V}$				ſ				r										
Fricative	φ	β	f	v	θ	ð	$\mathbf{S}$	$\mathbf{Z}$	ſ	3	ş	Z	Ç	j	x	Y	χ	R	ħ	ſ	h	ĥ
Lateral fricative							ł	ß														
Approximant				υ				J				ન		j		щ						
Lateral approximant								1				ſ		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	$\mathrm{p}'$ Bilabial
! (Post)alveolar	f Palatal	${ m t'}$ Dental/alveolar
+ Palatoalveolar	g Velar	$\mathbf{k}$ ' Velar
Alveolar lateral	${f G}$ Uvular	$\mathbf{S}'$ Alveolar fricative

#### OTHER SYMBOLS

- ${
  m M}$  Voiceless labial-velar fricative
- W Voiced labial-velar approximant
- U Voiced labial-palatal approximant

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W

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 $t^{h} d^{h}$ 

- H Voiceless epiglottal fricative
- ${f f}$  Voiced epiglottal fricative
- ${\it 2}_{\rm Epiglottal \ plosive}$

Voiceless

Voiced

Aspirated

More rounded

Less rounded

Advanced

Retracted

Centralized

Syllabic

∼ Rhoticity

Non-syllabic

Mid-centralized

h

••

- 𝔅 ℤ Alveolo-palatal fricatives
  - $\mathbf{J}$  Voiced alveolar lateral flap
- h Simultaneous and  $\mathbf{X}$

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

b

b

ť

 $t^{\mathrm{w}}$ 

 $\mathbf{t}^{\mathrm{j}}$ 

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 $t^{s}$ 

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Dental

Apical

Laminal

Nasalized

Nasal release

Lateral release

= voiced alveolar fricative)

= voiced bilabial approximant)

No audible release

t d

t d

d t

ẽ

 $d^n$ 

 $\overline{d^{l}}$ 

d٦

Long	er
<ul> <li>Half-long</li> </ul>	e•
Extra-short	ĕ
Minor (foot)	group
Major (intor	ation) group
. Syllable brea	ak .i.ækt
_ Linking (abs	ence of a break)
TONES AND LEVEL	WORD ACCENTS CONTOUR
″e or ∣ <sup>Extra</sup> high	$\check{\mathrm{e}}$ or $/$ Rising
é 1 High	$\hat{ extbf{e}} \hspace{0.1 in} igee \hspace{0.1 in}$ Falling
$\overline{e} \dashv Mid$	${f \check{e}}$ 1 $_{ m rising}^{ m High}$
è - Low	$\check{e} \rightarrow I_{rising}^{Low}$
${\rm \ddot{e}}$ $\Box_{\rm low}^{\rm Extra}$	$\tilde{e} \land \tilde{f}_{alling}^{Rising}$
↓ Downstep	✓ Global rise
↑ Upstep	Global fall

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

Breathy voiced

Creaky voiced

Linguolabial

Labialized

Palatalized

Velarized

Raised

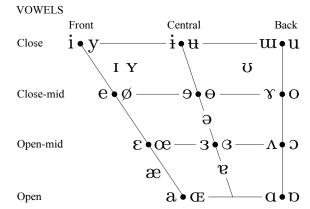
Lowered

Pharyngealized

∼ Velarized or pharyngealized

Advanced Tongue Root

Retracted Tongue Root



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

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#### SUPRASEGMENTALS

I	Primary stres	s	.foʊnə tı∫ən						
Т	Secondary str		00110	ujon					
I	Long	er							
•	Half-long	e•							
U	Extra-short	ĕ							
	Minor (foot)	group							
Ú	Major (intona	ation) g	roup						
•	Syllable break								
$\smile$	Linking (abse	ence of	a brea	k)					
Т	ONES AND '	WORD	ACCE						
ű	or 7 Extra	ě	or /	Rising					
é	┨ High	ê	Ν	Falling					
é ē è ě	- Mid	ế ě	1	High rising					
è	_ Low		۲	Low rising					
	$\int \frac{\text{Extra}}{\text{low}}$	ë	く	Rising- falling					
Ļ	Downstep	$\nearrow$	Global	rise					
↑	Unsten	\	Global	fall					