## THE INTERNATIONAL PHONETIC ALPHABET (revised to 2018)

	1			+ J							
	Bilabial	Labiodental	Dental	Alveolar	Postalve						
CONSONANTS (PULMONIC)											

© 2018 IPA

	Bila	bial	Labiode	ental	Den	tal	Alveol	ar	Postalveolar	Retr	oflex	Pal	atal	Ve	lar	Uv	ular	Phary	ngeal	Glo	ttal
Plosive	p	b					t c	1		t	d	c	J	k	g	q	G			?	
Nasal		m	ľ	ŋ			n	1			η		ր		ŋ		Ν				
Trill		В					r	•									R				
Tap or Flap				$\mathcal{N}$			ſ	•			r										
Fricative	φ	β	f	V	θ	ð	S Z	2	∫ 3	ş	Z	ç	j	Χ	Y	χ	R	ħ	ſ	h	ĥ
Lateral fricative							łţ	5													
Approximant			1	υ			J	[			ŀ		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
🛈 Bilabial	6 Bilabial	• Examples:
Dental	d Dental/alveolar	p' Bilabial
(Post)alveolar	f Palatal	t' Dental/alveolar
+ Palatoalveolar	g Velar	k' Velar
Alveolar lateral	G Uvular	<b>S'</b> Alveolar fricative

## OTHER SYMBOLS

- M Voiceless labial-velar fricative
- W Voiced labial-velar approximant
- U Voiced labial-palatal approximant
- ${f H}$  Voiceless epiglottal fricative
- ${f f}$  Voiced epiglottal fricative
- ${\bf 2}_{\rm Epiglottal\ plosive}$

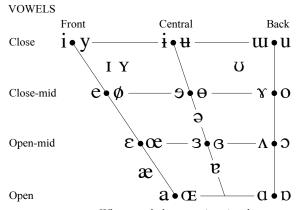
- CZ Alveolo-palatal fricatives
  - J Voiced alveolar lateral flap
- h and  $\boldsymbol{X}$ Simultaneous

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



DL	ACRITICS	Some dia	critics	may be placed above	/e a sy	vmbol v	vith a descender,	$_{e.g.}\mathring{\eta}$	
0	Voiceless	ņ	ģ	Breathy voiced	ÿ	ä	Dental	ţ	ď
	Voiced	Ş	ţ	← Creaky voiced	þ	ą	Apical	ţ	d
h		≁h	Jh		+	1		4	1

<b>\</b>	Voiced	şι	~ Creaky voiced	v a		Apical	ľ	ū
h	Aspirated	$t^h d^h$	Linguolabial	ţ ġ		Laminal	ţ	₫
)	More rounded	Ş	W Labialized	t <sup>w</sup> d	w ~	Nasalized		ẽ
c	Less rounded	ç	j Palatalized	t <sup>j</sup> d	j n	Nasal release		dn
+	Advanced	ų	Y Velarized	t <sup>v</sup> d	¥ 1	Lateral release		$d^1$
_	Retracted	e	S Pharyngealized	t <sup>s</sup> d	ר ו	No audible releas	e	d
	Centralized	ë	✓ Velarized or phase	ryngealized	1			
×	Mid-centralized	ě	Raised	ė (1	= voic	ed alveolar fricativ	e)	
	Syllabic	ņ	Lowered	ę. β	= voic	ed bilabial approxi	mant	t)
_	Non-syllabic	ĕ	Advanced Tongu	e Root e				
ι	Rhoticity	ð a	Retracted Tongue	e Root e				



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

## SUPRASEGMENTALS

I	Primary s	tress	foʊnəˈtɪʃən						
I	Secondary	/ stress	1*	oone	ujon				
X	Long	er							
•	Half-long	e'							
U	Extra-sho	rt ĕ							
	Minor (fo	ot) grou	ıp						
İ	Major (in	tonatior	ı) g	roup					
•	Syllable b	reak	Ţ	i.ækt					
$\smile$	Linking (a	a breal	k)						
Т	ONES AN LEVEL	D WO	RD	ACCE CONTO					
ế	or 7 Ext		ě	or 🖊	Rising				
é	┨ Hig	h	ê	Ν	Falling				
ē	- Mic	1	é	1	High rising				
è ề	_ Lov	v	è	۲	Low rising				
	⊥ Low	ra	è	Ч	Rising- falling				
t	Downstep		↗	Global	rise				
↑	Upstep		7	Global	fall				