THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993)

CONSONANTS (PULMONIC)

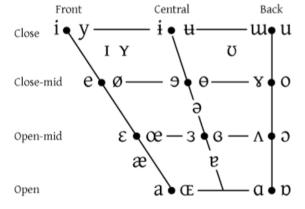
	Bilabial		Labiodental	Dental	Alveola	r Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glott	tal
Plosive	p	b			t d		t d	сј	k g	q G		?	
Nasal		m	m		n		η	n	ŋ	N			
Trill		В			r					R			
Tap or Flap					ſ		r						
Fricative	ф	β	f v	θð	S Z	∫ 3	ş z	çj	х ү	Χк	ħΥ	h	ĥ
Lateral fricative					ł k								
Approximant			υ		ı		ન	j	щ				
Lateral approximant					1		l	λ	L				

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

Clic	Clicks		ed implosives	Ejectives		
0	Bilabial	6	Bilabial	,	as in:	
	Dental	ď	Dental/alveolar	p'	Bilabial	
!	(Post)alveolar	ſ	Palatal	ť	Dental/alveolar	
ŧ	Palatoalveolar	ď	Velar	k'	Velar	
	Alveolar lateral	Ğ	Uvular	s'	Alveolar fricative	

VOWELS



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

OTHER SYMBOLS

\mathbf{M} Voiceless labial-velar fricative	e 6 Z Alveolo-palatal fricatives
W Voiced labial-velar approxima	ant dan Alveolar lateral flap
U Voiced labial-palatal approxim	mant $\int \int Simulataneous \int and X$
$\mathbf H$ Voiceless epiglottal fricative	Affricates and double articula-
Yoiced epiglottal fricative	tions can be represented by two symbols joined by a tie bar
2 Epiglottal plosive	if necessary

kn fs

SUPRASEGMENTALS

-	011010101111111111111111111111111111111		TONES & W	IORD I	ACCENTS
ı	Primary stress found tisen		LEVEL		CONTOUR
ţ	Secondary stress	ű	or 7 Extra high	ě	/ Rising
Ĭ	Long e:	é	∃ High	ê	\ Falling
$\overline{}$	Half-long e Extra-short e	ē	$\mathbf{H}_{\mathrm{Mid}}$	ĕ	1 High rising
:	Syllable break .i.ækt	è	J Low	ĕ	Low rising
ı	Minor (foot) group	è	J Extra low	ê	1 Rising-falling
	Major (intonation) group	\downarrow	Downstep	1	Global rise etc.
\smile	Linking (absence of a break)	1	Upstep	1	Global fall

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. $\check{\eta}$

									<u> </u>
o	Voiceless	ņ	ģ		Breathy voiced	ıģ	a	_ Dental	ţ₫
~	Voiced	ş	ţ	~	Creaky voiced	Ď	a	_ Apical	ţ₫
h	Aspirated	$t^{\mathbf{h}}$	d^{h}	~	Linguolabial	ţ	ğ	Laminal	ţd
,	More round	led	ş	w	Labialized	tw	dw	~ Nasalized	ẽ
c	Less rounde	ą	j	Palatalized	t ^j	d^{j}	n Nasal release	d^{n}	
+	Advanced			¥	Velarized	tγ	ďγ	l Lateral release	d^{l}
_	Retracted			۲	Pharyngealize	d t ^s	\vec{l} No audible release \vec{d}		
••	Centralized	ë	~	∼ Velarized or pharyngealized }					
×	Mid-centra	ě	_	Raised $e (1 = voiced alveolar fricative)$					
ı	Syllabic			Lowered $e \in \beta$ = voiced bilabial approximant)					nant)
^	Non-syllabi	ic	ĕ	4	Advanced Tong	gue Ro	oot	ę	
1	Rhoticity		ð	F	Retracted Tong	gue Ro	ot	ę	
	, , , , , , , , , , , , , , , , , , ,	Voiced h Aspirated , More round , Less rounde , Advanced Retracted Centralized Mid-centra Syllabic Non-syllabi	Voiced \$ h Aspirated th More rounded Less rounded Advanced Retracted Centralized Mid-centralized Syllabic Non-syllabic	Voiced \$ \$ \$ \$ \$ \$ \$ h Aspirated th dh Aspirated \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Voiced \$ \$ \$ \cdot	Voiced \$\frac{\frac}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\fr	Voiced S t ~ Creaky voiced b h Aspirated th dh ~ Linguolabial t , More rounded Q W Labialized tW c Less rounded Q J Palatalized t Advanced U W Velarized t Retracted i S Pharyngealized t Centralized E ~ Velarized or pharyng Mid-centralized E Raised P 1 Syllabic 1 Lowered P 1 Non-syllabic P Advanced Tongue Ro	Voiced S t ~ Creaky voiced b a h Aspirated th dh ~ Linguolabial t d , More rounded Q Labialized tw dw , Less rounded Q Palatalized t d d , Advanced U Velarized t d d Retracted i Pharyngealized t d d Centralized ë ~ Velarized or pharyngealized Mid-centralized ë Raised P 1 = voice Non-syllabic A Advanced Tongue Root	Voiced Ş ţ ~ Creaky voiced b a _ Apical h Aspirated th dh ~ Linguolabial t d _ Laminal , More rounded Q W Labialized tw dw Nasalized c Less rounded Q Palatalized t d d n Nasal release Advanced U Velarized t d d n Nasal release Retracted i Pharyngealized t d d n Na audible release Centralized ë ~ Velarized or pharyngealized t Mid-centralized ĕ Raised e (I = voiced alveolar fricative g non-syllabic e