

ceip		vælju			
		<i>inglic</i>	<i>frenc</i>	<i>dʒærmæn</i>	<i>æðar læNgwidʒiz</i>
p	az in	<i>put</i>	<i>pas</i>	<i>pferd</i>	
b		<i>but</i>	<i>bas</i>	<i>boot</i>	
t		<i>ten</i>	<i>tant</i>	<i>tot</i>	
d		<i>den</i>	<i>dent</i>	<i>da</i>	
k		<i>kind</i>	<i>képi</i>	<i>kuh</i>	
g		<i>good</i>	<i>gai</i>	<i>gut</i>	
m		<i>my</i>	<i>ma</i>	<i>mein</i>	
n		<i>no</i>	<i>non</i>	<i>nein</i>	
N			<i>règne</i>		ital. <i>regno</i> .
*N		<i>thing</i>		<i>ding</i>	ital. <i>anche</i> .
l		<i>lull</i>	<i>la</i>	<i>lang</i>	
*ʌ			<i>fille</i> (in ðə sauθ)		sp. <i>llano</i> , ital. <i>gli</i> .
r	<i>red</i>	<i>rare</i>	<i>rot</i>		(tœN-pɔint <i>r</i>)
R		<i>rare</i>	<i>rot</i>		(bak <i>r</i>). — dan. <i>træ</i>
U			<i>quer</i>		flem. <i>wrocht</i> , span. <i>bibir</i> .
q			<i>buis</i>		
w	<i>wel</i>	<i>oui</i>			ital. <i>questo</i>
f	<i>full</i>	<i>fou</i>	<i>voll</i>		
v	<i>vain</i>	<i>vin</i>	<i>wein</i>		
θ	<i>thin</i>				span. <i>razon</i>
ð	<i>then</i>				dan. <i>gade</i>
s	<i>seal</i>	<i>sel</i>	<i>weiss</i>		
z	<i>zeal</i>	<i>zèle</i>	<i>weise</i>		
*c	<i>she</i>	<i>chat</i>	<i>fisch</i>		swed. <i>skæl</i> , dan. <i>sjæl</i> , ital <i>lascia</i>
ʒ	<i>leisure</i>	<i>jeu</i>	<i>genie</i>		
ç			<i>ich</i>		
j	<i>you</i>	<i>yak</i>	<i>ja</i>		swed. <i>ja</i> , ital. <i>jena</i> .
x			<i>ach</i>		span. <i>jota</i>
q			<i>wagen</i>		

h	<i>high</i>	(<i>haut</i>)	<i>hoch</i>	
u	<i>full</i>	<i>cou</i>	<i>nuss</i>	
o	<i>soul</i>	<i>pot</i>	<i>soll</i>	
ɔ	<i>not</i>	<i>note</i>		ital. <i>notte</i>
A		<i>pas</i>	<i>vater</i>	swîd. <i>sal</i>
*a	<i>father</i>			ital. <i>mano</i> , swîd. <i>mann</i> .
a	<i>eye, how</i>	<i>patte</i>	<i>mann</i>	
æ	<i>man</i>			
ɛ	<i>air</i>	<i>air</i>	<i>bær</i>	
e	<i>men</i>	<i>né</i>	<i>nett</i>	
i	<i>pit</i>	<i>ni</i>	<i>mit</i>	
*œ	<i>but, fur</i>			
œ		<i>seul</i>	<i>kænnen</i>	
*œ		<i>peu</i>	<i>sæhne</i>	
y		<i>nu</i>	<i>dünn</i>	
*ü			<i>für</i>	
ə	<i>never</i>	<i>je</i>	<i>gabe</i>	
ʻ	<i>glotl kætc</i>			
-u, u-,	<i>wík strest u</i>			} ðîz mɔdɪfɪkɛɪcənz əplai tu ɔl letərz
·u, u·, ù,	<i>stroN strest u</i>			
u:,	<i>loN u</i>			
œ	<i>neizl æ</i> (ɔr eni æðar vauəl)			
û	<i>loN ən næro u</i> (ɔr əni æðar vauəl)			
hl, lh	<i>voislis l</i> (ɔr eni æðar kɔnsənənt)			
:	<i>mark əv lenθ</i> .			

ðə letərz markt wið ə star* ər prɔvɪʒənl ceips, ən wil
bɪ rɪpleɪst hwɛn sɜrkəmstənsɪz wil əlau

References

res: ip

		Laryn- gales	Guttu- rales	Uvu- laires	Vélaires	Palatales	Linguales	Labiales
CONSONNES	Plosives	ʔ		q ɢ	k ɡ	c ɟ	t d	p b
	Nasales				ŋ	ɲ	n	m
	Latérales				ɭ	ʎ	l	
	Roulées		ʀ	ʁ ʀ			r	
	Fricatives	h ɦ	ħ	ʁ ʁ̥	(ɯ w) x ɣ	(ɥ) ç ʝ	ɬ, θ ð, ʃ ʒ, s z ʂ ʐ	f v ɸ β ɱ w ɸ
VOYELLES	Fermées				u ɯ ü i̯ y i			(u ü y)
	Mi-fermées				ʊ ʏ ɪ			
	Moyennes				o ɤ ɵ ɵ̥ ø e ə			(o ɵ̥ ø)
	Mi-ouvertes				ɔ ʌ ɔ̃ ä œ ε			(ɔ ɔ̃ œ)
	Ouvertes				ɶ æ α a			

		Bronchs	Throat	Uvula	Back	Front	Tongue - point	Lip
CONSONANTS	Stopped		ʔ	q ɢ	k ɡ	c ɟ	t d	p b
	Nasal				ŋ	ɲ	n	m
	Side				ɭ	ʎ	l	
	Trilled			ʀ ʁ			r	
	Squeezed	ɸ β	h ɦ	ʁ ʙ	(ɯ w) x ɣ	(ɥ) ç ʝ	ɬ, θ ð, ʃ ʒ, s z	f v ɱ w ɸ ʋ
VOWELS	Close				u ʊ ü i̯ y i			(u ü y)
	Half - close				ʊ ʏ ɪ			(ʊ ʏ)
	Mid				o ɔ ʋ ɵ ɵ̥ ø e			(o ɵ ø)
					ɔ ʌ ɔ̃ ä œ ɛ			(ɔ ɔ̃ œ)
	Half-open				ɐ æ			
	Open				ɑ ʌ			

		Bron- chiales	Guttu- rales	Uvu- laires	Vélaires	Palatales	Gencivales	Labiales
VOYELLES	plus larges				ɑ a	ã		
	larges				ɔ œ ɶ ä æ	œ		(ɔ œ)
	moins larges				ɔ ʌ ɔ̃ ɐ ɛ ɛ	ẽ, ẽ		(ɔ ɔ̃ ɐ)
	moins étroites				o v ö ø ë e			(o ö ø)
	étroites				U Y ^ə I	ĩ		(U Y)
	plus étroites				u w ü ï y i			(u ü y)
	nasales				ã ɔ̃ œ ẽ ĩ			
CONSONNES	fricatives	h q	h ɦ	ʁ ʁ	(ɱ w) x ɣ	(ɟ)j ɟ j	ʃ, θð, ʒʒ, sz	f v F v ɱ w ɟ
	fermées		ʔ	q G	k g	c ɟ	t d	p b
	nasales				ŋ	ɲ	n	m
	latérales				ɬ	ʎ	l	
	roulées			ʀ R			r	

	<i>Lips</i>	<i>Lip-teeth</i>	<i>Point and Blade</i>	<i>Front</i>	<i>Back</i>	<i>Uvula</i>	<i>Throat</i>
CONSONANTS Plosive Nasal Lateral Rolled Fricative	p b		t d	c ɟ	k ɡ	q ɢ	ʔ
	m		n	ɲ	ŋ	ɴ	
			l ɭ	ʎ	(ɮ)		
			r ʀ			ʀ	
	ɸ β ɱ w ɰ σ ʃ	f v	θ ð s z ʃ ʒ ʁ	ç ʝ (ɥ)	(ɱ w) x ɣ	ʁ ʕ	h ɦ
VOWELS Close Half-close Half-open Open	(u ü y) (ʊ ʏ)			<i>Front</i> i y ɪ ʏ e ø	<i>Mixed</i> ɨ ʉ ̞ ̟ ə ɛ œ ̝ ̞ ʌ ɔ æ ɐ a ɑ		
	(o ö ø)						
	(ɔ ɔ̃ œ)						

(Sounds appearing twice on the chart have a double articulation, the secondary articulation being shown by the symbol in brackets.)

		Laryn- gales	Uvu- laires	Vélares	Palatales	Linguales	Labiales
CONSONNES	Plosives	ʔ	q ɢ	k ɡ	c ɟ	t d	p b
	Nasales		ɴ	ŋ	ɲ	ɳ	ɱ
	Latérales				ʎ	ɭ	
	Roulées		ʀ ʁ			ʀ	
	Fricatives	h	χ ʁ	(ħ w) x ɣ	(ħɥ ɥ) ɕ ʝ	ʃ ʒ s z ɬ ʈ θ ð	f v ɸ β ɸ w ɥ ɥ
VOYELLES	Fermées			u ʊ ʉ ɨ y i			(u ʉ y)
	Mi-fermées			o ɤ ɵ ɐ ø e			(o ɵ ø)
	Mi-ouvertes			ɔ ʌ ɐ ɜ œ ɛ a			(ɔ ɐ œ)
	Ouvertes			ɑ	a		

	Bilabiale	Labio- dentale	Dentale und alveolare	Zerebrale	Palato- alveolare	Alveolo- palatale	Palatale	Velare	Uvulare	Pha- ryngale
Konsonanten	explosive	p b	t d	t̪ d̪			c ɟ	k g	q ɢ	
	nasale	m	ɱ	n	ɲ		ɲ	ŋ	ɴ	
	laterale {frikative		ɬ ɮ							
	{nichtfrikative .		l	ɭ			ʎ			
	gerollte		r						ʀ	
	einmal angeschlagene .		ʀ	ʀ̥					ʀ̥	
	frikative	ɸ β	f v	θ ð	s z	ʃ ʒ	ç ʝ	x ɣ	χ ʁ	ħ ʕ
Vokale	Halbvokale u. reibungs- lose Dauerlaute	w ɥ	ʋ	ɹ			j (ɥ)	(w) ɣ		
	geschlossene	(y ɥ u)					Vor- dere i y	Zen- trale ɨ ʉ	Hin- tere ɯ u	
	halbgeschlossene	(ø ɔ)					e ø		ɤ ɒ	
	halboffene	(œ ɔ̃)					ɛ œ	ə ɐ	ʌ ɔ̃	
	offene	(ɒ)					æ a		ɑ ɒ	

Die Nebenartikulation von Lauten, deren Bildung sich gleichzeitig an zwei verschiedenen Artikulationsstellen vollzieht, ist durch Wiederholung der Buchstaben in Klammern () in der betreffenden Spalte der Tabelle gekennzeichnet.

THE INTERNATIONAL PHONETIC ALPHABET.

		<i>Bi-labial</i>	<i>Labio-dental</i>	<i>Dental and Alveolar</i>			<i>Retroflex</i>	<i>Palato-alveolar</i>	<i>Alveolo-palatal</i>	<i>Palatal</i>	<i>Velar</i>	<i>Uvular</i>	<i>Pharyngeal</i>	<i>Glottal</i>
CONSONANTS	<i>Plosive</i>	p b		t d		ʈ ɖ				c ɟ	k ɡ	q ɢ		ʔ
	<i>Nasal</i>	m	ɱ	n		ɳ				ɲ	ŋ	ɴ		
	<i>Lateral Fricative</i> .			ɬ ɮ										
	<i>Lateral Non-fricative</i> .			l		ɭ				ʎ				
	<i>Rolled</i>			r								ʀ		
	<i>Flapped</i>			ɾ		ɽ						ʁ		
	<i>Fricative</i>	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ʧ ʨ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ	
	<i>Frictionless Continuant and Semi-vowels</i>	w ɥ	ʋ	ɹ						j (ɥ)	(w)	ʁ		
VOWELS	{								<i>Front</i>	<i>Central</i>	<i>Back</i>			
									i y	ɪ ʏ	u			
									e ø		ɤ o			
									ɛ œ	ə	ʌ ɔ			
									æ		ɑ ɒ			
<i>Open</i>								a		ɑ ɒ				

(Secondary articulations are shown by symbols in brackets.)

OTHER SOUNDS.—Palatalized consonants : ʧ, ʤ, etc. Velarized or pharyngalized consonants : ɮ, ɢ, ɣ, etc. Ejective consonants (plosives with simultaneous glottal stop) : p', t', etc. Implosive voiced consonants : ɓ, ɗ, etc. ʀ fricative trill. σ, ɣ (labialized θ, ð, or s, z). ɸ, ɹ (labialized f, ʒ). ɕ, ɟ, ɖ (clicks, Zulu c, q, x). ɗ (a sound between r and l). ɱ (voiceless w). ɵ (a vowel between ø and o).

Affricates are normally represented by groups of two consonants (ts, tʃ, dʒ, etc.), but, when necessary, ligatures are used (ts, tʃ, dʒ, etc.), or the marks t^s or t^s (ts or ts, etc.). c, ɟ may occasionally be used in place of tʃ, dʒ. Aspirated plosives : ph, th, etc.

LENGTH, STRESS, PITCH.— : (full length). ˘ (half length). ˈ (stress, placed at beginning of the stressed syllable). ˌ (secondary stress). ˉ (high level pitch); ˊ (low level); ˑ (high rising); ˒ (low rising); ˋ (high falling); ˓ (low falling); ˗ˊˆ (rise-fall); ˗ˋˆ (fall-rise). See *Ecriture Phonétique Internationale*, p. 9.

MODIFIERS.— $\sim$ nasality. $\overset{\circ}{}$ breath ($\overset{\circ}{l}$ = breathed l). $\underset{\cdot}{}$ voice ($\underset{\cdot}{s}$ = z). $\overset{'}{}$ slight aspiration following p, t, etc. $\overset{.}{}$ specially close vowel ($\overset{.}{e}$ = a very close e). $\overset{.}{\circ}$ specially open vowel ($\overset{.}{e}$ = a rather open e). $\underset{\sim}{}$ labialization $\underset{\sim}{n}$ = labialized n). $\underset{\text{d}}{}$ dental articulation ($\underset{\text{d}}{t}$ = dental t). $\overset{\text{p}}{}$ palatalization ($\overset{\text{p}}{z}$ = $\underset{\text{p}}{z}$). $\overset{\text{r}}{}$ tongue slightly raised. $\overset{\text{l}}{}$ tongue slightly lowered. $\overset{\text{u}}{}$ lips more rounded. $\overset{\text{e}}{}$ lips more spread. $\underset{\text{c}}{}$ (e.g. n) syllabic consonant. $\overset{\text{v}}{}$ consonantal vowel. $\underset{\text{f}}{}$ variety of f resembling s, etc.

(Revised to 1932.)

(Secondary articulations are shown by symbols in brackets.)

MODIFIERS.— $\sim$ nasality. $\circ$ breath ($\underset{\circ}{l}$ = breathed l). $\underset{\circ}{v}$ voice ($\underset{\circ}{s}$ = z). $\overset{'}{ }$ slight aspiration following p, t, etc. $\underset{.}{ }$ specially close vowel ($\underset{.}{e}$ = a very close e). $\underset{.}{\circ}$ specially open vowel ($\underset{.}{e}$ = a rather open e). $\underset{\sim}{n}$ labialization ($\underset{\sim}{n}$ = labialized n). $\underset{\text{d}}{t}$ dental articulation ($\underset{\text{d}}{t}$ = dental t). $\overset{'}{z}$ palatalization ($\overset{'}{z}$ = $\underset{'}{z}$). $\overset{\cdot}{ }$ tongue slightly raised. $\overset{\cdot}{\circ}$ tongue slightly lowered. $\overset{\circ}{\circ}$ lips more rounded. $\overset{\circ}{\circ}$ lips more spread. Central vowels $\underset{\circ}{i}$ (= i), $\underset{\circ}{u}$ (= u), $\underset{\circ}{e}$ (= e), $\underset{\circ}{o}$ (= o), $\underset{\circ}{\epsilon}$, $\underset{\circ}{\text{ö}}$. $\underset{\text{c}}{n}$ (e.g. n) syllabic consonant. $\underset{\text{c}}{ }$ consonantal vowel. $\underset{\text{f}}{s}$ variety of f resembling s, etc.

(Revised to 1938.)

(Secondary articulations are shown by symbols in brackets.)

Affricates are normally represented by groups of two consonants (ts, tʃ, dʒ, etc.), but, when necessary, ligatures are used (ts, tʃ, dʒ, etc.), or the marks $\frown$ or $\smile$ (ts or ts̄, etc.). $\frown \smile$ also denote synchronic articulation ($\widehat{m\eta}$ = simultaneous m and η). c, j may occasionally be used in place of tʃ, dʒ. Aspirated plosives : ph, th, etc.

MODIFIERS.— $\tilde{\hspace{0.5em}}$ nasality. $\circ$ breath (! = breathed l). $\underset{\cdot}{\hspace{0.5em}}$ voice ($\S$ = z). $\acute{\hspace{0.5em}}$ slight aspiration following p, t, etc. ̣ specially close vowel (̣ = a very close e). ̤ specially open vowel (̤ = a rather open e). ̬ labialization (̬ = labialized n). ̮ dental articulation (̮ = dental t). ̯ palatalization (̯ = ž). ̰ tongue slightly raised. ̱ tongue slightly lowered. ̲ lips more rounded. ̳ lips more spread. Central vowels ̩ (= i), ̪ (= u), ̫ (= ə), ̬ (= ø), ̭ , ̮ . (e.g. n) syllabic consonant. ̯ consonantal vowel. ̰ variety of f resembling s, etc.

				Bi-labial	Labio-dental	Dental and Alveolar		Retroflex	Palato-alveolar	Alveolo-palatal	Palatal	Velar	Uvular	Pharyngeal	Glottal
CONSONANTS	Plosive	•	•	•	p b		t d	ʈ ɖ			c ɟ	k ɡ	q ɢ		ʔ
	Nasal	•	•	•	m	ɱ	n	ɳ			ɲ	ŋ	ɴ		
	Lateral Fricative	•		•			ɬ ɮ								
	Lateral Non-fricative	•					ɭ	ɮ̺			ʎ				
	Rolled	•	•	•			r						ʀ		
	Flapped	•	•	•			ɾ	ɽ					ʀ		
	Fricative	•	•	•	ɸ β	f v	θ ð s z	ɬ ɮ	ʃ ʒ	ç ʝ		x ɣ	χ ʁ	ħ ʕ	h ɦ
	Frictionless Continuants and Semi-vowels				w ɥ	ʋ		ɻ			j (ɥ)	(w)	ʁ		
VOWELS	Close	•	•	•	(y ʉ u)						Front i y	Central ɨ ʉ	Back ɯ u		
	Half-close	•	•	•	(ø ɔ)						e ø		ɤ ɒ		
	Half-open	•	•	•	(œ ɔ̃)						ɛ œ	ə	ʌ ɔ̄		
											æ	ɐ			
	Open	•	•	•	(ɒ)						a		ɑ ɒ		

(Secondary articulations are shown by symbols in brackets.)

OTHER SOUNDS.—Palatalized consonants : ɟ̟, ɖ̟, etc. ; palatalized ʃ, ʒ : ʃ̟, ʒ̟ Velarized or pharyngealized consonants : ɬ̠, ɮ̠, ʒ̠, etc. Ejective consonants (with simultaneous glottal stop) : pʰ, tʰ, etc. Implosive voiced consonants : ɓ, ɗ, etc. ɾ fricative trill. σ, ɣ (labialized θ, ð, or s, z). ɭ, ʒ (labialized ʃ, ʒ). ɰ, ɠ, ʘ (clicks, Zulu c, q, x). ɮ̺ (a sound between r and l). ɲ Japanese syllabic nasal. ɧ (combination of x and f). ʍ (voiceless w). ɹ, ɻ, ʋ (lowered varieties of i, y, u). ɜ (a variety of ə). ɐ (a vowel between ø and o).

Affricates are normally represented by groups of two consonants (ts, tʃ, dʒ, etc.), but, when necessary, ligatures are used (ts̺, tʃ̺, dʒ̺, etc.), or the marks ͡ or ͣ (ts̺ or ts̺ͣ, etc.). ͣ͡ also denote synchronic articulation (m͡ɲ = simultaneous m and ɲ). c, ɟ may occasionally be used in place of tʃ, dʒ, and ʃ, ʒ for ts, dz. Aspirated plosives : ph, th, etc. r-coloured vowels : eɹ, aɹ, ɔɹ, etc., or eʳ, aʳ, ɔʳ, etc., or eɻ, aɻ, ɔɻ, etc. ; r-coloured ə : əɹ or əʳ or ɹ or ɹ̥.

LENGTH, STRESS, PITCH.— : (full length). ˑ (half length). ˈ (stress, placed at beginning of the stressed syllable). ˌ (secondary stress). ˊ (high level pitch) ; ˋ (low level) ; ˊˊ (high rising) ; ˋˋ (low rising) ; ˊˋˊ (high falling) ; ˋˋˋ (low falling) ; ˊˋˊˋ (rise-fall) ; ˋˋˋˋ (fall-rise).

MODIFIERS.— ̃ nasality. ̤ breath (l̤ = breathed l). ̥ voice (s̥ = z). ʰ slight aspiration following p, t, etc. ̠ labialization (ɲ̠ = labialized n). ̡ dental articulation (t̡ = dental t). ̣ palatalization (ʒ̣ = ʒ). ̤ specially close vowel (e̤ = a very close e). ̥ specially open vowel (e̥ = a rather open e). ̦ tongue raised (e̦ or e̦̥ = e̥). ̧ tongue lowered (ȩ or ȩ̥ = ȩ). ̨ tongue advanced (ų or ų̥ = an advanced u, t̨ = t̡). ̩ or ̪ tongue retracted (i̩- or i̪ = i̦, t̨ = alveolar t). ̪̥ lips more rounded. ̪̥̥ lips more spread. Central vowels : i̠ (= i), u̠ (= ʉ), e̠ (= ə), o̠ (= ɐ), e̠̥, ð̠̥. ̠̠̠ (e.g. ɲ̠̠̠) syllabic consonant. ̠̠̠̠ consonantal vowel. ̠̠̠̠̠ variety of ʃ̠̠̠̠̠ resembling s, etc.

Consonants	Bilabial.	Labiodental.	Dental and Alveolar.	Retroflex.	Palato-alveolar.	Alveolo-palatal.	Palatal.	Velar.	Uvular.	Pharyngeal.	Glottal.
Plosive	p b		t d	ʈ ɖ			c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n	ɳ			ɲ	ŋ	ɴ		
Lateral			l	ɭ			ʎ				
„ fricative			ɬ ɮ								
Rolled			r						ʀ		
Flapped			ɾ	ɽ					ɽ		
Rolled fricative			ɽ								
Fricative	ɸ β	f v	θ ð s z ɬ ɮ	ʂ ʐ	ʃ ʒ	ɕ ʝ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Frictionless Continuants and Semi-vowels	w ɥ	ʋ	ɹ				j (ɥ)	(w) ɰ	ʁ		
Vowels	Rounded						Front	Centr.	Back		
Close	(y ɯ u)						i y	ɨ ɯ	ɯ u		
Half-close	(ø ɔ)						e ø		ɤ ɒ		
Half-open	(œ ɔ̃)						ɛ œ	ə	ʌ ɔ̃		
							æ	ɐ			
Open	(ɒ)						a		ɑ ɒ		

(Revised to 1979)

C	O	N	S	O	N	A	N	T
(non-pulmonic consonants)				(pulmonic air-stream mechanism)				

- Voiceless p t
- ✓ Voiced b d
- ^h Aspirated t^h
- .. Breathy-voiced b^h d^h
- _ɱ Dental $\text{t}_\text{ɱ}$
- ~ Labialized $\text{t}_\text{ɸ}$
- ~ Palatalized $\text{t}_\text{ɟ}$
- ~ Velarized or Pharyngealized $\text{t}_\text{ɣ}$, $\text{t}_\text{ʕ}$
- ◌, Syllabic p t
- ^ or ◌ Simultaneous sf (but see also under the heading Affricates)

ˆ or ˙ Raised e, ɛ, ɐ w	ç, ʒ Alveolo-palatal fricatives
˘ or ˙ Lowered e, ɛ, ɐ ʁ	ʎ, ʑ Palatalized ʃ, ʒ
+ Advanced u+, ʊ	ɹ Alveolar fricative trill
- or - Retracted ɨ, ɪ-, ʉ	ɻ Alveolar lateral flap
˙ Centralized ẽ	ʃ Simultaneous ʃ and x
˙ Nasalized ā	ʃː Variety of ʃ resembling s,
ˠ, ˡ, ˢ r-coloured aˠ	etc.
: Long a:	ɪ = ɪ
ˑ Half-long aˑ	ʊ = ʊ
˘ Non-syllabic ʉ	ɜ = Variety of ə
ˑ More rounded ɔˑ	əː = r-coloured ə
ˑ Less rounded ɔˑ	

Close

Half-close

Half-open

Open

' stress, placed at beginning of stressed syllable :
 , secondary stress : ~ high level pitch, high tone :
 _ low level : ^ high rising :
 , low rising : ^ high falling :
 _ low falling : ^ rise-fall :
 ~ fall-rise.

AFFRICATES can be written as digraphs, as ligatures, or with slur marks ; thus ts, tʃ, dʒ :
 ts tʃ dʒ : ts tʃ dʒ.
 c, j may occasionally be used for tʃ, dʒ.

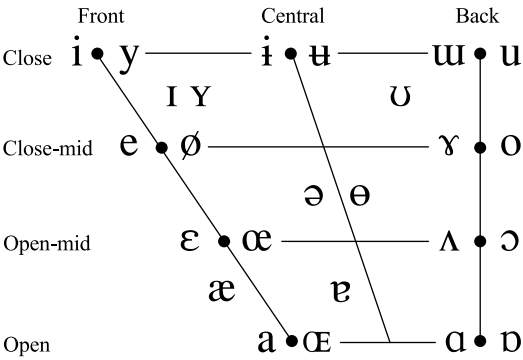
THE INTERNATIONAL PHONETIC ALPHABET (revised to 1989)

CONSONANTS

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap			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			
Ejective stop	pʼ		tʼ			ʈʼ	cʼ	kʼ	qʼ		
Implosive	ɓ ɗ		ɟ ɗ				ɕ ɗ	ʁ ɗ	ɕ ɗ		

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

VOWELS



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

OTHER SYMBOLS

- ʍ Voiceless labial-velar fricative
- ʋ Voiced labial-velar approximant
- ɥ Voiced labial-palatal approximant
- ħ Voiceless epiglottal fricative
- ʕ Voiced epiglottal fricative
- ʡ Epiglottal plosive
- ɕ ʑ Alveolo-palatal fricatives
- ɹ Additional mid central vowel
- ɸ Bilabial click
- ɬ Dental click
- ʄ (Post)alveolar click
- ɽ Palatoalveolar click
- ɭ Alveolar lateral click
- ɮ Alveolar lateral flap
- ɰ Simultaneous ʃ and x

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

kp̚ ts̚

DIACRITICS

^{◌̥} Voiceless	^{◌̥} ^{◌̥}	^{◌̙} More rounded	^{◌̙}	^{◌^w} Labialized	^{◌^w} ^{◌^w}	^{◌̃} Nasalized	^{◌̃}
^{◌̚} Voiced	^{◌̚} ^{◌̚}	^{◌̜} Less rounded	^{◌̜}	^{◌̞} Palatalized	^{◌̞} ^{◌̞}	^{◌ⁿ} Nasal release	^{◌ⁿ}
^{◌^h} Aspirated	^{◌^h} ^{◌^h}	^{◌̟} Advanced	^{◌̟}	^{◌̝} Velarized	^{◌̝} ^{◌̝}	^{◌̺} Lateral release	^{◌̺}
^{◌̤} Breathy voiced	^{◌̤} ^{◌̤}	^{◌̠} Retracted	^{◌̠}	^{◌̡} Pharyngealized	^{◌̡} ^{◌̡}	^{◌̚} No audible release	^{◌̚}
^{◌̰} Creaky voiced	^{◌̰} ^{◌̰}	^{◌̞̞̞}					

SUPRASEGMENTALS

		TONES & WORD ACCENTS			
Primary stress	founə'tʃən	LEVEL		CONTOUR	
Secondary stress					
Long	eː	ě or 𐀀	Extra high	ě or 𐀀	Rising
Half-long	eˑ	é 𐀁	High	ê 𐀂	Falling
Extra-short	ě	ē 𐀃	Mid	ě 𐀄	High rising
Syllable break	.i.ækt	è 𐀅	Low	ě 𐀆	Low rising
Minor (foot) group		è 𐀇	Extra low	ě 𐀈	Rising-falling etc.
Major (intonation) group					
Linking (absence of a break)		↓	Downstep		
Global rise		↑	Upstep		
Global fall					

THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993)

CONSONANTS (PULMONIC)

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap			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			

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

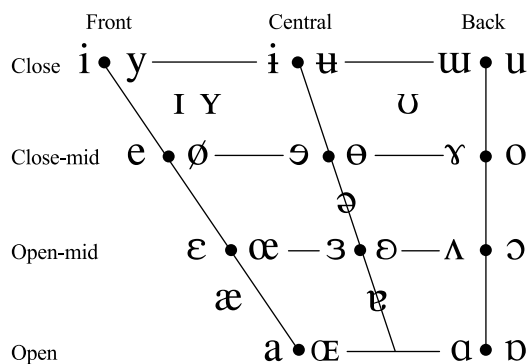
CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
⦿ Bilabial	ɓ Bilabial	ʼ as in:
Dental	ɗ Dental/alveolar	pʼ Bilabial
! (Post)alveolar	ɟ Palatal	tʼ Dental/alveolar
≠ Palatoalveolar	ɡ Velar	kʼ Velar
Alveolar lateral	ɠ Uvular	sʼ Alveolar fricative

SUPRASEGMENTALS

		TONES & WORD ACCENTS
ˈ Primary stress	ˌ Secondary stress	LEVEL
ː Long	ˑ Half-long	˥ Extra high
˚ Extra-short	˙ Syllable break	˦ High
◌◌ Minor (foot) group	◌◌ Major (intonation) group	˧ Mid
◌◌ Linking (absence of a break)		˨ Low
		˩ Extra low
		↓ Downstep
		↑ Upstep
		↗ Global rise etc.
		↘ Global fall

VOWELS



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

OTHER SYMBOLS

ɱ Voiceless labial-velar fricative	ç ʝ Alveolo-palatal fricatives
ʋ Voiced labial-velar approximant	ɭ Alveolar lateral flap
ɰ Voiced labial-palatal approximant	ɥ Simultaneous ʃ and x
ħ Voiceless epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʕ Voiced epiglottal fricative	
ʡ Epiglottal plosive	k͡p t͡s

DIACRITICS

Diacritics may be placed above a symbol with a descender, e.g. ɲ̥

◌̥ Voiceless	◌̤ Breathy voiced	◌̦ Dental
◌̣ Voiced	◌̰ Creaky voiced	◌̧ Apical
◌̨ Aspirated	◌̱ Linguolabial	◌̩ Laminar
◌̜ More rounded	◌̹ Labialized	◌̥ Nasalized
◌̝ Less rounded	◌̺ Palatalized	◌̣ Nasal release
◌̞ Advanced	◌̻ Velarized	◌̤ Lateral release
◌̠ Retracted	◌̼ Pharyngealized	◌̡ No audible release
◌̡ Centralized	◌̣ Velarized or pharyngealized	
◌̣ Mid-centralized	◌̤ Raised	
◌̥ Syllabic	◌̦ Lowered	
◌̧ Non-syllabic	◌̨ Advanced Tongue Root	
◌̩ Rhoticity	◌̪ Retracted Tongue Root	

THE INTERNATIONAL PHONETIC ALPHABET (revised to 1993, updated 1996)

CONSONANTS (PULMONIC)

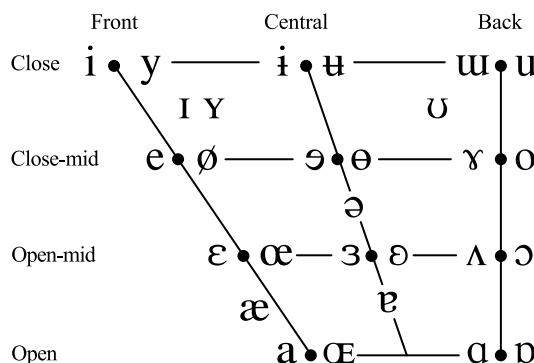
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			

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

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
◌ ɸ	ɓ Bilabial	ʼ Examples:
◌ ɱ	ɗ Dental/alveolar	ɓ' Bilabial
◌ ɳ	ɟ Palatal	ɗ' Dental/alveolar
◌ ʂ	ɠ Velar	ɟ' Velar
◌ ʐ	ʄ Uvular	ɠ' Alveolar fricative

VOWELS



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

OTHER SYMBOLS

ɱ	Voiceless labial-velar fricative	ɕ ʑ	Alveolo-palatal fricatives
ɰ	Voiced labial-velar approximant	ɭ	Alveolar lateral flap
ɱ	Voiced labial-palatal approximant	ɮ	Simultaneous ʃ and x
ħ	Voiceless epiglottal fricative		
ʕ	Voiced epiglottal fricative		Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʡ	Epiglottal plosive		

kp ts

SUPRASEGMENTALS

ˈ	Primary stress
ˌ	Secondary stress
ː	Long
ˑ	Half-long
˚	Extra-short
˘	Minor (foot) group
˙	Major (intonation) group
˙	Syllable break
˘	Linking (absence of a break)

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. ɲ̃

◌̥	Voiceless	◌̤	Breathy voiced	◌̦	Dental
◌̧	Voiced	◌̨	Creaky voiced	◌̩	Apical
◌̪	Aspirated	◌̫	Linguolabial	◌̬	Laminal
◌̭	More rounded	◌̮	Labialized	◌̯	Nasalized
◌̰	Less rounded	◌̱	Palatalized	◌̲	Nasal release
◌̳	Advanced	◌̴	Velarized	◌̵	Lateral release
◌̶	Retracted	◌̷	Pharyngealized	◌̸	No audible release
◌̹	Centralized	◌̺	Velarized or pharyngealized		
◌̻	Mid-centralized	◌̼	Raised		
◌̽	Syllabic	◌̾	Lowered		
◌̿	Non-syllabic	◌̺	Advanced Tongue Root		
◌̻	Rhoticity	◌̼	Retracted Tongue Root		

TONES AND WORD ACCENTS

LEVEL	CONTOUR
↗	Extra high
↘	High
↖	Mid
↙	Low
↘	Extra low
↘	Downstep
↗	Upstep
↗	Rising
↘	Falling
↗	High rising
↘	Low rising
↗	Rising-falling
↗	Global rise
↘	Global fall

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2005)

CONSONANTS (PULMONIC)

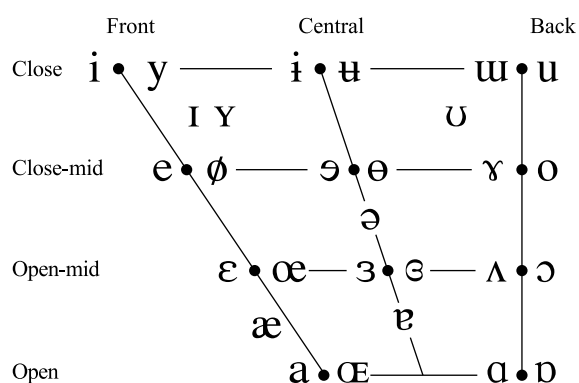
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap		ⱱ	ɾ			ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative			ɬ ɮ								
Approximant		ʋ	ɹ			ɻ	j	ɰ			
Lateral approximant			l			ɭ	ʎ	ʟ			

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

CONSONANTS (NON-PULMONIC)

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

VOWELS



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

OTHER SYMBOLS

ʌ	Voiceless labial-velar fricative	ɕ ʑ	Alveolo-palatal fricatives
ʋ	Voiced labial-velar approximant	ɭ	Voiced alveolar lateral flap
ɸ	Voiced labial-palatal approximant	ɥ	Simultaneous ɥ and ɥ
ħ	Voiceless epiglottal fricative		
ʕ	Voiced epiglottal fricative		Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʡ	Epiglottal plosive		

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

kp ts

SUPRASEGMENTALS

	Primary stress	
	Secondary stress	
		ˌfoʊnəˈtɪʃən
ː	Long	eː
ˑ	Half-long	eˑ
◌	Extra-short	ĕ
	Minor (foot) group	
	Major (intonation) group	
.	Syllable break	ˌi.ækt
◌	Linking (absence of a break)	

DIACRITICS Diacritics may be placed above a symbol with a descender, e.g. $\mathfrak{h}^{\circ}$

$\emptyset$	Voiceless	$n^{\text{̥}}$ $d^{\text{̥}}$	..	Breathily voiced	$b^{\text{̤}}$ $a^{\text{̤}}$	ᵀ	Dental	$t^{\text{̚}}$ $d^{\text{̚}}$
$\checkmark$	Voiced	$s^{\text{̬}}$ $t^{\text{̬}}$	~	Creaky voiced	$\underset{\sim}{b}$ $\underset{\sim}{a}$	ᶯ	Apical	$t^{\text{̟}}$ $d^{\text{̟}}$
h	Aspirated	$t^{\text{̰}}$ $d^{\text{̰}}$	$\tilde{\sim}$	Linguolabial	$\underset{\sim}{t}$ $\underset{\sim}{d}$	ᶮ	Laminal	$t^{\text{̠}}$ $d^{\text{̠}}$
ɔ	More rounded	$\text{ɔ}^{\text{̙}}$	w	Labialized	t^w d^w	$\tilde{\sim}$	Nasalized	$\tilde{e}$
c	Less rounded	$\text{ɔ}^{\text{̞}}$	j	Palatalized	t^j d^j	n	Nasal release	d^n
$+$	Advanced	u^+	γ	Velarized	t^γ d^γ	l	Lateral release	d^l
$-$	Retracted	e^-	ʕ	Pharyngealized	$t^{\text{̛}}$ $d^{\text{̛}}$	ᵽ	No audible release	$d^{\text{̚}}$
$\ddot{}$	Centralized	$\ddot{e}$	~	Velarized or pharyngealized	ɫ			
$\times$	Mid-centralized	$\tilde{e}$	ɹ	Raised	$e^{\text{̝}}$ ($\text{ɹ} = \text{voiced alveolar fricative}$)			
ɹ	Syllabic	$n^{\text{̩}}$	ɻ	Lowered	$e^{\text{̞}}$ ($\beta^{\text{̞}} = \text{voiced bilabial approximant}$)			
ɹ	Non-syllabic	$e^{\text{̥}}$	ɹ	Advanced Tongue Root	$e^{\text{̜}}$			
ɹ	Rhoticity	$\text{ə}^{\text{̺}}$ $a^{\text{̺}}$	ɹ	Retracted Tongue Root	$e^{\text{̠}}$			

TONES AND WORD ACCENTS
LEVEL CONTOUR

ě _{or}	↖	Extra high	ě _{or}	↗	Rising
é	↖	High	ê	↘	Falling
ē	↔	Mid	ẽ	↗	High rising
è	↘	Low	ẽ	↖	Low rising
ě	↙	Extra low	ẽ	↖	Rising-falling
↓		Downstep	↗		Global rise
↑		Upstep	↘		Global fall

THE INTERNATIONAL PHONETIC ALPHABET (revised to 2015)

CONSONANTS (PULMONIC)

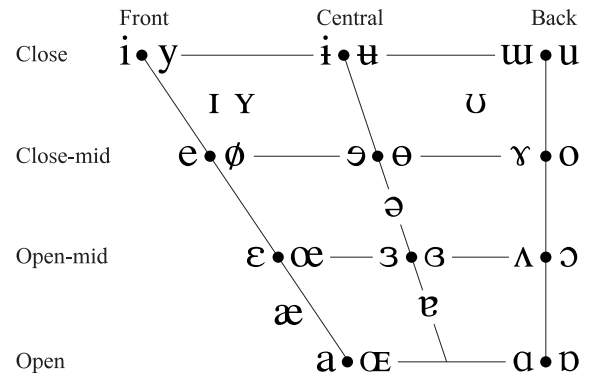
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ	n			ɳ	ɲ	ŋ	ɴ		
Trill	ʙ		r						ʀ		
Tap or Flap		ɸ	ɾ			ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative			ɬ ɮ								
Approximant		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.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
ɔ Bilabial	ɓ Bilabial	ʼ Examples:
ɖ Dental	ɗ Dental/alveolar	pʼ Bilabial
ɗ (Post)alveolar	ɟ Palatal	tʼ Dental/alveolar
ɗ Palatoalveolar	ɡ Velar	kʼ Velar
ɗ Alveolar lateral	ɠ Uvular	sʼ Alveolar fricative

VOWELS



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

OTHER SYMBOLS

ɱ Voiceless labial-velar fricative	ɮ Alveolo-palatal fricatives
ɰ Voiced labial-velar approximant	ɻ Voiced alveolar lateral flap
ɱ Voiced labial-palatal approximant	ɰ Simultaneous ʃ and x
ħ Voiceless epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʕ Voiced epiglottal fricative	
ʔ Epiglottal plosive	

ts kp

SUPRASEGMENTALS

ˈ Primary stress	ˌ Secondary stress
ː Long	ˑ Extra-short
ˑ Half-long	
ˑ Extra-short	
ˑ Minor (foot) group	
ˑ Major (intonation) group	
ˑ Syllable break	
ˑ Linking (absence of a break)	

DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. **ɲ̥**

◌̥ Voiceless	◌̤ Breathy voiced	◌̦ Dental
◌̬ Voiced	◌̬̥ Creaky voiced	◌̪ Apical
◌̨ Aspirated	◌̩ Linguolabial	◌̪̥ Laminar
◌̙ More rounded	◌̙̥ Labialized	◌̙̥̥ Nasalized
◌̘ Less rounded	◌̘̥ Palatalized	◌̘̥̥ Nasal release
◌̘̥ Advanced	◌̘̥̥ Velarized	◌̘̥̥̥ Lateral release
◌̘̥̥ Retracted	◌̘̥̥̥ Pharyngealized	◌̘̥̥̥̥ No audible release
◌̘̥̥̥ Centralized	◌̘̥̥̥̥ Velarized or pharyngealized	
◌̘̥̥̥̥ Mid-centralized	◌̘̥̥̥̥̥ Raised	
◌̘̥̥̥̥̥ Syllabic	◌̘̥̥̥̥̥̥ Lowered	
◌̘̥̥̥̥̥̥ Non-syllabic	◌̘̥̥̥̥̥̥̥ Advanced Tongue Root	
◌̘̥̥̥̥̥̥̥ Rhoticity	◌̘̥̥̥̥̥̥̥̥ Retracted Tongue Root	

TONES AND WORD ACCENTS

LEVEL	CONTOUR
˥ or ˧ Extra high	˥ or ˧ Rising
˥̥ High	˥̥ Falling
˥̥̥ Mid	˥̥̥ High rising
˥̥̥̥ Low	˥̥̥̥ Low rising
˥̥̥̥̥ Extra low	˥̥̥̥̥ Rising-falling
˥̥̥̥̥̥ Downstep	˥̥̥̥̥̥ Global rise
˥̥̥̥̥̥̥ Upstep	˥̥̥̥̥̥̥ Global fall

THE INTERNATIONAL PHONETIC ALPHABET

CONSONANTS (PULMONIC)

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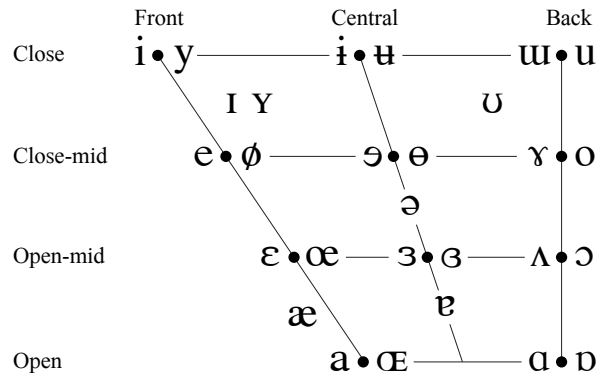
	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap		ⱱ		ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		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.

CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
◌ Bilabial	ɓ Bilabial	ʼ Examples:
Dental	ɗ Dental/alveolar	pʼ Bilabial
! (Post)alveolar	ɟ Palatal	tʼ Dental/alveolar
≡ Palatoalveolar	ɡ Velar	kʼ Velar
Alveolar lateral	ɠ Uvular	sʼ Alveolar fricative

VOWELS



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

OTHER SYMBOLS

ʌ Voiceless labial-velar fricative	ɕ ʑ Alveolo-palatal fricatives
ʋ Voiced labial-velar approximant	ɺ Voiced alveolar lateral flap
ɥ Voiced labial-palatal approximant	ɧ Simultaneous ʃ and x
ʜ Voiceless epiglottal fricative	Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.
ʕ Voiced epiglottal fricative	
ʡ Epiglottal plosive	

ts kp

SUPRASEGMENTALS

ˈ Primary stress	ˌ Secondary stress
ː Long	ˑ Half-long
˚ Extra-short	˘ Minor (foot) group
˙ Major (intonation) group	˙ Syllable break
˘ Linking (absence of a break)	

TONES AND WORD ACCENTS

LEVEL	CONTOUR
é or ˥ Extra high	ě or ˩ Rising
é High	ê \ Falling
ē ˨ Mid	ẽ ˨ High rising
è ˨ Low	ẽ ˨ Low rising
ẽ ˨ Extra low	ẽ ˨ Rising-falling
↓ Downstep	↗ Global rise
↑ Upstep	↘ Global fall

DIACRITICS

◌ Voiceless	◌ Breathy voiced	◌ Dental
◌ Voiced	◌ Creaky voiced	◌ Apical
◌ Aspirated	◌ Linguolabial	◌ Laminal
◌ More rounded	◌ Labialized	◌ Nasalized
◌ Less rounded	◌ Palatalized	◌ Nasal release
◌ Advanced	◌ Velarized	◌ Lateral release
◌ Retracted	◌ Pharyngealized	◌ No audible release
◌ Centralized	◌ Velarized or pharyngealized	
◌ Mid-centralized	◌ Raised	
◌ Syllabic	◌ Lowered	
◌ Non-syllabic	◌ Advanced Tongue Root	
◌ Rhoticity	◌ Retracted Tongue Root	

Some diacritics may be placed above a symbol with a descender, e.g. ɳ̥̊

TYPEFACES:

Baskerville Old Face

Bodoni MT Regular, *Bodoni MT Italic*

Doulos SIL

ipa kiel, IPA LS Uni

Junicode Regular, **Junicode Bold**

Nimbus Roman No9 L

Ratio Modern Medium

Scotch Roman MT Std Regular, *Scotch Roman MT Std Italic*

TEX Gyre Schola Regular, *TEX Gyre Schola Italic*, **TEX Gyre Schola Bold**

Times New Roman Regular, **Times New Roman Bold**

Times Ten LT Std Roman

unitipa

REFERENCES:

The 1888 Alphabet: *Le Maître Phonétique*, vol.3, Aug.–Sept. 1888, “aur rivàizd ælfəbit”, pp. 58–59, www.jstor.org/stable/44701189

The 1899 Alphabet: *Le Maître Phonétique*, vol.14, Feb. 1899

The 1900 Chart: *Le Maître Phonétique*, vol.15: Supplement, 1900, “Exposé des principes de l’Association Phonétique Internationale”, p. 7, www.jstor.org/stable/44749210

The 1903 Chart: *Le Maître Phonétique*, vol.18, May 1903, “Alphabet phonétique international: employé dans le Maître Phonétique”, p. 62, www.jstor.org/stable/44702356

The 1904 Chart: *Le Maître Phonétique*, vol.19: Supplement, 1904, “Aim and principles of the International Phonetic Association”, p. 7, www.jstor.org/stable/44703664

The 1905 Chart: *Le Maître Phonétique*, vol.20: Supplement, 1905, “Exposé des principes de l’Association Phonétique Internationale. Sonderabdruck: Das System der Association Phonetique Internationale (Weltlautschriftverein)”, p. 12, www.jstor.org/stable/44707887

The 1907 Chart: *Le Maître Phonétique*, vol.22, May–June 1907

The 1912 Chart: *Le Maître Phonétique*, vol.27: Supplement, 1912, “The principles of the International Phonetic Association”, p. 10, www.jstor.org/stable/44707964

The 1921 Chart: *L’Écriture Phonétique Internationale*, 2nd ed., p. 6

The 1926 Chart: *Le Maître Phonétique*, vol.41, July–Sept. 1926

The 1928 Chart: *Le Maître Phonétique*, vol.43: Supplement, 1928, “Lautzeichen und ihre Anwendung in verschiedenen Fachgebieten”, p. 23, www.jstor.org/stable/44704262

The 1930 Chart: *Le Maître Phonétique*, vol.45, July–Sept. 1930

The 1932 Chart: *Le Maître Phonétique*, vol.48, April–June 1933

The 1938 Chart: *Le Maître Phonétique*, vol.54, July–Sept. 1939

The 1947 Chart: *Le Maître Phonétique*, vol.62: Supplement, 1947, “Chart of the International Phonetic Alphabet”, www.jstor.org/stable/44748304

The 1949 Chart: *Le Maître Phonétique*, vol.64: Supplement, 1949, “The principles of the International Phonetic Association: The International Phonetic Alphabet”, p. 10, www.jstor.org/stable/44749216

The 1951 Chart: *Le Maître Phonétique*, vol.67, Jan.–July 1952

The 1979 Chart: *Journal of the International Phonetic Association*, vol.8, 1–2, 1978, “The International Phonetic Alphabet”, www.jstor.org/stable/44541414

The 1989 Chart: *Journal of the International Phonetic Association*, vol.19, 2, 1989

The 1993 Chart: *Journal of the International Phonetic Association*, vol.23, 1, 1993

The 1996 Chart: *Handbook of the International Phonetic Association*, 1999, p. ix, “Map”, www.jstor.org/stable/44526849
https://assets.cambridge.org/97805216/37510/frontmatter/9780521637510_frontmatter.pdf#page=8

The 2005 Chart: *The IPA Chart Archive*, IPA Kiel, full chart, 3000x3882px, PNG file, www.internationalphoneticassociation.org/IPAcharts/common_files/pdfs/pdfs_IPA_charts_archive/IPA_Kiel_2005_3000px.png

The 2015 Chart: *The IPA Chart Archive*, IPA Kiel, full chart, PDF file, www.internationalphoneticassociation.org/IPAcharts/common_files/pdfs/pdfs_IPA_charts_archive/IPA_Kiel_2015.pdf

The 2025 Chart: *The IPA Chart and sub-charts in four fonts*, IPA Kiel / LS Uni font, PDF (plain), www.internationalphoneticassociation.org/IPAcharts/common_files/pdfs/pdfs_IPA_charts_E/IPA_Kiel.pdf