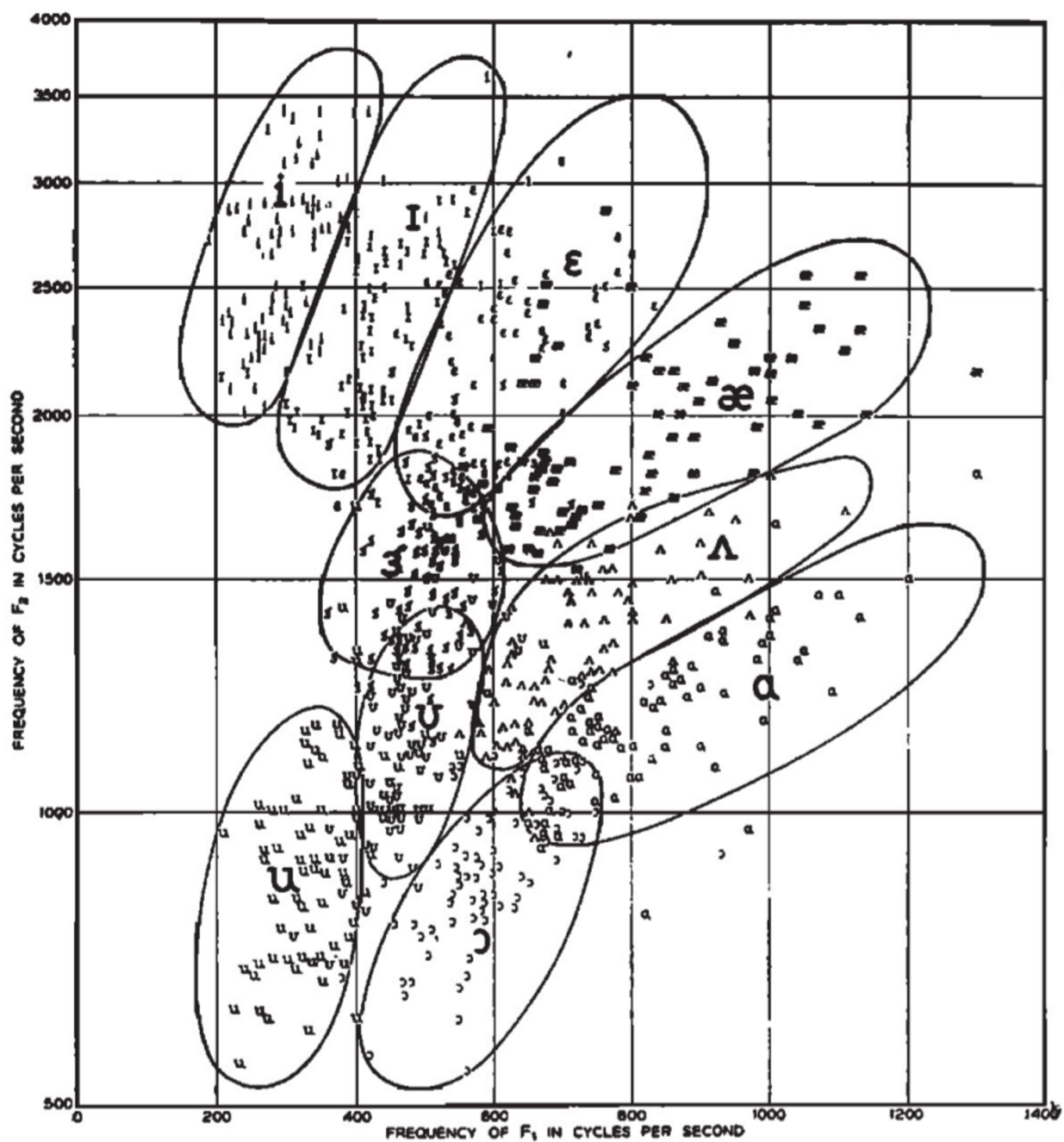




IPA Keyboard Layout

The keyboard layout is described in terms of an IPA chart rather than a keyboard. This is because many base characters are typed as a sequence of a letter followed by one of <, >, = or | which are characters used to change a base character to another base character. Diacritics are typed as sequences of an appropriate key. Blue denotes non-IPA sanctioned phonetic symbols (they may be used by other traditions such as Americanist, Chinese or Russian).

Consonants

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p ɸ b ɓ			t ɬ d ɗ		ʈ <t ɖ <d	c ɕ ɟ =j	k ɥ g <g	q ɢ G =G		ʔ =?
Nasal	m ɱ	ɱ >m		n ɳ		ɳ <n	ɲ =n	ŋ >n	N =N		
Trill	B =B			r ʀ					R =R		
Tap or Flap		ɹ̥¹ <v		ɾ >r		ɽ <r					
Fricative	ɸ =f β =b	f ɸ v ɓ	θ =t ð =d	s ɬ z ɗ	ʃ =s ʒ =z	ʂ <s ʐ <z	ç =c j <j	x ɥ ɣ =g	χ =x ʁ >R	ħ >h ʕ <?	h ɦ ɦ <h
Lateral Fricative				ɬ̺ =l ɗ̺ >l							
Approximate		ʋ =v		ɹ =r		ɻ <R	j ɟ	ɯ >w			
Lateral Approximate				ɭ ɮ		ɭ <l	ʎ <L	ɮ =L			

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

¹ This requires the use of Charis SIL (<http://scripts.sil.org/CharisSILfont>) or Doulos SIL (<http://scripts.sil.org/DoulosSILfont>).

Other Consonants

Clicks			Voiced implosives		
◌	=p	Bilabial	◌	>b	Bilabial
◌	<!	Dental	◌	>d	Dental/alveolar
◌	!	(Post)alveolar	◌	>j	Palatal
◌	>!	Palatoalveolar	◌	>g	Velar
◌	=!	Alveolar lateral	◌	>G	Uvular

Other Symbols

Λ	=w	Vl labial-velar fricative	◌	<c	vd alveolo-palatal fricative
W	w	Vd labial-velar approximant	◌	>z	Vd alveolo-palatal fricative
◌	<y or =h	Vd labial-palatal approximant	◌	>L	Vd alveolar lateral flap
H	=H	Vl epiglottal fricative	◌	>H	Simultaneous j and x
◌	<Q	Vd epiglottal fricative			
◌	=Q	Vd epiglottal plosive			

Vowels

	Front		Central		Back	
	Unrounded	Rounded	Unrounded	Rounded	Unrounded	Rounded
Close	i i	y y	i =I	ʉ =U	ɯ =u	u u
Near-close	ɪ =i	ʏ =y				ʊ <u
Close-mid	e e	ø >o	ə =E	ɵ =O	ɤ >O	o o
Mid			ə =e			
Open-mid	ɛ <e	œ <E	ɜ >e	ɔ <O	ʌ >u	ɔ <o
Near-open	æ <a		ɐ >a			
Open	a a	ɶ >E			ɑ =a	ɒ =o

Suprasegmentals

◌	>	Primary stress
◌	<	Secondary stress
◌:	=:	Long
◌'	<:	Half long
◌::	=: =:	Extra long
◌̥	@*	Extra short
◌	<.	Minor (foot) group
◌	=.	Major (intonation) group
◌	·	Syllable break
◌	=#	Linking (absence of a break)

Other (non-IPA) Vowels

æ	>A	α	a	open central unrounded vowel
ɪ	i	Λ	Λ	open central unrounded
ɪ	>I	ɿ	z	unrounded alveolar apical
ɪ	<I	ɿ	z	unrounded retroflex apical
ɪ	>U	ʏ	y	rounded alveolar apical
ɔ	u	ʏ	y	rounded retroflex apical
ɛ	E			
ə	e			

Tone and Word accents

Level ²			Contour ³		
⌈ #4	ě @4	Extra high	/ #0#4	ě @5	Rising
┘ #3	é @3	High	\ #4#0	ê @^	Falling
┘ #2	ē @2	Mid	∧ #2#4	ẽ @6	High rising
┘ #1	è @1	Low	∧ #1#2	ë @7	Low rising
┘ #0	è @0	Extra low	∧ #1#4# ₁	ë @ [	Rising-falling
				ẽ @8	Mid falling
				ē @9	Mid rising
				ẽ @]	Falling-rising
	↓ # [	Downstep		↗ # }	Global rise
	↑ #]	Upstep		↘ # {	Global fall

Tone numbers and pitch contours (non-IPA)

<u> </u>	##1 ##2 ##3 ##4 ##5 ##6 ##7 ##8 ##9	Level pitch contours from 1 to 9 ⁶
3	^3 (0-9)	superscript number
-	^-	superscript hyphen

Other (non-IPA) Symbols

ç	>c	vl palatal implosive
ɖ	d	alveolo-palatal vd plosive
ɳ	h	vd pharyngeal nasal
ƙ	>k	vl velar implosive
ɭ	l	front-palatal vd lateral approximate
ɲ	n	front-palatal vd nasal
ɓ	>p	vl bilabial implosive
ɗ	>q	vl uvular implosive
ʃ	=S	vl retroflex postalveolar fricative
ɗ	>t	vl dental or alveolar implosive
ɗ	t	front-palatal vl plosive
ɗ	T	dental click
w ⁷	<w	bilabial flap
ʒ	=z	vd retroflex postalveolar fricative
+	=+	

² Use “&” for Left-stem level tones, e.g. “&0” becomes A712 (Γ).

³ Glides to and from any level (e.g. “#3#2” becomes †) and any sequence of any two glides (e.g. “#3#1#4” becomes †).

⁴ This requires the use of Charis SIL (<http://scripts.sil.org/CharisSILfont>) or Doulos SIL (<http://scripts.sil.org/DoulosSILfont>).

⁵ This requires the use of Charis SIL (<http://scripts.sil.org/CharisSILfont>) or Doulos SIL (<http://scripts.sil.org/DoulosSILfont>).

⁶ These require the use of Charis SIL (http://scripts.sil.org/CharisSIL_font) or Doulos SIL (http://scripts.sil.org/DoulosSIL_font) version 4.1 or greater. They will turn into contours if used in Graphite applications.

⁷ This requires the use of Charis SIL (<http://scripts.sil.org/CharisSILfont>) or Doulos SIL (<http://scripts.sil.org/DoulosSILfont>).

Diacritics & Suprasegmentals

k^h	h	Aspirated
t^w	w	Labialised
t^j	j	Palatalised
l^y	$\#g$	Velarised
t^s	$\#?$	Pharyngealised
$^n k$	n	Pre/post nasalised
t^l	l	Lateral release
$^j j$	$\#j$	Other superscripts are available ⁸
k^e	$='$	Light aspiration
e^r	$ l$	Rhoticity
t^r	$>'$	Ejective
$t^{\text{̥}}$	$ l$	No audible release
b^e	$<'$	Weak aspiration
l	$\& $	Syllabic
a	$\&*$	Non-syllabic
a	$\&\sim$	Creaky voiced
a	symbol preceded by $\&$ e.g. $\&a$	Retroflex hooks ⁹
$ŋ$	$\&\%$	Voiceless
$ʃ$	$\&5$	Voiced
$ʃ$	$\&''$	Breathy voiced
$ɸ$	symbol preceded by $@$ e.g. $@b$	Palatal hooks ¹⁰
$ŋ̥$	$@\%$	Voiceless (diacritics are sometimes placed above a symbol with a descender)

⁸ The following characters can be superscripted:
0123456789 + - = () ^ ? b β c ç d ð f φ g γ h ħ j j̄ k l ḷ Ḷ m n ŋ ñ p r ṛ Ṛ s ṣ t θ v u w x y z z̄ ż z̈ z̉ z̊ z̋ ž z̍ z̎ z̏ z̐ z̑ z̒ z̓ z̔ z̕ z̖ z̗ z̘ z̙ z̚ z̛ z̜ z̝ z̞ z̟ z̠ z̡ z̢ ẓ z̤ z̥ z̦ z̧ z̨ z̩ z̪ z̫ z̬ z̭ z̮ z̯ z̰ ẕ z̲ z̳ z̴ z̵ z̶ z̷ z̸ z̹ z̺ z̻ z̼ z̽ z̾ z̿
Deadkeys ^ and # are used, please see keyboard chart for diagram.

⁹ Retroflex hooks may be added to: a a d e e ə i ɔ f u ʒ (a a d e e ə i ɔ f u ʒ)

Please see keyboard chart “&” for diagram.

¹⁰ Palatal hooks may be added to: b d f g k l m n p r s f v x z (b d f g k l m n p r s f v x z)

Please see keyboard chart “@” for diagram.

$t̪$	$\&[$	Dental
$t̺$	$\&]$	Apical
$t̠$	$\&\{$	Laminal
$t̡$	$\&\}$	Linguolabial
$t̚$	$\&.$	Closer variety / Fricative
$ẽ$	$@\sim$	Nasalised
$ɫ$	$\sim l$	Velarized or pharyngealized ¹¹
$ẽ$	$@''$	Centralised
$ẽ$	$@+$	Mid centralised
$ě$	$@*$	Extra short
$è$	$@.$	Palatalization/Centralization
$ṁ$	$@:$	
$k̟p$	$\&\#$	Double articulation / affricate ¹²
$ts̺$	$\&@$	Double articulation / affricate ¹³
$u̟$	$\&+$	Advanced
$i̠$	$\&_$	Retracted
$e̝$	$\&6$	Raised
$e̞$	$\&7$	Lowered
$e̜$	$\&8$	+ATR
$e̝̞$	$\&9$	-ATR
$e̞̝$	$\&)$	More rounded
$e̝̜$	$\&($	Less rounded
$q̟$	$\&,$	open vowel
$p̚$	$\&!$	Fortis
$p̚$	$\&\$$	Lenis
$\rightarrow$	$\Rightarrow$	Becomes, is realized as
σ	$>s$	Syllable

¹¹ Available for b, d, f, t, m, n, p, r, s, t and z.

Please see keyboard chart “~” for diagram.

¹² Typed between the characters. Thus k&#p.

¹³ Typed between the characters. Thus t&@s.