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.pictographic symbols

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Crystal, David (1987) *The Cambridge Encyclopedia of Language*, Cambridge University Press, <sup>1</sup>  
Cambridge.

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.ideography

.logography

. $\times \div - = + :$

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.vowels

consonants

. $\xi \upsilon \phi \chi \psi \omega :$

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Modern Roman	A	B	G	D	E	F	Z	H	I	K	L	M	N	O	P	Q	R	S	T
Early Latin	A	B	<	>	E	F	Z	H	z	k	l	m	n	o	p	q	r	s	t
Greek	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	Κ	Λ	Μ	Ν	Ξ	Ο	Π	Ρ	Σ	Τ	
Phoenician	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒
Early Aramaic	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒
Nabatian	𐤀	𐤁	𐤂	𐤃	𐤄	𐤅	𐤆	𐤇	𐤈	𐤉	𐤊	𐤋	𐤌	𐤍	𐤎	𐤏	𐤐	𐤑	𐤒
Arabic	ا	ب	ت	ث	ج	ح	خ	د	ذ	ر	ز	س	ش	ص	ض	ط	ظ	ع	ف

*Latin*                      *Greek*                      :  
*.Roman*  
*.Arabic*                      *Nabatian*                      *Aramaic*

capital letters

small letters

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	Y	X	Z
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	y	x	z

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<sup>6</sup> [http://graphicdesign.sfcc.spokane.cc.wa.us/tutorials/process/type\\_basics/history.htm](http://graphicdesign.sfcc.spokane.cc.wa.us/tutorials/process/type_basics/history.htm)

a	a	a	a	a	
b	b	b	b	b	
c	c	c	c	c	
d	d	d	d	d	
e	e	e	e	e	
f	f	f	f	f	
g	g	g	g	g	
h	h	h	h	h	
i	i	i	i	i	
(j)	j	j	j	j	
(k)	(k)	(k)	k	k	
l	l	l	l	l	
		ll			
m	m	m	m	m	
n	n	n	n	n	
o	o	o	o	o	
p	p	p	p	p	
q	q	q	q	q	
r	r	r	r	r	
		rr			
s	s	s	s	s	
t	t	t	t	t	
u	u	u	u	u	
v	v	v	v	v	
(w)	(w)	(w)	w	w	
x	x	x	x	x	
y	y	Y	y	y	
z	z	Z	z	z	





A	a			
C	c			
E	e			
I	i			
O	o			
Q	q			
U	u			
X	x			
R	r	ɹ		
G	g	g		
P	p	p		
V	v	v		
		a	ː	
		u	ː	
		i	ː	
		ʔ		
B	b	b		
T	t	t		
		θ		
J	j	ɟ̃		
		h		
		χ		
D	d	d		
		ð		
		r		

Z	z	z		
S	s	s		
		ʃ		
		s <sup>ʃ</sup>		
		ʒ <sup>ʃ</sup>	^	
		t <sup>ʃ</sup>		
		ð <sup>ʃ</sup>		
		ʎ		
		ʙ		
F	f	f		
		q		
K	k	k		
L	l	l		
M	m	m		
N	n	n		
H	h	h		
W	w	w		
Y	y	j		
		:		

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International Phonetics Association<sup>9</sup>

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consonants

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<sup>10</sup> Pullum, Geogrey and William Ladusaw (1986) *Phonetic Symbol Guide*, The University of Chicago Press, Chicago.

<sup>11</sup> <http://www.arts.gla.ac.uk/IPA/ipachart.html>

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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.

## OTHER SYMBOLS

ʌ	Voiceless labial-velar fricative	ʒ ʒ	Alveolo-palatal fricatives
W	Voiced labial-velar approximant	ɺ	Alveolar lateral flap
ɥ	Voiced labial-palatal approximant	ɧ	Simultaneous ʃ and X
H	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		

k̰p̰ t̰s̰

## CONSONANTS (NON-PULMONIC)

Clicks	Voiced implosives	Ejectives
◌◌ Bilabial	ɓ Bilabial	' as in:
Dental	ɗ Dental/alveolar	p' Bilabial
! (Post)alveolar	ɟ Palatal	t' Dental/alveolar
‡ Palatoalveolar	ɠ Velar	k' Velar
Alveolar lateral	ʄ Uvular	s' Alveolar fricative

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

◦ Voiceless	$\underset{\cdot}{n}$ $\underset{\cdot}{d}$	.. Breathy voiced	$\underset{\cdot}{b}$ $\underset{\cdot}{a}$	◡ Dental	$\underset{\cdot}{t}$ $\underset{\cdot}{d}$
∨ Voiced	$\underset{˘}{s}$ $\underset{˘}{t}$	˜ Creaky voiced	$\underset{˜}{b}$ $\underset{˜}{a}$	◡ Apical	$\underset{\cdot}{t}$ $\underset{\cdot}{d}$
<sup>h</sup> Aspirated	$t^h$ $d^h$	˘ Linguolabial	$\underset{\cdot}{t}$ $\underset{\cdot}{d}$	◡ Laminar	$\underset{\cdot}{t}$ $\underset{\cdot}{d}$
◡ More rounded	$ɔ̞$	<sup>w</sup> Labialized	$t^w$ $d^w$	˜ Nasalized	$\tilde{e}$
◡ Less rounded	$ɔ̟$	<sup>j</sup> Palatalized	$t^j$ $d^j$	<sup>n</sup> Nasal release	$d^n$
<sup>+</sup> Advanced	$u̟$	<sup>Y</sup> Velarized	$t^Y$ $d^Y$	<sup>l</sup> Lateral release	$d^l$
◡ Retracted	$i̠$	<sup>ʕ</sup> Pharyngealized	$t^{ʕ}$ $d^{ʕ}$	<sup>ˀ</sup> No audible release	$d^{ˀ}$
.. Centralized	$\ddot{e}$	˜ Velarized or pharyngealized	$\ddot{t}$		
<sup>x</sup> Mid-centralized	$\ddot{e}$	◡ Raised	$e̟$ ( $\underset{\cdot}{j}$ = voiced alveolar fricative)		
<sup>l</sup> Syllabic	$\underset{\cdot}{l}$	◡ Lowered	$e̠$ ( $\underset{\cdot}{\beta}$ = voiced bilabial approximant)		
˘ Non-syllabic	$e̠$	◡ Advanced Tongue Root	$e̟$		
˘ Rhoticity	$\ddot{a}^v$	◡ Retracted Tongue Root	$e̠$		

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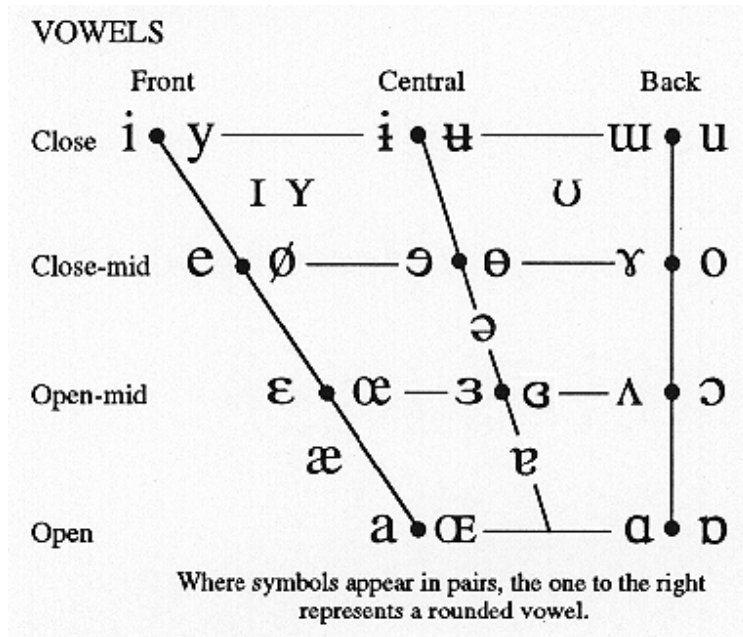
/ʁu:d/ /ʁud/

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### SUPRASEGMENTALS

'	Primary stress	
ˊ	Secondary stress	ˊfounəˈtɪʃən
ː	Long	eː
ˑ	Half-long	eˑ
◌̥	Extra-short	e̥
·	Syllable break	ii.ækt
	Minor (foot) group	
	Major (intonation) group	
◌̣	Linking (absence of a break)	

TONES & WORD ACCENTS			
LEVEL		CONTOUR	
ě	or ǀ	Extra high	ě or ǀ Rising
é	ǁ	High	ê ǂ Falling
ē	ǂ	Mid	ě ǃ High rising
è	ǃ	Low	ě Ǆ Low rising
ě	Ǆ	Extra low	ě ǅ Rising-falling etc.
↓		Downstep	↗ Global rise
↑		Upstep	↘ Global fall





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<sup>12</sup>( ) Hawkins

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/b / b̥ / p / p<sup>h</sup>/

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<sup>12</sup> Hawkins, Peter (1984) *Introduction Phonology*, Routledge, London.



Emhemmed

Muhammad

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