

# extIPA SYMBOLS FOR DISORDERED SPEECH

(Revised to 2008)

## CONSONANTS (other than on the IPA Chart)

	bilabial	labiodental	dentolabial	labioalv.	linguolabial	interdental	bidental	alveolar	velar	velophar.
Plosive		<b>p</b> <b>b</b>	<b>p̄</b> <b>b̄</b>	<b>p̥</b> <b>b̥</b>	<b>ṭ</b> <b>ḍ</b>	<b>t̠</b> <b>d̠</b>				
Nasal			<b>m̄</b>	<b>m̥</b>	<b>ṇ</b>	<b>n̠</b>				
Trill					<b>ṛ</b>	<b>r̠</b>				
Fricative median			<b>f̄</b> <b>v̄</b>	<b>f̥</b> <b>v̥</b>	<b>θ̣</b> <b>ð̣</b>	<b>θ̠</b> <b>ð̠</b>	<b>h̄</b> <b>h̠</b>			<b>ɸ</b>
Fricative lateral+median								<b>ɬ</b> <b>ɮ</b>		
Fricative nareal	<b>ṁ</b>							<b>ɳ</b>	<b>ɴ̃</b>	
Percussive	<b>w̥</b>						<b>ɸ̣</b>			
Approximant lateral					<b>ḷ</b>	<b>l̠</b>				

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

## DIACRITICS

$\leftrightarrow$ labial spreading	$\underset{\leftrightarrow}{s}$	„ strong articulation	$\underset{ˀ}{f}$	˜ denasal	$\underset{\sim}{m}$
$\overline{\quad}$ dentolabial	$\overline{v}$	ˋ weak articulation	$\underset{ˋ}{v}$	˜ nasal escape	$\underset{\sim}{v}$
$\overline{\quad}$ interdental/bidental	$\overline{n}$	\ reiterated articulation	$p \backslash p \backslash p$	˜ velopharyngeal friction	$\underset{\sim}{s}$
= alveolar	$\underset{=}{t}$	ˆ whistled articulation	$\underset{\hat{}}{s}$	↓ ingressive airflow	$p \downarrow$
˘ linguolabial	$\underset{\text{˘}}{d}$	→ sliding articulation	$\underset{\rightarrow}{\theta s}$	↑ egressive airflow	$! \uparrow$

## CONNECTED SPEECH

(.)	short pause
(..)	medium pause
(...)	long pause
<i>f</i>	loud speech [ $\{f \text{ laud } f\}$ ]
<i>ff</i>	louder speech [ $\{ff \text{ laud}^{\circ} ff\}$ ]
<i>p</i>	quiet speech [ $\{p \text{ kwat}^{\circ} p\}$ ]
<i>pp</i>	quieter speech [ $\{pp \text{ kwat}^{\circ} pp\}$ ]
<i>allegro</i>	fast speech [ $\{allegro \text{ fast } allegro\}$ ]
<i>lento</i>	slow speech [ $\{lento \text{ slou } lento\}$ ]
<i>crescendo, ralentando, etc.</i> may also be used	

## VOICING

$\underset{v}{\quad}$	pre-voicing	$\underset{v}{z}$
$\underset{v}{\quad}$	post-voicing	$z \underset{v}{\quad}$
$\underset{v}{\circ}$	partial devoicing	$z \underset{v}{\circ}$
$\underset{v}{\circ}$	initial partial devoicing	$\underset{v}{\circ} z$
$\underset{v}{\circ}$	final partial devoicing	$z \underset{v}{\circ}$
$\underset{v}{\circ}$	partial voicing	$\underset{v}{\circ} z$
$\underset{v}{\circ}$	initial partial voicing	$\underset{v}{\circ} z$
$\underset{v}{\circ}$	final partial voicing	$z \underset{v}{\circ}$
$\overset{=}{\quad}$	unaspirated	$p \overset{=}{\quad}$
<sup>h</sup>	pre-aspiration	<sup>h</sup> p

## OTHERS

( $\square$ ), ( $\overline{\square}$ ), ( $\underset{\sim}{\square}$ )	indeterminate sound, consonant, vowel	$\text{ɰ}$	Velodorsal articulation
( $\overline{\text{p̣}}$ , $\overline{\text{ṿs}}$ ), ( $\overline{\text{N}}$ )	indeterminate voiceless plosive, nasal, etc	$\text{ɿ}$	sublaminal lower alveolar percussive click
( $\emptyset$ )	silent articulation ( $\text{ʃ}$ ), ( $\text{m}$ )	$\text{!i}$	alveolar and sublaminal clicks (cluck-click)
(( $\quad$ ))	extraneous noise, e.g. ((2 sylls))	*	sound with no available symbol