

ExtIPA SYMBOLS FOR DISORDERED SPEECH
(Revised to 1997)

CONSONANTS (other than those on the IPA Chart)

	bilabial	labiodental	dentolabial	labioalv.	linguolabial	interdental	bidental	alveolar	velar	velophar.
Plosive		<u>p</u> <u>b</u>	<u>p̥</u> <u>b̥</u>	<u>p̥</u> <u>b̥</u>	<u>t̥</u> <u>d̥</u>	<u>t̥</u> <u>d̥</u>				
Nasal			<u>m̃</u>	<u>m̃</u>	<u>ñ</u>	<u>ñ</u>				
Trill					<u>r̃</u>	<u>r̃</u>				
Fricative: central			<u>f̣</u> <u>ṿ</u>	<u>f̣</u> <u>ṿ</u>	<u>θ̣</u> <u>ð̣</u>	<u>θ̣</u> <u>ð̣</u>	<u>ḥ</u> <u>ɦ̣</u>			<u>fɰ</u>
Fricative: lateral+central								<u>ɬ</u> <u>ɮ</u>		
Fricative: nareal	<u>ṁ</u>							<u>ṅ</u>	<u>ṇ̇</u>	
Percussive	<u>ẉ</u>						<u>ɸ</u>			
Approximant: lateral					<u>ḷ</u>	<u>ḷ</u>				

DIACRITICS

↔ labial spreading	<u>ɸ</u>	strong articulation	<u>f</u>	~ denasal	<u>ṁ̃</u>
˘ dentolabial	<u>ṿ</u>	˘ weak articulation	<u>ṿ</u>	˘ nasal escape	<u>ṃ̇</u>
˘ interdental/bidental	<u>ɦ̣</u>	\ reiterated articulation	<u>p\p</u>	˘ velopharyngeal friction	<u>ṃ̇̃</u>
= alveolar	<u>ṭ</u>	↗ whistled articulation	<u>ṣ</u>	↓ ingressive airflow	<u>p↓</u>
˘ linguolabial	<u>ɸ̣</u>	→ sliding articulation	<u>θ̣</u>	↑ egressive airflow	<u>!↑</u>

CONNECTED SPEECH

(.) short pause
(..) medium pause
(...) long pause
<i>f</i> loud speech [{ <i>f</i> loud <i>f</i> }]
<i>ff</i> louder speech [{ <i>ff</i> loud <i>ff</i> }]
<i>p</i> quiet speech [{ <i>p</i> kwaiət <i>p</i> }]
<i>pp</i> quieter speech [{ <i>pp</i> kwaiət <i>pp</i> }]
<i>allegro</i> fast speech [{ <i>allegro</i> fa:st <i>allegro</i> }]
<i>lento</i> slow speech [{ <i>lento</i> slou <i>lento</i> }]
<i>crescendo, ralentando, etc.</i> may also be used

VOICING

˘ pre-voicing	<u>˘z</u>
˘ post-voicing	<u>z˘</u>
˘ partial devoicing	<u>ẓ</u>
˘ initial partial devoicing	<u>ẓ</u>
˘ final partial devoicing	<u>ẓ</u>
˘ partial voicing	<u>ẓ</u>
˘ initial partial voicing	<u>ẓ</u>
˘ final partial voicing	<u>ẓ</u>
= unaspirated	<u>p=</u>
^h pre-aspiration	<u>^hp</u>

OTHERS

(̣) indeterminate sound	(()) extraneous noise ((2 sylls))
(̣̃) indeterminate vowel, plosive, etc.	ǀ sublaminal lower alveolar percussive click
(̣̣̃) indeterminate voiceless plosive, etc.	ǀ̣ alveolar & sublaminal click ('cluck-click')
() silent articulation (j), (m)	* sound with no available symbol