

APPENDIX

Table A1
International Phonetic Alphabet (IPA) and Computer-Readable “Klattice” Transcription Equivalents

IPA	Klattice	IPA	Klattice
Stops		Syllabic Consonants	
p	p	ɳ	N
t	t	m	M
k	k	l̥	L
b	b	Glides and Semivowels	
d	d	l	l
g	g	ɹ	r
Affricates		w	w
tʃ	C	j	y
dʒ	J	Vowels	
Sibilant Fricatives		i	i
s	s	ɪ	I
ʃ	S	ɛ	E
z	z	e	e
ʒ	Z	æ	@
Nonsibilant Fricatives		ɑ	a
f	f	au	W
θ	T	aɪ	Y
v	v	ʌ	^
ð	D	ɔ	c
h	h	oɪ	O
Nasals		o	o
n	n	u	U
m	m	u	u
ŋ	G	ɹ	R
		ə	x
		ɪ	
		ɹ	X

Klattice Transcription Conventions

Repeated phonemes. The only situation in which a phoneme is repeated is in a compound word. For example, the word *homemade* is transcribed in Klattice as /hommed/. All other words with two successive phonemes that are the same just have a single segment. For example, *shrilly* would be transcribed in Klattice as /Srlli/.

X/R alternation. /X/ appears only in unstressed syllables, and /R/ appears only in stressed syllables.

Schwas. There are four schwas: /x/, /|/, /X/, and unstressed /U/. The /U/ in an unstressed syllable is taken as a rounded schwa.

Syllabic consonants. The transcriptions are fairly liberal in the use of syllabic consonants. Words ending in *-ism* are transcribed /IzM/ even though a tiny schwa typically appears in the transition from the /z/ to the /M/. However, /N/ does not appear unless it immediately follows a coronal. In general, /xl/ becomes /L/ unless it occurs before a stressed vowel. Words that end in the suffix *-ly* are exceptions. For example, *bodily* is /badxli/ not /badLi/.

Vowels preceding /r/. Nine of the vowels appear before /r/. In some cases, the differences are subtle, as between /cr/ and /or/, or /@r/ and /Er/.

ar	as in <i>aardvark</i>	Ir	as in <i>fear</i>
cr	as in <i>horse</i>	Ur	as in <i>tour</i>
or	as in <i>hoarse</i>	Yr	as in <i>fire</i>
@r	as in <i>hair</i> or <i>Mary</i>	Wr	as in <i>hour</i>
Er	as in <i>herring</i> or <i>merry</i>		

Diphthongs. /yu/ and /wa/ are considered by some to be diphthongs. In the database, /yu/ in stressed syllables is /yu/ and in unstressed syllables it is /yU/. /wa/ is transcribed as /wa/ in all stress environments.

Alternate pronunciations. Only the most common pronunciation for each word is included in the database (e.g., *tomato*, *potato*).

The information in this Appendix is also contained in a document that accompanied the computerized database, prepared by several researchers at MIT including Dennis Klatt, Dave Shipman, Meg Withgott, and Lori Lamel. The information is included here because the Phonotactic Probability Calculator uses information contained in this database, and therefore, the same conventions.