

IPA Transcription

Phonological versus Phonetic Transcription

- **IPA** = International Phonetic Association
- founded in 1886 by a group of leading phoneticians from Fr., Ger., GB, and Denmark
- the International Phonetic Alphabet

Phonology

- the 1st task in a phonological description: to determine the different sounds which can convey a difference in meaning, i.e. to determine the different phonemes
- phonemes = abstract units forming the basis for a phonological transcription of a language
- **phonological**, or, **phonemic**, or, **broad transcription** //
- = records the variations btw the sounds causing a difference in meaning
- shows the underlying phonemes
- uses a simple set of symbols, the same symbols repres. different sounds in different contexts
- shows none of the details of pronunciation predictable by phonological rules
- places the underlying phonemic segments btw slanting lines /tɛn/ and /tɛnθ/ x the phonetic segments pronounced [tɛn] and [tɛnθ]
- symbols for phonemic transcription chosen accord. to the following principles:
 - (a) use one symbol per phoneme (Gimson uses 44 different symbols)
 - (b) use the phonetic symbols of the most frequent allophones
 - (c) replace non-roman symbols arising from the above principle by roman symbols where these are not already in use, i.e. the principle of romanisation
- **romanisation** = the replacement of phonetic symbols by their nearest roman symbols in phonemic transcrip.
- (the phonetic symbols for the most common allophone of the phoneme at the beginning of 'red' is /ɹ/ > the phonemic transcription replaces it by /r/)

Phonetics

- **phonetic**, or, **allophonic**, or, **narrow transcription** []
- = indicates the detailed sound values
- shows the allophonic differences
- uses more unusual symbols
- also uses diacritics = small marks added to a symbol to modify its value ([.] = a small circle, indicates a voiceless sound, 'play' [p̥laɪ], 'try' [t̥ɹaɪ])
- applies the phonological rules to the segments in the underlying forms of words, shows the variations in words as described by the phonological rules = **alternations**
- places the phonetic segments btw square brackets, even if just one phonetic detail of one segment in an otherwise phonemic transcription is indicated, square brackets are used

The Transcription of Consonants

- a **minimal set** = a set of words differing from each oth. by only one sound
- some consonant sounds contrast with oth. only in the middle or at the end of words ('rang' /ŋ/ x 'ran' /n/)

Special Consonant Symbols

- (a) ascenders = letters going up from the line of writing
 - (b) descenders = letters going below the line of writing
- [ŋ], voiced velar nasal ('rang') = the letter *n* combined with the tail of the letter *g* descending below the line
 - [θ], voiceless dental fricative ('high, thin, breath') = an upright version of the Gr. letter theta
 - [ð], voiced dental fricative ('thy, then, breathe') = an Anglo-Saxon letter; the corresponding voiced sound for [θ], not distinguished by the spelling system of E ('either' [ð] x 'ether' [θ])
 - [ʃ], voiceless palato-alveolar fricative ('shy, sheep, rash') = a long straightened letter *s* going both above and below the line of writing
 - [ʒ], voiced palato-alveolar fricative ('vision, measure, leisure') = a long letter *z* descending below the line

- [ɹ], voiced alveolar approximant ('red, rose, rye') = an upside down letter *r* x [r], voiced alveolar trill ('rye, raw')
- [tʃ] and [dʒ] = sequences of two oth. consonants; both [tʃ] and [dʒ] cluster only with [t] and [d] respectively, yet should be transcribed with two symbols to show there are two elements in each of them

IPA Symbols for Transcribing English Consonants (alternative symbols in parentheses)

p	pie	pea	
t	tie	tea	
k	kye	key	
b	bye	bee	
d	die	D	
g	guy		
m	my	me	ram
n	nigh	knee	ran
ŋ			rang
f	fie	fee	
v	vie	V	
θ	thigh		
ð	thy	thee	
s	sigh	sea	listen
z		Z	mizzen
ʃ (š)	shy	she	mission
ʒ (ž)			vision
l	lie	lee	
w	why	we	
ɹ (r)	rye		
j (y)		ye	
h	high	he	
+ tʃ (č)	chi(me)	chea(p)	
+ dʒ	ji(ve)	G	

The Transcription of Vowels

Special Vowel Symbols

- [ɪ] = a small capital letter I ('sit, hit'); somewhat like [i] ('seat, head')
- [ɛ] = the Gr. letter **epsilon** ('head')
- [æ] = the letters *a* and *e* joined together into **digraph** ('had')
- [ɑ] = another version of the letter *a* ('heart' and 'hot' RP: [hɑt] and [hɒt] x GA: [hɑt] and [hɑt])
- [ɔ] = an open letter *o* or an inverted letter *c* ('caught, naught')
- [ʊ] = a letter *u* with the ends curled out ('hood, could, good'); somewhat like [u] ('who, hoot, cooed')
- [ə] = an upside down letter *e*, or, **schwa**; the most common unstressed vowel, in RP the sole component of the <-er> part of words ('father, brotherhood, simpler')
- **rhotacization** = an additional feature added to the vowel when followed by <r> in GA
- GA: [ə̃] = an unstressed vowel, the little hook indicates the *r*-colouring of the vowel
- GA: [ɜ̃] = a stressed vowel ('my sister's bird' [mɑɪ 'sɪstə̃z 'bɜ̃d])
- [ʌ] = an upside down letter *v*, or, **wedge** ('bud, hut')
- [ɜ] = a reversed version of the Gr. letter epsilon ('pert, bird, curt')

IPA Symbols for Transcribing Contrasting English Vowels

GA	RP					
ɪ	i	heed	he	bead	heat	keyed
ɪ	ɪ	hid		bid	hit	kid
eɪ	eɪ	hayed	hay	bayed	hate	Cade
ɛ	ɛ	head		bed		
æ	æ	had		bad	hat	cad

ɑ	ɑ	hard		bard	heart	card
ɑ	ɒ	hod		bod	hot	cod
ɔ	ɔ	hawed	haw	bawd		cawed
ʊ	ʊ	hood				could
oʊ	əʊ	hoed	hoe	bode		code
u	u	who'd	who	bood	hoot	cood
ʌ	ʌ	Hudd		bud	hut	cud
ɜ	ɜ	herd	her	bird	hurt	curd
aɪ	aɪ	hide	high	bide	height	
aʊ	aʊ		how	bowed		cowed
ɔɪ	ɔɪ		(a)hoy	Boyd		
ɪ	ɪə		here	beard		
eɪ	ɛə		hair	bared		cared
aɪ	aə	hired	hire			
+ ju	+ ju	hued	hue	Bude		cued

Transcription Systems

- more vowel sounds than vowel letters in the alphabet in E
- different transcription systems: different degrees of application of the principle of romanisation
- different styles of transcription appropriate for different purposes

Comparative versus Simple Phonemic Transcription

(a) comparative phonemic transcription

- = does not fully implement the principle of romanisation
- allows comparison with vowels in oth. languages even in a phonemic transcrip.
- ('cot' and 'caught', simple phonemic transcrip.: /o/ and /o:/ x comparative phonemic transcrip.: /ɒ/ and /ɔ:/)

(b) simple phonemic transcription

- = fully implements the principle of romanisation
- ('hid', comparative phonemic transcrip.: /ɪ/ x simple phonemic transcrip.: /i/)

(c) variation on the simple phonemic transcription

- uses double letters instead of the length marks to indicate long vowels
- ('card', /a:/ > /aa/)

(d) variations representing oth. factors

- /əʊ/ > /oʊ/ or /ou/, represents different pronunciation ('foal')
- [:] = indicates greater length, and so eliminates the symbols [ɪ, ɛ, ʊ] (presumes differences in quality also indicate differences in length)

RP versus GA Transcription

- RP phonemes /ɑ, ɪə, eə, ʊə/ > GA: no equivalents
- RP diphthongs /eɪ/ and /oʊ/ > GA: monophthongs /e/ and /o/ ('play, goat')
- RP /e/ > GA: /ɛ/, the quality of vowel nearer C3 /ɛ/ than C2 /e/ ('set')
- RP /u:/ > GA /ū/, length indicated by a macron
- RP /aɪ/ and /əʊ/ > GA /aj/ and /əw/, the 2nd element in closing diphthongs indicated by /j/ and /w/

Changes within IPA

- IPA revised in 1989
- before '89: [ɪ] and [ɪ], [ʊ] and [ɔ] alternatives x after '89: only [ɪ], [ʊ] officially approved
- before '89: both vowels in 'above' transcribed as [ə] for GA x after '89: the unstressed vowel as [ə], the stressed vowel as [ʌ]
- before '89: the vowel in 'boat' transcribed as [oɔ] for both GA and RP x after '89: transcribed as [oʊ] for GA and [əʊ] for RP

Differences between Authorities

J. S. Kenyon & T. A. Knott: *A Pronouncing Dictionary of American English* (1953)

- varieties of AmE pronunciation
- < Ladefoget: uses very similar symbols x but: substitutes K&K's GA [e] in 'bait' and [o] 'boat' for RP [eɪ] and [oʊ]

C. Prator & B. Robinett: *A Manual of American English Pronunciation* (1985)

- varieties of AmE pronunciation
- an overdifferentiated transcription
- indicates the ends of diphthongs by [y] and [w] to mark a vowel followed by an offglide, not just a sequence of two vowels

D. Jones: *Everyman's English Pronouncing Dictionary* (1977), revised by **A. C. Gimson**

- varieties of BrE pronunciation
- avoids unusual letter shapes as far as possible
- marks the vowels in 'beat' and 'boot' as longer than those in 'bit' and 'put' => avoids the symbols [ɪ] and [ʊ]

A. C. Gimson, revised by **A. Cruttenden:** *Gimson's Pronunciation of English* (1998)

- indicates difference btw pairs of phonemes in quality and length at the same time
- symbols for the short vowels /i, æ, ɒ, ʊ, ə/ different from symbols for the long vowels /i:, ɑ:, ɔ:, u:, ɜ:/ to indicate their difference in quality as well as length
- the length mark still used with the long vowels to indicate the equal importance of both factors in maintaining the contrast btw the vowels

J. C. Wells: *Longman Pronunciation Dictionary* (1990)

- both GA and RP
- x Ladefoget: uses the same symbols x but: avoids length marks

Webster: *New International Dictionary* (1961)

- does not confirm to IPA

Main Transcription Systems in Transcribing Vowels

key word	Ladefoget before '89	Ladefoget after '89	Kenyon & Knott	Prator & Robinett	Gimson & Jones	Wells	Webster
beat	i	i	iy	iy	i:	i:	ē
bit	ɪ	ɪ	ɪ	ɪ	ɪ	ɪ	ɪ
bait	eɪ	eɪ	e	ey	ei	eɪ	ā
bet	ɛ	ɛ	ɛ	ɛ	e	e	e
bat	æ	æ	æ	æ	æ	æ	a
father	ɑ	ɑ	ɑ	a	ɑ	ɑ:	ā
bother	ɒ	ɒ	ɑ	a	ɔ	ɒ	ā
bought	ɔ	ɔ	ɔ	ɔ	ɔ:	ɒ: ɔ:	o [with a single dot above]
boat	oʊ əʊ	oʊ	o	ow	ou	oʊ əʊ	ō
put	ʊ	ʊ	ʊ	ʊ	u	ʊ	u [with a single dot above]
boot	u	u	u	uw	u:	u:	ü
butt	ʌ	əʌ	ʌ	ə	ə	ʌ	ə
bird	ɜ̃ ɜ	ɜ̃ ə	ɜ̃	ər	ə: ɜ:	ɜ̃: ɜ:	ər
bite	aɪ	aɪ	aɪ	ay	aɪ	aɪ	ī
bout	aʊ	aʊ	aʊ	aw	au	aʊ	au [with a single dot above u]
boy	ɔɪ	ɔɪ	ɔɪ	y	ɔi	ɔɪ	oi [with a single dot above o]