# Transcribing Speech to IPA: Examples from English (RP)

Charalambos Themistocleous www.charalambosthemistocleous.com Department of English Studies University of Cyprus

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# 1 Broad and Narrow Transcription

The IPA provides a set of symbols for transcribing speech. A transcription is an approximation of a specific pronunciation uttered by a specific speaker at a specific time. You should consider these guidelines as suggestions that capture the most probable pronunciations.

Orthographic symbols have a specific purpose in IPA. Therefore you should avoid using the following:

- 1. Capital letters. For example, the capital /G/ is employed as the symbol for voiced uvular stops;
- 2. Punctuation marks. For example, colons indicate length, /m:/, an apostrophe following a symbol indicates an ejective sound /p'/.

# 2 Letters do not correspond to IPA symbols.

- A letter may represent two sounds. For example, the English letter<sup>1</sup> <x > represents two sounds and it is transcribed in IPA as /ks/.
- $\bullet$  Some letters are not pronounced at all. For example, in the word <br/> <br/>knife> , the grapheme <br/> <br/>k> is not pronounced.
- Double letters are transcribed with one symbol in IPA. For example, *call* is transcribed [kɔːl-].

<sup>&</sup>lt;sup>1</sup>The term *grapheme* is often employed instead of the term letter.

There following letters do not correspond to English sounds and you should avoid using in your transcription the symbols x, c, or q. These are symbols for sounds that occur in other languages.

- 1. /x/ is a voiceless velar fricative, like in the Greek word /xa'ra/ (joy).
- 2. /c/ is a voiceless palatal stop, like in the Greek word /ceˈri/ (candle).
- 3. /q/ is a voiceless uvular stop.

The sounds that the letters represent in English are transcribed as follows:

- 1. <X, x> represent either / ks / or / gz / as in fix and exactly, respectively;
- 2. <C, c> represent either /k/ or /s/ as in car and since, respectively;
- 3.  $\langle Q, q \rangle$  represent the sound /k/ as in quick or risqué.

There are two types of transcription.

- 1. Broad transcription—sometimes called phonological—is indicated by slanted brackets: / / (phonemes).
- 2. Narrow transcription—or phonetic transcription—is indicated by square brackets: [] (phones or sounds).

Standard orthography is indicated within the greater and less symbols < >.

#### 3 Vowels

#### 3.1 Short Vowels

There are 7 short vowels in RP English; these are the following:

- [I]  $[p^h \ it]$  < pit>
- $\bullet \ [e] \qquad \qquad ['p^h \ et] \qquad < pet >$
- [x]  $[p^hxt]$  < pat>
- $[\Lambda]$   $[k^h \Lambda t]$  < cut>
- [p]  $[p^h pt]$  < pot >
- [v]  $[p^h vt]$  <put>
- [a] [a] (about)

### 3.2 Long Vowels

There are 5 long vowels in RP English; these are the following:

- [iː] [biːd] <bead>
- [3ː] [bɜːd] <bird>
- [aː] [baːd] <bard>
- [x] | (bard) | (bard>
- [uː] [fuːd] <food>

#### 3.3 Diphthongs

- (a) Glide to [1]
  - $\bullet$  [eɪ]  $p^{h}erd$  < paid >
  - [aɪ] [haɪd] <hide>
  - $[\mathfrak{I}]$   $[k^h\mathfrak{I}]$   $<\infty$
  - (b) Glide to [v]

  - [au] [laud] <loud>
  - (c) Glide to the open-mid [ə]
  - [iə] [biəd] <beard>
  - [εə] | [bɛəd] | <bared>
  - [və] [mvəd] <moored>

#### 3.4 Vowel Length

There are phonetic relationships between short and long vowels in English, as illustrated in the following words

- [1] [bid] < bid > and [ix] [bixd] < bead >
- [v] [gvd] < good > and <math>[ur] [furd] < food >
- [x]  $[k^hxt]$  <cad>and [x] [kxt] <card>
- [p]  $[k^hpd] < cod > and <math>[p]$  [kp:d] < cord >
- [ə] [fɔ:wəd] <forward>and [ɜː] [wɜːd] <word>

# 4 Suggestions

Standard orthography does not represent pronunciation but it can correspond to pronunciation; the following are provided as mere suggestions. To avoid errors you should learn to listen and try to distinguish between them.

#### 4.1 [iː]

- ee tree, cheese, canteen
- e complete, be, these,
- ea leaf, reason, sea
- *ie* piece, field, siege
- $\bullet$  *i* machine, police prestige, suite

#### 4.2 [i]

- i fifth, rich, with
- y city, rhythm
- e pretty, needed, wicket, wicket, except, careless, houses
- *ie* ladies, cities
- a village, private

also in

### 4.3 [e]

- e bed, set, went
- ea breath, dead, head
- a many, Thames

also in

- <Geoffrey>['tdzefx i], <Leicester>['lestə], <friend>
- [fiend],  $\langle ate \rangle$ [et],  $\langle again \rangle$ [ə'gen] or [ə'gem].

# 4.4 [æ]

a- hand [hænd], lamp [læmp], macho [ˈmæt͡ʃəʊ], marry [ˈmæri], rash [ˈɪ æʃ], sat [sæt] aiplaid [pļæd], plait [pļæt], reveille [rɪˈvæli], timbre [ˈtʰæmbɪ ə]

Compare these minimal pairs

- [e], [æ]: pet-pat, peck-pack, said-sad, ten-tan, lend-land, merry-marry
- [1], [e], [æ]: bid-bed-bad, big-beg-bag, tin-ten-tan, miss-mess-mass
- $\bullet$  u cut, drug, dull, sun, yuppie
- o son, come, among, one ["w2n], done, month, colour, monkey, mother, nothing, Monday, onion, London, oven
- ou country, southern, couple, enough, young,
- oo blood, flood,
- oe does

#### Compare these minimal pairs

- [æ] [A]: cat vs. cut; lamp vs. lump; match vs. much
- $[\alpha :]$   $[\Lambda]$  : cart vs. cut; barn vs. bun; march vs. much
- [D] [A]: cot vs. cut; fond vs. fund; wander vs. wonder
- [3:]  $[\Lambda]$ : curt vs. cut; fern vs. fun; turf vs. tough

The short RP  $/\Lambda$  is articulated with a considerable separation of the jaws and with the lips neutrally open; the centre of the tongue (or a part slightly in advance of centre) is raised just above the fully open position, no contact is made between the tongue and the upper molars. The quality is that of a centralized and slightly raised C[a]=[ $\ddot{a}$ ].  $/\Lambda$  does not occur in final, open syllables.

#### (a) 2.4

- o dock, bonk, dog, holiday, sorry, gone
- a was, what, swan, want, watch, quality,
- ou,ow- cough, trough, Gloucester, knowledge
- au because, sausage, laurel, Austria, Australia, cauliflower (Note also [p] in yacht [jpt])

Compare these minimal pairs

- [p] vs. [qr] lodge vs. large, cot vs. cart, cough vs. calf, impossible vs. impassable
- [b] vs. [c] cod vs. cord, don vs. dawn, stock vs. stalk This short vowel is articulated with wide open jaws and slight, open lip-rounding; the back of the tongue is in the fully open position, no contact being made between the tongue and the upper molars. The quality is that of an open lip-rounded C[A], i.e. secondary C[6].
- [p] does not occur in a final open, syllable.
- θhe extremely open nature of the ɛnglish vowel can be emphasized by relating it to [αː]. words such as part, large, calf should be said as far in the mouth as possible, with the jaws apart and only the slightest lip-rounding. In this way, a quality near to the [ρ] of pot, lodge, cough may be obtained.

#### 4.6 [ɔː]

- ar, or war, quart, cord, horse, sworn, born
- ore before, more
- our court, four
- oar, oor oar, board, door, floor
- au, augh fault, cause, daughter
- a all, talk, water, salt
- aw saw, lawn, jaw, yawn, awesome
- ou bought, ought

#### 4.7 [v]

- u butcher, cellular, cushion, European, full, put, sugar
- oo book, good, wood, wool
- o bosom, wolf, woman
- ou could, courier, should, would

#### compare

- [v], [uː] -full, fool; wood, wooed
- [v], [x] -could, cord; wood, ward
- [v] following –full, pull, wool, wolf

#### 4.8 [uː]

- u rude, June, Susan, crucial
- oo food, soon, moon, spoon
- o do, who, move, lose
- ou group, soup, wound (n.), through
- ew chew, flew, askew
- ue, ui, oe blue, juice, shoe

Compare [uː], [u] shoe, shoot; rude, root; lose, loose; use (v.), use (n.); nude, newt; Jews, juice [uː], /v/ food, good; pool, pull [u], /v/ boot, foot; loop, look

#### 4.9 [3ː]

- er, err her, serve err
- ur, urr turn, church, nurse, purr, cursor
- *ir*, *yr* bird, first, girl, myrtle
- wor word, world, work, worse
- ear earth, heard
- our journey, courtesy, scourge

#### 4.10 Dark I [↓]

- 1. Before pure vowels, diphthongs and /j/, the /l/ is realized as [l] (clear l) as in leave, let, loch, look, blow, glad, splice, silly, and yellow.
- 2. After a vowel and before a consonant the /l/ is realised as a [4] dark l as in help, bulb, salt, cold, milk, film, pale, and silver.
- 3. When the /l/ is word final following a vowel, it is realised as [4] as in feel, fill, fell, canal, snarl, doll, call, bull, and pool.

#### 4.11 Aspiration

At the onset (beginning) of stressed syllables, voiceless oral stops are aspirated:

- pen
- ten
- cake

# 5 English Consonants

# 5.1 [<sub>1</sub>]

Conventionally, r is transcribed as /r/, yet in narrow transcription you should transcribe it as [x].

#### 5.2 Devoicing after voiceless oral stops

When /l/, /x/, /w/ or /j/ follow the voiceless stop in the same context as above, they are made voiceless by the aspiration (note that there is no need to transcribe the aspiration separately).

- /plei/ [pl ei] play
- /pɪ iːst/ [pɪɪ iːst] priest
- /pju:/ [pɪj uː] pew (nb: diacritics are placed over characters with descenders)
- /tɪɑ e/ [tɪɪ aɪ] try
- /twaes/ [txw ais] twice
- /tju:n/ [t.j u:n] tune
- /kliːn/ [kɹl iːn] clean
- /kı aı/ [kıı aı] cry
- /kjuːt/ [kɹj uːt] cute

#### 5.3 Release of syllable and word-final (VC) oral stops oral stops

When carrying out a narrow transcription of VC stops we are particularly interested in whether the release of the stop is audible or inaudible. This applies to both *voiced* and *voiceless* stops.

In narrow transcription we show stops without audible release as: [p], [b], [t], [d], [k], [g] Here are some examples of pairs of words with and without audible release:

Word	Unreleased	Released
map	[mæp <sup>¬</sup> ]	[mæt]
$_{\mathrm{mat}}$	[mæt]	[mæt]
$\max$	$[\mathrm{mæk}]$	$[\mathrm{^{ ext{}}}\mathrm{mæk}]$
robe	[rəʊb <sup>¬</sup> ]	[rəʊb]
road	[rəʊd <sup>¬</sup> ]	[rəʊd]
rogue	[rəʊg¯]	[rəʊg]

#### 5.4 Syllabic Consonants

Be careful when transcribing /r/, /l/, /m/, and /n/ when they occur at the end of a word. In most instances, they can form a syllable on their own in this position. You would transcribe these syllabic consonants with a tick mark under the symbol to indicate this. For example,

- puddle/'pʌdəl/or/'pʌdl/.
- golden/'gəʊldən/or/'gəʊldn/

#### 6 Assimilation

- 1. /m/ becomes [m] before [f] or [v].
- 2. /n/ becomes [n] before [k] or [g].

Words that contain "ank" and "and", like tank, thank, bank, hand, band, tanned, should be transcribed with the vowel [æ] and the appropriate nasal consonant: tank: [tæŋk], thank [θæŋk], bank [bæŋk], hand [hŋnd], band [bŋnd], tanned [tŋnd].