

## Sounds & Words Week 4 Michaelmas 2010

### Review

#### Allophonic processes in RP English

- dark /l/ in coda
- preglottalised plosives
- deaspiration
- nasalisation
- vowel duration
  - short vowel + [-voice] – bit
  - short vowel + [+voice] – bid
  - long vowel + [-voice] – beat
  - long vowel + [+voice] – bead

Allophones realisations of phonemes (brackets [allophones], /phonemes/)

Accent differences occur in allophonic processes

Preaspiration of final [-voice] plosives occurs in Geordie & Welsh English

vocal folds abducted at closure; opposite of aspiration in terms of timing, ‘got’ [gɒ<sup>h</sup>t]

Glottal reinforcement of word-medial [-voice] plosives occurs in Geordie & Welsh English (again!), Cockney, Norwich, e.g. ‘paper’ [p<sup>h</sup>ei?pə], ‘baker’ [beɪ?kə]

Northern English /t/ > /r/, e.g. ‘shut up’ [ʃʊɪ ʊp], ‘get out (of t’house)’ [geɪ a:t ə ? a:s]

Is this allophonic, or a change in phoneme? [ɹ] as an allophone of /t/, or /t/ > /r/?

Word-medial /t/ also appears as a

tap (e.g. American English)

fricative (e.g. Irish English, Liverpool English)

Irish & Geordie English – no dark /l/ same quality (almost – codas tend to be slightly darker)

Leeds English has no light /l/ - /l/ is dark in onsets too

Also, /l/ vs. /r/ ‘polarisation’:

- Leeds English: /l/ is dark and /r/ is light
  - Newcastle English: /l/ is light and /r/ is dark
- /l/s and /r/s often interact: Portuguese branco vs. Spanish blanco

### Crosslinguistic differences

#### Phonemes in English not phonemes in other languages

- Korean or Japanese have no /r/ vs. /l/ ‘rap’ vs. ‘lap’, ‘rack’ vs. ‘lack’
- ‘park’ /ɑ/ vs. ‘pack’ /æ/ quality difference not phonemic in Arabic (duration is!)

#### Allophones in English are phonemes in other languages

- [ç] in ‘sheep’ and [ʃ] in ‘shark’ (allophones of /ʃ/) phonemes in Mandarin & Polish, /ç/ vs. /ʃ/
- [ɽ] in ‘eighth’ and [t] in ‘eight’ are phonemes in Malayalam, Arrernte

## Connected speech processes

Utterances usually contain more than one word so words are connected together in speech  
There are no gaps between words – adjacent sounds influence each other  
these effects are occasionally variable

## Universals

Just like allophones, these processes are language-specific

- all languages have words
- all languages combine words

but different connected speech processes apply (French final plosives tend to be audibly released)  
If we listen to an unknown language, we can hear vowels and consonants, but we can't hear where the words are.

Assimilation involves sounds becoming more similar

commonly affects place of articulation (place assimilation)  
usually in English final alveolar stops (nasals and plosives) share place of articulation with following sound

some examples:

ten things [t<sup>h</sup>ɛŋ θɪŋz] /n/ is dental

ten shoes [t<sup>h</sup>ɛŋ ʃu:z] /n/ is post-alveolar

ten years [t<sup>h</sup>ɛr jɪ:z] /n/ is palatal

These cases are clearly phonetic; no dental, post-alveolar, palatal nasal phonemes in English

Other cases more problematic

is [m] an allophone of /n/ in 'ten bears' [t<sup>h</sup>ɛm beɪz]? or is it an actual /m/?

Often – like many processes – 'explained' in terms of ease of articulation:  
easier to say two sounds at single place

But this cannot be strictly true: surely easier to maintain place of first sound articulated  
not 'ten bears' [t<sup>h</sup>ɛm beɪz] but [t<sup>h</sup>ɛn deɪz]

Also, some sounds not affected, e.g. alveolar fricatives, /l/, non-alveolars,  
'fell down', 'pass by', 'back down'

## Coalescence

'miss you' /mɪs ju:/ [mɪʃ ʃu:] (also within words: 'tissue')

dental fricatives assimilate too: this time initials

ease of articulation is not a straightforward explanation: dentality is retained so effects go both ways

tell them [t<sup>h</sup>ɛl<sup>h</sup> ɪ<sup>h</sup>ɛm]

on those [ð<sup>h</sup> n<sup>h</sup>əʊz]

### /r/-sandhi

Occurs in non-rhotic accents (most Eng Eng, Aus Eng, NZ Eng, some Southern US)

Linking /r/ = historical /r/ (as in rhotic accents) present in spelling  
occurs in pronunciation before vowel-initial words, e.g. 'far away', 'car alarm'

Intrusive /r/ = innovation (NOT in rhotic accents), e.g. 'some data/r/ analysis', 'a koala/r/ eats'

### Strong & weak forms

Many function words have two forms:

'for, at, of, that, to'

Compare: '(I saw) four children' vs. '(not suitable) for children'

The weak forms tend to contain a schwa

### Stress

One syllable in a word is more prominent than others

this is stress

in RP English stressed syllables are:

- louder
- longer
- may have higher pitch

stressed vs. unstressed

not all vowels appear in unstressed syllables

/ɪ, ʊ, ə/

may appear in stressed & unstressed /ɪ, ʊ/

### Secondary stress

Some syllables are intermediate

- not most prominent
- not unstressed

These syllables also contain 'full' vowel qualities: these are secondary stressed

'maintain' /ˌmeɪn'teɪn/

'aspirate' /'æspɪreɪt/

'advance' /ˌæd'vɑːns/

Diatones are 'minimal pairs' involving stress

- the impact vs. to impact
- the import vs. to import
- the object vs. to object
- the produce vs. to produce
- the record vs. to record

Nouns have initial stress, whereas verbs have final stress

Eurhythmy and stress shift

Aberdeen > Aberdeen Football Club

Heathrow > Heathrow Airport

Japanese > Japanese restaurant

thirteen > thirteen men

Often called the thirteen men rule

- primary stress shifts to syllable with secondary stress
- shifts away from an adjacent stressed syllable
- does not just move one syllable back! (Aberdeen)

References

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