Review

Allophonic processes in RP English
- dark /l/ in coda
- preglottalised plosives
- deaspiration
- nasalisation
- vowel duration
  - short vowel + [-voice] – bit
  - 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’ [ɡɒʰt]

Glottal reinforcement of word-medial [-voice] plosives occurs in Geordie & Welsh English (again!), Cockney, Norwich, e.g. ‘paper’ [pʰɛɾɪpə], ‘baker’ [berɪkə]

Northern English /t/ > /r/, e.g. ‘shut up’ [ʃuː(ap)], ‘get out (of t’house)’ [ɡɛɾ ə ʔ aːs]
Is this allophonic, or a change in phoneme? [ɾ] as an allophone of /t/, or /t/ > /ɾ/?

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. /ɾ/ ‘polarisation’:
- Leeds English: /l/ is dark and /ɾ/ is light
- Newcastle English: /l/ is light and /ɾ/ is dark

/l/s and /ɾ/s often interact: Portuguese branco vs. Spanish blanco

Crosslinguistic differences

Phonemes in English not phonemes in other languages
- Korean or Japanese have no /ɾ/ vs. /l/ ‘ɾ’ 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
- [ɕ] in ‘sheep’ and [ʃ] in ‘shark’ (allophones of /ʃ/) phonemes in Mandarin & Polish, /ɕ/ vs. /ʃ/
- [ɾ] in ‘eighth’ and [ɾ] 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 [tʰɛn ɵŋz] /n/ is dental

ten shoes [tʰɛn jʊːz] /n/ is post-alveolar

ten years [tʰɛn ʃiːz] /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’ [tʰɛm beːz] 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’ [tʰɛm beːz] but [tʰɛn deːz]
Also, some sounds not affected, e.g. alveolar fricatives /ʃ/, non-alveolars,
‘fell down’, ‘pass by’, ‘back down’

Coalescence
‘miss you’ /mɪs juː/ [mɪʃ ʃuː] (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 [tʰel] /ʃɪːm/
on those [ðŋ ɲau]
/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
/i, ʊ, ə/
may appear in stressed & unstressed /i, ʊ/

Secondary stress
Some syllables are intermediate
• not most prominent
• not unstressed

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

‘maintain’ /ˌmeɪnˈteɪn/
‘aspirate’ /ˈæspɪˌreɪt/
‘advance’ /ˌædˈvɑːns/

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
Eurhythm 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
Cruttenden, Alan (2001) Gimson’s pronunciation of English, Arnold (survey of realisations)

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