GINSON'S PRONUNCIATION OF ENGLISH

SIXTH EDITION

Revised by

ALAN CRUTTENDEN



12

Words in Connected Speech

Citation Forms and Connected Speech 12.1

Every utterance is a continuous, changing, pattern of sound quality with associated (prosodic) features of quantity, accent, and pitch. The word (consisting of one or several morphemes) is, like the phoneme, an abstraction from this continuum and must be expected to be realized in phonetically different ways according to the context, cf. the various allophonic (phonetic) realizations of the abstract unit known as the phoneme. The word constitutes, however, a separable linguistic reality for the speaker. Whether it has a simple or a complex morphemic structure, it is an element of language which is commutable in an utterance with other members of its class, i.e. nouns for other nouns, verbs for other verbs etc. It is, moreover, often capable of constituting an utterance by itself. It must, therefore, be considered as an abstraction on a higher level than the phoneme, its separable identity having been recognized in the sophisticated written form of English by the use of spaces between words. If, however, the word is admitted as an abstracted linguistic unit, it is important to note the differences which may exist between its concrete realization when said (often artificially) in isolation and those which it has when, in connected speech, it is subject to the pressures of its sound environment or of the accentual or rhythmic group of which it forms part. The variations involved may affect the word as a whole, e.g. weak forms in an unaccented situation or word accentual patterns within the larger rhythmic pattern of the complete utterance; or may affect more particularly the sounds used at word boundaries, such changes involving a consideration of the features of morpheme and word junctures, in particular, ASSIMILATIONS, ELISIONS, and LIAISONS. In addition, it will be seen that the extent of variation depends largely upon the casual or formal nature of the utterance, the more formal and careful (and probably the slower rate of) the delivery the greater the tendency to preserve a form nearer to that of the isolate word.

Neutralization of Weak Forms

We have seen already (§11.3) that a number of function words may have different pronunciations according to whether they are accented (or said in isolation)

or, more typically, are unaccented. Such is the reduction and obscuration of the unaccented forms that words which are phonetically and phonemically distinct when said in isolation may be neutralized under weak accent. Such neutralization causes no confusion because of the high rate of redundancy of meaningful cues in English; it is only rarely that the context will allow a variety of interpretations for any one cue supplied by an unaccented word form. The examples of neutralization which follow might occur in casual (and usually rapid) RP:

/a/= unaccented are, a (and, less commonly, her, or, of) The 'plays are `poor He 'plays a 'poor man She wants $a \cdot dog$ She 'wants her 'dog (less rapidly, with reduced /3:/ for her) 'One or 'two of them are 'coming (or /3:/ for or, /av/ for of) 'Two 'books are 'mine 'Two 'books of 'mine (or, less rapidly, /əv/ for of) $/\partial v/ = unaccented have (aux.), of$ 'Some of one piece ... 'Some have won . . . The 'boys of 'Eton `fish The 'boys have 'eaten 'fish (The last two utterances being identical, the meaning is clear only from the larger context.) /ər/ = unaccented are, or Ten or under (less rapidly, /o:/ for or) 'Ten are `under /ðə/ = unaccented the, there There 'seems a 'chance The 'seams are 'crooked /s/ = unaccented is, has, does 'What's ('s = does or is) he 'like? 'What's ('s = has) he 'lost? /z/ = unaccented is, has, does 'Where's ('s = has, less commonly does) he 'put it? Where's ('s = is) he 'going? /əz/ = unaccented as, has

'How 'much has he 'done? As 'much as he 'can

¹ Byrd (1992a,b,c) found women reducing less than men

/ən/ = unaccented and, an

'On and 'off 'On an 'off-chance

/n/ = unaccented and, not

'Didn't he .do it? /'dıdni: 'du: ɪt/ He 'did and he 'didn't /hı 'dıd n i: 'dıdnt/

/d/ = unaccented had, would

I'd ('d = had, would) 'put it 'here

Variation in the Accentual Patterns of Words 12.3

When a word (simple or compound) pattern consists in isolation of a primary accent preceded by a secondary accent, the primary accent may be lost, if, in connected speech, a strong accent follows closely, e.g.

'thir'teen, but 'thirteen 'pounds 'West minster, but 'Westminster Abbey 'full-`grown, but a 'full-grown `man 'after' noon, but 'afternoon 'tea

The secondary accent in the word rather than the primary may be lost when another word with secondary accent immediately precedes, e.g.

'eight thir'teen; 'near West'minster; 'not full'grown; 'Friday after'noon

Such examples, and the others in this section, confirm the tendency in English to avoid adjacent accented syllables.

It is in order to avoid the placing of primary accents on adjacent syllables that 'accent shift' occurs in phrases such as 'Chinese 'restaurant (but Chi nese), 'outside world (but out'side), 'aquamarine 'necklace (but aquama'rine), accents not occurring on adjacent syllables in either case. Where the accents are separated by an unaccented syllable, the accent shift is optional, e.g. diplo matic, diplo matic `incident or 'diplomatic 'incident; aquama rine, aquama rine ti 'ara, 'aquamarine ti 'ara.

This tendency to the alternation of accented and unaccented syllables is so strong that the accent may be shifted in the case of certain words whose citation form contains only one, later, accent, e.g. or nate but 'ornate 'carvings; u'nique but unique 'features; and di rect but 'direct 'access. The alternation tendency extends into longer utterances and may be seen in examples such as i'dea but the 'idea 'pleases me; 'recom'mend but I can 'recommend 'several; and in phrasal verbs such as 'come 'out, 'get 'in, e.g. The 'pictures 'didn't come 'out, but They 'came out 'well and What time will you get in? but What time will you 'get in from 'work?

12.4 Phonemic and Phonetic Variations at Boundaries

We have seen (Chapter 5) that our basic linguistic units, the phonemes, represent abstractions from actual phonetic reality. If the phoneme /t/ is given a convenient, generalized label—a voiceless alveolar plosive—it is nevertheless true that the actual phonetic realization of this consonant depends on the nature of the context, e.g. /t/ is aspirated when before a vowel (except after /s/), and dental, rather than alveolar, when adjacent to θ or θ . Moreover, we are dealing with a sound and articulatory continuum rather than with discrete units: features of sound segment A may be found in a following segment B, and features of B in A (cf. 'transitions' of consonants, §9.2.2). If, therefore, the utterance is analysed in terms of a sequence of phonemes, account must be taken of the phonetic continuity and merging of qualities by describing the mutual influence which contiguous elements exert upon each other; in other words, tendencies towards assimilation or co-ARTICULATION have to be noted. The tendencies outlined below are valid for colloquial English RP but may not be characteristic of other languages.

Variations of articulation may be of an allophonic kind, either within a word or at word boundaries; or, at word and morpheme boundaries, they may be of such an extent that a change of phoneme is involved, as between the pronunciation of a word in isolation and that which it may have in context. The fact that the phonemic pattern of a word is subject to variation emphasizes the potential nature of phonemic oppositions. The meaning of a word derives as much from the situation and context in which it occurs as from its precise phonemic shape, the high redundancy of English tolerating considerable variation at the phonemic level. The mutual influence of contiguous phonemes in English functions predominantly in a REGRESSIVE or ANTICIPATORY direction, i.e. features of one phoneme are anticipated in the articulation of the preceding phoneme; sometimes it is PROGRESSIVE or PERSEVERATIVE, i.e. one phoneme markedly influences the following phoneme, and sometimes it is COALESCENT, i.e. a fusion of forms takes place.

12.4.1 Allophonic Variations

Since the actual realization of any phoneme is at least slightly different in every context, it is necessary to give examples only of those variants which exhibit striking changes. The same types of allophonic variation, involving a change of place of articulation, voicing, lip position, or position of the soft palate, may be found within the word and also at word boundaries:

- (1) Place of articulation.
- (a) within word:

/t/—post-alveolar in try (influence of [1])

—dental in eighth (influence of $[\theta]$)

/k/—advanced (pre-velar) in key (influence of [i:])

/n/—dental in *tenth* (influence of $[\theta]$)

/m/—labiodental in nymph, infant (influence of [f])

/\lambda/-retracted in result (influence of [1])

/u:/—centralized in music (influence of [i])

(b) at word boundaries:

/t/—dental in not that (influence of [o])

/d/—dental in hide them (influence of [o])

- (2) Voice—devoicing of continuants following a voiceless consonant.
- (a) within word:

/l.r.w.j/—devoiced following voiceless consonants, e.g cry, plight, quite, queue /m,n,n/—slightly devoiced following voiceless consonants, e.g. smoke, snow. mutton, open / popm/, bacon / beikn/

(b) at word boundaries (only in close-knit sequences): /l.r.w.j/—devoiced following voiceless consonants in close-knit sequences, e.g. at last [a tlast], at rest [ə'trest], at once [ə'twʌns], see to it ['si:twit], thank you ['θænkiu:].

Note also the devoicing of word-final voiced plosive or fricative consonants before silence, and of fricatives when followed by a voiceless consonant; and of word-initial voiced fricative or plosive consonants when preceded by silence, e.g. in What can you give? ([v]); Can you breathe? ([v]); It's his ([v]); Near the bridge ([dʒ]); They've ([v]) come; with ([o]) some; He's ([z]) seen it; George ([dʒ]) can; ([y]) very good ([d]); ($[\delta]$) there; ([z]) zinc does ([z]).

- (3) Lip position—under the influence of adjacent vowels or semi-vowels.
- (a) within word:

	Lip-spread	Lip-rounded ²
/p/	pea, heap	pool, hoop, upward
/t/	tea, beat	two, boot, twice, outward
/k/	keep, speak	cool, spook, quite, backward
/m/	mean, seem	moon, loom, somewhat
/n/	knee, seen	noon, onward
/1/	leave, feel	bloom, fool, always
$/r/^3$	read	rude
/f/	feel, leaf	fool, roof
/s/	seat, geese	soon, goose, sweep
/ʃ/	sheet, leash	shoot, douche, dishwasher
/h/	he	who etc.

- (b) at word boundaries (only in close-knit sequences), e.g. /t,k,n,n,l,s/ are somewhat labialized in cases such as that one, thick one, thin one, wrong one, shall we, this way, the syllables with initial /w/ carrying no accent; a rounded vowel (as opposed to semi-vowel) in an adjacent word does not seem to exert the same labializing influence, e.g. /uː/ does not labialize /s/ markedly in Who said that? nor /o:/ in This ought to.
- (4) Nasal resonance resulting particularly from regressive but also from progressive lowering of the soft palate in the vicinity of a nasal consonant.

- (a) within word—nasalization of vowel preceding /m/ in ham and /n/ in and, of vowel between nasal consonants in man, men, innermost, and of short vowels on each side of the nasal consonant in any, sunny, summer, singer; also /l/ in situations such as in helmet, wrongly; and possible slight nasalization of vowel following /m, n/, as in meal, now.
- (b) at word boundaries—vowels may sometimes be nasalized somewhat by the boundary nasal consonant of an adjacent word, especially when an adjacent nasal consonant also occurs in the word containing the vowel, e.g. the first /ə/ in bring another, or /1/ in come in, but sometimes also with no adjacent nasal consonant in the word containing the vowel (usually unaccented), e.g. /ə/ in come along, wait for me. /1/ in every night. Approximants may also be nasalized by a nasal in an adjacent word, e.g. /l/ in tell me.

12.4.2 Phonemic Variations

Different pronunciations of the same word (either between two speakers or between different styles of speech in the same speaker) sometimes exhibit a different choice of internal phoneme depending on the degree of assimilatory pressure of the word environment felt by the speaker, e.g. length may be /lenθ, lenkθ/, or /lenθ/, encounter may have /in/ or /in/ in the first syllable, disgrace may have final /s/ or /z/ in the first syllable, absolutely may have final /b/ or /p/ in the first syllable, and issue may have medial /sj/ or a coalesced form /[/. From a diachronic point of view, a phonemic change within a word may sometimes be attributable to the combinatory pressures exerted on a phoneme by the word environment, e.g. by labialization /wa(:)/ \rightarrow /wp/ or /wo:/ (swan, water); /ir,er,ur/ coalesced into /ər/ (later /ɜː/) under the influence of the post-vocalic /r/ (first, earth, curse); and /s/ or /z/ and /j/ combined their phonetic characteristics to give /[,3/ (mansion, vision).

Many phonemic changes occur in connected speech at word boundaries (i.e. change as compared with the phonemic pattern of the isolate word form). Such phonemic variation is found in changes within the pairs of voiced/voiceless phonemes and, more particularly, in changes involving modification of the place of articulation.

12.4.3 Voiced/Voiceless Variations

Word-final voiced fricatives followed by a word-initial voiceless consonant may with some speakers be realized as the corresponding voiceless fricative, if the two words form part of a close-knit group. Thus the final /o/ of with may be replaced by $|\theta|$ in with thanks; the final |z| of was by |s| in he was sent; and the final /v/ of of, we've, by /f/ in of course, we've found it. Such a change to a voiceless fricative is an extension of the allophonic devoicing of such consonants mentioned in §12.4.1(2). The phonemic change in such examples may be complete in that a preceding long vowel or diphthong may be realized in the reduced form appropriate to a syllable closed by a voiceless consonant (See \$8.4.1 (d)–(f), 9.2.1(5), 9.4(3)).

² This will apply only for those speakers who have appreciable rounding of the vowels and semi-vowels

³ For some speakers /r/ has inherent labialization and will not be lip-spread even before a lip-spread vowel

⁴ See Cohn (1990)

The weak form of is or has is /s/ or /z/ according to the final consonant of the preceding word, cf. the cat's paw, the cat's gone /kæts/ vs the dog's paw, the dog's gone /dpgz/.

It is unusual in RP for word-final /b,d,g/ to be influenced in the same way by following voiceless consonants, though voiceless forms may be heard in such contexts in the speech of northern England, e.g. the /d/ of good time and the /q/ of big case may be realized as /t,k/.

It is to be noted that word- or morpheme-final voiceless consonants in English do not show tendencies to assimilate to their voiced counterparts: such pronunciations of nice boy, black dress, half-done, they both do, wishbone, birthday, as /'naiz 'boi, 'blæg 'dres, 'haiv 'dan, ðei 'bouð 'dui, 'wizboun, 'bsiðdei/ are typical of many foreign learners.

12.4.4 Nasality and Labialization

Phonemic assimilations involving nasality (i.e. anticipation or perseveration of the lowered soft palate position) would be likely to show /b/ (or /v/) \rightarrow /m/, /d/ $(\text{or }/\text{z}/\text{ or }/\text{o}/) \rightarrow /\text{n}/, /\text{q}/ \rightarrow /\text{n}/, \text{ such changes being based on roughly homorganic}$ mouth articulations; nasalization of other sounds, e.g. /l/ or vowels, is never phonemic, there being no nasalized counterpart with approximately homorganic mouth articulation. Such phonemic nasalization as does occur concerns mainly the alveolars, especially adjacent to the negative 'nt /n(t)', and is characteristic of very rapid speech, often as a popular form unacceptable in RP (marked † in the examples below), e.g.

 $/d \rightarrow n/$ —He wouldn't do it /hi 'wonn(t) `du: it/ good news /'qun `nju:z/

 $/d \rightarrow q \rightarrow n/$ —He wouldn't go /hi 'wunn(k) 'qəu/

 $/d \rightarrow b \rightarrow m/$ —Good morning /qum `mɔ:nɪn/

 $/v \rightarrow m/--You$ can have mine /iv kn hæm `main/

 $/z \rightarrow n/$ —He doesn't know /hi 'd\(\text{Ann}(t)\) `n\(\text{o}\)/\frac{1}{7}

 $|\eth \rightarrow n|$ —He wasn't there /hi 'won(t) `neə/† to win the race /tə 'win nə `reis/†

(In the above examples, the nasalized assimilated form may be elided altogether.) The extension of labialization produces no changes of a phonemic kind, since lip-position is not a distinctive feature opposing any two phonemes in RP. /p/ and /a:/ come nearest to having an opposition of lip action, but the lip-rounding for /p/ is very slight and open and, in any case, there is some difference of tongue position and a considerable difference of length. Where /w/ precedes a vowel of the /a:/ type (and, therefore, might be expected to exert a rounding influence), either labialization has become established at an earlier stage of the development of the language (e.g. in was, what, war, water etc.) or two pronunciations are today permitted, e.g. qualm /kwa:m/ or /kwa:m/, quaff /kwpf/ or /kwa:f/. Labialization of /a:/ involving a phonemic change to /p/ or /ɔ:/ does not extend beyond word boundaries, e.g. in two arms or the car won't go. Some confusion may, however, occur between a strongly centralized form of /əu/ and /ɜː/ in a labial context, cf. they weren't wanted and they won't want it; also, with the influence of a strongly labialized form of /r/, in a pair such as they weren't right, they won't write.

12.4.5 Variations of Place

The most common phonemic changes at word boundaries concern changes of place of articulation, particularly involving de-alveolarization. Though such changes are normal in colloquial speech, native speakers are usually unaware that they are made. The phenomenon is essentially the same as that resulting in nonphonemic assimilation of place. Recent electropalatographic research⁵ shows that phonemic assimilations of place are rarely complete, e.g. in an assimilation involving an apparent change from alveolar to labial, as in bad boy \rightarrow /bæb boy/. some residual articulation on the teeth ridge may accompany the labial articulation. (See §9.2.6(2), §9.6.2(2).)

(1) Regressive (or anticipatory) assimilation: instability of final alveolars— Word-final /t,d,n,s,z/ readily assimilate to the place of the following word-initial consonant whilst retaining the original voicing. /t.d,n/ are replaced by bilabials before bilabial consonants and by velars before velar consonants; /s,z/ are replaced by palato-alveolars before consonants containing a palatal feature:

 $/t/ \rightarrow /p/$ before /p,b,m/, e.g. that pen, that boy, that man / $\delta \approx p$ `pen, $\delta \approx p$ `boj. ðæp 'mæn/

→ /k/ before /k,g/, e.g. that cup, that girl /ðæk `kʌp, ðæk `qɜːl/

 $d/d \rightarrow b/d = p,b,m/$, e.g. good pen, good boy, good man /qub 'pen, qub 'boi, gub 'mæn/

 \rightarrow /g/ before /k,g/, e.g. good concert, good girl /quq `kpnsət, quq `q3:l/

 $/n/ \rightarrow /m/$ before /p,b,m/, e.g. ten players, ten boys, ten men /tem `pleiəz, tem 'boiz, tem 'men/

 $/n/ \rightarrow /n/$ before /k,q/, e.g. ten cups, ten girls /ten `kaps, ten `qs:lz/

(As a result of word-final assimilations, /n/ may be preceded by vowels other than /i,e,æ,,p,\lambda/. Thus /n/ can occur after long vowels as a result of assimilation (cf. \$10.9), e.g. I've been /bim/ gardening, She'll soon /sum/ come, his own /sum/ car etc.).

Assimilations to alveolars and between labials and velars are generally felt to be substandard in RP, although they may sometimes be heard in fast speech, e.g. same night, /sein `nait/, King Charles /kin `t[a:lz/, same kind /sein `kaind/, blackmail / blæpmeil/.

 $/s/ \rightarrow /[/]$ before /[,t[,d3,i/, e.g. this shop, cross channel, this judge, this year / δ i[`[pp, krp[`t[ænəl, ði[`dʒʌdʒ, ði[`jiə/.

 $/z/ \rightarrow /z/$ before /[,t[,d3,j/, e.g. those young men /ðəuʒ 'jʌŋ 'men/, cheese shop /tsiz [pp/, those churches /ðəuz `tsatsız/, has she? / hæz si/ or / hæs si/

Other assimilations involving fricatives are generally felt to be substandard in RP, although /θ,δ/ may assimilate to /s,z/ in fast speech, e.g. I loathe singing /aι

⁵ See Nolan and Kerswill (1990). They also found girls less likely to assimilate than boys and /n/ more likely to assimilate than /d/

⁶ See also §12.7 for stylistic variation in the frequency of assimilation

⁷ Byrd (1992b) found around 78% of sequences of /s,z/ plus /ʃ/ reduced to a palatoalveolar articulation only in the TIMIT database of American English, with no effect from syntax, sex, or dialect

lauz 'sinin/, What's the time? /wots za 'taim/, Has the post come? /hæz za 'paus k_Λm/.

Alveolars have a high frequency of occurrence in word-final position. especially when inflexional, and so their assimilation leads to many neutralizations in connected speech, e.g. /ræn `kwikli/ (ran or rang quickly), /raip `peəz/ (right or ripe pears or pairs), /laik `kri:m/ (like or light cream), / hpp mənjuə/ (hot or hop manure), /pæri[\fou/ (Paris Show or parish show), /wpt[fo: \weit/ (what's or watch your weight),8 or, with a neutralization to a labiodental articulation, /'greip vain/ (great or grape vine), [ram fə jɔ: `mani] (run or rum for your money).

When alveolar consonants /t,d,n/ are adjacent in clusters or sequences susceptible to assimilation, all (or none) of them will undergo the assimilation, e.g. Don't /dəump/ be late, He won't /wəunk/ come, I didn't /diank/ go, He found /faumb/ both, a kind /kaing/ gift, red and black /reb m blæk/.

(2) Coalescence of /t,d,s,z/ with /j/—The process which has led historically to earlier /t, d, s, z/ + /i/ giving /t[, d3, [, 3/ medially in a word (nature, grandeur, mission, vision—§9.3.1) may operate in contemporary colloquial speech at word boundaries, e.g.

/t/ + /j/—What you want /wpt[u: `wpnt/

/d/ + /i/—Would vou? /`wodzu:/

/s/ + /i/—In case you need it /in kei[u: `ni:d it/

/z/ + /j/—Has your letter come? /hæʒɔ: `letə kʌm/, as yet /ə`ʒet/

The coalescence is more complete in the case of t,d/+/j/ (especially in question tags, e.g. didn't you?, could you? etc.); in the case of $\frac{1}{5}$, the coalescence into /ʃ,ʒ/ may be marked by extra length of friction, e.g. Don't miss your train /daump miffo: `trein/.

In very careful speech, some RP speakers may use somewhat artificial, uncoalesced, forms within words in words like nature, question, unfortunate, soldier /'neitjə, 'kwestjən, An'fo:tjunət, 'səuldjə/. Such speakers will also avoid coalescences at word boundaries; yet other careful speakers, who use the normal coalesced forms within words, may consciously avoid them at word boundaries. (See also §12.7 below.)

(3) Progressive (or perseverative)—Assimilation is relatively uncommon. It may occur when a plosive is followed by a syllabic nasal and the nasal undergoes assimilation to the same place of articulation as the preceding plosive, e.g. $/n/ \rightarrow /m/$ after /p,b/, happen, urban /hæpm, `s:bm/; and $/n/ \rightarrow /n/$ after /k,g/ in second chance, organ as /sekn `tfains, `pign, `beikn/.

12.4.6 Elision

Apart from word-internal elisions (see \$10.8) and those associated with weak forms, sounds may be elided in fast colloquial speech, especially at or in the vicinity of word boundaries.

(1) Vowels

- (a) Allophonic variation—When one syllable ends with a closing diphthong (i.e. one whose second element is closer than its first, in RP /ei,ai,əi,əu,au/) and the next syllable begins with a vowel, the second element of the diphthong may be elided. Word-internal examples of the type discussed in §7.11 (e.g. hyaena /har i:nə/ smoothed to [ha i:nə]) may result in neutralization, thus layer / leiə/ with smoothing is the same as lair /leə/, mower / məuə/ with smoothing is the same as myrrh /ms:/. Similar smoothing occurs across word boundaries, e.g. go away /qs: 'wei/, I may as well /ai meəz 'wel/, I enjoy it /ai in 'dʒɔ it/, try again [tra ə'qen] or [tra: `qen].
- (b) Phonemic elision—Initial /ə/ is often elided, particularly when followed by a continuant and preceded by a word-final consonant (compensation for the loss of /ə/ frequently being made by the syllabicity of the continuant), e.g. not alone [not 'loun], get another [get 'naõo], run along [ran 'lon], he was annoved [hi waz 'noid]; or again, when final /ə/ occurs with following linking /r/ (see §12.4.7) and word-initial vowel, /ə/ may be elided, e.g. after a while /a:ftrə wail/, as a matter of fact /əz ə mætrəv `fækt/, father and son /fa:ŏrən `sʌn/, over and above /əuvrən ə`bʌv/.
- (2) Consonants—In addition to the loss of /h/ in pronominal weak forms and other consonantal elisions typical of weak forms (see §11.3), the alveolar plosives are apt to be elided. Such elision appears to take place most readily when /t/ or /d/ is the middle one of three consonants. Any consonant may appear in third position, though elision of the alveolar plosive is relatively rare before /h/ and /j/. Thus elision is common in the sequence voiceless continuant + /t/ or voiced continuant + /d/ (e.g. /-st, -ft, -ft, -nd, -ld, -zd, -ŏd, -vd/) followed by a word with an initial consonant, e.g. next day, raced back, last chance, first light, west region, just one; left turn, soft centres, left wheel, drift by, soft roes; mashed potatoes. finished now, finished late, pushed them; bend back, tinned meat, lend-lease, found five, send round, dined well; hold tight, old man, cold lunch, bold face, world religion; refused both, gazed past, caused losses, raised gently; loathed beer; moved back, loved flowers, saved runs, served sherry etc. Similarly, word-final clusters of voiceless plosive or affricate + /t/ or voiced plosive or affricate + /d/ (e.g. /-pt. -kt, -t[t, -bd, -gd, -d3d/) may lose the final alveolar stop when the following word has an initial consonant, e.g. kept quiet, helped me, stopped speaking, jumped well; liked jam, thanked me, looked like, looked fine, picked one; reached Paris, fetched me, reached Rome, parched throat; robbed both, rubbed gently, grabbed them; lagged behind, dragged down, begged one; changed colour, urged them, arranged roses, judged fairly etc. (In the sequence /-skt/, /k/ rather than /t/ is often elided, e.g. risked prison, asked them.) The final clusters /-nt.-lt/, which are the only alveolar sequences which involve a change of voicing, are less prone to elision, the /t/ often remaining as [?], e.g. went down.

Elision of final /t/ or /d/ is rarer before initial /h/, e.g. the alveolar stops are more regularly retained in kept hold, worked hard, East Ham, reached home, gift horse, rushed home, grabbed hold, round here, bald head, jugged hare, changed horses, raised hands, moved house etc. Final /t,d/ followed by a word beginning with /j/ are usually kept in a coalesced form, i.e. as /t[/ and /dʒ/, e.g. helped you. liked you, lost you, left you, grabbed you, lend you, told you etc.

⁸ If the utterance is reduced to /'wpt[5: 'wett/, there is also the possibility of the interpretation watch or wait

It will be seen that in many cases, e.g. in I walked back, they seemed glad, elision of word-final /t/ or /d/ eliminates the phonetic cue to past tense, compensation for which is made by the general context. Such is the instability of the alveolar plosives in such a position of apparent inflexional significance that it can be assumed that the context regularly carries the burden of tense distinction. Where the juxtaposition of words brings together a cluster of consonants (particularly of stops), elision of a plosive medial in three or more is to be expected. since, because of the normal lack of release of a stop in such a situation, the only cue to its presence is likely to be the total duration of closure.

The /t/ of the negative /-nt/ is often elided, particularly in disyllables, before a following consonant, e.g. you mustn't lose it /ju masn `lu:z it/, doesn't she know? /dazn si nou/, and sometimes before a vowel, e.g. wouldn't he come? /wudn i 'kam/, you mustn't over-eat /ju masn auvar 'i:t/. Less common is the omission of the stops in the negative /-nt/ component of monosyllables, e.g. he won't do it /hi waon 'du: it/.

Clusters of word-final /t/ and word-initial /t/ or /d/ are sometimes simplified in informal speech, e.g. I've got to go /aiv gptə 'qəu/, what do you want? /wpdə ju 'wont/ or /wpd3u 'wont/, and less commonly /d/ before /t/ or /d/, e.g. we could try /wi ku 'trai/, they should do it /dei [a 'du: it/.

The elision of one of a boundary cluster of two consonants sometimes occurs in casual speech, but is usually characterized as substandard, e.g. he went away /hi wen a wei/, I want to come /ai wona kam/ (< /ai wonta kam/, which frequently occurs), give me a cake /qi mi ə `keik/, let me come in /lemi kʌm `in/, get me some paper /qemi sm 'peipə/, as well as the very reduced forms of I'm going to /'aim gənə, `ainənə, `ainnə/. Clusters in adverbs formed with -ly are also liable to reduction in rapid and/or casual speech, e.g. stupidly / stju:pili/, openly / əupəni/.

12.4.7 Liaison

(1) Linking /r/—As has been mentioned in §9.7(2)(a), RP introduces word-final post-vocalic /r/ as a linking form when the following word begins with a vowel. The vowel endings to which an /r/ link may, in this sense, justifiably be added are /a;,ɔ:/ and those single or complex vowels containing final [ə] (/ə,ə,ıə,eə,uə/), e.g. in far off, four aces, answer it, fur inside, near it, wear out, secure everything. Prescriptivists seek to limit the allowability of linking /r/ to those cases where there is an <r> in the spelling; nevertheless many examples of linking /r/ occur where there is no <r> in the spelling, such /r/'s being labelled as 'intrusive'. Such /r/'s are to be heard particularly in the case of /ə/ endings, e.g. Russia and China /rn[ər ən `t[ainə/, drama and music /dra:mər əm `mju:zik/, idea of /ai diər əv/, India and Pakistan /Indiar an paiki stain/, area of agreement /eariar av a griimant/; and rather less frequently after final /a;,ɔ:/ e.g. law and order /lɔ:r ənd `ɔ:də/, aweinspiring / oir inspaierin/, raw onion /roir `Anjen/. Spelling consciousness remains an inhibiting factor in the use of linking /r/, but the present general tendency among RP speakers is to use /r/ links, even—unconsciously—among those who object most strongly. The comparative rarity of potential contexts for 'intrusive'

/r/'s following /a:,o:/ tends to make speakers more aware of the 'correct' forms; thus I saw it /ai `so: r it/, drawing, /`dro:rm/, are generally disapproved of, though those who avoid such pronunciations have to make a conscious effort to do so. The focusing of attention on 'intrusive' /r/'s as an undesirable speech habit has led to the use by some speakers of a pause or glottal stop in such cases of vowel hiatus, with the result that, in avoiding 'intrusive' /r/'s, they have also abandoned other linking /r/'s in favour of a vowel glide or glottal stop, e.g. in secure it, I'm sure it does, War and Peace, winter evening. As might be expected, in those regions where post-vocalic /r/ is pronounced and pour, paw are identified as separate word forms in isolation, the tendency to introduce intrusive /r/'s is less marked than in RP or in RP-influenced types of speech.

The same process is in operation whether the /r/ link inserted is historically justified (linking) or not (intrusive). The examples below demonstrate that the environment is phonetically comparable whether the /r/ link is inserted before a suffix or before a separate word and whether it is linking or 'intrusive'.

<i>stir</i> /sta:	stirring `stɜːrɪŋ	stir it in 'stair it `in/		
<i>dear</i>	<i>dearer</i>	my dear Anna	idea of it	
/dɪə	`dıərə	maı dıər `ænə	aı`dıər əv ıt/	
roar	roaring	roar angrily	raw egg	strawy
/rɔ:	`rɔ:rɪŋ	гэн `æŋgrəlı	ro:r `eg	`stro:ri/
star	starry	a star in the sky	the spa at Bath	schwaish
/sta:	`sta:rı	ə sta:r in ðə `skai	ðə spa:r ət `ba:θ	`[wa:rɪ[/

There appears, however, to be some graduation in the likelihood of occurrence as follows:

- (1) The insertion of /r/ is obligatory before a suffix beginning with a vowel, where the /r/ is historically justified.
- (2) The insertion of /r/ is optional, though generally present, before a following word beginning with a vowel, where the /r/ is historically justified.
- (3) After [a], even an intrusive /r/ (i.e. historically unjustified) is generally used before a following word, e.g. vanilla essence /vənilər 'esəns/, vodka and tonic /vodkər ən `tonık/.
- (4) After /a:/ and /ɔ:/, an intrusive /r/ is often avoided before a following vowel, e.g. nougat and chocolate /nugg:r ən `t[pklit/, straw in the wind /stro:r in ðə `wind/.
- (5) The insertion of intrusive /r/ before a suffix is often strongly stigmatized, e.g. strawy / stron/.

Phonetically (as well as historically) the resulting /r/ closes the syllable rather than being initial in the next, e.g. the /r/ of more ice /mor ais/ is shorter than that of more rice /mo: `rais/, the latter also being associated with accent onset and possible pitch change (cf. §12.4.8).

(2) Linking [j,w]—In vocalic junctures where the first word ends in /iː/, /t/, /eɪ/, /ai/, or /oi/, a slight linking [j] may be heard between the two vowels, e.g. my arms [mai 'a:mz], may ask [mei 'a:sk], he ought [hi: 'b:t], annoy Arthur [ənəi 'a:0ə], beauty and [bju:ti 'bnd]. But this is not sufficient to be equated with phonemic

⁹ Intrusive <r> is decried as a vice as early as Sheridan (1762)

/i/; indeed, there are minimal pairs which illustrate the difference between linking [i] and phonemic /j/, my ears [mai sipz] vs my years [mai sipz], and I earn [ai sipsi] vs I yearn [ai js:n]. Similarly, a linking [w] may be heard between a final /u:/, /əu/, and /au/ and a following vowel, e.g. window open [windou woupon], now and then [nau "and 'oen], you aren't [ju: 'wa:nt]; and minimal pairs illustrating linking [w] and phonemic /w/ can be found, e.g. two-eyed [tu waid] vs too wide [tu waid]. Alternative pronunciations, more frequent in faster speech, in the case of the sequences of diphthong plus following vowel, involve the absorption of the second element of the diphthong, i.e. of the [1] in the case of /e1,a1,51/ and of the [u] in the case of /au.au/, giving renderings like annoy Arthur [and additional], my ears /ma 'iəz/, window open / wində əupən/ (see further under §8.11(8) above).

In yet another possibility, the linking [i] or [w] may be replaced by a glottal stop. This is most common before a vowel beginning an accented syllable, e.g. very angry [veri ?ængri] (see further §9.2.8). However, glottal stop in such cases is not so often used as in some other languages, e.g. German, and is usually associated in English with some degree of emphasis.

As regards boundaries where a consonant precedes a vowel, it is unusual for a word-final consonant to be carried over as initial in a word beginning with an accented vowel, the identity of the words being retained (see §12.4.8). Thus, run off, give in, less often are rarely /ra`nof, givin, le`sofn/ (shown because the nuclear tone, usually high fall in citation, does not begin on the consonant); and get up, look out, stop arguing, are not usually [ge `thap, lu `khaut, sto pha:gjun] (the plosives lacking the strong aspiration characteristic of an accented syllable-initial position). One or two phrases in common use do, however, show such transference, e.g. at home, not at all, often pronounced [a thoum, not a 'thoral; they may be considered as constituting, in effect, composite word forms.

12.4.8 Juncture

Despite the fact that the word may have its isolate-form identity considerably modified by its immediate phonemic and accentual context, both as regards its constituent sounds and its accentual or rhythmic pattern, phonetic features may be retained in the speech continuum which mark word or morpheme boundaries. Thus, the phonemic sequence /pisto:ks/ may mean pea stalks or peace talks according to the situation of the word boundaries (i.e. /i:+stɔ:/ or /i:s+tɔ:/). In this case, if the boundary occurs between /s/ and /t/, the identity of the words peace and talks may be established by the reduced /i:/ (in a syllable closed by a voiceless consonant) and by the slight aspiration of /t/; on the other hand, if the boundary occurs between /i:/ and /s/, this may be signalled by the relatively full length of /i:/ (in an open word-final syllable) and by the unaspirated allophone of /t/ (following /s/ in the same syllable), as well as by the stronger /s/. Such phonetic differentiation depends upon the speaker's consciousness of the word as an independent entity.

The following examples illustrate various ways in which phonetic cues may mark word boundaries:

I scream ice cream	/aɪ skrim/ /aɪs krim/	: long /ai/, strong /s/, little devoicing of /r/ : reduced /ai/, weak /s/, devoiced /r/
why choose white shoes	/wai t∫uz/ /wait ∫uz/	: long /ai/, short [ʃ] as element of /tʃ/ : reduced /ai/, long /ʃ/
a name an aim	/ə neim/ /ən eim/	: relatively long /n/ (beginning accent) : relatively short /n/ (accent onset on /ei/), possibility of glottal stop before /ei/

It must be noted that the glottal stop before a vowel beginning an accented syllable in the last example is optional, and generally not used unless emphasis is required (see §9.2.8). Overuse of glottal stop in such positions is typical of some foreign learners of English.

Similarly, simple word entities may be distinguished from words composed of separable morphemes:

nitrate night-rate	/naitreit/ /nait reit/	:	devoiced /r/ little devoicing of /r/
illegal ill eagle	/ɪli:gl/ /ɪl i:gl/		clear [l] before vowel dark [ł] in word-final position possibility of glottal stop before /i:/

It is to be noted, however, that such junctural cues are only potentially distinctive and, in any case, merely provide cues to word identification additional to the large number provided by the context. Junctural oppositions are, in fact, frequently neutralized in connected speech or may have such slight phonetic value as to be difficult for a listener to perceive.

12.5 Frequency of Occurrence of Monosyllabic and Polysyllabic Words

In a running text of a conversational kind, the following approximate percentages of occurrence of words containing different numbers of syllables are to be expected: one syllable—81%; two syllables—15%; three syllables—3%. The remaining 1% of words have four syllables or more, those with five or more syllables accounting for a minute proportion of the total word list. If the 1,000 most common words used are examined, 10 it has been calculated that some 15% admit of the kind of phonemic variability mentioned in §10.9. Half of such words permitting phonemic variation are monosyllables whose phonemic structure depends upon the degree of accent placed upon them.

¹⁰ Gimson (1969)

12.6 Advice to Foreign Learners

The foreign learner, even one aiming at a native pronunciation, need not attempt to reproduce in his speech all the special context forms of words mentioned in the foregoing sections. He must, however, observe the rules concerning weak forms, should cultivate the correct variations of word rhythmic patterns according to the context, and should make a proper use of liaison forms (German speakers, in particular, should avoid an excess of pre-vocalic glottal stops). In addition, he should be aware of the English assimilatory tendencies governing words in context, so as to avoid un-English assimilations such as I like that /ai 'laig ,oæt/ (incorrect voicing) or I was there /ai wəo 'oeə/ (incorrect dental modification of the place of articulation). If his speech is to approach that of a native speaker, he must use the special assimilated and elided word forms used in context which have been described above. In any case, whether or not he uses such forms himself, he must know of their existence, for otherwise he will find it difficult to understand much of ordinary colloquial English. This knowledge is particularly important because a second language is often learned on a basis of isolate word forms; in the speech of the native, however, the outline of these words will frequently be modified or obscured, as has been seen.

The foreign learner is recommended to aim at a relatively careful pronunciation of English in his own speech and, at the same time, to be aware of the features which characterize the more colloquial pronunciation he is likely to hear from native speakers. The following dialogue illustrates some of the differences which may be found between a more careful and a more colloquial pronunciation:

- What do you think we should do this evening?
 - wot do io 'θιηk wi(:) [ud `du: ðis i:vnm
- 'wpd3u 'θιηk wi fəd 'du: ðəs irvnın
- many of us will there be? How
- meni ðеэ `bi: 'hau 'DV əs (1)
- `bi: 'hau mnı ąν əs
- There are the two of us. and probably the two
- ðer 'tu: , AS/ ənd ıldedarq' ðэ 'tu: (1)
- (2)ðər 'tu: AS/ m 'probbli 'tu: door. That'll be four of already girls from next us/
- ĭfɔ:r o:l'redi 'gs:lz frəm 'nekst 'do:/ ðætl bı əν əs/
- neks \do:/ ðætl bı ĭfɔ:r əv əs/ o: redi аз:lz frm
- think they' re a nice young couple, don't vou?
- .ju: 'θιŋk ðei `nais jan , kapl/ 'dəunt (1)aı ər ə
- a(i)θιηκ ðeər `naif ,kapl/ 'dəun, t[u:
- only talked to them once. but they seemed nice
 - wans/ bət ðei `si:md nais (1) aıv əunlı `tɔ:kt ðəm
 - wans/ bət ðe(i) `si:m (2) a(ı)v əuni `tɔːk tə ðm nais

- wonder if we should go to the theatre 'wandər if wi ſud
- (1)uep' tə θι`etə a(ı) 'wʌndr ıf ſg WI 'qəu tə ðә θr`eta

 - book some seats round the trv corner kən 'trai ən 'buk eğ bnuar' \st:iz, mes `kə:nə
- a(1) kn `tra: m buk sm .si:ts/ raun `kɔ:nə

Stylistic Variation

(1)

All the features of connected speech discussed in this chapter are common in the normal, fluent speech of native speakers of English and the lack of such features would be abnormal and artificial. As throughout the rest of this book, the descriptive emphasis has been on RP which is not a monolithic accent but displays considerable variation within itself. Many factors influence this variation and one which may usefully be singled out is style of discourse, e.g. whether a speaker is being either casual, or formal and hence careful.

It is important to avoid equating 'casual' and 'rapid', since slow speech is possible in a casual situation and rapid utterances can occur in more formal circumstances. It should also be borne in mind that the average rate of delivery differs from speaker to speaker regardless of discourse style. 11 Thus the degree of formality and the rate of utterance are independent variables. The generalizations which follow are based on data drawn from 20 hours of tape-recorded spontaneous conversation concentrating on the speech of six RP speakers. 12 Rate of utterance was not found to be a regular function of style, nor was style defined in terms of rate, 13 even though casualness and rapidity often co-occur. Social situations were set up that were designed to be markedly formal (e.g. an undergraduate in conversation with a professor who was a stranger to her) or markedly casual (e.g. a man in conversation with his wife). All speakers were recorded in both formal and casual situations and the speech of all of them exhibited the same trends to differing degrees.

(1) Accent and intonation—In all styles of speech, simple falls in pitch (whether from a high or a mid starting point) account for the majority of nuclear tones. between 60% and 70% in most conversation. The falling-rising nuclear tone accounts for roughly 20% on average. Thus it may be seen that speech exhibiting a large number of rises or rise-falls would be conspicuous in this respect. In general. intonation patterns show no marked distribution in casual speech. However, formal speech shows some concentrations of one pattern, whether repetitions of fall-rise nuclear tones or a stretch of speech with repeated rising nuclear tones, e.g. If you pull them off | and put them in a glass of water | they grow little `roots | and then I you plant them in soil I and they grow I and then you 've got a nother spider plantI.

¹¹ Byrd (1992a) found women speaking 6.2% faster than men

¹² For details of this research, see Ramsaran (1978)

¹³ The slowest rate of utterance recorded in conversation was 189 sylls/min (3.1 sylls/sec.

^{7.6} segs/sec) and the fastest was 324 sylls/min (5.4 sylls/sec, 13.4 segs/sec)

Casual speech has longer intonational phrases and contains fewer accented syllables than formal speech.

- (2) Weak forms—The use of strong and weak forms does not appear to be a matter of style except in so far as the more frequent occurrence of strong forms in more formal situations results from additional accents. The alternation of strong and weak forms is entirely regular in both formal and casual styles of speech: weak forms occur unless the grammatical word is accented. Since accents are more frequent in the intonational phrases of formal speech, strong forms occur more often.
- (3) Linking /r/—As with weak forms, linking /r/ is frequent in all styles of speech, though an /r/ link is not necessarily used on every occasion where such an insertion would be possible (see §12.4.7). Its occurrence is of no stylistic significance. (The avoidance of intrusive /r/ results from a deliberate carefulness shown by some speakers in more formal speech.)
- (4) Assimilation—Assimilations occur in all styles of speech. However, unassimilated forms occur more often than assimilated forms which tend to increase in frequency in the more casual style of speech, regardless of pace.

The fact that rate of utterance has no direct effect on the use of assimilation may be illustrated by examples taken from the conversation of a single speaker who has /d3x[`[xtm/ for just shutting (also exhibiting elision of /t/) when speaking at a medium pace in a comparatively formal situation, but has foul for horse show when speaking very rapidly in a casual situation.

In general, although all types of anticipatory de-alveolar assimilation do occur, speakers use palato-alveolar assimilations (of the kind / speif [Atl/ for space shuttle) and bilabial assimilations (of the kind /ðæp 'pa:sn/ for that person) far less commonly than they use velar assimilations (of the kind /[o:k `kAt/ for short cut). Such velar assimilation is also more common than coalescent assimilations (such as $\frac{d}{+} \frac{1}{j} \rightarrow \frac{d}{3}$ as in /noutid3ptsmon/ for noted yachtsman or $\frac{z}{+} \frac{1}{j} \rightarrow$ /3/ as in /bikəʒu:/ for because you). However, coalescence is frequent in common phrases such as the auxiliary verbs + pronouns of did you, can't you etc. / did3u:, 'ka:nt[u:/ and may occur even in very formal conversation, e.g. Would you like a cup of tea? /'wodzu: 'laik ə 'kʌp əv ˌtiː/.

- (5) Elision—Elisions do show some correlation with rate of delivery. In all styles they become more frequent as the rate of utterance increases; but, whereas in formal speech they are almost entirely regular (e.g. alveolar plosives may be elided interconsonantally, /ə/ in pre-nuclear unaccented syllables, and /h/ in unaccented non-initial grammatical words), in casual speech they are less rulebound. Casual speech may contain unpredictable elisions such as those of /l/ and /ð/ in Well, that's all right /we 'æts o: rait/.
- (6) Co-occurrence of phonemic features of connected speech—It should be noted that the occurrence of /r/ links, elisions and assimilations is optional in the sense that when the appropriate phonetic environments occur, these processes may or may not operate. The preceding sections (1)-(5) indicate some tendencies in the likelihood of occurrence. If, then, such processes do operate, they will follow the regular patterns described in §§12.4.5-12.4.7. Disregarding the occasional irregular elisions that may occur in casual and/or rapid speech, it should be added that an utterance not uncommonly contains instances of both assimilation and elision in conjunction with each other, since alveolar consonant

clusters are not infrequent in word-final position: after the elision of a final /t/ or /d/ the remaining fricative or nasal may be assimilated to the place of articulation of the initial consonant of the following word, e.g. closed shop /klauzd fpp → klauz `[op → klauz `[op/, hand made /hænd `meid → hæn `meid → hæm `meid/ and just shutting /d3Ast \hat{a} \hat{b} \hat{d} $\hat{d$ has a common weak form with /d/ elided and the /ə/ may also be elided, leaving the nasal to function syllabically, particularly after plosives. The resulting syllabic [n] is itself susceptible to assimilation, which accounts for pronunciations such as [wug n'glass] (wood and glass).

- (7) Plosive release—One of the most stylistically significant variables concerns a non-phonemic variation in the release of plosives, particularly the voiceless series. As is explained in §9.2.4(2), a plosive usually has an inaudible release when followed by another stop consonant, however, in the most formal social situations, there is a marked increase in the number of audibly released plosives in such a context, e.g. [ai lukth `kwizikəl]. Women release their final stops more than men.14
- (8) Summary—No feature is unique to one style, but some features are more common in one style than the another. In particular, pre-consonantal plosives may be audibly released when speech is formal, whereas assimilations increase in frequency as speech becomes more casual. Elision is the only feature that bears a definite relation to rate, occurring more frequently as the rate increases. however formal the situation may be. There is more fluctuation of rate in casual speech.

¹⁴ Byrd (1992c)