The Sound Structure of English (McCully)

CHAPTER 10: Website

CHAPTER 10: VOWELS (3): VARIATION

COMMENT ON IN-CHAPTER EXERCISES

10.1, PAGE 151. It's difficult to reconstruct the linguistic history that lies behind your deployment of the structures of your own variety of English, although we'll be doing some work later in this chapter that will make some aspects of that history manifest. On the other hand, there are two exercises you can do which can reveal something of the *synchronic* pressures on your own English. These pressures can lead to variation, even within your own accent.

First, get hold of a Dictaphone or other recording device, and record a stretch of your own connected speech. It helps if you are to record yourself in two different situations, eg. reading aloud, then in informal conversation. Listen to the play-back. (It's customary to be nervously self-conscious, even horrified, at this stage.) Is your accent what you think it is? If it is, how would you characterise that accent, and why? If your accent is different from what you think it is, what are the principal differences? (My hunch would be that the answer to this last question will focus on, but need not be entirely restricted to, your implementation of long vowels.)

Second, consider the synchronic pressures on your phonology. The easiest way to reveal those pressures is again to record yourself speaking in two different linguistic environments, the one formal, the other informal. How does your accent differ in each environment? (*Does* it differ?) If it does differ, why might that be?

Since there's no way of knowing quite what you've recorded then it's difficult to comment on this one. Some noteworthy features of my own speech, however, are these:

Formal

- **[i] realises underlying /ɪ/ word-finally in eg. *happy, city***
- **No /h/-dropping initially in stressed syllables (eg. *house* is pronounced [haʊs] not [aʊs]); some 'h'-dropping in unstressed syllables**
- **Little or no /t/-glottaling**
- **In eg. *captain, fountain*, the final unstressed syllable tends to be realised as [ɪn]**
- **In pronouns (*she, you*) the 'full' forms appear, ie. forms containing long vowels (/ʃi:/, /ju:/**

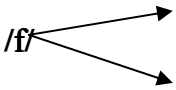
Informal

- ***happy, city* have word-final [ɪ]**
- **Sporadic /h/-dropping in unstressed syllables, esp. pronoun *he***
- **Some /t/-glottaling, esp. word-finally in eg. *get* [gɛʔ]**
- **In *captain, fountain* the final syllable is realised [ən]**
- **In pronouns, 'reduced' forms appear: *she* [ʃɪ] etc.**

10.2, PAGE 155. Consider the following data, and suggest what had occurred, in terms of phonemic split, to account for the present-day English spellings. Words are given in their *alphabetic* forms, but in each line of example I have indicated which present-day consonant needs some kind of explanation, and this last I have transcribed phonemically.

Old English (OE)	Present-day English	
fæder	*father*	/f/
fæst	*fast ('firm, fixed')*	/f/
æfter	*after*	/f/
clif	*cliff*	/f/
heofon	*heaven*	/v/
seolfor	*silver*	/v/

The answer to this one is discussed immediately below the box in the main text. In summary:



[f] syllable-initially, syllable-finally

[v] between two voiced segments

10.2. PAGE 157. Can you work out the environment which might suggest how and why /ʊ/ was retained in words such as *bush* and *pull*, but drifted to /ʌ/ in words such as *cut* and *strut*?

Again, this is discussed fairly fully in the main text. Here's the relevant quote: 'In southern varieties, /ʊ/ unrounded, and usually drifted towards /ʌ/ *except where it was preceded by a bilabial consonant* (such as /b/ or /p/). That observation would help to account for the fact that speakers of southern British Englishes typically have /bʊʃ/ "bush" alongside eg. /nʌt/ "nut".'

10.3, PAGES 159-160. Spellings and pronunciations, GVS

Spellings		Pronunciations		
ME	Modern	Chaucer	Shakespeare	PDE ('standard' varieties)
bite	bite	/bi:t/	/bəɪt/	/baɪt/
bete	beet (sugar-beet)	/be:t/	/bi:t/	/bi:t/
bete	beat	/bɛ:t/	/be:t/	/bi:t/
abate	abate	/əba:t/	/əbɛ:t/	/əbeɪt/
foul	foul	/fu:l/	/fəʊl/	/faʊl/
fol	fool	/fo:l/	/fu:l/	/fu:l/
fole	foal	/fɔ:l/	/fo:l/	/fəʊl/

Using the information above, try to reconstruct where and how the long vowels changed in quality during the GVS. For instance, it seems the long vowel associated with position 1, /i:/, began to diphthongise, having the quality /əɪ/ in Shakespeare's English. Accordingly, and in terms of what we've been discussing in this section, it seems likely that the nearest adjacent long vowel would change in quality, filling the gap left by the diphthongisation of /i:/. Does this happen? And if that does happen, what is its consequence likely to be? Does something similar appear to occur in the set of back vowels?

First, note that the table above is simplified, in that I haven't shown the word-final schwa that would have been a part of the pronunciation of the words in question for conservative speaker's of Chaucer's London English. (I say as much in a footnote at the end of chapter 10.)

Second, what seems to happen is that

- **The highest vowels (/u:/ and /i:/) diphthongise, first to a glide with schwa as its first element, and later, to the fully-dissimilated /aʊ/ and /aɪ/. ('Dissimilation' is a technical term for the development of diphthongs whose two elements slowly become maximally dissimilar from each other, ie. in the present-day diphthong /aʊ/ (in words such as 'house'), the first element of the diphthong /a/ is a low, front element, and is therefore maximally different from the second element, /ʊ/, which is high and back.)**
- **Once the /i:/ of Chaucer's English starts to diphthongise, then the main text states that the 'nearest adjacent long vowel' would theoretically move into the place formerly occupied by /i:/. Does this happen? Yes, it appears to – words such as *beet*, pronounced in Chaucer's English with /e:/, are by Shakespeare's time (and in large areas of the south and Midlands) pronounced with /i:/.**
- **And once /e:/ starts to raise? Then it follows that in our theoretical model, the next lowest, adjacent long vowel to /e:/ would raise into the space vacated by /e:/. Does that happen? Yes, again it appears to – words pronounced with /ɛ:/ in Chaucer's English are pronounced with /e:/ in Shakespeare's English.**

We've just described changes occurring in the set of front vowels. If we're right that *symmetry* is often involved in changes of vowel quality, then we should find the same sort of thing happening (and happening at the same time) in the back vowel set. Chaucer's /u:/ appears to dissimilate, first to /əʊ/ and then to /aʊ/, and as a consequence – more carefully, *arguably* as a consequence – Chaucer's /o:/ raises to /u:/, a fact which helps to explain why present-day *moon* is spelled with <oo> but pronounced in many accents as /mu:n/.

If you'd like to read further about the GVS, a good starting-point for further work would be the description given in Charles Barber (1993) *The English language: a historical introduction* (Cambridge: CUP).

10.4, PAGE 164. Try to get hold of a recording of an RP speaker of English, preferably as his or her variety was recorded in the period 1920-1940. (Such recordings can sometimes be downloaded from the Internet. Try searching on eg. *Gaumont news*.) In

what follows, I'm going to describe a mere *one* feature of (conservative, old-fashioned) RP, and that is its system of short front vowels, but there will be other features of the phonology that will have changed. What are they?

The likely answer to this is fairly thoroughly explored in-text on page 165. The discussion there relates to the form of the short front vowels. I've nothing to add to that here.

10.5, PAGE 169. Does your variety of English have *happY-tensing?* If so, is this feature of your speech high prestige, low prestige, or neither? How conscious are you of it (or of its absence from your speech)? How do you regard it – as prestigious, non-prestigious, neutral – when you come across *happY-tensing* in others?

As explored above in the discussion of 10.1, my own speech has what appears to be sporadic *happY*-tensing, but the tensing involved seems to be conditioned, these days, by an adaptation of my speech to prestige norms which are those of Standard Southern British English. That is, the tensing involves underlying /ɪ/ being realised as the 'half-long' [i]. This feature seems to be shared by many other speakers of either advanced RP or SSE. In terms of whether this is a prestige feature or not…. I simply don't think about it. It's in some way 'neutral'.

Interestingly, however, there was a time in my life when I suspect I had much more radical *happY*-tensing, though I can't prove it, and there are no recordings of my speech to help me prove it. Between 1979 and 1982 I studied English at the University of Newcastle upon Tyne (in the north-east of England) and was there surrounded by friends and acquaintances who *did* have *happY*-tensing, and tensing, moreover, of the kind where underlying /ɪ/ is realised as [i:]. Because I found this feature of speech in the language of friends and acquaintances, I almost always found it attractive…and (therefore) may even have tried to acquire it. I'm sure I did. In other words, and despite the fact that my friends and acquaintances of that time were drawn from many different social groups, I found that that *happY*-tensing was in some sense 'prestige' (otherwise it isn't likely I'd have tried to acquire it).

The point is that speakers tend to want to acquire (and slowly, many do in fact acquire), features they regard as 'prestige', and 'prestige' doesn't have to mean 'upper class'. There also seems to be a difference in men and women in terms of how they regard their speech. In a classic study conducted many years ago in Norwich, the sociolinguist Peter Trudgill showed that men (but not women) seemed very favourably disposed to what they preceived to be 'working-class speech'. In one study, for instance, some male respondents *claimed* to pronounce the non-prestige form [tu:n] (for <tune>) *even when what they actually pronounced* was the standard, prestige form [tju:n] (Trudgill1983: 90). That self-reported data is very hard to explain unless these male respondents were in some way responding to the 'covert prestige' in which they held 'working-class speech'. In the same study, women respondents were more likely to *claim* they were using higher-class prestige forms – when in fact, they weren't.

If you'd like to read more about this, another good starting-point would be Peter Trudgill (1983) *Sociolinguistics*. Revised second edition. London: Penguin. See specially chapter 4, 'Language and sex'.

10.6, PAGE 174. Transcribe the *phrases* below as these would be pronounced by the speaker of purportedly *non-rhotic* accents:

Word	Transcription	Phrase	Transcription
fear	/fɪə/	*fear is*	?
near	/nɪə/	*near enough*	?
air	/eə/	*air is*	?
hammer	/hamə/	*hammer is*	?

A very simple exercise. You should find that your new transcriptions include 'linking *r*' between the first and second words. However, there's something further to think about in this exercise, and it's this:

So far in the main text, and in large parts of the website work we've done or are currently doing, I've been transcribing the centring diphthongs /ɪə/ (*fear)* and /eə/ (*air, fair*) as centring diphthongs. I've also said quite bluntly that my own speech includes these phonemes as part of its underlying inventory of vowels.

It's time to wonder whether those transcriptions and that blunt claim are true. We should begin to wonder, because it seems that such centring diphthongs almost invariably show up (or perhaps, show up most clearly) when the word in which they occurs has what *historically* was a post-vocalic 'r'. That is, the synchronic presence of schwa might correlate in some way with the former presence of 'r' word-finally, ie. Schwa here would be a 'residue' of a former 'r'. If that's along the right lines, then we could and indeed should claim that the underlying form of eg. *fear* isn't /fɪə/ but something like /fi:r/ or /fi:ɹ/.

That idea is explored in the next exercise, in the main text of chapter 11 and in the website pages which accompany that chapter.

10.6, PAGE 175. If their underlying phonology contains precisely those post-vocalic 'r's which we'd unhesitatingly say were parts of the phonology of rhotic accents, then how 'non-rhotic' are 'non-rhotic' accents?

The answer is that they are not *underlyingly* 'non-rhotic' at all! The main text now introduces the idea that there are rules operating in your pronunciation of English such that in some varieties, post-vocalic 'r' may be deleted, while other varieties will either not have, or not make use of, that same rule (these varieties would allow [ɹ] to appear on the phonetic surface in words such as *fear*). The relevant rule is explored in chapter 11.

10.6, PAGE 175. Study the following data. The data relate again to non-rhotic accents, although the phenomenon also occurs in rhotic ones. First, phonemically transcribe the words in the left-hand column. Next, phonemically transcribe the phrases in the right-hand column. Last, consider liaison: what transitional phenomena can you observe in your pronunciation and transcription of the *phrases*? I've done the first example for you.

Word	Transcription	Phrase	Transcription
<law>	/lɔ:/	<law and order>	?/lɔ:rənɔ:rdər/
<cinema>		<cinema is>	
<Crimea>		<Crimea is>	
<spa>		<spa is>	

The main text makes the point that when [r] appears on the surface in these examples, it cannot be a realisation of some historically-prior and underlying 'r'. Unlike the word *fear*, the word *law never* contained an underlying 'r'. Therefore in these examples, what occurs is what linguists describe as 'intrusive "r"' rather than 'linking "r"'.

The main text asks 'where does intrusive 'r' come from?' You'll find an answer – and a very surprising one – in the work we do on the same topic in the final chapter.

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CHAPTER 10: SUGGESTED SOLUTIONS TO END-OF-CHAPTER EXERCISES

Exercise 10.A. Make simple phonemic transcriptions of the following words, as these transcriptions reflect your own variety of English, paying particular attention – based on the transcriptions you make - to whether or not you speak a rhotic or non-rhotic variety:

<robe>, <prop>, <brown>, <torpedo>, <rip>, <part>, <appear>, <par>, <supermarket>, <Europa>

<robe>	/ɹəʊb/	
<prop>	/pɹɒp/	
<brown>	/bɹaʊn/	
<torpedo>	/tɔ:pi:dəʊ/	(BUT why not /tɔ:rpi:dəʊ/?)
<rip>	/ɹɪp/	
<part>	/pɑ:t/	(BUT why not /pɑ:rt/?)
<appear>	/əpɪə/	(BUT in light of the foregoing, wouldn't /əpi:r/ be more plausible?)
<par>	/pɑ:/	(BUT in the light of the foregoing, what about /pɑ:r/?)
<supermarket>	/su:pəmɑ:kɪt/	(BUT why not /su:pərmɑ:kɪt/?)
<Europa>	/jəɹəʊpə/	

(Here transcribed in my own accent, which is allegedly non-rhotic. McC.)

Exercise 10.B. First, make simple phonemic transcriptions of each word, and then consider how each word would be syllabified. The data contain segments which may be ambisyllabic, or which are in other ways problematic or provoking in terms of their syllabification:

<ample>, <implying>, <tunnel>, <tunnelling>, <care>, <caring>, <cough>, <coffin>, <summer>, <summery>, <summary>, <extraordinary>

Phonemic transcription **Syllabification**

/ampl/ **am.pl**

[Comment. /p/ is syllabified as the onset of the second, unstressed syllable by the PMO. /l/ may fill the nucleus of unstressed syllables.]

/ɪmplaɪjɪŋ/ **ɪm.plaɪ.jɪŋ**

[Comment. /p/ and /j/ are onset-initial by the PMO. For the transcription /ŋ/ for what's written <ng>, see chapter 11, particularly end-of-chapter exercise 11B.]

/tʌnl/ **tʌ[n]l**

[Comment. As the symbol [..] implies (and as it was used earlier in the main text], /n/ is arguably ambisyllabic.]

/tʌnəlɪŋ/ **tʌ[n]ə.lɪŋ**

[Comment. /l/ in *tunnelling* seems more difficult to syllabify as the nucleus of an unstressed syllable than it does in *tunnel*. [n] is arguably ambisyllabic, but /l/, which follows an unstressed syllable, forms the onset of the final syllable under the PMO, and there's no reason or context to motivate ambisyllabicity there.]

/kɛ:/ **not applicable**

[Comment: The transcription reflects my own variety (but see the following sentence). RP and advanced RP speakers might have /eə/, but it's also plausible, given the analysis we've begun to develop in chapter 10 and will continue in chapter 11, that the underlying form is /kɛ:r/.]

/kɛ:ɹɪŋ/ **kɛ:.ɹɪŋ**

[Comment: /ɹ/ is thus syllabified by the PMO, even though it doesn't appear on the surface in eg. non-rhotic pronunciations of *care*.]

/kɒf/ **not applicable**

/kɒfɪn/ **kɒ[f]ɪn**

[Comment. Note that /f/ is here arguably ambisyllabic, even though the /f/ of *cough* is unambiguosly part of the coda.]

/sʌmə/ **sʌ[m]ə**

[Comment. The transcription is that of a non-rhotic variety, BUT if non-rhotic varieties have underlying 'r' in eg. words such as *air* and *care*, why shouldn't they have underlying 'r' in *summer* (/sʌmr/)?]

/sʌməɹ/ **sʌ[m]ə.ɹ**

[Comment. [m] arguably ambisyllabic. Notice also that while the 'r'of *summer* (in rhotic and very possibly non-rhotic varieties) is unambiguously coda- and word-final, the 'r' of *summery* is onset-initial, despite the fact that the morphology of the same word is [[summer]+y] There is therefore apparently a dislocation, as it were – which we've noticed before – between a word's *morphology* and its *syllabification*.]

/sʌməɹ/ ('summary' **sʌ[m]ə.ɹ**

[Comment. In my speech, a homophone with *summery* BUT notice that the morphological composition of *summary* is [summary] (*[[summar]+y] because there is no word-root *[summar])

/ɛkstɹɔ:dənəɹ/ **ɛk.stɹɔ:.də.nə.ɹ**

[Comment. Transcription tries to capture my own variety. The schwas in the final syllable are vulnerable to deletion, and it's entirely possible that in rapid speech the word is realised as [ɛk.stɹɔ:.dn.əɹ], where [n] is a syllabic nasal lying in the nucleus of an unstressed syllable.]

<u>Exercise 10.C.</u> In chapter 10 we said that a word such as *fear*, as this might be broadly transcribed in the underlying form of a non-rhotic accent, might be /fi:r/. Then we suggested that non-rhotic accents may have a rule of /r/-Deletion. But even if /r/-Deletion is assumed to operate on this example, how would you account for the form /fiə/? Hint: you might need another rule – but what might that rule look like, and would it apply before or after the /r/-Deletion rule?

We need (i) a rule to change to underlying /i:/ to /ɪə/, and we need (ii) a rule to delete the 'r'in non-rhotic accents. But since it is precisely the presumed underlying 'r' which triggers the process /i:/ > /ɪə/ then if there are indeed two such rules then they must operate in the following order: first (i) and then (ii), ie. vowel-change must take place before r-deletion. This rule is further discussed and formalised in chapter 11, see especially 11.4.

<u>Exercise 10.D.</u> We've suggested that phonemes may be the expression of the sum of their distinctive features. In chapter 10, for example, we specified possible features such as [tense] and [voice] might be relevant for the classification of English vowels – and may help to explain the behaviour of vowels. Looking back at the work we've done in this book, and specifically at chapter 2- 4, what kind of distinctive features might it be reasonable to propose as belonging to English consonants? Hint (1): a good idea would be to begin with a feature such as [voice]. Hint (2): what sort of distinctive feature might account for the difference between /s/ and /p/, /z/ and /k/, /m/ and /t/?

We need [voice] – more specifically [±voice] – to help us account for the differences between voiced and voiceless consonants. We need [tense] - more specifically, [±tense] - because 'tenseness' helps us to account most neatly for the distinction between what we've been informally calling the 'long' vowel /i:/ and the 'short' ([-tense]) vowel /ɪ/. But once we allow distinctive features to do this for us, we can allow then to do maky other things.

/s/ and /p/, for example, are both voiceless, so [±voice] doesn't help us at all to differentiate them. We know, hoever, that /s/ is a fricative, and that /p/ is not. As it happens, /s/ belongs to a *class* of very *strident* ('hissy') sounds, and therefore might be classified as [+strident], whereas /p/ does not belong to that class, instead belonging to a class of stops, which last sounds are in principle non-continuant ('no continuous air escape'). Given this sort of analysis, /s/ might be characterised as [-voice, +strident, +continuant] and /p/ as [-voice, -strident, +continuant].

/z/ and /k/. Using the terminology we're now exploring, /z/ is [+continuant, +voice] and /k/ is [-continuant, -voice].

/m/ and /t/. /m/ is in principle a nasal stop, while /t/ is in principle an oral stop. That is, both sounds are [-continuant], but one, /m/ is {+nasal], while the other, /t/, is [-nasal].

This analysis is discussed in chapter 11, which offers a much fuller, though still introductory and incomplete, description of distinctive feature theory.

Further reading

Chapter 10 of the main text includes a rather long reading-list, and I have nothing to add to that here beyond directing you in addition to the Peter Trudgill reference you'll find above (page 4 of this web chapter).

Web resources

The key thing at present is for you to begin to familiarise yourself with variation in as many of the varieties of English as possible. One resource I thoroughly recommend (although it's not available online but as a CD accompanying a two-volume book) is Schneider et al. – a reference detailed in full in the main text.

One other online resource you might like to browse is the 'Varieties of English' project maintained by the *Language Samples Project* in the Anthropology Department of the University of Arizona. Please click on http://www.ic.arizona.edu/~lsp/. While the site is orientated largely to varieties of English found in North America, there are also informative and useful pages about varieties of British English, including Cockney and 'Estuary English'.