The Sound Structure of English (McCully)

CHAPTER 4: Website

CHAPTER 4: CONSONANTS (DISTRIBUTION)

COMMENT ON IN-CHAPTER EXERCISES

> **4.1, PAGE 53: Let's make the well-formedness, or otherwise, of syllable onsets somewhat more analytically tricky. If there are *two* consonants present in the onset of a well-formed syllable, what can these two consonants be? And what can they not be? You might like to make two lists, for well-formed and non-well-formed syllables. Work top-to-bottom from the consonant inventory list already given. Give examples. You can use the alphabetic system of English for your examples if necessary.**

Your lists might look something like this (but notice – the following list is still by no means complete):

Distribution of English consonants

1. Well-formed 2-consonant onsets		2. Ill-formed (or non-occurring) 2-consonant onsets	
/pl/	Example: \<play\>	/lp/	Example: *\<lpay\>
/pr/	Example: \<pray\> (etc.)	/rp/	Example: *\<rpay\>
/br/	*brown, bride*	/rb/	Example: *\<rbit\>
/bl/	*blue*	/lb/	Example: *\<lbue\>
/fr/	*free*	/rf/	Example: *\<rfee\>
/fl/	*flee*	/lf/	Example: *\<lfee\>
/vr/	Example: \<vroom\>?	/rv/	Example: *\<rvoom\>
[/vl/ non-occurring?]		/vl/	Example: *\<vloom\>
/θr/	Example: \<three\>	/rθ/	Example: *\<rthee\>
[/θl/ non-occurring?]		/lθ/	Example: *\<lthee\>
[/ð/ doesn't seem to occur with a following consonant in a well-formed onset]			
/tr/	*try*	/rt/	Example: *\<rty\>
[/tl/ non-occurring?]		/tl/	Example: *\<tly\>
/dr/	*dry*	/rd/	Example: *\<rdy\>
/sp/	*spin*	/ps/	Example: *\<psin\>
/st/	*step*	/ts/	Example: *\<tsep\>
/sk/	*skin*	/ks/	Example: *\<ksin\>
/sf/	Example: \<sphere\>	/fs/	Example: *\<fsin\>
/sn/	*snow*	/ns/	Example: *\<nsow\>
/sm/	*smooth*	/ms/	Example: *\<msooth\>

There are some further items we could and should add here:

Occurring/well-formed		Non-occurring/ill-formed	
/tw/	*twice*	/wt/	Example: *wtice
/sr/	?*syringe*	/rs/	Example: *rsinge

 [For many speakers, this word is pronounced with a vowel after the initial /s/]

/sw/	*swim*	/ws/	Example: *wsim
/sj/	*suit*	/js/	Example: *jsuit

[Note that the pronunciation of *suit* with /s/+glide is old-fashioned RP, and will rarely occur in eg. GA.]

/tj/	*tune*	/jt/	Example: *jtune

[As with /s/+glide, for many GA speakers the word <tune> would be pronounced with no glide after the initial consonant (cf. 'Loony Toons')]

/nj/	*new*	/jn/	Example: *jnew
/mj/	*mew*	/jm/	Example: *jmew
/pj/	*pew*	/jp/	Example: *jpew
/bj/	*beaut(y)*, *Bute*	/jb/	Example: *jbeaut

4.3, PAGE 57: Can you work out what this realisation of /t/ might be? If it helps, consider the following words and phrases (pronounce them if necessary, or get a friend of colleague to pronounce them): *get*, *get at*, *getting*; *hat*, *hatchet*, *hat-shop*; *ought*, *ought to*.

This is a question about the *glottal stop*. Although the question is fully answered

within the chapter, you might like to supplement your reading by clicking on

http://www.bbc.co.uk/dna/h2g2/A1002808

This site includes a good definition of the glottal stop, and also asks you to try

your hand (?) at pronouncing *Betty bought a bit of butter*….

You can also hear the glottal stop being pronounced if you click on

http://www.paulmeier.com/ipa/consonants.html and then click on the symbol for

the glottal stop.

CHAPTER 4: SUGGESTED SOLUTIONS TO END-OF-CHAPTER

EXERCISES

Exercise 4.A. **Re-read the section on allophones (4.2). Now think about the phonemes /h/ and /ŋ/. One - /h/ - only ever occurs at the beginning of a syllable, the other - /ŋ/ - only ever occurs syllable-finally.**

Both /h/ and /ŋ/ seem on the face of it to be phonemes – minimal pair tests strongly suggest as much – but given the distributional facts, are /h/ and /ŋ/ best analysed as phonemes? What else could they theoretically be analysed as? (Note: this problem will be revisited in chapter 11.)

Theoretically, and since they appear to be in complementary distribution, /h/ and /ŋ/ could be allophones of some underlying phoneme. The problem then would be working out what that phoneme might be. The problem is compounded by the fact that /h/ and /ŋ/ appear to have very different articulatory qualities (see below).

A further reason why we should NOT analyse /h/ and /ŋ/ as allophones of an underlying phoneme is that we could very well regard /ŋ/ not as a phoneme but as an allophone, since it appears only ever to occur after a vowel and in final position within the syllable – usually where there is syllable-final <g> present in the written signal. One thing we shall explore again in chapter 11 is whether the written signal of English, ie. the spelling system, encodes information about historical pronunciation. We could, for instance, argue that the <g> was once pronounced, and that the /n/ which preceded it assimilated to the velar quality of this /g/…. More about this topic in chapter 11 of the hard text.

One other thing you might like to notice is that if we were to consider /h/ and /ŋ/ as allophones of some underlying phoneme then even as potential allophones these two sounds have *nothing phonetic in common*. It's usually the case that allophones of some underlying phoneme share at least some phonetic feature.

Exercise 4.B. **…Try to judge the degree to which your accent has rhoticity.**

To help you understand how widespread rhoticity is, try exploring varieties of English within eg. the USA. By clicking on

http://accent.gmu.edu/browse_language.php?function=find&language=english

you will be taken to a set of recordings (made by researchers at the George Mason University) and will be able to read IPA transcriptions alongside the recordings. You will also be able to analyse the 'phonological generalisations' made by the researchers – and these generalisations include remarks about rhoticity.

Exercise 4.C. **(It might be helpful to re-read 4.2- 4.3. before completing the following.)** **What follows is a list of** *phonetic* **transcriptions of single words. Notice that these phonetic transcriptions are set within square brackets, and may use diacritics (ie. those diacritics we've encountered in this chapter). For each transcription, notate what the underlying (= simple phonemic) transcription would be. I've completed the first example for you:**

> **1. [pʰ̩m]   Simple phonemic   /pm/   Word: 'pin'**
> **2. [fɪt]   /fɪt/   'fit'**
> **3. [seʔ]   /set/   'set'**

[Note: the glottal stop can also be a realisation of underlying /p, k/, so theoretically [seʔ] could equally be a realisation of underlying /sep, sek/. However, there are no words <sep> and <sek> in English; such words simply don't occur, not because they're ill-formed but because they're just….gaps in the lexicon.]

> **4. [ʔɪnɪŋz]   /ɪnɪŋz/   'innings'**
> **5. [pʰɪʔʧɪŋ]   /pɪʧɪŋ/   'pitching'**

Exercise 4.D

See again 4.1., PAGE 53 (in-text exercise) above.

Links to other sites

Although rhoticity is often, and properly, linked to many accents spoken in the US and Canada you should also be very aware that rhoticity features in many accents spoken within the UK, and also features in some varieties of Hiberno (Irish) English. Many speakers of Scottish varieties of English, for instance, have rhoticity. By clicking on

http://accent.gmu.edu/searchsaa.php?function=detail&speakerid=82

you can hear and analyse the speech of a speaker (a 37 year old male) from Glasgow.