Notes on the Vowel Analysis in CommonWords

Diphthongs and Consonant Digraphs
Syllabic Consonants
[r]-Colored Vowels
Low Back Vowels

Diphthongs and Consonant Digraphs. For now, following Ladefoged in his *A Course in Phonetics* (NY: Harcourt Brace Jovanovich, 1975, p. 74), I treat the diphthongs [oi] and [ou] as tense, though for our purposes the issue is not too important since digraph spellings are not affected by the standard tactical distinctions.

Though there are several complications, I regularly treat the consonant digraphs <ch>, <ph>, <sh>, and as cases of CC in VCC strings. (See AES, 101-108 for discussion of some of the complications.)

Syllabic Consonants. Though the peak of most syllables is a vowel sound spelled by a vowel letter, in some syllables the peak is spelled by a consonant. These peak consonants are called *syllabic consonants*. The most common is [l2], usually spelled <l> as in *bottle* [bo1t'l2], with a nondiacritical silent final <e>, but occasionally <ll> as in one pronunciation of *satellite* [sa1t'l2-i2t,]. The nasal [n2] also is syllabic, as in *button* [bu1t'n2]. The nasal [m] is not syllabic since it always is preceded by a distinct schwa sound, as in *chasm* [ka1z'əm]. The pronunciation of syllabic consonants tends to vary a great deal from dialect to dialect, from speaker to speaker within dialects, and even with a given speaker from one setting to another.

[r]-Colored Vowels. The <Vre> spellings — as in bare, tire, and tore — introduce some complexities. Because of the effect of the [r] on the preceding vowel sound, we must extend the notion of diacritic function to include sometimes subtle changes in the vowel sound other than the typical short-long distinction. In the <are> and <ire> spellings, the silent <e> is always diacritic: Except for the irregular verb are and its contraction aren't, where <are> spells [o3r], the <are> spelling always spells the [a3r] sound, as in bare. Since words like bare contrast in pronunciation with words like bar, the silent <e>'s can be said to be diacritic: care/car, fare/far, mare/mar, pare/par, tare/tar, etc. A similar pattern holds for the <ire> spelling, which consistently spells the [i2r] sound, as in fire. Fire contrasts

with *fir* – as does *sire* with *sir*, so again the <e> is diacritic.

The opposite holds with the <ore> spelling, which consistently spells [o5r], as in *tore*. But phonetically *tore* does not contrast with the homophonic *tor* "rocky peak", without the final <e>. or *torch* with a consonant after the <r>. So the <e> in <ore> is not diacritic. Other examples are *bore*, *border*; *for*, *fore*; *or*, *ore*; *sore*, *sort*, etc.

With the <ere> and <ure> spellings whether the silent final <e> is diacritic depends on the sound being spelled. When <ere> spells [u1r] as in were, the final <e> is not diacritic: It does not affect the vowel sound, as can be seen by comparing were with words like her and term. However, when <ere> spells [e3r] as in here, the final <e> is diacritic – compare here with her. And when it spells [a3r] as in there and where and in the preposition ere, the final <e> is also diacritic. Ere contrasts with the interjection er, and there contrasts with, say, the <ther> in thermostat.

Similarly, when <ure> spells the unstressed [u4r], as in *capture*, the final <e> is not diacritic, as can be seen by comparing *capture* with the word *sulphur* without the final <e>. However, when <ure> spells [u3r], as in *sure*, the <e> is diacritic – compare *surely* with the word *surly* with no <e>. And when it spells [yu3r], as in *cure*, the <e> is also diacritic – compare *cure* with *cur*.

The normal VCV/VCC contrast, as in *fate* and *fatten*, holds in several cases when the consonant involved is [r]. However, we must again allow for varying effects of the [r] on the preceding vowel and must sometimes choose among accepted variant pronunciations:

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<arV> = [a3r] as in care vs. <arr> = [a1r] as in carry
<erV> = [e3r] as in here vs. <err> = [e1r] as in herring
<irV> = [i2r] as mire vs. <irr> = [i1r] as in mirror
<orV> = [o5r] as in bore vs. <orr> = [o1r] as in borrow
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The VrV/Vrr contrast is somewhat different with <u>: <urV> = [u3r] as in *sure* or [yu3r] as in *cure* vs. <urr> = [u1r] as in *current*

The pattern does not apply to <yrV>, as in *lyric*, *pyramid* with <yrV> and a short head vowel, or to <yrr>, as in the rare and technical *pyrrole* with [e3r].

Notice that the Vrr pattern usually involves the regular short vowel with very little, if any, [r]-coloring of the vowel. Among the long vowels, [i2r] also involves very little or no [r]-coloring, [o5r] involves more, [a3r] and [e3r] even more yet. (For even more on [r]-colored vowels, see *AES*, chap. 25, "Vowels before /r/", 307-26.)

There is room in any description of correspondences for honest differences of opinion, especially in view of the sometimes large differences in pronunciation among various dialects. These differences might be expected to arise particularly with the treatment of the non-long <o> vowels, schwa, and [r]-colored vowels.

Low Back Vowels. In *AES* I recognized only two different low back vowels, there called high and low short <o>. Doing so conflated some vowel sounds and spellings that I now believe should be distinguished. CommonWords now recognizes three low back vowels, tagged [o1], [o3], and [o4]. I've used the *American Heritage Dictionary (AHD)* and *Webster's* 3^{rd} (*W3*) as references since they are widely available and accessible. In *AHD*'s pronunciation system our [o1] = their [ŏ], [o3] = [ä], and [o4] = [ô]. In *W3* 's pronunciation system our [o1] and [o3] both = their [ä], and our [o4] = their [ŏ].

Distinguishing the three groups of low back vowels raises some difficulties, especially in identifying orthographically short and long vowels. Most long vowels are phonetically tense – that is, pronounced with marked tenseness in the vocal tract. Orthographically short vowels are phonetically lax.

The distinction between long and short vowels involves us with variations in pronunciation that go back into Middle English. For instance, in CommonWords there are 100 words with vowels tagged [o4] and spelled with the digraphs <au>, <aw>, <oa>, or <ou>. Since orthographic tactical patterns like VCV and VCC do not apply to vowel digraphs, these 100 instances of [o4] lie outside the normal short and long tactics. I treat [o4] as linguistically tense but orthographically neither long nor short. Several instances with tense [o4] pronunciations listed first in the AHD and W3 have variant pronunciations with short and lax [o1]. Those instances in which the vowel is spelled <o> I have tagged [o1] because the <o> spellings tend to be consistent with more general short vowel tactics. For

instance, they typically occur in VCC or VC# patterns – as in *coffee* and *fog*. Also they are affected by diacritic silent final <e>'s as in the contrasts between *dog* and *doge*, *cloth* and *clothe*, *lop* and *lope*. Such is not the case with the <a> and digraph spellings, which I tag as [o4]. The degree of variation here is also reflected in the fact that seventeen other words with [o1] pronunciations listed first in the *AHD* have [o4] as variants: nine with the <o> spelling, eight with <a> following <w>. All of these I tag as [o1].

The low back vowel [o1] is the regular short <o>: In the CommonWords sample it is overwhelmingly spelled <o>: in 732 of the 771 instances of [o1]. It is spelled <a> in 32 words, always following [w], a regular rounding of the earlier <a> vowel that became widespread by the 17th century. In four words it is spelled <oh> or <ow>, as in *John* and *knowledge*. (The other four spellings of [o1] are in the adoptions *bureaucracy, entrepreneur, entourage,* and *leprechaun*.) In general the [o1] sounds occur in normal short vowel patterns VCC and CVC# and participate in normal short vs. long vowel contrasts, as in *wan* vs. *wane*, *dot* vs. *dote*, and *hop* vs. *hope*.

Orthographically, the low back vowels [o3], and [o4], are in a class quite different from [o1]. Both are tense, or at least moderately tense, vowels. And although tense vowels are typically classed as orthographically long, [o3] and [o4] do not behave like long vowels. Admittedly, like other long (tense) vowels, they can occur in word-final position in words like *grandma* and *Panama*, *straw* and *jaw*. But they both also occur in what would normally be short vowel patterns, as [o3] in *calm*, *father*, and [o4] in *salt* and *strong* (compare *film*, *rather*, *silt*, *string*). Neither [o3] nor [o4] seems ever to be involved in the normal tactics for long vowels. Thus, I treat [o3] and [o4] as tense, but not orthographically long. So we have lax and short [o1], tense and long [o2], and tense but neither long nor short [o3] and [o4].