

### Journal 5

I've had more trouble than I expected in revising my phonology section, specifically the subsections dealing with vowels and syllable structure. Looking at the corpus, it's hard at times to tell what is a diphthong and what isn't. I tried to go back to what I know about analyses of English in order to apply similar reasoning here, but then I realized I didn't fully understand how those decisions are made in analysis of English.

In the most ideal (i.e., most conducive to analysis) case, a single phoneme is realized as a single phone with little variation except on the boundaries as one phone transitions into the other. We might think of the relatively pure monophthongic vowel phonemes of Spanish for a real-world example of something approaching this ideal. But look at English. There are some things that “objectively” seem to be composed of two phones that we'd nevertheless like to think of a single phoneme for other analytic reasons.

An example is the word *boat*, whose vowel is undeniably made of two phonetic segments, in this case something close to [oʊ]. We nevertheless understand this sequence as phonemic /o/, a decision motivated presumably by the way the vowel /o/ patterns with other vowels, but it is this decision process which I do not fully understand. I think one line of reasoning is that [o] never phonemically contrasts with [oʊ]. The other reasons for why we ought to understand [oʊ] as /u/, though, are unclear to me. Syllable structure couldn't have much to do with it: we are happy to have syllables in English with empty onsets and codas as in *Ju.de.a*, *zo.e.a* (a sort of plankton), *Mong.ol.i.a*, *me.mo.ra.bil.i.a*, and *E.lys.i.an*.

Turning back to what motivated all this thought in Arapesh, I'm not sure how to understand the vowels in some words like [dɔuk] 'today', [ɛcah<sup>w</sup>] ~ [əɪcah<sup>w</sup>] 'bag', and [mɔkədai] 'now', among others. In the 'today' word, the vowel sequence seems variable, sometimes being heard as only [o]. In the 'bag' word, an [e] sometimes seems like [əɪ]--both of which we know to be independent

phonemes /ə/ and /i/. In the 'now' word, a similar situation is found but without the apparent allophony: 'now' can only be said (as far as we can tell) with [ai] at the end, a sequence whose segments both form independent phonemes /a/ and /i/.

So the question I've been trying to answer is: how do I decide whether a sequence, like [ai], should be listed as a diphthong /ai/ or a sequence of monophthongs /a/ and /i/? Maybe there are hints phoneticians use. Just thinking off the top of my head here, there may be phonetic qualities that indicate one over the other. For example, the normal pronunciation of the vocalic sequence in *ice* might be considered phonetically a diphthong, but in very exaggerated pronunciation (perhaps following a question "You said you wanted *rice*?") a phonetic realization [a.is] might be observed which could seem somehow phonetically a sequence of two monophthongic segments. For one thing, we've had very few diphthongs in our corpus so far, so I hope that more data will come soon.