Study questions on Hayes 1995 [1]

To be turned in Tuesday, Nov. 23

Notes

Although this book came out in 1995, it was written before OT had really come onto the scene. So the framework is rule-based, although constraints play a role in blocking and triggering rules, as you'll see.

p. 26 Lack of assimilation: on the other hand, the phonetic effects of stress may extend over more than one syllable, as in Russian where the vowel in the syllable immediately before the stressed syllable ("pretonic") is said to be less reduced than the vowels in other unstressed syllables.

p. 28 On the relationship of musical rhythm to linguistic rhythm, see Patel, Aniruddh D. (2008). *Music, Language, and the Brain*. (New York: Oxford Univ. Press)

p. 29 A good way to do the tapping test in (5) is to select the number of fingers you'll be using and use one finger for each tap.

p. 30 "we might expect grid marks to be associated to more than one syllable": this is assuming the autosegmental view of assimilation as spreading (to quote the title of the Hayes article on Toba Batak that we discussed in class)

p. 35 a stress clash is a configuration like $\begin{bmatrix} x & x \\ x & x \end{bmatrix}$ (where there can be any amount of material in these columns above or below the rows in question, and any amount of white space between the *x*s on the same row). Thus, two strictly adjacent, stressed syllables constitute a stress class, as in the examples here, but there can also be clashes between syllables that aren't strictly adjacent.

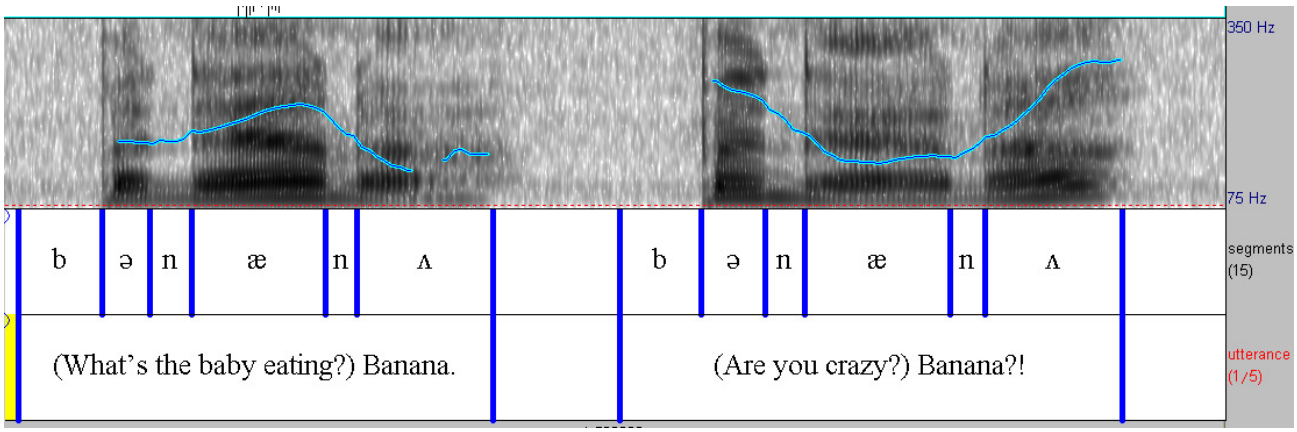
p. 35 In (11) and (12), it's assumed that compound stress has been applied before clash tries to get resolved through Move-x (that ordering is crucial in (12)). *Sunset Park Zoo* gets main stress on *Zoo*, but *kangaroo imitators* gets main stress on *kangaroo* (if you've thought about the example too much and have no intuition about where the main stress goes any more, try *wállaby ìmitators*, or Prince's original example *antíque dèaler*).

p. 45 I'm not sure we ever talked about "natural classes" in phonology. There are two ways to define the term. (I) a natural class, with respect to some phoneme inventory and some feature set, is a subset of the phoneme inventory that can be picked out by specifying some set of feature values [e.g., the [+voice, –nasal] sounds of some language]. (II) a set of sounds that, in some language, is referred to by a rule or active constraint (e.g., the vowels that trigger round harmony in Turkish). The idea is that the sets of type II should be definable in type-I terms.

Here the term is being used a bit differently: Hayes is talking not about phones referred to by a single rule, but about structures that recur in different rules of the same language (or even across languages).

p. 50 Invariant tonal contours: the idea is that in a classic stress language like English, a word like *banána* can have its stress realized with a pitch peak or a pitch trough (or even a plateau), depending on the intonational context:

[1] Hayes, Bruce. 1995. *Metrical Stress Theory: Principles and Case Studies*. Chicago: The University of Chicago Press.



By contrast, in a classic pitch-accent language like Tokyo Japanese, pitch-accent is (to a first approximation) always realized as a fall on the following syllable (if there is one), regardless of the intonational context.

p. 53 Moraic conservation: e.g., /nixt/ → [niːt] rather than [nit]

Question

1. Hayes gives various arguments in favor of adding feet or some kind of constituency to the grid. Pick one example and speculate on how it could be tackled without feet. Please try to be brief...