Study questions on (Steriade 2008)
To be turned in Wednesday, Nov. 14

Notes
p. 1 “correspondence constraints” = “faithfulness constraints”: MAX, DEP, IDENT, LINEARITY (don’t change order of segments) etc.

p. 5 The contexts in the IDENT constraints in (4) are output contexts rather than input contexts.

Section 2.2 can be skimmed

p. 8 For a proposal on how to turn confusion rates (e.g., how often a subject presses the “p” button in response to a “b” stimulus) into similarity scores, see Wilson, Colin. 2006. Learning Phonology with Substantive Bias: An Experimental and Computational Study of Velar Palatalization. Cognitive Science 30(5). 945-982.

p. 11 “V-C transitions”: if you look at a spectrogram that includes a vowel-consonant sequence, you’ll see that the vowel’s formants (caterpillar-looking bands that indicate frequency ranges with increased energy) curve on the way in to the consonant. This area of “V-C transition” gives the listener information about the vowel’s place of articulation.

p. 12 “phonotactic optimization afforded by changes like apsa -> pasa”: violations of NOCODA and ONSET are both eliminated

p. 16 “syntagmatic context”= what sounds precede and follow the sound in question

p. 20 “In the similarity comparison between the pairs in (15)” should be (14), I think.

p. 20 “the voicing contrast (15.a) stands out because it is the only one to be lacking what is considered its primary perceptual correlate: the VOT value”: “VOT” = “voice onset time” = the duration from the consonant’s closure release until voicing begins in the following sound; if voicing is already present during the stop closure, then VOT will be negative.

In an English word like teen, after the [t] is released it might take about 80 msec. for voicing to begin in the following vowel, so the [t] has a VOT of 80 msec. By contrast, the [d] in dean (which is not actually voiced during its closure) might have a VOT of only 10 msec. Differences in VOT are a major cue to the feature [voice].

When a word is uttered in isolation, its final sound has no ability to manifest a positive VOT (since there’s no following sound), so that cue is not available.

pp. 23-24 This paper is assuming that the “less confusable than” relation is transitive

p. 25 MAX[αF] constraints: we’ll talk about these when we talk about autosegmentalism. The idea is to treat a [+nasal] specification like a segment, which can have or lack a correspondent. MAX[+nas] is violated in (a) and (b) below, but not (c), though all violate IDENT(voice) at least once:

(a) /d₁ i₂ m₃/ → /d₁ i₂/ (b) /d₁ i₂ m₃/ → /d₁ i₂ b₃/ (c) /d₁ i₂ m₃/ → /n₁ i₂ b₂/


In (19), the first candidate has lost the [+voice], but in the second candidate the [+voice] has just moved over (without explicit drawings like the above, it’s hard to say why the second candidate has also lost a [–nas], according to its constraint violations, rather than just moving the [–nas] to the other consonant).

p. 31, fn. 8 “not structure-preserving” = creates a sound ([β]) that is not in the phoneme inventory (of Turkish, in this case)

p. 31 “stricture contrasts”: e.g., stop vs. fricative, stop vs. approximant (these differ in how small the consonantal constriction is)

p. 32 “heterorganic”: having different place of articulation

Questions

1. In discussing markedness constraints like *COMPLEXONSET and *COMPLEXCODA, we’ve seen that they could be satisfied, depending on the language (or even within the same language, as in Yawelmani Yokuts), by either deleting a consonant or inserting a vowel. On the other hand, we haven’t seen cases where a C and V metathesize (change places) to satisfy this constraint, as in hypothetical /sabt+ko/ → [sabtok] (which would violate the correspondence constraint LINEARITY, roughly “segments shouldn’t change their order”), or where a C changes into a V (/sabt₄+ko/ → [sabi₄ko], violating several IDENT constraints).

Assume that this is complete typology of humanly possible repairs for *COMPLEX: C-deletion or V-insertion, but no metathesis or feature changes.

Under Steriade’s theory, this means that there are some ties in the P-map, but also some non-ties. Sketch out the relevant fragment of the P-map, and state the default rankings of correspondence constraints that would result.