Study questions on (Steriade 2008) [circulated 2001 as ms.] , pp. 1-33
To be turned in Tuesday, Nov. 12

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 2006. For a proposal on how to turn them into default rankings (weights), see White 2013.

p. 11 "V-C transitions": if you look at a spectrogram that includes a <u>v</u>owel-<u>c</u>onsonant sequence, you'll see that the vowel's formants (caterpillar-looking bands that indicate frequency ranges with increased energy) curve up or down on the way in to the consonant. This area of "V-C transition" gives the listener information about the consonant'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 in its own right (instead of just a property), which can then 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) $/ d_1 i_2 m_3 /$ $\rightarrow /d_1 i_2/$ (b) $/ d_1 i_2 m_3 /$ $\rightarrow / d_1 i_2 b_3/$ (c) $/d_1 i_2 m_3 /$ $\rightarrow / n_1 i_2 b_2/$
         | | | |
       $[+nas]_4$ $[+nas]_4$ $[+nas]_4$ $[+nas]_4$

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

References

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McCarthy, John J. & Alan Prince. 1995. Faithfulness and Reduplicative Identity. In L. Dickey J. Beckman & S. Urbanczyk (eds.), *University of Massachusetts Occasional Papers in Linguistics*.

Steriade, Donca. 2008. The phonology of perceptibility effects: the P-map and its consequences for constraint organization. In Kristin Hanson & Sharon Inkelas (eds.), *The nature of the word: studies in honor of Paul Kiparsky*, 151–180. MIT Press.

White, James. 2013. Bias in phonological learning: evidence from saltation. UCLA PhD dissertation.

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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"—see (McCarthy & Prince 1995, Heinz 2005), or where a C changes into a V (/sabt$_4$+ko/ → [sabi$_4$ko], violating several IDENT constraints).

   Assume that this is the complete typology of humanly possible repairs for *COMPLEX: C-deletion or V-insertion, but no metathesis or feature changes (unlike what standard OT predicts, which is that any of these should be possible repairs). 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 needed to explain this restricted typology, and state the default rankings of correspondence constraints that would result.