Linguistics 124 Fall 2004

Reading guide: Steriade (2001a)

Steriade, Donca. 2001a. Directional asymmetries in place assimilation: a perceptual account. In Elizabeth V. Hume and Keith Johnson, eds., *The Role of Speech Perception in Phonology*. San Diego: Academic Press, 219-250.

Background

Steriade is interested in "positional effects" — why material in certain phonological contexts shows more faithfulness effects than material in other contexts. The current version of her approach to this question is the P-map, which is addressed in this reading. Here, we will see some of the phenomena that the P-map is designed to address, and get an overview of the formal model. The next paper we read, Steriade (2001b), gives a more explicit formal treatment of the P-map and its role in an OT grammar.

Questions to keep in mind while reading

- (1) Here is a little exercise to make sure that you understand why directional patterns in assimilation are an important research area. Assume an input /okpa/ and a ranking AGREE-PLACE (constraint requiring [Place] to be the same in adjacent consonants) >> IDENT[Place]; assume also MAX, DEP, etc. >> IDENT[Place] so that assimilation can't be avoided in a "sneaky" way. You should find that there are two winning candidates. Why is this a problem?
- (2) Steriade discusses a "contrast-specific" model, a "syllable-based" model, and a "recency" model as possible accounts of assimilation patterns. Which model does she support? What is the crucial evidence?
- (3) What is the phonetic basis for the phonological patterns found in major C-place assimilation?
- (4) What is the phonetic basis for the phonological patterns found in what Steriade calls "apical" assimilation?
- (5) Having established that phonetic factors are important in explaining assimilation patterns, Steriade goes on to argue that it is specifically perceptual factors, rather than articulatory factors, that are important. What is her evidence for this claim?
- (6) A category not (explicitly) included in the chart in (8) is "Non-apical + apical." What kinds of predictions might we make for this type of cluster?
- (7) What evidence does Steriade present that the perceptual factors that affect assimilation are synchronically relevant, rather than being relevant only in diachronic change? [Later course readings will return to this general question.]

- (8) What is the P-map? What is the extra-linguistic evidence that Steriade presents for framing her model of perception-based effects in this way?
- (9) How does the P-map interface with an OT phonological model? What new formal devices are added to the OT system? (We will continue to address these questions in the next reading, Steriade (2001b).)

Some points for further thought and discussion

- (10) We have considered two main views of the phonology-phonetics interface within OT, the "direct-phonetics" model advocated by Kirchner and Zhang and a "phonetically mediated formal phonology" model (my label) advocated by Hayes. Are the effects that Steriade discusses equally compatible with both models, or do they seem to privde support for one or the other?
- (11) Should we expect the effects of the P-map to be universal or language-particular? Why? Does this seem like a useful or a problematic result?