Assignment 5: McCarthy article


I suggest reading through the article once, using the tips below. Then go through again to answer the study questions.

Study questions (answers to be turned in; total should not exceed 3 pages)

1. What are the three empirical criteria McCarthy applies to a proposed hierarchical grouping of features?

2. Briefly, why does McCarthy argue for a Place node, but not a Manner node?

3. Make up a rule in a fictional language that would assimilate a set of manner features, and illustrate it with a few made-up words.

4. Briefly, why does McCarthy put [sonorant] and [consonantal] in the root node?

5. Make up a rule in a fictional language that would be expected if [sonorant] were below the root node, the way [nasal] is.

6. Why would the fact that [-nasal] consonants block nasal harmony in Guaraní (p. 86) be impossible to account for if [+nasal] and [-nasal] were on separate tiers, the way [labial] and [coronal] are in (14)?

7. In your own words, why do nonglottalized [+continuant]s in CVC roots in Yucatec Maya have to be identical (p. 98)? Illustrate with one legal and one illegal CVC root with these consonants.

8. Invent a fictional language that would, in some way, illustrate an OCP effect for [nasal]. Describe the situation and illustrate with a few made-up words.


10. In (23) on p. 103, why can’t the illegal structure be repaired to obey to OCP by merging the two [labial] nodes?
Tips for reading

pp. 84-85 Don’t worry if you don’t understand the introduction.

p. 86 The Guaraní example would look something like [norohe"dui] → [nôrôhe"dui]. The prenasalized stop, /"d/, is assumed to have a sequence of values of [nasal]: first minus, then plus. This is just like a contour tone (sequence of tones associated to a single tone-bearing unit). [+nas] is able to spread only until it hits a [-nas]; that’s why the last two vowels aren’t nasalized.

p. 88 “Debucalization” literally means “de-mouth-ization”. It involves getting rid of all articulatory activity that takes place in the mouth (“supraglottally”), leaving behind only what’s going on in the larynx.

Geminates as a single segment: i.e., the features of [p] are attached to two separate slots, creating a long [pp].

“Dissimilation” = nearby sounds becoming less similar, or not being allowed to be similar.

p. 89 “Homorganic” = having the same place of articulation

“Class nodes” = the nonterminal nodes in the tree, like Place and Supralaryngeal.

The “Root” is the node that connects all the features to the C or V placeholder slot.

p. 90 Deletion with compensatory lengthening: in Lithuanian, for example, the final nasal of the prefix /san-/ deletes before a fricative, and the prefix becomes [saa-] instead. The features of [a] seem to spread to the empty slot that used to be filled by the features of [n].

“Tautomorphemic” = belonging to the same morpheme. When there’s a geminate (long consonant) inside a morpheme, it often resists rules that would change one half of it, suggesting that it’s a single bundle of features attached to two placeholder slots.

“Regressive” assimilation is when an earlier sound assimilates to a following sound. “Progressive” assimilation is when a later sound assimilates to an earlier sound.

p. 92 A theory “overgenerates” when it predicts rules or language types that don’t exist.
Glides, fricatives, and laterals can, of course, be nasal, but the claim is that nasality is never contrastive in these manners (a nasal glide and an oral glide can’t be separate phonemes).

p. 93
A kymograph is an old instrument that I’m really not familiar with. It involved a stylus that wrote on a moving drum, but I don’t know whether it would have been hooked up directly to the velum, or just measuring nasal airflow.

“check the propagation of” = “block the spreading of”

p. 94
Don’t worry too much about the n-ary feature stuff. The idea is that a feature needn’t be a property that every sound has to be specified as + or – for. For one thing, it doesn’t have to have just two values. For example, vowel height could be expressed with a single feature that takes on values from 1 to 5. Furthermore, not every sound has to have a value for every feature. Some could just be blank (you’d be able to tell because such sounds wouldn’t block spreading of that feature, for example). In that case, some features could have just one value ( ), and be absent otherwise (“monovalent”, “unary”, or “privative” features).

p. 95
“Double stops” are stops that take place simultaneously (or close to it) at two places of articulation. Try making a [g] and a [b] at the same time!

The stuff about negative feature values refers to the observation that for some features, +F picks out a natural class that occurs in many rules, but –F doesn’t.

p. 96
Imagine that the coronal tier in (14) projects out from the page.

The “opacity” effect McCarthy refers to in Guaraní is just blocking of spreading, not opacity in the counter-feeding/counter-bleeding sense.

p. 98
“Deocclusivization” = becoming less constricted (in this case, losing the complete closure of a stop or the first half of an affricate).

p. 99
In (17), the idea of [-cont][+cont] is that a single consonant could start out as a stop, then become a fricative, with all other features staying the same (i.e., an affricate). Similarly, a consonant with [+nas][-nas] starts out nasal, then becomes oral, but acts like it’s just one consonant.

p. 100
The letter c with a hacek on top is non-IPA notation for a postalveolar affricate. Alveolar [t] is not strictly homorganic to it.

p. 101
“Similarity” here really means “lack of cooccurrence”. The reasoning is: since it’s obvious that similar consonants rarely occur within a morpheme
in Arabic, the less often two sounds cooccur (controlling for raw frequency of each sound), the more similar the language regards them as.

p. 104 “dh” and “nh” (tongue-blade to top teeth), “di” and “ni” (tongue-blade to postalveolar area) are not IPA. Nor is “gl”.

p. 105 What’s a “latent coronal component”? We don’t know. McCarthy’s just pointing out that there’s something going on with these sounds that suggests coronality.