

## Study questions on K&K chapter 2 (all), ch. 3 (pp. 45-62), and ch. 9 (pp. 331-339)

### Notes/tips

- Ch. 1 is not required reading. But, if you haven't studied phonetics, you may want to take a look at it. You can hear examples of various speech sounds at <http://www.phonetics.ucla.edu/vowels/contents.html>
- K&K don't use exactly the phonetic symbols of the IPA. The symbols they use are often called "Americanist". There are charts on p. 12 and 17 you can consult any time to see what an unfamiliar symbol means. See also [en.wikipedia.org/wiki/Americanist\\_phonetic\\_notation](http://en.wikipedia.org/wiki/Americanist_phonetic_notation)
- p. 36: "apply in the lexicon" means apply some time before the form is sent off to the 'phonological component' box of p. 7 (this means that the drawing on p. 7 needs another box, perhaps inside the "lexicon" box—p. 7 is not part of your assigned reading, but it's probably helpful to look at the figure).
- p. 37: If you are curious, see Hayes & Stivers ms. (on Bruce Hayes' web page) for a plausible phonetic explanation of postnasal voicing.
- p. 51: K&K aren't claiming that aspiration never alternates in English (*compáre* vs. *cómparable*—think about which [p]s should be aspirated according to the rule of ch. 2), just that many morphemes don't have any aspiration alternation, because they don't find themselves in both aspirating and non-aspirating environments (e.g. *cab*). Even without aspiration alternations, K&K still want to account for English aspiration by rule because it is predictable and, they claim, part of a speaker's implicit knowledge.
- pp. 338-339: Ponder the point made about conciseness vs. naturalness. Where this is leading is that the evaluation metric can't depend on conciseness alone. Or, if it does, we need to find a way to allow natural rules to be made more concise than structurally similar unnatural rules.
- p. 338: For those who know OT: the way the term "optimality" is used here has nothing to do with OT.
- The rest of ch. 9 (pp. 342-377) covers similar ground as the notation review we're doing in class, so it's a good reference if you're looking for more.

### Questions

1. List some **types** of evidence K&K propose, towards the beginning of ch. 2, in favor of a significant distinction between idiosyncratic and systematic properties of a pronunciation (not the individual examples, but the *types* of evidence)?

2. In the Zoque, Papago, and Chatino examples in ch. 2, K&K talk about how to choose one analysis over another (Zoque: voice obstruents after nasals vs. devoice them elsewhere; Papago: change dental stops to palatal affricates before high vowels vs. turn palatal affricates to dental stops elsewhere; Chatino: devoice vowels in a certain environment vs. voice them elsewhere) and give their reasons.

Pick one reason given for one case (give the page number for my reference) and say what you think of it.

3. In Chatino, the devoicing rule applies only to stressless vowels, and thus must apply after the stress-placement rule (looking ahead to a term to be introduced later: this is a *bleeding* relationship). It would also be possible to write the rule so that only non-final vowels can be devoiced (i.e., with no reference to stress). First, try writing the rule:

Second, can you think of any criteria by which to pick one analysis over the other? Or additional data from this language or other languages that could help us decide?

**4.** In chapter 3, why do K&K reject an approach for Russian that lists multiple allomorphs for those morphemes that alternate?

(Also contemplate what you think of their reasons, but you don't need to write that down. We'll discuss your thoughts in class.)

**5.** Again in chapter 3, why do K&K reject characterizing Russian final devoicing environments in morphological terms? (Again, also consider what you think of their reasons—we'll discuss it in class.)

6. In chapter 9, the introduction of the conciseness condition in (8) rests in part on the argument that (6) does a better job than (7) of capturing Russian speakers' competence. Besides arguments from brevity and generality (the use of which would be circular), can you find evidence from ch. 3 that the subparts of (7) bear a special relation to each other, and what do you think of that evidence?

*Further reading if you're curious*

Ernestus, Mirjam & Harald Baayen (2001). Predicting the unpredictable: interpreting neutralized segments in Dutch. *Language* 79, 5-38.

Reports on an experiment in which speakers are given new words and required to 'undo' a voicing neutralization (i.e., they have to decide if a final consonant is underlyingly voiced or voiceless)