

**Ling 20: Introduction to Linguistic Analysis**  
**Homework 3**

*This homework is due in class on Monday, April 22*

Do the following problems from Chapter 3 of the text, after reading the Appendix on pp. 107–110.

**Note:** In all of these problems, assume the symbol [a] represents a low non-front unrounded tense vowel; whether it is central or back will not be relevant.

For questions 1–6, if you conclude that sounds are allophones of a single phoneme, you may describe their environments in words, you do not need to use distinctive features to characterize natural classes; use distribution diagrams like the ones on pg. 110 to present your answers. Practice for these questions using *Study Guide* Practice 3.1 (pg. 41), 3.4 (pp. 44–45), and 3.5 (pp. 47–48).<sup>1</sup>

**Pgs. 111–13 #1, #2, #3, #4.**

**Pg. 113, #5.** Assume that [r] is some sort of voiced alveolar nonlateral liquid—its precise articulation will not matter.

**Pgs. 113–14, #6, part i) only.**

**Pg. 116, #11, all parts except (a) and (e).** Answer in terms of phonological distinctive features (the ones listed in Tables 3.29 and 3.30 in the book), not phonetic descriptions. If the segments differ on more than one feature, list all of the features on which they differ. Use Study Guide Practice 3.12 #1 as practice.

**Pg. 116, #12.** Assume that the language is English, and try to add only as many feature values as necessary to distinguish the sound from all other sounds of English. (Copying the entire feature matrix from the feature chart will not earn any points.)

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<sup>1</sup> Corrections to answers in Study Guide.

**3.1 #3** should have same answer as #7.

**3.4** You would also be required to note that the sounds are phonetically similar, as follows:

#1: both alveolar fricatives; #2 both voiceless coronal fricatives; #3 all alveolar noncontinuant obstruents. Combined with the observed distributions, you would conclude in each case that these are allophones of a single phoneme.

**3.5: #2** should additionally state that they are phonetically similar by virtue of both being voiced (anterior) coronal obstruents.

#3 should additionally state that they are phonetically similar by virtue of both being voiceless dorsal fricatives. (As a central vowel, [a] counts as [+back])

#4: Since there is a minimal pair in each case, there is no need to mention near-minimal pairs.

Moreover, 4&10 would not be a good near-minimal pair, since they differ in what immediately precedes the sounds in question!