

## Homework Assignment #3

Phonology — Predictable and contrastive distribution; sound classes

Due **M Sept 18 at the beginning of class**. Please write or type your assignment on a separate paper, not on this assignment sheet. Write your recitation number on your paper.

- *CL* is your textbook, *Contemporary Linguistics*

If you need help **typing phonetic symbols**, there is information at:

<https://users.castle.unc.edu/~jlsmith/ipa-fonts.html>

You can also copy/paste phonetic symbols from lecture slides or this PDF

### Phonology: Exercises from *CL* (Ch 3, pp 112–114)

- **Q1.** Do exercise (4) — Hindi (p 112). **Make this change:** Where the textbook says “Use natural classes or features in your description”, change this to “State your answer in terms of natural classes, characterized by sound properties, whenever possible.”
- **Q2.** Do exercise (6) — Passamaquoddy (pp 113–114).

#### **Follow these instructions in place of the instructions in the textbook:**

- (i) Do [p] and [b] belong to separate phonemes, or are they allophones of one phoneme?
  - If **separate phonemes**, list **data** (Passamaquoddy words — *not* just their English translations!) to support your case, and **explain** why your case is supported.
  - If **allophones of one phoneme**:
    - (a) **State** the environment where [p] occurs, using sound properties and natural classes wherever possible.
    - (b) **State** the environment where [b] occurs, using sound properties and natural classes wherever possible.
- (ii) Do the same as in part (i) for [t] and [d]. (Be aware that [t] and [tʃ] are *different speech sounds*. Do not include a “t” **that is part of a [tʃ]** when you are analyzing the environments for [t]; likewise for [d] and [dʒ].)
- (iii) Do the same as in part (i) for [k] and [g]. (Be aware that [k] and [kʷ] are *different speech sounds*. Do not include a “k” **that is part of a [kʷ]** when you are analyzing the environments for [k]; likewise for [g] and [gʷ].)
- (iv) Do the same as in part (i) for [kʷ] and [gʷ]. (As the textbook notes, these oral stops have the place of articulation **labiovelar**, like [w] which we know from English.)
- (v) Make a general statement about the relationship among all the consonant pairs whose distribution you have examined. In your general statement, try to use **natural classes** and **sound properties** as insightfully as you can.
- (vi) **Optional:** Are there any other sounds in the data set that show the same pattern as the sounds you have analyzed in parts (i)–(v)? Can your analysis be easily extended to these other cases? Discuss why or why not.