

Hall  
Ling 503  
Spring 2006

### **Final Exam**

There are two sections to this exam. The first is a data analysis problem. This should be written up following the usual guidelines: the goal is to account for all the phonological alternations in the dataset. Your final answer should consist of a list of the underlying forms for *each* morpheme, a list of (ordered) rules (using feature theory!), and a discussion section where you explain and motivate your analysis. This analysis is worth 60% of the final exam grade. The second section of the exam consists of 4 short-answer thought questions about phonology. You should answer each of them using a few sentences, giving examples where you think it would be helpful. Each question is worth 10% of the exam grade. Remember, the final exam is worth 20% of your total grade for this class. You may use whatever notes and materials you want in writing up your answers, and you may ask me questions, but you may NOT work together on the final exam. The exam is due to me (either in person, in my mailbox, or in my e-mail inbox in .pdf format) by 5:00 PM on Wednesday, 7 June 2006.

#### **I. Data Analysis (60% total)**

Do the Latin problem on p. 210-211 (Chapter 7, #4).

#### **II. Thought Questions (10% each)**

1. Go back to the homework we did on Catalan. Explain whether the phones [p, t, k, b, d, g, β, ð, γ] are allophones of each other or separate phonemes, making use of their distribution in the dataset to support your answer.
2. Looking at the IPA and APA charts, there are a lot of different speech sounds in the world's languages. According to the theory we have developed in this class, what is a possible phoneme in a natural language? Why might the notions "possible IPA/APA symbol" and "possible phoneme" be different?
3. Explain why the rule  $k \rightarrow k^y / \_\_\_ i$  is natural. (To do this, you will have to define what it means to be natural!)
4. Explain why the underlying forms of morphemes are not always the same as the surface forms. Give examples from at least three different languages.