These exercises will be due at the beginning of class on Wednesday, February 15.

1. In the new appendix (“Dialectal Variation in Pronunciation of Vowels”) at the end of chapter 2 in the seventh edition of our textbook, the authors observe: “For speakers in the southern Midland and in the South of the U.S., the sound [ɛ] becomes [i] before the nasal in such words as pen, hem, and length. In this dialect, the word *length* [lɛŋθ] is pronounced [lɪŋθ].”

Express this observation formally as a phonological rule, in the format described in section 4.2 of chapter 3 in the textbook. Use features and feature sets to capture the rule’s generality.

2. For each of the following words, transcribe it phonemically, then diagram its syllabic structure, showing the onset (if there is one), nucleus, and coda (if there is one) of each syllable. (Your diagrams should be similar to those in sections 2.2 through 2.4 of chapter 3 in the textbook.)
   a. perjury
   b. kingdoms
   c. extra
   d. prescription
   e. goblin
   f. promptly

3. Do the exercise on Tamil from the end of chapter 3 of the textbook. (It’s exercise 17 on page 118 of the seventh edition, exercise 15 on page 113 of the sixth edition.)

4. In some dialects of English, speakers regularly delete the /h/ sound in the words forehead, buttonhole, warehouse, and backhand, while retaining it in the words freehold, cowhand, coffeehouse, and arrowhead. How do the words in the former set differ phonologically from those in the latter set? Propose a hypothetical phonological rule that would account for the deletion of the underlying /h/.