Midterm Study Questions

1. Words in natural languages can be classified into two broad categories: content words, including nouns, verbs, adjectives and other meaning-bearing words, and function words, including articles, prepositions, conjunctions, auxiliaries and so forth. We have noted several distinctions between these two classes of words in normal and impaired processing of language. Evidence from acquisition of pidgin languages by children suggests that children will invent function words (by grammaticizing content words) when none exist in the input language. For example, a word that is an adverb in the adult’s pidgin like baimbai (‘soon’) becomes an auxiliary verb bai (‘will’) in the child’s creole. Why should function words be so important for human use of natural languages? If you were given the task of designing a new language, would you include function words? Why or why not? You may make an argument from language acquisition, language processing or language production, or some combination of these.

2. The lexicon is sometimes called a “mental dictionary.” Describe two ways in which the lexicon is like a dictionary and two ways in which it isn’t. Using a real dictionary is a straightforwardly bottom-up process. However, several psycholinguists have argued that there exist top-down influences on spoken word recognition and lexical access. (Do not include this distinction in describing ways in which mental lexicons and dictionaries are different.) What does this term mean? What is some of the evidence supporting the hypothesis of top-down influence?

3. Is speech (that is, its perception or processing) special? Take a position, cite two or three relevant findings and explain why they support the position you have taken. Cite one finding that does not fit with your position and explain why it does not.

4. Professor Quirk has been nattering on for years about his theory that accents are categorically perceived, but he hasn’t yet offered a shred of evidence to back up his claims. Finally weary of being taunted by all the well-respected linguists in scientific journals, he decides to put an end to this nonsense by actually doing a study. To narrow the question down a bit for his first study, he decides to test whether British accents (including Cockney, Liverpuddlian, Brummie, Scouse and Yorkshire) are categorically perceived by native speakers of American English.
a. Using your knowledge of experimental methods in psycholinguistics and of categorical perception, describe in detail how you would perform this experiment. Feel free to further refine the experiment from the above description as you see fit.

b. What evidence would Prof. Quik need to find in order to make a good argument that British accents are, in fact, categorically perceived? Why?

5. Over the first year of life, infants lose the ability to discriminate non-native speech sound contrasts. Current accounts portray this change as a by-product of a developmental advance: as native language speech sound categories are acquired, nearby non-native sounds are attracted, assimilated or magnetically drawn to these categories, thereby losing their distinctiveness. However, many questions about the nature of native speech sound categories remain unanswered: How large are they (do early categories correspond to phonemes, something larger, or something smaller)? How general are they (do infants form categories specific to, say, initial versus final word- or syllable-positions, or do their categories abstract across varying positions)? Recently, Anderson, Morgan and White (2003) have provided data showing, they claim, that the order in which native speech sound categories are acquired is a function of the statistical frequency of the sounds constituting these categories. Assume this claim is correct and design an experiment to test one of the questions noted above. Specify the exact hypothesis you are testing. What are the critical properties of the stimuli you would use? What sort of procedure would you use? What patterns of data would confirm or disconfirm your hypothesis? Why?

6. Estimates of the number of words that children know vary widely. Some researchers have estimated that children entering 1st grade only know about 2,500 words, whereas others have claimed that 1st graders know as many as 16,000 words. What do you think a child must have learned about a word for him/her to know it? Given this, would you expect all words to be equally easy to learn or should some words be more difficult than others? Explain.