Psych156A/ Ling150
Winter 2009
Review Questions: Sounds

(1) Terms/concepts to know: contrastive sounds, phonemes, categorical perception, within-category perception, across-category perception, voice onset time, maintenance and loss theory, functional reorganization theory, contrastive feature, unimodal distribution, bimodal distribution, Switch Procedure, Stager-Werker task, neighborhood hypothesis

(2) Describe one way you can recognize if two sounds are phonemic in a language.

(3) Will the acoustic signal of the vowel sound "oo" (as in the English word *boot*, represented as [u] in IPA) vary between speakers of the same language? If so, give an example that shows this variation. If not, explain why not.

(4) Give an example of contrastive sounds in English that differ only in their voice onset time (VOT). Which has a shorter VOT and which has a longer one?

(5) Why is reaction time longer at a category boundary?

(6) Why did Werker et al. (1981) test both *adult* Hindi speakers and *adult* English speakers in their experiment when they were trying to determine when English *infants* lost the ability to hear Hindi contrastive sounds?

(7) Why were Salish and Hindi children tested in the experiment by Werker & Tees (1984) that examined English infants' ability to perceive non-native (Salish/Hindi) contrasts?

(8) Sigmund has heard about a study where adults were able to consciously perceive the difference between non-native sound contrasts if they were fooled into believing the sounds were water dropping into a bucket. Why is this problematic for the Maintenance & Loss theory, and how does it support functional reorganization?

(9) Why was it important for Dietrich et al. (2007) to test English children with vowels that differ in vowel quality (as opposed to vowel duration)?

(10) Why would having a native language filter (like what the Functional Reorganization Model posits) for sounds be useful to infants who are trying to learn words?

(11) In the second experiment by Stager & Werker (1997), which children performed better at the task? Why might this be surprising?

(12) In the experiment series conducted by Stager & Werker (1997), experiment 4 was a modification of experiment 2. What was the key modification? Why did it lead to different results in 14-month-olds than experiment 2 did?

(13) What does it mean if a word has a neighbor? Give an example of a word and a "neighboring" word.   Why does a neighborhood account predict that 14-month-olds would produce the results found in the Stager & Werker (1997) experiment?

(14) Swingley (2005) found that 11-month-olds can recognize the difference between familiar words and mispronunciations of familiar words. Why does this weaken the claim of the neighborhood hypothesis?