

Psych56L/ Ling51

Fall 2008

Review Questions: Biological Bases of Language

(1) Terms/concepts to know: pidgin, creole, Nicaraguan Sign Language, Language Bioprogram Hypothesis, contralateral brain connection, ipsilateral brain connection, optical topography, near-infrared spectroscopy, split-brain patients, function asymmetry, right-ear advantage, equipotentiality hypothesis, invariance hypothesis, Broca's aphasia, Wernicke's aphasia, plasticity, maturation hypothesis, process-change hypothesis, critical period, sensitive period, "less is more" hypothesis, monozygotic twins, dizygotic twins, FOXP2, vervet monkey alarm call, honeybee waggle dance, intentionality, reference, bird song

(2) Does creolization necessarily indicate that there is domain-specific knowledge about language? Why or why not?

(3) In which ear would you expect a normal subject with no brain damage to report hearing a language stimulus in a dichotic listening experiment? Why?

(4) Would MEG be easy to use for a young child? Why or why not?

(5) Which side of the brain seems to control non-linguistic visual-spatial information processing? How do you know?

(6) Give two examples of aspects of language that the right hemisphere seems to control.

(7) Where is a non-native language usually located in the brain for speakers who aren't as proficient with syntax? Does this fit with the general notion of what the right and left hemispheres are specialized for? Why or why not?

(8) What are deaf-of-hearing children? Why are they a better case study for language's critical period than Isabelle and Genie?

(9) What is the "less is more" hypothesis, in relation to language-learning? Why might it be counterintuitive, given children's cognitive abilities and adults' cognitive abilities?

(10) Does a honeybee's waggle dance have the intentionality feature? Why or why not?

(11) How can birdsong be compared to human language, with respect to how it develops?

(12) What is one reason that chimpanzees were more able to learn a signed human language than a spoken human language?

(13) What was the difference in Matata's and Kanzi's language training? Who succeeded better at learning language? Why was this the case, and how does this relate to the critical period of language acquisition?

(14) What are two ideas why other primates like Kanzi may be unable to learn human languages as well as human children learn them?