Study Set 6: Plasticity

Neville & Lawson, 1987; Muente et al. 2001; Roder et al. 1999; McLaughlin et al. 2004

(1) What two control groups did Neville and Lawson include in their study against which to compare the results of their deaf subjects? Why were these two groups chosen? What do Neville and Lawson have to say about whether attention to central and peripheral space are mediated by the same neural systems?

(2) Describe Neville and Lawson’s ERP evidence indicating a role for early language experience in hemispheric organization for non-language processing.

(3) What did Roder et al. find in their search for evidence of improved auditory discrimination in individuals blind from birth? Make sure to include a description how their experimental design addressed the question at hand. What aspect of their data did Roder et al use as evidence for compensatory reorganization following early visual deprivation in humans?

(4) How did Muente et al. test their hypothesis that experienced professional (musical) conductors have enhanced auditory localization skills? (Pay attention to the control groups they used.) What distinguishes the enhanced auditory skills observed in the congenitally blind and the professional conductors?

(5) What evidence do McLaughlin et al. provide for their statement that “some behavioral assessments of L2 (second language) learning might underestimate what has been learned.” Make sure to briefly describe the experiment and the result supporting this conclusion.