HCS6330 and ACN6330

Reading Questions for the Final Exam

Instructions- Please choose three of these questions to prepare at home and to answer during the in-class final exam Dec 16 (7pm). For all of these questions, you should work alone without discussing the material with anyone else. Your answers should be your own.


What role do these authors suggest for the inferior frontal and inferior parietal brain area in speech? On what evidence do the authors make this proposal? Discuss also the implication of these areas for connecting auditory and articulatory representations of speech.


State briefly the major theory of the processes impaired in each of these articles (one paragraph per article). Which findings and overriding themes are compatible in the two articles? Which findings and these are not easily reconcilable?


Describe (a paragraph) the double dissociation that led to the classic view of the separability of STM and LTM. Part of the authors’ argument against this claim is to challenge the view that mediotemporal cortex is not involved in any way in STM. What is the evidence they offer to demonstrate that mediotemporal cortex may be involved in STM?


Give a short synopsis of the evidence presented by these authors for a dialog between neocortex and hippocampus in consolidating memory. (an outline is fine)

Chase et al. (1998) offer a list of 3 problems with the classical definitions of rationality. State them briefly. Which of these (any combination) challenges the type of analysis attempted by Charles Darwin in deciding whether or not to marry? (see Appendix A)


Explain the sense in which OFC lesion patients operate more in line with the rational theory of decision making than normal subjects. What role does regret play in modulating the way we consider risk and in altering decision strategies as we gain experience with the contingencies of the kinds of games used in the behavioral experiments (a general interpretation of these experiments is ok)?


Sketch out the logic behind the authors’ co-analysis of neuropsychological syndromes and the perceptual distortions associated with dreams. After discussing the logic, work through one of the examples they give. What can the common “symptoms” and perceptual distortions tell us about the function of the brain regions involved?


What is the goal of multivariate approaches to the analysis of functional neuroimaging data. What advantages does it have over more conventional univariate approaches?
Appendix A
Marry or Not Marry? – Charles Darwin

**Pros and Cons of Marriage**

Children — (if it Please God) — Constant companion, (& friend in old age) who will feel interested in one, — object to be beloved & played with. — —better than a dog anyhow. — Home, & someone to take care of house — Charms of music & female chit-chat. — These things good for one's health. — Forced to visit & receive relations but terrible loss of time. —

My God, it is intolerable to think of spending ones whole life, like a neuter bee, working, working, & nothing after all. — No, no won't do. — Imagine living all one's day solitarily in smoky dirty London House. — Only picture to yourself a nice soft wife on a sofa with good fire, & books & music perhaps — Compare this vision with the dingy reality of Grt. Marlbro' St.

No children, (no second life), no one to care for one in old age.— What is the use of working 'in' without sympathy from near & dear friends—who are near & dear friends to the old, except relatives

Freedom to go where one liked — choice of Society & little of it. — Conversation of clever men at clubs — Not forced to visit relatives, & to bend in every trifle. — to have the expense & anxiety of children — perhaps quarrelling — Loss of time. — cannot read in the Evenings — fatness & idleness — Anxiety & responsibility — less money for books &c — if many children forced to gain one's bread. — (But then it is very bad for ones health to work too much)

Perhaps my wife wont like London; then the sentence is banishment & degradation into indolent, idle fool —