

Paper

Geiger, G. Lettvin, J.Y., Zegarra-Moran, O. "Task-determined strategies of visual process", *Cognitive Brain Research*, Elsevier, 1992, 39-52.

Bizzi, E., Mussa-Ivaldi, F.A., Giszter, S. "Computations Underlying the Execution of Movement: A Biological Perspective."

WRT: 40 minutes

Assignment

The piece de resistance is the Geiger paper. You can skim the Bizzi paper.

On a total of one side of one sheet of paper, using 10 pt type or larger, with standard interline spacing and margins, respond to all the following:

- The subject of dyslexia turns up in a conversation you are having with friend who happens to be dyslexic. "Well," says the friend, "I recently heard about an article appearing in that eminent scientific journal, The Boston Globe ("Abnormal Brain Patterns Indicate Dyslexia Has Physical Explanation", by Richard Saltus, Globe Staff), that says MRI studies on dyslexics demonstrate that my brain is, regrettably, defective, and that accounts for my inability to read." You read the article, via the link, and having read it, write a letter to the scientists mentioned, commenting on the conclusions reached, based on what you have learned in Geiger's paper. Because you presume that the authors have not read the Geiger paper, include a V-S-N-C summary. Also, plainly state the goal are you trying to achieve in your letter. Identify V-S-N-C and the goal; be prepared to be paraded through building 10 in Winston's next dream if you forget.
- You are asked by a frog for help in competitive jumping. You have heard, from a reliable source, that it takes longer to relax a muscle than it does to contract it, and you have read Bizzi's paper. Then, following one of the principles of knowledge engineering, you decide to watch the frog at practice. What would you particularly look for in the frog's approach to competitive jumping, and in its absense, recommend? Note: if the answer is not obvious, you may want to ask a track-and-field athlete for help on this one.