Homework 5

Due Fri June 28

1. What is the degrees of freedom (df) problem? What are the df in the motor system? If one counts df in terms of joints, then what problem in addition to control must be addressed and why? [Read lecture slides and Turvey, Fitch & Tuller, 1982]
2. Describe how muscle properties contribute to the problem of Context Conditioned Variability in the control of action.
3. How does the means of force generation in skeletal muscle yield the length tension relation?
4. Joints are moved by torques, but muscles produce forces. What is the relation between joint torque and muscle force and how does this contribute to the problem of context conditioned variability?