Math of Games

Week 5 Journal/Ch. 6–8 Study Guide

Due: start of class, 12 March 2012

Terms

Research the following concepts related to trust, reciprocity, and retaliation. Write up a one-paragraph summary for three of them.

1. payoff-dominant strategy
2. risk-dominant strategy
3. credible commitment
4. limiting your options
5. world government
6. third-party punishment
7. conditional cooperation
8. PAVLOV strategy
9. implicit cooperation
10. pork-barrel politics
11. quantum entanglement

Short Essays (Choose One)

1. After reading all of *Rock, Paper, Scissors*, explain one concept that came as a surprise or was otherwise noteworthy. Discuss the change in perspective this finding will provide in your future encounters with issues of competition and cooperation.
2. Every Thursday, after a night of board games with his pals in College Park, Tom hits up the Trader Joe’s on Columbia Pike for their “after-midnight sale” (his euphemism for dumpster diving). Around 1 a.m. he often encounters similarly-minded folks as they converge on the neatly-wrapped bags of discarded food, thoughtfully set aside by the Trader Joe’s employees —Tom calls them “angels”—who apparently want to mitigate the wasteful practice of tossing out perfectly edible food just to make room for fresher, more appealing specimens. Discuss how Tom could approach the task of fishing through the bags of food, keeping in mind the high probability that the same “usual suspects” of dumpster divers will cross his path again in subsequent weeks. Indicate some of Tom’s possible strategies in the case that (i) his competition is in no mood to share the loot, and (ii) his competition is willing to negotiate over the division of the spoils.

3. Congressman Dennis Kucinich recently lost his bid for a spot on the general election ballot, after a redrawing of the district lines spearheaded by the Ohio Republicans. His former colleague, Marcy Kaptur, ended up in the same district, and her locally-grounded approach sat more comfortably with voters than Kucinich’s crusades on issues of national and global scope. What do these events say about the various subgroups within Ohio and in the U.S. Congress? Whose interests are advanced, and whose interests are left unaddressed? Which coalitions can be expected to continue or start working together (now that Ohio’s progressive representation in congress is diminished by one seat), and what negotiating tactics do you think are likely to be employed?