

This essay question will be one of four questions on the final exam. You should plan on spending half an hour writing it, without books or notes. It is meant to get you thinking about how to use behavioral game theory to do economics; the choice gives you some freedom to make the question about the kind of economics you are interested in. My sample references should be easy to find, but let me know by email if you have trouble.

4. Write a brief (one-page or less) essay on how research on the parts of behavioral game theory studied in this course (how people predict others' strategic behavior) should change how we think about your choice of one of the following kinds of application. For some or perhaps all of them, more than one answer is defensible. Full credit will be given for any answer that includes a coherent and empirically plausible rationale. In most cases, there are readings on the syllabus beyond those discussed in class that may be helpful.

- (a) the standard use of the revelation principle in designing auctions or incentive schemes
- (b) the standard use of the Folk Theorem to characterize outcomes sustainable as implicit contracts in complete-information repeated games
- (c) the use of subgame-perfect equilibrium to predict outcomes in infinite-horizon alternating-offers bargaining with complete information, as in Rubinstein (*Econometrica* 1982)
- (d) the use of sequential or perfect Bayesian equilibrium in models with "crazy types" to characterize reputation building, as in Kreps and Wilson, Milgrom and Roberts, or all of the above (*Journal of Economic Theory* 1982)
- (e) the use of refinements such as the "intuitive criterion," as in Cho and Kreps (*Quarterly Journal of Economics* 1987), to derive unique predictions despite multiple equilibria in signaling games
- (f) the use of rational expectations and/or perfect foresight assumptions in dynamic macroeconomic models to predict the effects of policy changes, as in the Lucas critique, Kydland and Prescott, "Rules versus Discretion..." (*Journal of Political Economy* 1977), or Barro, "Are Government Bonds Net Wealth?" (*Journal of Political Economy* 1974)
- (g) the use of refinements such as risk-dominance to derive unique predictions despite multiple equilibria in macroeconomic models based on coordination failure like those discussed in Cooper and John (*Quarterly Journal of Economics* 1988)
- (h) the use of iterated dominance in incomplete-information games with small idiosyncratic payoff trembles ("global games") to select among multiple Pareto-ranked equilibria in coordination games, as in Carlsson and Van Damme, "Global Games and Equilibrium Selection" (*Econometrica* 1993) and recent applications to bank runs and other problems, as in Morris and Shin, "Global Games: Theory and Application" (<http://www.econ.yale.edu/~sm326/seattle.pdf>; to appear in the Conference Volume for the Eighth World Congress of the Econometric Society)
- (i) the use of ergodic evolutionary dynamics to characterize equilibrium selection in the "long run" in games played repeatedly in populations, as in Kandori, Mailath, and Rob; or Young (*Econometrica* 1993)