

PSC/PEC 593 TOPICS IN POSITIVE POLITICAL THEORY

Spring, 1999

T 2:00-4:40

Dunkman Library

Professor: John Duggan

Office: Harkness 320b, x34999

Hours: M,W 3:30-4:30

*Course Description:* The subject of this class is collective choice. We take up four topics. First is social choice theory, an approach with a long tradition in political science and economics. This topic is likely to take the first four weeks of the course. I will be lecturing from

Austen-Smith and Banks (1999) *Positive Political Theory 1: Collective Preference*, Ann Arbor: University of Michigan Press,

which unfortunately cannot be purchased until later this year. Below, I refer to this book as simply “ASB.” I will distribute the material needed from ASB.

We then take up game-theoretic analyses of collective choice, as presented in assorted published papers. The format of this part of the course will be student (and professor) presentations of papers. Our second topic, after social choice theory, is the candidate competition game (or “Downsian model”) of policy formation. In the one-dimensional model, we have the well known median voter theorem; in higher dimensions, however, we encounter a difficult equilibrium existence problem. Some authors overcome this by maintaining the assumption of probabilistic voting.

Our third topic is models of bargaining, particularly pertaining to decision-making in legislatures and committees. Thus, we move from Rubinstein’s model of two-person bargaining under unanimity rule to models with multiple bargainers and more interesting voting rules.

Our fourth and last topic is models of elections repeated through time. In addition to the dynamic aspects of elections, these models also capture various types of incomplete information.

*Course Requirements:* Homeworks will be required of all students in the first part of the course, during which time I will be lecturing on social choice theory. After that, paper presentations will be required of all students on a voluntary basis.

Students who are taking the course for credit will also be required to produce a term paper — I will explain more about this in class.

*Readings:* The following list contains readings on social choice theory and papers that I think are interesting or otherwise valuable. We will most likely select from these papers, though deviations from the list are possible.

### **Social Choice**

- preference rationalizable choice – ASB, Chapter 1.
- impossibility theorems – ASB, Sections 2.1-2.3.
- acyclicity and simple rules – ASB, Sections 3.1-3.3.
- single-peakedness – ASB, Sections 4.1-4.4.
- acyclicity and multiple dimensions – ASB, Sections 5.1-5.3.
- core instability – ASB, Section 5.4.
- chaos
  - McKelvey (1976) “Intransitivities in Multi-dimensional Voting Models and Some Implications for Agenda Control,” *Journal of Economic Theory*, 12:472-482.

### **Two-candidate Competition**

- uncovered set
  - McKelvey (1986) “Covering, Dominance, and Institution-free Properties of Social Choice,” *American Journal of Political Science*, 24:68-96.
  - Banks, Duggan, and Le Breton (1998) “Bounds for Mixed Strategy Equilibria and the Uncovered Set,” mimeo.
- probabilistic voting
  - Coughlin (1992) *Probabilistic Voting Theory*, Cambridge: Cambridge University Press, Chapters 4 and 5.

- Ball (1998) “Discontinuity and Non-existence of Equilibrium in the Probabilistic Spatial Voting Model,” *Social Choice and Welfare*, forthcoming.
- Hinich (1977) “Equilibrium in Spatial Voting: The Median Voter Result Is an Artifact,” *Journal of Economic Theory*, 16:208-219.
- Hinich, Ledyard, and Ordeshook (1972) “Non-voting and the Existence of Equilibrium under Majority Rule,” *Journal of Economic Theory*, 4:144-153.
- Ledyard (1984) “The Pure Theory of Large Two-candidate Elections,” *Public Choice*, 44:7-41.

### **Bargaining**

- – Rubinstein (1982) “Perfect Equilibrium in a Bargaining Model,” *Econometrica*, 50:97-109.
- Baron and Ferejohn (1989) “Bargaining in Legislatures,” *American Political Science Review*, 83:1181-1206.
- Baron (1991) “A Spatial Bargaining Theory of Government Formation in Parliamentary Systems,” *American Political Science Review*, 85:137-164.
- Banks and Duggan (1998) “A Bargaining Model of Collective Choice,” mimeo.
- Jackson and Moselle (1998) “Coalition and Party Formation in a Legislative Voting Game,” mimeo.
- Banks (1998) “Committee Proposals and Restrictive Rules,” mimeo.
- Winter (1996) “Voting and Vetoing,” *American Political Science Review*, 90:813-823.
- Baron (1996) “A Dynamic Theory of Collective Goods Programs,” *American Political Science Review*, 90:316-330.

### **Repeated Elections**

- – Barro (1973) “The Control of Politicians: An Economic Model,” *Public Choice*, 14:19-42.
- Ferejohn (1986) “Incumbent Performance and Electoral Control,” *Public Choice*, 50:5-25.

- Austen-Smith and Banks (1989) “Electoral Accountability and Incumbency,” in Ordeshook ed. *Models of Strategic Choice in Politics*, Ann Arbor: University of Michigan Press.
- Banks and Sundaram (1993) “Adverse Selection and Moral Hazard in a Repeated Elections Model,” in Barnett, Hinich, and Schofield ed. *Political Economy: Institutions, Competition, and Representation*, Cambridge: Cambridge University Press.
- Reed (1994) “A Retrospective Voting Model with Heterogeneous Politicians,” *Economics and Politics*, 6:39-58.
- Duggan (1997) “Repeated Elections with Asymmetric Information,” mimeo.
- Reed (1989) “Information in Political Markets: A Little Knowledge Can Be a Dangerous Thing,” *Journal of Law, Economics, and Organization*, 5:355-374.
- Bernhardt, Dubey, and Hughson (1998) “Term Limits and Pork Barrel Politics,” mimeo.