Theory of Voting (HT 2015)
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Overview

In "Theory of Voting" we will explore some of the key issues in social choice and positive political economy more broadly as it relates to systems of collective choice. Social choice theory is divisive: some political scientists view social choice theory as "our physics", i.e. the area of the discipline that explores the deep questions that underly the rest of our enterprise; others view social choice theory as an intellectual dead-end that is only of interest to those who misinterpret its findings. We will assess for ourselves by looking at some of the classic questions in social choice, some recent responses to them, and some extensions in the design of electoral systems.

Background reading and reference:

- Kenneth A. Shepsle, *Analyzing Politics: Rationality, Behavior, and Institutions*, 2nd edition 2010, especially Part II "Group Choice". [Mostly non-technical treatment of many of the important issues.]

- Christian List, "Social Choice Theory", from *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/archives/win2013/entries/social-choice/. [Slightly more technical survey.]

- Alan D. Taylor, Allison M. Pacelli, *Mathematics and Politics: Strategy, Voting, Power and Proof*, 2008. [Very clear development of many of the key mathematical results.]

(1) Epistemic democracy

Bernard Grofman and Scott L. Feld, "Rousseau's general will: A Condorcetian perspective", *The American Political Science Review*, 82:2 (1988). [Provides a non-technical statement of Condorcet's jury theorem that links it to to classical democratic theory.]

Christian List and Robert Goodin, "Epistemic democracy: generalizing the Condorcet jury theorem", *The Journal of Political Philosophy*, 9:3 (2001). `[Extends Condorcet's Jury Theorem to the case of plurality voting with more than two options.]`

David Estlund, "The Irrelevance of the Jury Theorem", Chapter XII of *Democratic Authority* (2008). `[Offers some critiques, of which the ''disjunction problem'' seems particularly telling.]`

Peyton Young, "Condorcet's Theory of Voting", *The American Political Science Review* (1988). `[Considers Condorcet's procedure for ranking more than two alternatives, which has an analogue in maximum likelihood procedures in statistics, and establishes some of the attractive properties of this procedure.]`

(2) Properties of majority rule in restricted contexts

Kenneth O. May, "A Set of Independent Necessary and Sufficient Conditions for Simple Majority Decision", *Econometrica*, 20:4 (1952). `[The classic paper. For reference see also section 2 of List's SEP chapter, Pacelli and Taylor chapters 1 and 7.]`

Duncan Black, "On the rationale of group decision-making", *The Journal of Political Economy*, 46:1 (1948). `[Later appeared as the first several chapters of The Theory of Committees and Elections; introduces the median-voter theorem and the concept of single-peaked preferences.]`

Scott L. Feld and Bernard Grofman, "Partial single-peakedness: An extension and clarification" *Public Choice*, Vol. 51 (1986). `[Shows why the median voter theorem applies even when many voters do not have single-peaked preferences.]`

Christian List, Robert C. Luskin, James S. Fishkin, and Iain McLean, "Deliberation, Single-Peakedness, and the Possibility of Meaningful Democracy: Evidence from Deliberative Polls" *Journal of Politics*, 75:1 (2013). `[Provides empirical evidence that deliberation makes participants' preferences more single-peaked.]`

(3) Problems with majority rule

Donald P. Green and Ian Shapiro, "Legislative Behavior and the Paradox of Voting", chapter 6 of *Pathologies of Rational Choice Theory* (1994). `[A clear exposition of the problems of majority cycling in a two-dimensional spatial model and research that emerges from it.]`

Scott L. Feld and Bernard Grofman, "Necessary and sufficient conditions for a majority winner in n-dimensional spatial voting games: an intuitive geometric approach", *American Journal of Political Science* 31:4 (1987). [An attempt to summarize several of the major results on majority cycles in an accessible way.]

Donald G. Saari, sections 2.1.4-2.2.3 (inclusive) of *Disposing Dictators, Demystifying Voting Paradoxes: Social Choice Analysis* (2008). [An analysis that links the Condorcet paradox to two other majority-rule paradoxes and offers a common explanation.]

(4) Arrow's Theorem

Allan M. Feldman and Roberto Serrano, "Arrow's Impossibility Theorem: Two Simple Single-Profile Versions", *The Harvard College Mathematics Review* 2.2 (2008). [Conveys the flavor of Arrow's theorem in the simplest possible setting.]

Philip J. Reny, "Arrow's theorem and the Gibbard-Satterthwaite theorem: a unified approach", *Economics Letters* 70 (2001). [Establishes two theorems with one particularly clear method of proof.]

Amartya Sen, "Social Choice and Justice: A Review Article", *Journal of Economic Literature* 23:4 (1985). [Clarifies the role of the neutrality assumption in Arrow's Theorem and the implications of the theorem for welfare economics.]

John W. Patty and Elizabeth Maggie Penn, "The debates surrounding social choice" and "Social choice defended", chapters 2 and 3 of *Social choice and legitimacy: The possibilities of impossibility* (2014). [Summarizes the debates and argues for the broad relevance of preference aggregation.]

(5) Strategic behavior

William H. Riker, "The manipulation of social choices: strategic voting", chapter 6 of *Liberalism against populism: A confrontation between the theory of democracy and the theory of social choice* (1982). [Theory and examples of strategic voting in a brief chapter from the classic alarmist text.]

Gary W. Cox, "Strategic voting in single-member single-ballot systems", chapter 4 of *Making votes count: strategic coordination in the world's electoral systems* (1997). [Highlights the relationship between strategic voting and Duverger's Law.]

Roger Myerson, "Effectiveness of Electoral Systems for Reducing Government Corruption: A Game-Theoretic Analysis", *Games and Economic Behavior* 5 (1993), 118-132. `[Highlights the relationship between strategic voting, electoral systems, and electoral accountability.]`

Keith Dowding and Martin van Hees, "In praise of manipulation", *British Journal of Political Science* 38:1 (2008). `[Manipulation is not so bad, and might even be good.]`

(6) "Majority judgment"

Michel L. Balinski and Rida Laraki, chapters 1 and 9-16 of *Majority Judgment* (2010). `[A proposed method of choosing and ranking that builds on and challenges the traditional approach to social choice.]`

(7) Representation (1): Accountability and responsiveness

James Fearon, "Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance", in Adam Przeworski, Susan C. Stokes and Bernard Manin, eds., *Democracy, Accountability, and Representation*, New York: Cambridge University Press (1999), pp. 55-97. `[Selection and incentives in elections.]`

John D. Huber and G. Bingham Powell, Jr., "Congruence Between Citizens and Policymakers in Two Visions of Liberal Democracy" *World Politics* 46:3 (1994), pp. 291-326. `[Assessing congruence and responsiveness under assumption that parties are the units of representation.]`

Torben Iversen and David Soskice, "Electoral Institutions and the Politics of Coalitions: Why Some Democracies Redistribute More than Others", *The American Political Science Review*, 100:2 (2006), pp. 165-181. `[Relates electoral systems to representation of social groups and ultimately government policy.]`

(8) Representation (2): Hypothetical systems

John R. Chamberlin and Paul N. Courant, "Representative Deliberations and Representative Decisions: Proportional Representation and the Borda Rule", *The American Political Science Review* 77:3 (1983). `[A proposal for a system of representation that considers both deliberation and decision-making.]`

Dan Alger, "Voting by Proxy", *Public Choice*, 126:1/2 (2006), pp. 1-26. `[A proposal for a system of representation in which legislators hold voting weight in proportion to the support they receive from citizens.]`

Joseph Banzhaf III, "Weighted voting doesn't work: A mathematical analysis", *Rutgers Law Review*, Vol. 19, 1965. [A classic and influential argument against using weighted legislative voting when legislators represent different numbers of citizens.]