INTRODUCTION TO BEHAVIORAL SOCIAL CHOICE ANALYSIS

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I provide an overview of a forthcoming book with Cambridge University Press, co-authored with Bernard Grofman (UC Irvine), A.A.J. Marley (U Victoria) and Ilia Tsetlin (INSEAD) as well as newer follow-up work in behavioral social choice with various co-authors.

The book develops a mathematical modeling and statistical inference framework that allows us to construct descriptive (as opposed to normative) theories of social choice behavior and to test these theories against empirical data. We believe that this work provides a first systematic attempt towards a formal behavioral theory of social choice behavior, in the spirit of behavioral economics and of behavioral decision theory (a la Kahneman and Tversky). Our empirical work on majority rule decision making demonstrates that some influential strands of theoretical research (the impartial culture assumption, and domain restriction conditions, such as Sen's value restriction and Black's single peakedness) are descriptively invalid. We also show that our behaviorally plausible conditions, which we validate on empirical data, predict that majority rule decision making is extremely unlikely to generate cycles (among sincere preferences) for realistic distributions in mass electorates. A major implication is that majority rule provides a ‘solution’ (in practice) to Arrow's impossibility theorem.

We also discuss how statistical considerations of social choice processes can dramatically redefine what are important research questions (e.g., finding the correct winner may be a bigger concern than avoiding cycles) and can reverse policy implications (e.g., high turnout, not low turnout, as often argued, is desirable when using majority rule).

In follow-up work, we show how Condorcet’s majority rule and Borda’s scoring rule are in almost perfect agreement with each other in some major empirical data sets. These findings suggest that behavioral approaches to social choice can dramatically alter our focus: Rather than emphasize impossibilities of universally feasible solutions and pessimistic predictions about what might go wrong in a social choice process in the worst case scenario, we may investigate redundancies among social choice procedures in actual elections and how to choose social choice procedures that are easy for the voter to use. As indicated above we also must turn our attention to problems that have been widely ignored in the theoretical social choice literature, such as, for instance, the susceptibility of social choice procedures to erroneous election outcomes 1) when voters experience preference uncertainty, 2) when ballots are complex to fill out or 3) when tally procedures contain probabilistic components.

I will illustrate my theoretical and empirical arguments using attitudinal survey data, single transferable vote ballot and approval voting ballot data from real elections.