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SYMPOSIUM: REGULATING THE ELECTORAL PROCESS: Public Choice, Civic Republicanism, and American Politics: Perspectives of a "Reasonable Choice" Modeler.

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SUMMARY:

... Within the domain of Public Choice theory, I deal primarily with work in Social Choice, which is based on Arrow's Impossibility Theorem and ideas related to Black's Median Voter Theorem. ... Condorcet's Jury Theorem led to the development of models of group decision processes that make use of group judgments about the public interest or other evaluative or classificatory criteria. ... In the first, Scott Feld and I examined voter choices among presidential candidates in 1980 and found that, even though all possible preference orderings were found in the electorate, the basis for that transitive ordering at the aggregate level was a set of ideological locations that corresponded to what most political scientists would consider the correct ordering of candidates on a left-right dimension. ... I believe that most voting outcomes in spatial games (at least in those with two or three dimensions) can be expected to be both relatively central and relatively stable, despite the existence of a top cycle set that is the entire space and the corresponding potential for agenda manipulation. ... The word "manipulable" indicates both that there is some voter who can change the outcome by changing his vote and that such a voter has an incentive to vote in a fashion different from his true or sincere preference. ...

TEXT:

[*1542] Many voices compete in American public law. Critical legal theory and feminist perspectives share law review space with paeans to the efficiency of common law. In this Paper, I wish to focus on two important streams of research, the "Public Choice School" n1 and the "Civic Republicanism School." n2 Although the Public Choice and Civic Republicanism [*1543] traditions seem to be at opposite ends of the political and intellectual spectrum, each school of thought has provided a rationale for remedying alleged deficiencies of electoral and legislative politics through judicial intervention. These rationales are, however, sufficiently different that a comparison of the two approaches can yield new insights.

My initial focus is on Public Choice theory because it is the older and the more established tradition, and so far it has had -- in conjunction with its kissing cousin, the Law and Economics Movement n3 -- the greater impact on legal theory. Within the domain of Public Choice theory, I deal primarily with work in Social Choice, which is based on Arrow's Impossibility Theorem n4 and ideas related to Black's Median Voter [*1544] Theorem. n5 While I regard Public Choice scholarship as the most important intellectual contribution to social and political theory in the post-World War II period, n6 the chief aim of this Paper is to debunk certain widely held beliefs about what Public Choice theory tells us about the practice of

democratic politics. n7 Some scholars claim that Public Choice views on the inherent instability of majority rule or the inescapable manipulability of voting outcomes prove the need for judicial correction of the choices made by the people's elected representatives. n8 I argue that these claims are, like the premature rumors of Mark Twain's death, much exaggerated -- *i.e.*, [*1545] dead wrong. n9 I also look briefly at differences between Public Choice and Civic Republican perspectives on the motives that drive legislative decision-making, the role of deliberation, and the importance of political persuasion. n10

My critique of recent political theory is divided into four parts. In Part I, I argue that Arrow's Theorem does not show that democratic politics is inherently impossible, because the Theorem's presumption of instability is not borne out in real world conditions. That Part enumerates the many reasons that the likelihood of stable majority-rule outcomes should be quite high -- exactly what we observe it to be in the real world. Part I focuses on only a few of the models that have been offered to account for the absence both of observed cycles and of the pernicious consequences ostensibly associated with the existence of underlying preferences that lack preference-induced equilibria. n11 For reasons readily explainable in terms of the Tullockian theory of rent-seeking n12 (as well as in terms of the [*1546] notion of an evangelical mission to the heathens), much of what I review is my own work and that of my colleagues.

In Part II, I argue that the manipulation of voting outcomes is not as prevalent as Public Choice theory claims it is. The Gibbard-Satterthwaite Theorem n13 does not mean that it is easy to manipulate voting outcomes through deceit, or that politicians usually find it in their interest to lie about their true preferences. Indeed, I argue that the behavior labeled as "preference misrepresentation" by the Theorem is not lying at all, at least not in the commonsense meaning of the word. Moreover, I argue that the McKelvey Global Cycling Result n14 does not mean that agenda setters can really manipulate outcomes so as to make virtually anything possible. Rather, even where there is no clear majority choice, we frequently expect outcomes either to be centrally located in the space of voter ideal points or, at a minimum, to move in that direction. Thus, I argue that even when there is no answer that is clearly best, the outcome will probably be a reasonable one.

Part III examines the model of judicial review of issues of constitutionality and statutory interpretation. While this model justifies judicial review as a corrective measure for defects in the legislative process, I argue that most of the problems said to plague the legislative process also hold true for the process of judicial interpretation if a majority of judges is required [*1547] to agree on an interpretation of the text. n15 Even if we simplify the process further to require merely that judges decide on what is or is not constitutional, we still may be unable to avoid inconsistencies that can make predicting future judicial decisions difficult and make stare decisis appear ill-behaved. Thus, just as I earlier argued that legislative choice is not as badly behaved as it often is pictured by theorists, I now argue that judicial decisionmaking is not as well behaved as it is sometimes pictured in theory. n16

In Part IV, I argue that the contrast between Public Choice and Civic Republicanism can be overdrawn. Public Choice emphasizes aggregation procedures such as logrolling and incentives for legislators to act as rent-seekers. n17 The recent work in Civic Republicanism emphasizes political deliberation, political persuasion, and the search for the public interest. n18 Yet the Arrowian aggregation problems emphasized by Public Choice theory re-emerge even in the context of the deliberative search for the public interest that characterizes the Civic Republican viewpoint. Similarly, in the Public Choice school's model of preference-driven social choice, deliberation and persuasion may have an important role. Additionally, Part IV explores the reasons that theoretical work in Public Choice is often taken to have an empirical validation even when it does not. For example, Downs's result about tweedledum-tweedledee politics (where there is little "difference in policy positions between parties or candidates") in the context of unidimensional two-party competition in a one-shot contest is only a partial model for understanding candidate and party competition in the United States.

In conclusion, I argue that although politics is inherently messy, incomplete, and inefficient, this is not an unreasonable price to pay to live in a democracy.

I. If We Shoot an Arrow's Theorem into the Body Politic, Does It Actually Hit Anything?

Before we begin our discussion of Arrow's Theorem and its results, it is useful to make distinctions between preferences and epistemic judgments; n19 between three types of collective choice processes: (1) those that [*1548] give rise to an ordering, (2) those that give rise to a unique (set of) "best" choice(s), and

(3) those that divide the world into acceptable and unacceptable categories; n20 and between processes that either require individuals to deliberate or can simply be thought of as processes of aggregation. n21

The distinction between preferences and judgments n22 can be thought of in several different ways. Perhaps the simplest way defines judgments as decisions that can be characterized as better or worse according to some [*1549] (not necessarily fully objective or fully specifiable) criterion. For example, the weather forecasts of different meteorologists are judgments because they can be compared in terms of their predictive accuracy. In contrast, preferences are driven by taste and cannot be characterized as better or worse. Thus, if a group decision process is seen as an aggregation of preferences, it makes no sense to describe the outcome as "good" or "bad." However, if the preference-based decision process were somehow manipulated or rigged, we might characterize the outcome as "not really what most people wanted."

The distinction between preferences and judgments is critical to understanding one central difference between Civic Republican and Public Choice views on how democracy can or should work. Civic Republicans, unlike Public Choice theorists, generally believe that there is a genuine, substantive concept of the public interest that cannot be reduced to an aggregation process based on individual preferences. n23 In short, they believe in some concept of the public good that may be perceived, however dimly, by the citizenry, legislators, and judges. n24

Although Public Choice theorists reject the characterization of politics as the search for the public good, this concept was fundamental to the work of the Marquis de Condorcet, from which Public Choice theorists drew other key elements in their theory. n25 Condorcet's Jury Theorem led to the development of models of group decision processes that make use of group judgments about the public interest or other evaluative or classificatory criteria. n26 Under such models, voters each are assumed to be characterized [*1550] by some competence value ($P[i]$) that represents the probability that a given voter will make the "better" of two choices with respect to some given criterion. If average group competence is above one-half, the basic result is that majority decisions can be more accurate than average group competence. Indeed, if average group competence is above one-half, and voters are independent, then the probability of group judgmental accuracy over dichotomous choices approaches one as group size increases. The Condorcet Jury Theorem provides a justification for majoritarian decisionmaking and a potential justification for mass democracy if its citizenry are of at least minimal competence. n27

[*1551] Distinguishing between aggregative and deliberative processes also is useful for a number of reasons. Models that see choice in purely aggregative terms often fail to recognize the importance of deliberative processes to political life and fail to recognize the symbolic components of political legitimacy, such as the belief that one's views have been considered in the political debate. It also is important to understand empirically when deliberation will benefit the decision process. n28 Moreover, whether choices are based on "preferences" or on "judgments," it is impossible to understand politics and the formation of public policy without discussing the role of persuasion in the deliberative process. n29

It is important to distinguish between social decision processes that (a) give rise to complete orderings of all alternatives from most to least preferred, (b) merely single out a best choice (or choices), and (c) merely identify which choices are acceptable. These distinctions cover the full range of complexity and precision possible in social decision processes. While some critiques may be valid for the most complex models, they may not hold true for the less demanding categories. Quite simply, the less you expect of a social decision process, the less likely you are to be disappointed.

A. *Who's Afraid of the Big Bad Cycle?*

The paradox of cyclical majorities, n30 known since at least the time of Condorcet (1787), n31 is a specter that has haunted Social Choice theory [*1552] since Black and Arrow rediscovered it. n32 In my view, it is the paradox of cyclical majorities that is at the heart of Arrow's Impossibility Theorem, n33 since reasonable procedures exist if we decide that cyclic preferences are permitted. If social preferences are cyclic, then social decision processes will not give rise to well behaved transitive orderings. The link between cycles and Arrow's Theorem clearly demonstrates that Arrow's Theorem is about what can go wrong, not about what will go wrong -- the theorem is about possibilities, not probabilities. If we admit all possible preference orderings, sometimes (exactly how often remains to be seen) we will have cyclic preferences. If we want to resolve deadlocks or inconsistencies in a consistent fashion, we will need a dictator.

There are at least four reasons why Public Choice theory has exaggerated the importance of cycles.

First, the probability of their occurrence has been exaggerated. n34

Second, the cycles actually experienced may have less impact than the theories would suggest. Although Arrow's Theorem is violated when collective choice does not produce a transitive ordering, we may not always need to require that the *entire* ordering be transitive. In particular, we can find situations where collective choice is intransitive over some part of the domain of alternatives, and yet there is a clear majority winner (*i.e.*, there may be a cycle but not a top cycle). n35

Third, where the decision process produces resistance to change, the influence of cyclical majorities is decreased. Arrow's Theorem is concerned with resolute choices -- situations where we can determine which of two alternatives is to be preferred. n36 But sometimes we may be willing to settle for less, and we may allow a clear majority preference to go unrecognized. A common example of this is a system that requires more than a simple majority in order to replace one alternative with another. Often, [*1553] alternative A cannot get a specified supermajority over alternative B, but neither can alternative B get that specified supermajority over alternative A. This is an irresolute process (and possibly an intransitive one), but if we do not mind a bias toward the status quo, it may be a process we can live with. Moreover, as I argue in Part IV, n37 sometimes all that we want is a process that allows us to separate the sheep from the goats (as, for example, when we distinguish between constitutional and unconstitutional choices) without deciding on the merits of one choice relative to the other. When we set our sights this low, Arrow's Theorem no longer haunts us. n38

Finally, the consequences of cyclicity, even with a top cycle that includes all alternatives, may not be that bad. n39

B. *Why So Few Observed Cycles?*

Cycles are much harder to find than early Social Choice models suggest they ought to be. n40 Indeed, hunting for the paradox is much like hunting for the Loch Ness monster: appearances are few and far between, and some of the sightings are suspect. n41

Why has the likelihood of cyclic preferences in real-world situations been so overstated by early Social Choice models? The answer, in part, [*1554] revolves around three points. First, the Social Choice models often wrongly assume that democracies are impartial cultures in which all preference orderings are equally likely. n42 In fact, the shared values within a given culture reduce the likelihood of shifting preferences. Additionally, informal norms may bias a given culture toward a particular outcome. n43

Second, Social Choice models neglect the impact of a two-party system on preference orderings. A two-party system creates a largely single-dimensional competition within the legislature. n44 Single-dimensional competition stabilizes the preferences of the majority and thereby decreases the frequency of cycling.

Finally, many cycles simply are not observable in real-world situations. This phenomenon may occur where the nature of the decision process masks the presence of cycles. n45

1. Why Results About the Probability of the Paradox of Cyclical Majorities Derived from the Assumption of an Impartial Culture Are Misleading. -- There is considerable literature on the probability of a paradox and the size of the top cycle set when the number of alternatives is finite and all preference orderings are equally likely. n46 The results of such research are extremely discouraging for supporters of the democratic system. Not only will the paradox be virtually certain as the number of alternatives increases, but we can expect all or almost all of the alternatives to be in the top cycle. Thus, it would appear that restricting choices to the top cycle set does not solve the paradox.

Such research is misleading, however, because the assumed impartiality overstates the importance of the paradox. The impartial culture has only one thing to recommend it as an assumption: it is mathematically tractable. Its one overwhelmingly important drawback, however, is that it gives something very close to knife-edge results. In other words, relatively small deviations from the impartial culture can change the results dramatically. Richard Niemi observed that as the proportion of single-peaked orderings increases the likelihood of the paradox decreases and approaches zero as the proportion of single-peaked preferences rises. n47 Other authors have [*1555] noted that greater social homogeneity (defined in

various ways) can inhibit the presence of the paradox. n48 Yet other authors have looked at "balance conditions," where transitivity is guaranteed when certain triples cancel each other out, leaving only a net balance of single-peaked, single-troughed, or polarized orderings. n49 However, few authors have interpreted these balance results as having much empirical relevance.

The paradox will be rare (or nonexistent) in real-world choices among a set of finite alternatives as long as the probability in any pairwise choice that a randomly chosen voter would see *i* as being "to the left of" *j* is greater than one-half. This is likely to occur if and only if *i* is to the left of *j* in some "orienting" ideological ordering. n50 Such a result might be expected to occur with considerable frequency if either of two conditions exist. First, if some relatively small subset of voters sees the world in single-peaked ideological terms while the rest of the electorate is a veritable cloud of random choice, the views of the ideological minority become the signal that emerges from the noise. n51 Alternatively, elites and news media may provide the ideological orientation by portraying the world in left-right terms. Even if most citizens do not consistently see the world in those terms, the media impact may be sufficient to make the left-right ordering the most probable way that voters *in the aggregate* see the world. In such a case, whenever a large aggregate chooses among a small set of [*1556] alternatives, group majority choices almost certainly will be made *as if* all members of the group saw choices as occurring in ideological terms. n52 Whether such ideological ordering is the result of media portrayals or the disproportionate influence of a small group, its existence will diminish the frequency of observable paradoxes.

Two empirical studies verify that such ideological ordering exists. In the first, Scott Feld and I examined voter choices among presidential candidates in 1980 and found that, even though all possible preference orderings were found in the electorate, the basis for that transitive ordering at the aggregate level was a set of ideological locations that corresponded to what most political scientists would consider the correct ordering of candidates on a left-right dimension. n53 Moreover, when looking at preference orderings among particular subsets of voters such as those who identified themselves as politically conservative or politically liberal, the subgroups also had an ideologically consistent ordering. The first preference of each subset corresponded to what we would expect given the ideological self-identifications of members of that subset, even though all possible preference orderings were found among the individual members. n54 These findings support the idea that it is sensible to talk about groups having ideological attitudes even though most members of the group lack single-peaked orderings. n55 Hence Feld and Grofman assert that ideology should be considered a "collective phenomenon." n56

In the second empirical study, Feld and Grofman analyzed ballots in elections conducted under the single transferable vote system, where voters are required to rank-order the candidates. n57 They found that *every election had a Condorcet (majority) winner*, n58 and that majority preferences were perfectly transitive in two-thirds of the elections. n59 Moreover, even in the elections that were not perfectly transitive, the deviations from majority-rule transitivity were minimal -- one or two reversals somewhere [*1557] down the candidate list. n60 Indeed, the largest proportion of intransitive triples in any election was two percent. n61 This study identifies two related reasons voting may give rise to a transitive majority ordering despite tremendous divergence in the underlying bases of voter choice. First, voting can be transitively ordered if different voters are involved in determining different segments of the collective choice. Second, voting will tend to produce transitive results if voters distinguish among only a few alternatives and lump the rest together at the bottom of their ordering. n62 As long as voters differ slightly in which alternatives they "distinguish" from the pack, the transitive ordering simply becomes a function of the number of voters who "approve" each alternative. Feld and Grofman suggest that the latter mechanism probably accounts for much of the transitivity observed in the election data set. n63

In like manner, left-most candidates may be relatively indistinguishable to the right-most voters, while many of the left-most voters would have a clear conception of the ideological placement of candidates near to them. Likewise, the right-most candidates are largely indistinguishable to the left-most voters, while the right-most voters accurately perceive the ideological placement of candidates on the right. As a result, the aggregate ideological continuum is not completely apparent to any segment of the population, but depends instead on the agreement among subsets of voters with "local" knowledge.

2. *How Two-Party Competition Can Create Largely Single-Dimensional Competition in Legislatures Even Though the Electorate Exhibits Multidimensional or Unstructured Preferences.* -- Cyclic preferences will be less likely to occur in a two-party system, because a two-party system inevitably creates a single-

dimensional competition along the ideological spectrum. The effect of this single-dimensional competition reduces the number of likely preference orderings. n64 As a result, the probability of a paradox is diminished if all choices are positioned on a single ideological scale.

Candidates in a two-party system are motivated to adopt a non-ideological position. Glazer and Grofman argue that a candidate's adopting an ideological stance, especially one stated in left-right terms, is "like putting on a pre-knotted tie; it requires very little work and the consequences for [*1558] one's appearance are clear in advance." n65 Thus, "[a] candidate whose positions conform to an ideology need only mention that ideology in his messages" to the electorate or, more importantly, to party activists and sources of campaign funding. n66 Adopting an ideology makes campaigning and fundraising easier.

Once an ideological position is adopted, candidates have powerful incentives to adhere strictly to that view. For example, a liberal representative will tend to be consistent in voting with fellow liberals, because "[v]oters who discover that a congressman who claims to be a liberal supported a bill that other liberals opposed[] may fear that the congressman is not as liberal as he claims. . . ." n67 This will be true even if most voters are indifferent to ideological consistency or unable to detect it, because a subset of voters (generally consisting of party activists) is monitoring the representative's behavior. Thus, there are incentives for representatives to vote ideologically.

It is not apparent why the ideology will be one-dimensional. Yet, studies have shown that approximately eighty-five percent of roll-call voting patterns in the U.S. Congress can be accounted for by a single dimension. n68 One reason for the emergence of a single left-right dimension is its simplicity, but that cannot be the whole story. Glazer and Grofman argue that the consequence of a desire to appear ideologically consistent is that left and right come to be defined in terms of either the voting patterns of the representatives who are self-identified liberals and conservatives or the roll-call voting scores generated by various interest groups and trade associations. n69 Hence, a vote against the death of baby seals becomes a "leftist" vote, and a vote against the death of human fetuses becomes a "rightist" vote, even though environmentalist and moral choices do not fit easily (if they fit at all) with the traditional notions of left or right. n70 In other words, very disparate dimensions are crammed into a single ideological spectrum. "A newly elected congressman who comes from a state where strip mining is not a salient issue and who espoused a liberal ideology [*1559] will nevertheless find it wise to oppose strip mines." n71 When this "liberal" congressman chooses to vote against strip mining, the issue is further assimilated to a left-right dimension. Ideology, therefore, becomes self-reinforcing. A left-right orientation also is strongly enhanced by the presence of competition involving exactly two parties. n72 Just as two points define a line, so two parties facilitate one-dimensional competition by anchoring it. The Democrats are pro-seals and pro-choice, and the Republicans are anti-seals and (more or less) anti-choice. n73

3. *Why Cycles May Be There but Go Unseen.* -- The evils of cycles appear to have been greatly exaggerated. The early studies on the size of top-cycle sets n74 and on the potential for agenda manipulation n75 suggested that cycles necessarily generate either unpredictability of policy choices or outcomes that are far from the preferences of the voters. n76 Yet stubborn [*1560] empirical facts do not support this thesis:

[A]s Tullock has argued, *in contrast* with what has been shown to be true about the majority rule relation, government policies do *not* tend to change quickly or to wander all over the set of possible policies. As a consequence, it is hard to resist the alternative inference that the primary contribution of recent work on the majority rule relation is as a grand "reductio ad absurdum" that tells us to go back to the basic model that has been used to see how it should be modified in order for theory and empirical observations to match up. n77

This contradiction between the theory and the evidence has given rise to a new cottage industry in search of the reasons for stability. I have actively contributed to this industry, especially in my joint work with other authors such as Scott L. Feld, Nicholas Miller, and Guillermo Owen. For example, I have suggested that as we move from voter preferences to voting in legislatures, there may be an aggregate smoothing and ideologizing process that creates stability despite the presence of very diverse preferences at the individual voter level. n78 Even Richard McKelvey and Norman Schofield, whose early work was a major source of pessimism about the potential for meaningful democratic choice, have recently developed revised models that believe some, if not all, of that pessimism. n79

This recent scholarship has helped explain why cycles have not undermined the existence of highly durable policy outcomes and have not produced outcomes far from the center of voter preferences. One possibility, which does not deny the theoretical evils of cycles, is that we may not be able to detect the presence of cycles because of the few votes that take place. n80 More importantly, the existence of certain norms and institutional [*1561] structures has been shown to inhibit the tendency of cycles to lead to instability.

Norms such as "benefit of the doubt" n81 and "no-quibbling" n82 turn instability into stability. Special rules, such as one requiring a supermajority for the adoption of new policies, create further resistance to change and thereby enhance stability. n83 Other political institutions force choices into one-issue-at-a-time or take-it-or-leave-it decisionmaking, n84 constrain the number of options among which choice is to be made, n85 or create complex and multi-tiered decision processes that are the analogue of supermajoritarian decisionmaking. n86 In other words, even if a cycle is present, the nature of the decision process may mask it and obviate its potentially destabilizing consequence in the process.

The decision process itself also may operate to create stability, even when, technically speaking, all alternatives are in a majority-rule top cycle set. Also, a predecisional cycle may be dissolved after a decision has been reached. To understand voters' preferences for an alternative, we often have to know the "history" of the votes for that alternative. Alternatives may gain support if they are seen as the product of a legitimate democratic [*1562] process, or they may lose support if they are seen as being unfairly imposed. In other words, an alternative changes as the voting history associated with it changes. Similarly, expectations will have shifted once a decision has been reached. In the post-decision world, some voters may now suffer a loss if there is a further change. Perceptual asymmetries between gains and losses may lead to changes in voter preference orderings between the pre-decisional and post-decisional periods. n87 Because of these phenomena, the same alternative is rarely encountered twice. Additionally, the post-decision environment is different because decisions create new actors and new interests. n88 Such pre-decision and post-decision influences on voter behavior are a stabilizing force in a democratic society.

C. Structure-Induced Equilibria

The work of Kenneth Shepsle n89 has inspired extensive literature on structure-induced equilibria. Because that literature has been comprehensively reviewed by other scholars, n90 I shall be content to note that stability can be created from an underlying structure of cyclic preferences in the electorate by a variety of institutional devices that structure the agenda process. For example, we can force all decisions to be made one issue dimension at a time -- on dimensions where single-peaked preference orderings presumably exist. n91 Or, we can use complex tiered voting rules such as bicameralism with an executive veto and a legislative override; n92 we [*1563] can simply require supermajorities; n93 or we can impose constraints on what agendas can be considered. n94

D. The Neglected Importance of Norms

While most of the work on controlling cycles has focused on formal rules such as germaneness requirements for amendments, jurisdictional assignment rules, and closed or semi-closed voting rules, Scott Feld and I have investigated the role of informal norms in enhancing stability. n95 We focused on two norms -- the common practice of according benefit of the doubt to the status quo and the closely related no-quibbling norm.

The idea of *benefit of the doubt* is quite simple: voters will choose to shift from the status quo to some other alternative only when that other alternative is "clearly" superior, thus giving the status quo some benefit of the doubt. If a relatively large number of voters gives a very small benefit of the doubt to the status quo, then centrally located choices become invulnerable to defeat and can often be expected to defeat proposed alternatives by large margins. n96 A similar result can be expected if a small number of randomly distributed voters gives a large benefit of the doubt to the status quo. n97 In most settings, moreover, even a middling number of voters giving what is still a quite small benefit of the doubt can produce stability. n98 Voters are motivated to give the benefit of the doubt as a risk-avoidance mechanism in the presence of uncertainty as to the true location -- or the true consequences -- of any proposed replacement for the status quo. The status quo, in contrast, is a known commodity. n99

The idea of a *no-quibbling norm* is equally straightforward: voters will not bother to consider alternatives that are only "trivially" different from one another. n100 Voters gravitate towards such a no-quibbling norm because there are costs to considering alternatives; n101 because there is [*1564] uncertainty as to the true location of alternatives; n102 and because they tend to engage in behaviors that lead to satisfactory results. n103 Thus, differentiation among alternatives is sensible only when the differences exceed the threshold costs of decisionmaking. n104 In law, for example, we often have de minimis rules, such as the rule that reapportionment plans with population deviations below ten percent are prima facie constitutional. n105 Cycles, therefore, are highly unlikely to occur when a no-quibbling norm is in place. n106

E. *What to Do When the Cycle Comes*

While I believe (and the empirical evidence suggests) that cycles will be rare, there are certain types of situations where their presence might be anticipated. Consider, for example, a department faced with choosing between alternatives *Y* and *N* on a very controversial academic matter, but with the option simply to leave the decision up to the Dean (*D*). Assume that members of Group One have preferences *YDN*, members of Group Two have preferences *DNY*, and members of Group Three have preferences *NYD*. We might imagine that members of Group One believe that the Dean has some chance of sharing their views and care more about the outcome than about who makes the decision. Members of Group Two would like to pass the buck to the Dean in a controversial situation and thus avoid taking a stand that will be very unpopular with some of their colleagues no matter how they choose to vote. Members of Group Three [*1565] are adamantly opposed to precedents which enhance the power of the Dean vis-a-vis the department. n107 If no single group has a majority, then there will be a paradox of cyclical majorities. n108

How much of a problem is that? When such an issue is noted by the faculty, asymmetries in either the nature of the options or the nature of the pairwise preferences are likely to suggest a "reasonable" way to escape from indecision and cycling. One option is to privilege a particular alternative such as the status quo. n109 Another option is to look at the detailed structure of preferences and eliminate the alternative with either the fewest first place votes or the most last place votes. The voters then could choose between the two remaining alternatives or use the Borda count to determine relative enthusiasm for the various alternatives. n110 While one may quibble about which of these methods to use, such a rule is unlikely to be rejected in practice when it is established in advance.

In sum, cycles are both less common and less serious than they are often thought to be. I believe that most voting outcomes in spatial games (at least in those with two or three dimensions) can be expected to be both relatively central n111 and relatively stable, despite the existence of a top cycle set that is the entire space and the corresponding potential for agenda manipulation. n112 When an outcome is not central, it is likely to be [*1566] because the majority has agreed to defer to the views of an intense minority. In such situations, the theoretical presence of a cycle usually does not translate into much of a problem from either a practical or a normative perspective.

II. Manipulability of Election Outcomes

The discussion in Part I does not deal with what many regard as the most pernicious feature of democratic decision procedures -- their alleged openness to manipulation through strategic misrepresentation of preferences and through agenda control over the sequence of votes. n113 My general view is that the potential for manipulation has been much exaggerated, but that certain types of voting procedures, such as a simple plurality, are indeed open to important types of manipulation. In practice, the possibilities for manipulation are reduced both by norms such as no quibbling and benefit of the doubt, as well as by features of decisionmaking such as limitations on agenda length and de facto requirements for more than bare majorities.

A. *Gibbard-Satterthwaite Theorem*

The Gibbard-Satterthwaite Theorem is a direct analogue of Arrow's Theorem. n114 Roughly speaking, it shows that no resolute voting process with various other desirable attributes can produce results that are never manipulable. The word "manipulable" indicates both that there is some voter who can

change the outcome by changing his vote and that such a voter has an incentive to vote in a fashion different from his true or sincere preference. n115

[*1567] Here it is necessary to be very precise about what is meant by a voter's "true preference." n116 For example, Social Choice theorists characterize it as misrepresentation (insincere voting) for a voter to choose $[b]$ from the set $[[b], [a,c]]$ if that voter's transitive preference ordering has a preferred to b preferred to c . n117 But why is this misrepresentation if the voter knows that the outcome expected from $[a,c]$ will be c , rather than that voter's first choice, a ? Clearly, in a choice between b and c , the voter prefers b . In this situation, c is called the "sophisticated outcome" at the right-hand node, n118 and hence the real choice is between b and c , not between $[b]$ and $[a,c]$. A far better term for sincere voting is optimistic voting, because to choose $[a,c]$ over $[b]$ because one's first preference is in the set $[a,c]$ makes sense only if one thinks (optimistically) that a will be chosen -- otherwise b is preferred. n119

Even if the choice is between $[a,b]$ and $[a,c]$, the fact that the voter prefers b to c does not mean that the voter shows a "true" preference by choosing $[a,b]$ over $[a,c]$. If the process is standard amendment procedure in which either b or c will be paired against a in a final vote, with the winner of that final vote being chosen, then it matters which alternative will win that final vote. If the voter knows that a will defeat b , but c will defeat a , then it makes sense to choose $[a,c]$ over $[a,b]$ if the voter's preferences are first b , then c , then a . Or, to put it another way, *voters have preferences over outcomes, not over alternatives*. It may look to the voter in the above example as if he is merely choosing between b and c on the first round, but that would be a mistake. The real choice is between $[a,b]$ and $[a,c]$, and what the likely outcome will be from among each set is very much a matter worth knowing or speculating about.

I am not that much bothered by voters voting "insincerely" because I regard that term as a misnomer; therefore, I am not as troubled as some scholars are by the Gibbard-Satterthwaite result. n120 But more [*1568] importantly, like Arrow's Theorem, the Gibbard-Satterthwaite result is about what is possible, not what is probable. With large electorates and multiple options, actual manipulation is very unlikely under various "reasonable" voting rules, even when it is theoretically possible given the patterns of preferences. n121 It is very unlikely that a pattern of preferences will arise under which a *single* voter's or cohesive voting bloc's change of vote could be decisive. n122 Manipulability, in the technical sense identified above, is thus likely only in circumstances where there are only a handful of voters or only a handful of voting blocs, each of which is capable of cohesive voting. n123

Of course, all other things being equal, it probably would be best for voters to be able to make their decisions at any given moment based solely on their preferences concerning the dichotomous choice directly before them. But we cannot so cavalierly wish away the problems of decisional uncertainties in a multi-option world of sequential decisionmaking.

B. Constraints on the Number of Alternatives to be Voted Upon

If we have two political parties with strong party discipline such that each can be taken to be a unitary actor, constraints on the number of alternatives [*1569] presented have no importance because the preference ordering of the larger of the two parties will determine societal preferences. But in all other circumstances, especially those where cycling is likely to occur, these constraints become critical because they inhibit the manifestation of the horrific consequences of cycles that were predicted by McKelvey n124 and Cohen. n125 Both the potential for outcomes to wander all over the space and the ability of a skilled agenda manipulator to achieve virtually any outcome depend upon agenda length -- the number of alternatives that the group is prepared to consider. n126 If there are constraints on agenda length, then there are constraints (usually quite severe ones) on how far away from the "center" of the space n127 even the most devilish agenda setter can move the outcome when the group members vote sincerely and the voting rule is standard amendment procedure. n128

In particular, if we begin at the center of the space, the path that takes us away from the center the fastest is a spiraling path that takes a great many steps to get far away. n129 In general, there will be very strong centripetal pressures in most voting situations if the number of substitute amendments to be voted upon is limited. n130 To put it simply, while we can devise an agenda that *eventually* will take us anywhere some agenda setter wants us to go, we could not necessarily get there in our lifetime or at least in the length of time that any sane group of people might be willing to spend voting on a sequence of agenda

items. n131 Moreover, if anyone happens to notice that outcomes are spiraling away from the Pareto set, all they need do is reintroduce a centrally located alternative onto the agenda.

[*1570] *C. Closed Rules*

I certainly do not claim that there are no circumstances under which agenda control matters. For example, when we constrain voting options to a take-it-or-leave-it vote, n132 we can create stability by allowing the agenda setter to implement the choice acceptable to the group majority -- and preferable to the status quo of no bill at all -- that is closest to the agenda-setter's own preference. n133 Thus, in a closed rule in the U.S. House of Representatives, the committee can move the legislature in the direction of the committee's own preferences. But I would still emphasize that the committee can deviate from the preferences of the legislature only so far. Any committee proposal still must be preferred by the legislature to the status quo of no bill at all. n134 Moreover, any change is likely to be one that moves in the direction of the larger group's overall preferences, even if at the same time it also moves in the direction of the committee's preferences. n135

D. Plott-Levine Flying Club

In perhaps the best-known example of recent successful agenda manipulation in the real world, members of a university flying club were able to manipulate the sequence of votes on what set of planes would be leased by the club so as to obtain their most preferred choice. n136 Moreover, Professors Plott and Levine were able to replicate their successful manipulation of the group outcome experimentally in a setting where voters were given monetary rewards to establish their preference ordering in such a fashion as to replicate the hypothesized preferences of flying club members. n137

There are several problems in generalizing from the Plott-Levine flying club example to other potential agenda manipulation settings. First, Plott and Levine did not use a standard agenda. n138 Their agenda eliminates [*1571] several alternatives at a time from consideration, rather than just one. Second, for the manipulation to have succeeded, very tight agenda control was necessary because there appears to have been a majority winner. Indeed, as I have reviewed the hypothesized preference orderings, I have come to the conclusion that almost any other agenda sequence would have vitiated the manipulators' attempt to get their *most* preferred outcome. Third, for the manipulation to have succeeded, the manipulators needed very nearly perfect information about the preference structure of the various flying club members in order to design an agenda that would achieve their purpose, and that information could not be known to others in the group, lest they perceive that a majority winner did exist and seek to obtain an agenda that would provide such an outcome. This information requirement may be particularly difficult to meet when the voters are sophisticated. For example, when a Public Choice scholar sought to elicit information from his colleagues at the California Institute of Technology about their preferences in order to study faculty decision processes, some of his skeptical colleagues either refused to give him that information or lied about their true preferences. n139 Fourth, the authors did not always succeed, even in an experimental setting in which they had strong control over the voting procedures. Thus, the ability of Professors Plott and Levine to manipulate an agenda successfully does not mean that other agenda-setters will be successful.

III. A Model of Constitutional Review as an On-Off Switch

Thus far, I have rebutted the Public Choice theorists' claim that democratic voting systems are inherently flawed by instability and vulnerability to manipulation. Some Public Choice theorists cite these flaws and argue that judicial review is justifiable as a method of correcting these defects. I am not an opponent of judicial review. I propose a model for judicial review that insulates the review process from the same theoretical critiques that the Public choice School levels at democratic voting systems. Under this model, a judge acts as an umpire, determining whether a particular voting system or outcome complied with constitutional requirements.

Most contemporary legal scholars doubt that the "umpire role" is a metaphor for judicial review of constitutionality n140 because it either [*1572] overstates the power that courts have or overstates the strength of the ties that bind judges to sacred texts. n141 But few would dispute that courts do behave like umpires in one sense: umpires decide whether a pitch is a ball or a strike; the courts decide whether an

action is unconstitutional or constitutional. Characterizing the courts' role in this way does not commit one to the view that there are particular principles by which the distinction is to be made; the belief that there are such things as balls and strikes independent of the labels affixed by umpires; or the view that a court's determination of constitutionality is the ultimate answer to which all citizens and all other political actors must bow. n142 From a modeling perspective, one may use the umpire analogy to characterize the choice facing a judge as a decision to turn a switch on or off. n143 Different judges may have different reasons for turning the switch off or on. Moreover, although a judge may not articulate the "real" reasons for her position, we can assume that each judge's written opinion does give reasons for her choice under an explicit rule or classification scheme. The word "decision" refers to the vote of a majority of judges. The word "rule" refers to a classification scheme from which future decisions can be anticipated by applying the classification scheme to case-specific facts. A "precedent," then, is a rule that has been endorsed by some requisite set of judges.

A. Precedent

Before proceeding to a detailed examination of the judicial review model, it is helpful to note some of the inherent limitations on the use of precedents in the judicial decision process. The first thing to observe about precedent is that there may be various Supreme Court opinions that permit a decision to be reached without stating a rule that commands majority endorsement, although there may not be dispositive opinions that can be [*1573] called precedent. Second, precedent rarely states a rule that is precise enough to classify all likely patterns of future case facts according to their constitutionality. n144 Third, judges can be remarkably inventive in interpreting rules stated in earlier cases. For example, in *City of Mobile v. Bolden*, n145 the Supreme Court majority asserted that in *White v. Regester*, n146 it had held that purposeful discrimination is an element of a successful claim of unconstitutional vote dilution under the Fourteenth Amendment. n147 This interpretation of *White* was a surprise to the various circuits that had reviewed vote dilution cases immediately subsequent to the *White* decision; n148 to some of the Justices who had signed the opinion; n149 and especially to the scholars who had watched nearly two decades of cases involving "one person, one vote" issues at the state and local level being decided under the rubric of the Fourteenth Amendment without mentioning the word "intent," n150 and who continued to see that happen even after *City of Mobile v. Bolden* was decided. n151 Fourth, not only do courts sometimes overrule precedent *sub rosa*, they sometimes explicitly overrule even long-standing precedent. n152

If we think about these points, we would certainly not conclude that court decisions are immune from instability. Instead, we might develop some a priori skepticism about any claim that judicial decisionmaking is necessarily more stable than that of legislatures. With this skepticism, one can strip away unwarranted claims about the judiciary's ability to correct flaws in the legislative decision process. In the two following subparts, I examine two such claims.

B. Modeling Judicial Interpretations

The judiciary's ability to correct flaws in the legislative process assumes that the judiciary's decision process is not subject to the same [*1574] defects. Yet the basic process of textual interpretation n153 introduces the problems of instability and manipulability into the judicial sphere.

To illustrate this problem, assume that a court must interpret a text for which there are only two relevant dimensions on which there is disagreement as to what the text means. A particular interpretation of the text can then be thought of simply as a point in two-dimensional space. The court's task is to reach agreement (majority or otherwise) on an interpretation of the text. n154 Each individual judge's preference for any proposed interpretation falls off in each direction with distance from that judge's own preferred interpretation. But if there are three or more judges, everything that can be said about legislative voting processes -- in which a voter's ideal point indicates his most preferred outcome -- applies with equal force to judicial interpretation where a judge's ideal point is that judge's interpretation of the text. n155 That is, if voter or legislative *preference aggregation* is unstable, manipulable, or subject to misrepresentation of preferences, then the process of judicial agreement on any *single interpretation* of the text also will share these characteristics. n156

Of course, my argument in Parts I and II that the instability and manipulability of legislative decisionmaking have been much exaggerated would also apply with equal force to the limitations of

judicial interpretation because the two processes are essentially isomorphic. From this perspective, not only is judicial decisionmaking in no way "privileged" by being exempt from the problems of decisionmaking to which the social [*1575] choice literature calls our attention, but it shares most, if not all, of the supposed key "faults" of legislative processes. n157

C. Modeling Judicial Decisions

One way in which we can rescue judicial interpretation from the Arrowian trap n158 is to require not that judges agree on an *interpretation* from which constitutionality can be deduced when the case facts are known, but that they agree on a *decision* as to constitutionality. How does this help? By requiring only dichotomous classification, an ordering of points in terms of more and less preferred interpretations is no longer necessary. Therefore, the issue of transitivity of group preferences (in this case group-preferred interpretations) that is at the heart of Arrow's Theorem is simply not relevant. Because the only question is a dichotomous one, no judge has an incentive to state a classification rule that is not his true one.

This result can be illustrated by examining a very simple classification rule. Imagine that a judge draws a line in some two dimensional space of relevant case characteristics such that every point falling on one side of the line is held constitutional while every point on the other side is held unconstitutional. Different judges may draw different lines. By determining which points fall on the "constitutional" side of a majority of lines, we can identify what decision will be reached. Note that this example gives us a straightforward algorithm for determining what is or is not constitutional, but it does not guarantee that the classification scheme will exhibit what legal scholars might regard as a unified and intellectually defensible principle. Analogously, we can imagine that each judge has some zone such [*1576] that the points within that space will be held to be unconstitutional. Again, we can find those points that a majority of judges agree to be unconstitutional. For example, in Figure 1, we show three judges with three different (roughly circular) zones of constitutionality.

Figure 1.

The shaded areas are those points that a majority would find constitutional. Thus, even though points A, B, and C are held constitutional, point D, within the convex hull defined by these three points, would not be held constitutional. n159

This example is a very simple one. We can make it even more extreme by having the majority agreement on what is constitutional fall into two discontinuous zones, as shown in Figure 2. The prospects for such difficulties increase as we move from three-judge panels to nine-member courts. In the judicial context, therefore, the price we must pay to avoid Arrowian problems completely by settling for an agreed-upon classification of cases according to their underlying facts rather than seeking an agreed-upon

[*1577] interpretation of the law n160 is to give up any strong claims for the intellectual coherence of legal rules. n161

Figure 2.

[SEE FIGURE IN ORIGINAL]

IV. Reconciling Public Choice and Civic Republican Portraits of Politics

In comparing work in Public Choice with recent work in Civic Republicanism, I argue that the contrast between the two perspectives has been overdrawn. The traditional view of Public Choice emphasizes aggregation procedures such as logrolling and incentives for legislators to act as rent-seekers, n162 while the traditional view of Civic Republicanism emphasizes [*1578] political deliberation, political persuasion, and the search for the public interest. n163 Standard Public Choice scholarship relies on self-interest and rational calculation and constructs models of the political process that see legislators as both vote-maximizers wishing to stay in office as long as possible and manipulators who bribe their constituents with funds from the public purse. In contrast, Civic Republican works focus on the virtues of deliberation and the possibility of disinterested pursuit of the common good. In light of these views, it would be fair to say that there is little in the Public Choice tradition (with the notable exception of the heretic wing that draws upon the Condorcet Jury Theorem) n164 which suggests a convergence with Civic Republicanism. But as a "reasonable choice" modeler n165 and a recent participant in a six-week National Endowment for

the Humanities-funded Institute on "Athenian Democracy," n166 and in honor of the Bill Clinton presidency, I seek reconciliation and a golden mean between Civic Republicans and Public Choice advocates. n167

On the one hand, waving the flag of the public interest does not mean that everyone will rally to that banner. The same Arrowian aggregation problems that plague judicial interpretation can manifest themselves in the context of a deliberative search for the public interest unless we posit that all voters share a common notion of the common interest. n168 On the other hand, I argue that persuasion and deliberation may have an important role in the context of preference-driven social choice. In this Part, I wish to call attention to a few recent works in the Public Choice tradition that could fit relatively easily within a framework of Civic Republicanism -- papers that emphasize political persuasion, or the role of the legislator as entrepreneur and policy innovator. n169

[*1579] A. *Persuasion*

For the Civic Republicans, political persuasion is a key element in the electoral process. Proponents of various issues work through the electoral system to persuade voters that particular proposals are in the public interest. In the Public Choice School, however, the role of persuasion is not so clear. The usual economic model posits that actors have pre-existing preferences and that they take actions to maximize the realization of those preferences. So the fundamental role of persuasion in Public Choice theory is to persuade voters that a particular position is in their own interest.

But from the very first applications of economic theory to democratic processes, scholars recognized that a voter's definition of self-interest is shaped by the attempts at persuasion in the public debate. In what is undoubtedly the least well-known section of *An Economic Theory of Democracy*, Downs insisted on the importance of political persuasion for a realistic understanding of how politics operates. n170 Downs also emphasized the potential for voters to take their cues about what to prefer from others who may be more informed than themselves. n171 This theme has been developed further by various authors in the Public Choice tradition. In particular, Downs and other authors who have followed him have emphasized the role of the party label as a cueing device. n172 Arthur Lupia, Barbara Norrander, and I each have developed models that show how voters can take their voting cues from the endorsements of particular groups or individuals with known points of view so as to improve the "accuracy" of their own choices. n173 McKelvey and Ordeshook look at how polling data enables voters to perceive the political ideology of the candidates accurately. n174 [*1580] Other scholars have emphasized the informative nature of political persuasion. Samuel Popkin examined in detail all the empirical evidence supporting Downsian views of information search and utilization by voters in U.S. presidential elections. n175 Scott Thomas studied the effects of negative campaigning. n176 Gary Hammond and Brian Humes argue that a debate to persuade voters that certain issues are more important than others is an important part of political competition because the outcome of the election will often depend upon which issues are salient to the voters. n177 Steven Weatherford sketches a model in which the appeal by a President for a common commitment to national economic policy goals can attract sufficient support from re-election-oriented legislators to outweigh competing claims based on more narrowly defined notions of interest. n178 Two other Public Choice-inspired authors, Page and McCubbins, have proposed a model of persuasion in which people seek to inform and persuade one another of the expected consequences of particular actions. n179 In this model, if there is a change in people's perception of which consequences will follow particular actions or choices, people can change their minds without changing their values. I am presently working on using the notion of Bayesian "cascaded inference" n180 to look at how one piece of new information can sometimes have startling and non-obvious ramifications throughout an individual's belief system. n181

[*1581] As these projects suggest, political persuasion can be an integral feature of the electoral process within the Public Choice theory.

B. *Innovation*

The Public Choice School often depicts legislators as self-serving actors who are unconcerned with the public interest. If this were true, a sharp contrast with Civic Republicanism would be warranted. But the narrow view depicted by the Public Choice theorists does not account for the role of the legislator as an innovator. Because I am skeptical of that aspect of anti-Federalist doctrine that stresses the doctrine of

instruction n182 and because I view the prospect of government by referenda as even more frightful than government by entrenched rent-seeking incumbents, n183 I feel compelled to find something good to say about having legislators legislate. Indeed, *if legislators do not deliberate and do not innovate, why not replace them with a poll* and stop worrying about whether or not you have convergence to the views of the median voter? In my view, the actual role of legislators is far more complex than the roles suggested by either the Median Voter Theorem or the Tullockian logrolling and rent-seeking models -- that of public opinion pollster or dispenser of constituency-directed goodies. This complexity requires us to develop a notion of legislative activity in Public Choice theory that includes an entrepreneurial search for programs that serve either the public interest or, at a minimum, the constituency's interest. n184

A few authors in the Public Choice tradition have viewed legislators as actors who seek effective public policies. Cowen, Glazer and MacMillan, for example, have described the competition between legislators to [*1582] be innovative in developing policy solutions. n185 The Austrian School of economics, with its emphasis on entrepreneurship and on institutional as well as technological innovation, also offers formal models which can be given a Civic Republican flavor. n186

C. Deliberation

Just as the vices of unchecked self-interest can easily be attacked, the virtues of unchecked public deliberation can easily be exaggerated, as anyone knows who ever sat through an SDS meeting in the 1960s or who ever attended a faculty meeting. Public Choice theorists could help formulate the question of when the expected costs of deliberation outweigh the expected benefits. Certainly, there are many times when it is preferable simply to vote (or for that matter, to let either the executive or the administrative staff make the decision) than to take the time for further deliberation. Part of the social contract may be a determination to allow some decisions to take place without the need for them to be debated in part or in whole. n187

It is important to distinguish the net benefits of deliberation from those that are achieved by aggregation. The Condorcet Jury Theorem shows the benefits of aggregation in terms of the statistical effects of the law of large numbers. n188 For deliberation to be useful in terms of social efficiency, [*1583] there must be something about the deliberative process that improves the result above and beyond this statistical effect. Following pseudo-Aristotle, n189 we may posit that deliberation results in a sharing of information by individuals who have diverse experience or knowledge. Thus, like a jigsaw puzzle where different people have different pieces, the deliberative process may improve problem solving.

Of course, deliberation also opens the possibility that people will be persuaded to believe things that are not so. n190 For example, I have written a piece questioning the need for jury deliberation, as opposed to merely polling the jurors after the trial has concluded. n191 It is still open to question whether good answers tend to drive out bad, or whether there is something analogous to Gresham's Law n192 at work in the deliberative market of ideas, although there is a considerable body of work in social psychology that looks empirically at the benefits of deliberation. n193 Public Choice analysis can further clarify the limits of public deliberation in the electoral process. n194

D. Virtue

While some Public Choice scholars would freely admit that a free market cannot be sustained by amoral citizens except in a police state, [*1584] virtue is a concept often conspicuously absent from Public Choice literature. Most Public Choice theorists take a view similar to that of James Madison in *The Federalist*. n195 Madison advocated designing institutions that check man's selfishness rather than ones that require men to be angels. n196 Downs adopted a similar view of government, recognizing that it is a human agency whose elected officials must be "privately motivated to carry out their social functions." n197 In a recent article, Geoffrey Brennan and James Buchanan quote approvingly the similar views of David Hume and John Stuart Mill on this point. n198 Hume said, "[I]n contriving any system of government, and fixing the several checks and controuls of the constitution, every man ought to be supposed a *knave*, and to have no other end, in all his actions, than private interest." n199 Mill said, "[T]he very principle of constitutional government requires it to be assumed, that political power will be abused to promote the particular purposes of the holder; not because it is always so, but because such is the natural tendency of things, *to guard against which is the especial use of free institutions.*" n200

This theoretical work in Public Choice that relies on Madison's view of government is often taken to have a stronger empirical validation than is really the case. In particular, I would argue that the appropriate response to the claim by some Public Choice scholars, as well as some muckrakers and journalists, n201 that legislators are exclusively logrolling and rent-seeking animals would be to look more closely at the empirical truth of such sweeping claims, n202 and to propose alternative testable [*1585] models. Similarly, Downs's result about tweedledum-tweedledee politics in the context of unidimensional two-party competition in a single contest should be understood as only a partial model for understanding candidate and party competition in the United States. n203 Rather than merely praising or rejecting Downs's theories, we must build upon his powerful, but often incomplete insights. n204 My own recent work asserts that we need to modify and enrich Downs's basic models in order to account more realistically for the complex institutional structure of political competition in activities such as party primaries, campaign financing rules, competition at different levels of government, multi-candidate slates, and concurrent and non-concurrent election cycles, among other things. n205 When Public Choice models are adjusted to account for these complexities, the stark contrast between the legislator as a rent-seeker and the Civic Republican emphasis on virtue is softened considerably.

[*1586] V. Conclusions

The single most important fact to understand about democratic politics is that it is "messy." n206 It also is incomplete in that none of its answers are final, and it can be expected to be inefficient, at least as economists use the term. But none of these problems is fatal. They are part of the price we pay for living in a democracy and for being human. We ought not expand the role of judges because of alleged flaws in the way that majority rule or representative democracy functions, especially when many of those flaws are greatly exaggerated, and judicial decisionmaking has comparable problems of its own. n207

In my view, the central challenge for Public Choice theorists of democracy is posed not by Arrowian problems of indeterminacy or manipulability of voting systems n208 but by the Madisonian problems of *coping with majority factionalism and intense but unrepresented minority interests*, n209 [*1587] and this is the central challenge for Civic Republicans as well. In addition, Civic Republicans, like all social theorists, must meet another Madisonian challenge: they must design institutions that foster deliberation and the search for the public interest that are *robust enough to work in a world where not all -- or even most -- are committed to those values*. n210

Legal Topics:

For related research and practice materials, see the following legal topics:

Governments Courts Judges Governments Legislation Enactment Tax Law Federal Income Tax
Computation Compensation & Welfare Benefits Fringe Benefits (IRC secs. 61, 132) General Overview

FOOTNOTES:

n1 The Public Choice School lies at the intersection of economics and politics. While Public Choice scholars generally use tools adapted from economics, such as game theory, to understand the behavior of government and of citizens when they deal with politics, Public Choice is an interdisciplinary endeavor that draws from political science, the social sciences, and economics. Public Choice had its origins in a series of seminal books that includes: KENNETH J. ARROW, *SOCIAL CHOICE AND INDIVIDUAL VALUES* (2d ed. 1963); DUNCAN BLACK, *THE THEORY OF COMMITTEES AND ELECTIONS* (1958); JAMES M. BUCHANAN & GORDON TULLOCK, *THE CALCULUS OF CONSENT: LOGICAL FOUNDATIONS OF CONSTITUTIONAL DEMOCRACY* (1962); ANTHONY DOWNS, *AN ECONOMIC THEORY OF DEMOCRACY* (1957); ROBIN FARQUHARSON, *THEORY OF VOTING* (1967); ALBERT O. HIRSCHMAN, *EXIT, VOICE AND LOYALTY* (1970); WILLIAM A. NISKANEN, JR., *BUREAUCRACY AND REPRESENTATIVE GOVERNMENT* (1971); MANCUR OLSON, JR., *THE LOGIC OF COLLECTIVE ACTION* (Schocken Books 1968) (1965); and WILLIAM H. RIKER, *THE THEORY OF POLITICAL COALITIONS* (1962). I will use the term Public Choice to include ideas drawn from these books and the literature they inspired. Thus, unless otherwise

indicated, I use the term Public Choice expansively to include: (1) the subfield of Social Choice theory that stems from the work of Black and Arrow, (2) the theories of the Virginia School (named for Virginia Professors James Buchanan and Gordon Tullock), and (3) the work in "positive political theory" associated with William Riker and his students. Public Choice research fills the leading journals in political science and economics and has had an important influence on both philosophy and law. Public Choice ideas are widely disseminated in a number of specialized journals such as *Social Choice and Welfare*, *Constitutional Political Economy*, and the oldest journal in this field, *Public Choice*, and they frequently appear in journals such as *Rationality and Society*, *Journal of Theoretical Politics*, and *Theory and Decision*. Two scholars associated with Public Choice, James Buchanan and Kenneth Arrow, have won the Nobel Prize in Economics.

The central ideas of Public Choice include: (1) the susceptibility of majority rule procedures to intransitivities and political manipulation, (2) the difficulty of organizing in the common interest to produce public goods because of the free-rider problem, (3) the use of logrolling by a coalition of intense minorities to assemble a majority coalition, (4) the problem of sustaining mutual cooperation in prisoner's dilemma situations, (5) the need for demand-revelation procedures to determine accurately the value placed by citizens on public goods, (6) the role of information heuristics in overcoming the rational ignorance of voters about political choices, (7) the distinction between zero-sum and non-zero-sum models of political competition, (8) the perverse incentives generated by rent-seeking behavior (in which public office is used for private purposes), (9) principal-agent models of political representation that predict when officials will remain responsible to their constituents' wishes, (10) hypotheses about the pivotal role of the median voter, and (11) transaction cost- and decision cost-based models of constitutional design.

n2 Among the leading works are: Frank I. Michelman, *Political Markets and Community Self-Determination: Competing Judicial Models of Local Government Legitimacy*, 53 *IND. L.J.* 145 (1977-78) [hereinafter Michelman, *Political Markets*]; Frank I. Michelman, *Law's Republic*, 97 *YALE L.J.* 1493 (1988); Cass R. Sunstein, *Interest Groups in American Public Law*, 38 *STAN. L. REV.* 29 (1985) [hereinafter Sunstein, *Interest Groups*]; and Cass R. Sunstein, *Beyond the Republican Revival*, 97 *YALE L.J.* 1539 (1988) [hereinafter *Republican Revival*]; see also SANFORD LEVINSON, *CONSTITUTIONAL FAITH* 60-65 (1988) (discussing the tensions between republicanism and the growing modern pressures of individualism and pluralism). For a more critical view, see Derrick Bell and Preeta Bansal, *The Republican Revival and Racial Politics*, 97 *YALE L.J.* 1609 (1988) (warning that non-whites should remain skeptical of the claims of Civic Republicanism). Work on the role of Civic Republican ideas in shaping theories of jurisprudence is related to work by historians, philosophers, political scientists, and sociologists rediscovering the "republican virtue" roots of modern democratic theory, and tracing those roots to both ancient and modern writers such as Aristotle, St. Augustine, Machiavelli, and Rousseau. See, e.g., BERNARD BAILYN, *THE IDEOLOGICAL ORIGINS OF THE AMERICAN REVOLUTION* 23-30 (1967) (examining in detail the historical sources of the colonists' thought); ROBERT N. BELLAH ET AL., *THE GOOD SOCIETY* 111-44 (1991) (detailing the origins of modern democratic problems in the United States and proposing methods for reviving democratic citizenship); J.G.A. POCOCK, *THE MACHIAVELLIAN MOMENT: FLORENTINE POLITICAL THOUGHT AND THE ATLANTIC REPUBLICAN TRADITION* at viii (1975) ("I pursue the history of 'the Machiavellian moment' into English and American thought of the Seventeenth and Eighteenth Centuries, and seek to show that the English-speaking political tradition has been a bearer of republican and Machiavellian, as well as constitutionalist, Lockean and Burkean, concepts and values."); GORDON S. WOOD, *THE CREATION OF THE AMERICAN REPUBLIC 1776-1787*, at 68 (1969) ("This willingness of the individual to sacrifice his private interests for the good of the community -- such patriotism or love of country -- the eighteenth century termed 'public virtue.'"); see also HANNAH ARENDT, *ON REVOLUTION* 115-28 (1963) (comparing the concern for "public freedom" in the American and French Revolutions with other historically important approaches); John Dewey, *Democracy as a Way of Life*, in *FRONTIERS OF DEMOCRATIC THEORY* 13, 13 (Henry S. Kariel ed., 1970) ("The keynote of democracy as a way of life may be expressed, it seems to me, as the necessity for the participation of every mature human being in

formation of the values that regulate the living of men together. . . ."); GEORGE F. WILL, *RESTORATION: CONGRESS, TERM LIMITS AND THE RECOVERY OF DELIBERATIVE DEMOCRACY* 166-68 (1992) (characterizing term limits as an attempt to restore the balance and virtue of public life that the Founders originally envisioned).

n3 For a discussion of the basic tenets of the Law and Economics Movement, see ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 9 (1988) (arguing that economic concepts such as maximization, equilibrium, and efficiency are fundamental to the study of law); READINGS IN THE ECONOMICS OF CONTRACT LAW (Victor P. Goldberg ed., 1989); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF TORT LAW* 312 (1987) (arguing that most rules of tort law are economically efficient); STEVEN SHAVELL, *ECONOMIC ANALYSIS OF ACCIDENT LAW* (1987) (testing "the efficiency theory of the common law by examining the rules of tort law"). In addition, periodicals such as *The Journal of Law and Economics* and *The Journal of Legal Studies* are dedicated exclusively to the development of Law and Economics theories.

n4 See generally ARROW, *supra* note 1, at 46-60 (using logical proof to prove the theorem that "[i]f we exclude the possibility of interpersonal comparisons of utility, then the only methods of passing from individual tastes to social preferences which will be satisfactory and which will be defined for a wide range of sets of individual orderings are either imposed or dictatorial").

n5 See BLACK, *supra* note 1, at 16-25.

n6 Public Choice theories have revolutionized the way in which politics are studied and have attracted many scholars who find the rational-choice model unpalatable and who feel the need to formulate alternative theories. See, e.g., BRUCE A. ACKERMAN, *SOCIAL JUSTICE IN THE LIBERAL STATE* 293 (1980) (noting that Public Choice theory raises questions about the democratic process that likely will be addressed by future scholarship); Erwin Chemerinsky, *The Supreme Court, 1988 Term -- Foreword: The Vanishing Constitution*, 103 *HARV. L. REV.* 43, 79-80 (1989) (noting that "social choice theorists have demonstrated reasons why multi-membered bodies cannot accurately . . . reflect majority wishes"); Michelman, *Political Markets*, *supra* note 2, at 157 n.48 (reviewing Public Choice literature and noting that it "argues strongly *against* the plausibility of thinking that even a deftly designed majoritarian process can churn out . . . legislated settlements which are individualistically optimizing or waste-minimizing . . ."). For a history and critique of Public Choice ideas and their impact on public law, see DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE* (1991); Mark Kelman, *On Democracy Bashing: A Skeptical Look at the Theoretical and "Empirical" Practice of the Public Choice Movement*, 74 *VA. L. REV.* 199, 268 (1988) (offering a critical legal studies critique of Public Choice theory and concluding that Public Choice theory "gives us false messages about the inevitably perverse nature of collective action"); Richard H. Pildes & Elizabeth S. Anderson, *Slingshot Arrows at Democracy: Social Choice Theory, Value Pluralism, and Democratic Politics*, 90 *COLUM. L. REV.* 2121, 2128 (1990) (criticizing Public Choice theory's conception of rationality and democratic politics and concluding that it "invites either complacency or undemocratic responses").

n7 I have been a member of the Public Choice Society almost since its founding and am presently on the editorial board of the journal *Public Choice*. It would be fair, however, to describe me as an iconoclast rather than as a true believer. For example, I prefer to describe myself as a "reasonable choice" modeler rather than as an advocate of "rational choice." The reasonable choice model views politics as (a) making choices that are acceptable but not necessarily best, (b) using "reasonable" rules, (c) providing answers that allow us to go on with life without civil war, and (d)

using actors who are neither angels nor devils and whose choices combine self-interested preferences with judgments about what is socially desirable and constitutionally permissible. See Bernard Grofman, *On the Gentle Art of Rational Choice Bashing*, in INFORMATION, PARTICIPATION AND CHOICE: 'AN ECONOMIC THEORY OF DEMOCRACY' IN PERSPECTIVE (Bernard Grofman ed., forthcoming 1993); A Wuffle, *Credo of a Reasonable Choice Modeler*, in SIX PUZZLES ABOUT POLITICS (Bernard Grofman et al. eds., forthcoming 1994).

n8 See, e.g., William H. Riker & Barry R. Weingast, *Constitutional Regulation of Legislative Choice: The Political Consequences of Judicial Deference to Legislatures*, 74 VA. L. REV. 373, 375 (1988) (concluding that "judicial deference to the legislature is inappropriate for all kinds of rights"); cf. Frank H. Easterbrook, *Statutes' Domains*, 50 U. CHI. L. REV. 533, 547 (1983) (arguing that Public Choice theories explain why courts have difficulty determining the "original meaning" of statutes); Richard A. Posner, *Legal Formalism, Legal Realism, and the Interpretation of Statutes and the Constitution*, 37 CASE W. RES. L. REV. 179, 195-96 (1986-87) (finding that Public Choice theory has led to skepticism of the tools of statutory interpretation).

n9 My views on many points parallel those of Pildes and Anderson, *supra* note 6, and Farber and Frickey, *supra* note 6. In particular, I endorse the point made by Farber and Frickey: "[N]o theory of government can ignore the powerful forces of individual self-interest and the critical role of institutional design. It is equally one-sided, however, to lose sight of the role of civic virtue." FARBER & FRICKEY, *supra* note 6, at 11. Like them, I try to "steer a middle course between cynicism and romanticism." *Id.*

n10 I am especially intrigued by Farber and Frickey's emphasis on the importance of institutional design and their reminder of the ways in which deliberation (not merely aggregation) is central to the political process. See FARBER & FRICKEY, *supra* note 6, at 55-62. I am equally intrigued by Pildes and Anderson's distinction between "outcomes" and the "meanings" to be attached to them, and their argument that, because public values are "irreducibly plural and diverse," it would be inappropriate to expect "that rational choice be consistent, mechanistic, or consequentialist." Pildes & Anderson, *supra* note 6, at 2169, 2145. In my view, however, Pildes and Anderson (and even to some extent Farber and Frickey) accept too many of the claims made by Social Choice theorists about the unavoidable logical incoherence or manipulability of voting procedures. In contrast, my emphasis in this Paper is on the ways in which the *practical* implications of various formal Social Choice results have been exaggerated. The chief emphasis in Kelman's essay is on critiquing specific empirical work in the Public Choice tradition about the effects of various types of regulation. See Kelman, *supra* note 6, at 236-68. I have nothing to say that bears directly on most of the points raised by Kelman, although I share with him a skepticism that the motivations of various types of political actors are as simple-minded as some economic modelers wish to posit. *Id.* at 205-06. Such economists writing about politics sometimes act as if the results of their rational choice model *must* be an accurate description of how the world of politics *actually* works. As I have emphasized elsewhere, there is no such thing as *the* rational choice model of a given phenomenon, only a rational choice model. See Grofman, *supra* note 7, at 370.

n11 Equilibria that are derived from the structure of the preferences themselves are frequently referred to as preference-induced equilibria (PIE), in contrast to structure-induced equilibria identified by Shepsle and Weingast. Cf. Kenneth A. Shepsle & Barry R. Weingast, *Structure-Induced Equilibrium and Legislative Choice*, 37 PUB. CHOICE 503 (1981) (attributing the stability present in legislatures to the complex institutional structures that restrict legislative exchange).

n12 Gordon Tullock, *Efficient Rent-Seeking*, in TOWARD A THEORY OF THE RENT-SEEKING SOCIETY 97, 99-112 (James M. Buchanan et al. eds., 1980) [hereinafter RENT-SEEKING SOCIETY] (drawing on game theory to show how resources are wasted by rent-seeking behavior); Robert D. Tollison, *Is the Theory of Rent-Seeking Here to Stay?*, in DEMOCRACY AND PUBLIC CHOICE: ESSAYS IN HONOR OF GORDON TULLOCK 143, 143-54 (Charles K. Rowley ed., 1987) (assessing the development and the problems of Tullockian rent-seeking theory).

n13 The Gibbard-Satterthwaite Theorem is an "existence theorem for strict strategy-proof voting procedures" which proves that if there is a range of three or more alternatives, the system can be strategy-proof only if it is dictatorial. Mark A. Satterthwaite, *Strategy-Proofness and Arrow's Conditions: Existence and Correspondence Theorems for Voting Procedures and Social Welfare Functions*, 10 J. ECON. THEORY 187, 193, 192-202 (1975); see Allen Gibbard, *Manipulation of Voting Schemes: A General Result*, 41 ECONOMETRICA 587, 587 (1973) (asserting that any nondictatorial voting scheme with at least three possible outcomes is subject to individual manipulation).

n14 The McKelvey Global Cycling Result is a theory based on the hypothesis that "where all voters evaluate policy in terms of Euclidean metric, if there is no equilibrium outcome . . . it is theoretically possible to design voting procedures which, starting from any given point, will end up at any other point in the space of alternatives." Richard D. McKelvey, *Intransitivities in Multidimensional Voting Models and Some Implications for Agenda Control*, 12 J. ECON. THEORY 472, 472 (1976) [hereinafter *Intransitivities*]; see also Richard D. McKelvey & Richard G. Niemi, *A Multistage Game Representation of Sophisticated Voting for Binary Procedures*, 18 J. ECON. THEORY 1, 2 (1978) (noting that "when a majority alternative exists it may be possible to frustrate the will of a majority through the adoption of appropriate voting procedures if voting is sincere, but not if voting is sophisticated"); Linda Cohen & Steven Matthews, *Constrained Plott Equilibria, Directional Equilibria and Global Cycling Sets*, 47 REV. ECON. STUD. 975, 975 (1980) ("[T]he key observation is that global cycling is ubiquitous for the same reason that majority rule equilibria rarely exist, namely, that the distribution of voters is rarely symmetric enough."); cf. Norman Schofield, *The Theory of Dynamic Games*, in GAME THEORY AND POLITICAL SCIENCE 113, 161 (Peter C. Ordeshook ed., 1978) (asserting that the "core might well exist in a structurally stable fashion for a particular system but that a *sufficient* perturbation of preference or in the 'rules of the game' can create an infinitesimal cycle set which is structurally stable").

n15 Here I focus not on the substantive or interpretive principles that should guide judicial decisionmaking, but simply on the holding of a judicial decision that some practice is or is not constitutional. See *infra* notes 153-61 and accompanying text.

n16 In this context, it is useful to point out that Gregory Kavka has reminded us that even a single individual's decisionmaking may suffer from various Arrow-like problems. See Gregory S. Kavka, *Is Individual Choice Less Problematic than Collective Choice?*, 7 ECON. & PHIL. 143, 143-65 (1991).

n17 For background on rent-seeking, see generally RENT-SEEKING SOCIETY, *supra* note 12.

n18 See, e.g., Sunstein, *Interest Groups*, *supra* note 2, at 69-72 (advocating greater powers of judicial review in order to protect the public interest).

n19 The distinction between judgments and preferences is the same as that used in Bernard Grofman & Scott L. Feld, *Rousseau's General Will: A Condorcetian Perspective*, 82 AM. POL. SCI. REV. 567, 568 (1988), reprinted in REPRESENTATION AND ELECTORAL SYSTEMS: CANADIAN PERSPECTIVES (J. Paul Johnston & Harvey Paris eds., 1990) (arguing that social judgments, rather than individual preferences, often form the basis for voters' decisions); see also Jules Coleman & John Ferejohn, *Democracy and Social Choice*, 97 ETHICS 6, 15-16 (1986) (explaining that epistemic views of the relationship between the popular will and voting must distinguish between judgments, which can be true or false, and preferences, which cannot be characterized as true or false). A large volume of scholarly material has explored the effects of both preferences and judgments on group decisionmaking. See, e.g., Joshua Cohen, *Reflections on Rousseau: Autonomy and Democracy*, 15 PHIL. & PUB. AFF. 275, 292-96 (1986) (exploring the effects of individual citizens' beliefs on the formation of the collective decisions expressed by the general will); SHMUEL NITZAN & JACOB PAROUSH, COLLECTIVE DECISION MAKING: AN ECONOMIC OUTLOOK 10-11 (1985) (proposing an optimal decisionmaking procedure in a dichotomous situation where all decisionmakers share common preferences); Scott L. Feld & Bernard Grofman, *Ideological Consistency as a Collective Phenomenon*, 82 AM. POL. SCI. REV. 773, 773-74 (1988) [hereinafter Feld & Grofman, *Ideological Consistency*] (arguing against the belief that collective judgments are ideologically consistent only when the individuals composing the decisionmaking group are ideologically consistent in their preferences); Scott L. Feld & Bernard Grofman, *Who's Afraid of the Big Bad Cycle?*, 4 J. THEORETICAL POL. 231, 231 (1992) [hereinafter Feld & Grofman, *Big Bad Cycle*] (examining the idea that collective judgments are more consistent than individual preferences are over time).

In another work now in progress, I make a further distinction that cuts across the distinction between judgments and preferences along ideological and meistic dimensions, but I do not make use of that distinction for present purposes. Basically, that distinction is between choices that involve *policies* and those that simply involve *payoffs*. Ideology involves some single or multidimensional *policy* continuum, such as a unidimensional continuum anchored by pro-choice and pro-life positions, or policies that can be characterized as points in multidimensional space, such as shares of governmental expenditures to be devoted to defense, education, and welfare. In contrast, meistic choices allocate *payoffs* to each individual voter or to the elements of some partition of the set of voters (*i.e.*, choices specifying what, in game theory terms, would be called an imputation). In Theodore Lowi's terminology, ideological choices involve regulatory or distributive policies, while meistic choices are about explicitly redistributive issues. See Theodore J. Lowi, *Four Systems of Policy, Politics, and Choice*, 32 PUB. ADMIN. REV. 298, 299-300 (1972). Many actual policy choices will, of course, combine meistic and ideological components.

n20 For reasons that will become clear later, dichotomous decision processes have various "nice" properties such as the ability to define backward folding strategies. See generally McKelvey & Niemi, *supra* note 14.

n21 I am indebted to Pamela Karlan for her remarks at the University of Texas School of Law Symposium, *Regulating the Electoral Process*, suggesting the need to incorporate into this Paper the distinction between deliberative and aggregative processes. This distinction is central in David Estlund's Paper in this volume and in the work of Civic Republican theorists such as Frank Michelman. See generally David Estlund, *Who's Afraid of Deliberative Democracy? On the Strategic/Deliberative Dichotomy in Recent Constitutional Jurisprudence*, 71 TEX. L. REV. 1437 (1993); Michelman, *Law's Republic*, *supra* note 2.

n22 I will omit the adjective "epistemic" when the meaning is clear from the context.

n23 See, e.g., Sunstein, *Republican Revival*, *supra* note 2, at 1554-55 (explaining that republican theorists "embrace the notion of a common good as a coherent one"). The clear rejection by Public Choice theorists of any non-preference-aggregative interpretation of the public good is exemplified in the discussion of the public interest in BUCHANAN & TULLOCK, *supra* note 1, at 12-13 (rejecting "[t]he grail-like search for some 'public interest' apart from, and independent of, the separate interests of the individual participants in social choice").

n24 The Civic Republican approach to the notion of the public interest has much in common with older legal process views of constitutional and statutory interpretation that seek to establish better or worse ways of interpreting texts. One does not have to believe in absolute truth to believe that some interpretations are less plausible than others.

n25 Condorcet's work on the paradox of cyclical majorities, known as Condorcet's Paradox, serves as a cornerstone of the Public Choice critique of the democratic process. LE MARQUIS DE CONDORCET, *ESSAI SUR L'APPLICATION DE L'ANALYSE A LA PROBABILITE DES DECISIONS RENDUES A LA PLURALITE DES VOIX* at 1v-1vii (Paris, de l'Imprimerie Royale 1785). For a general historical discussion of Condorcet's work, see BLACK, *supra* note 1, at 159-80.

n26 Condorcet's Jury Theorem is found in the same essay as the discussion of cyclical majorities. See Condorcet, *supra* note 25. The theorem was reintroduced to social science scholars by Duncan Black. See BLACK, *supra* note 1, at 163-65. For exploration of Condorcet's ideas, see, for example, Arnold B. Urken & Stephen Traflet, *Optimal Jury Design*, 24 *JURIMETRICS J.* 218, 228 (1984) (applying Condorcet's theory of jury voting); H.P. Young, *Condorcet's Theory of Voting*, 82 *AM. POL. SCI. REV.* 1231 (1981) (proposing adjustments to Condorcet's methods of relative choice rankings in a three-choice cycle situation). The Jury Theorem can be thought of as a way out of the paradox of cyclical majorities. It implicitly assumes a kind of unidimensionality that is similar to the assumption of single-peaked preferences introduced by Black. See BLACK, *supra* note 1, at 6-10; cf. Scott L. Feld & Bernard Grofman, *Distinguishing Preferences and Judgments* (1992) (unpublished manuscript, on file with the *Texas Law Review*) (distinguishing two types of unidimensionality); H. Peyton Young, *Optimal Ranking and Choice from Pairwise Comparisons*, in 2 *DECISION RESEARCH* 115 (Bernard Grofman & Guillermo Owen eds., 1986) (discussing unidimensionality -- though not employing that term -- in relative ranking and binary choice decisionmaking).

n27 See Jonathan Bendor, *Condorcet Dynamics* 1 n.2 (noting that the probability that a group of decision makers will make the "correct" choice increases with the number of decisionmakers) (Dec. 1992) (unpublished research paper, Graduate School of Business, Stanford University, on file with the *Texas Law Review*); BLACK, *supra* note 1, at 184-85; Cohen, *supra* note 19, at 292-96 (applying Rousseau's democratic principles to the establishment of the general will); Coleman & Ferejohn, *supra* note 19, at 8; Estlund, *supra* note 21, at 1464-69; Scott L. Feld & Bernard Grofman, *The Accuracy of Group Majority Decisions in Groups with Added Members*, 42 *PUB. CHOICE* 273 (1984) ("Analytic results indicate that many heads often can be better than one *even when none of the added heads is as individually competent as the first.*" (emphasis in original)); Bernard Grofman, *A Comment on "Democratic Theory: A Preliminary Mathematical Model,"* 21 *PUB. CHOICE* 99, 100 (1975) [hereinafter Grofman, *Comment on Democratic Theory*] (explaining the principles of Condorcet's Jury Theorem); Bernard Grofman, *Judgmental Competence of Individuals and Groups in a Dichotomous Choice Situation: Is a Majority of Heads Better than One?*, 6 *J. MATH. SOC.* 47, 48-52 (1978) (concluding that larger groups have an increased probability of reaching a correct decision than do smaller ones); Bernard Grofman et al., *Thirteen Theorems in Search of the Truth*, 15 *THEORY & DECISION* 261 (1983) (surveying recent theories of group judgmental processes and accurate group decisionmaking); INFORMATION POOLING

AND GROUP DECISION MAKING (Bernard Grofman & Guillermo Owen eds., 1986) [hereinafter INFORMATION POOLING]; Feld & Grofman, *Ideological Consistency*, *supra* note 19, at 774-76 (discussing why collectivities are likely to be more ideologically consistent than the individuals who compose them); David Estlund et al., *Democratic Theory and the Public Interest: Condorcet and Rousseau Revisited*, 83 AM. POL. SCI. REV. 1317, 1319 (1989) (noting the weakness of the Jury Theorem in situations where a faction votes for its own interests rather than for the general good); Krishna K. Ladha, *Condorcet's Jury Theorem in Light of DeFinetti's Theorem: Majority Rule Voting with Correlated Votes*, SOC. CHOICE & WELFARE (forthcoming 1993) (demonstrating that Condorcet's theorem can encompass voting where votes are exchangeable and systematically dependent); Krishna K. Ladha, *The Condorcet Jury Theorem, Free Speech and Correlated Voters*, 36 AM. J. POL. SCI. 617 (1992) (suggesting that Condorcet's theorem holds true under general voting conditions where society holds opposing views). *See generally* Shmuel Nitzan & Jacob Paroush, *Optimal Decision Rules in Uncertain Dichotomous Choice Situations*, 23 INT'L ECON. REV. 289 (1989) (seeking an optimal neutral decision rule for a set of individuals with identical objectives but different levels of decision competence); NITZAN & PAROUSH, *supra* note 19 (arguing that the best decision rule is one in which individual voter's preferences are weighted according to the voter's ability or expertise); Lloyd Shapley & Bernard Grofman, *Optimizing Group Judgmental Accuracy in the Presence of Interdependencies*, 43 PUB. CHOICE 329 (1984) (concluding that weighted voting may be more accurate in smaller groups than is majoritarian decisionmaking); Young, *Condorcet's Theory of Voting*, *supra* note 26, at 1239, 1242-43 (arguing that Condorcet's rule is desirable because it leads to accurate decisionmaking and greater stability).

n28 For example, my earlier work on jury decisionmaking examined the consequences of deliberation on the accuracy of verdicts. *See, e.g.*, Bernard Grofman, *Mathematical Models of Juror and Jury Decisionmaking*, in 2 PERSPECTIVES IN LAW AND PSYCHOLOGY 305 (Bruce D. Sales ed., 1981) [hereinafter Grofman, *Mathematical Models*] (surveying studies that compare six-member and twelve-member juries); Bernard Grofman, *The Case for Majority Verdicts*, TRIALS, Dec. 1979, at 23; Bernard Grofman, *The Slippery Slope: Jury Size and Jury Verdict Requirements -- Legal and Social Science Approaches*, 2 LAW & POL'Y Q. 285 (1980) [hereinafter Grofman, *Slippery Slope*] (analyzing six Supreme Court decisions on jury size and unanimity requirements). Jury deliberations are beneficial if they decrease the frequency of either Type I errors -- where an innocent defendant is convicted -- or Type II errors -- where a guilty defendant is acquitted. *Cf.* Grofman, *Mathematical Models*, *supra*, 341 (criticizing the trend to six-member juries because the incidence of both types of errors increases due to changes in the dynamics of deliberations). The discussion of cycles which follows involves social decision processes where Type I errors -- *i.e.*, a candidate or referendum is chosen as the best alternative when, in fact, it is not -- are likely to occur.

n29 *See infra* notes 170-80 and accompanying text; *cf.* Bernard Grofman, *Introduction to INFORMATION, PARTICIPATION AND CHOICE: 'AN ECONOMIC THEORY OF DEMOCRACY' IN PERSPECTIVE*, *supra* note 7, at 5-6.

n30 Consider three voters, one with preference over alternatives A, B, and C ordered ABC, one ordered BCA, and one ordered CAB. Majority preference is A preferred to B, B preferred to C, but C preferred to A.

n31 *See generally* BLACK, *supra* note 1, at 168-73 (discussing Condorcet's work on the role of probability in majority voting).

n32 See ARROW, *supra* note 1, at 93-96 (reviewing the work of authors developing Condorcet's theorem of cyclical majorities); BLACK, *supra* note 1, at 39-51 (explaining and illustrating cyclical majorities).

n33 Arrow's Impossibility Theorem posits "that no method of amalgamating individual judgments can simultaneously satisfy some reasonable conditions of fairness on the method and a condition of logicity on the result." WILLIAM H. RIKER, LIBERALISM AGAINST POPULISM 116 (1982); *see generally* JOHN CRAVEN, SOCIAL CHOICE: A FRAMEWORK FOR COLLECTIVE DECISION AND INDIVIDUAL JUDGMENTS (1992); DENNIS C. MUELLER, PUBLIC CHOICE II (1989); Pildes & Anderson, *supra* note 6. Pildes and Anderson's work on Arrow's Theorem is especially helpful, as it is addressed to a legal audience and is generally quite clear. As will be apparent from the subsequent discussion, my own approach to Arrow's Theorem differs from that of all the above authors.

n34 See *infra* notes 40-41 and accompanying text.

n35 If we neglect the possibility of ties, a top cycle (a.k.a. the Schwartz set) is the smallest set of alternatives such that no alternative not in the set is preferred to any alternative in the set in a pairwise contest. See Thomas Schwartz, THE LOGIC OF COLLECTIVE CHOICE 144 (1986).

n36 See Arrow, *supra* note 1, at 13.

n37 See *infra* notes 140-61 and accompanying text.

n38 See discussion *infra* Part IV.

n39 See *infra* notes 82-88 and accompanying text.

n40 See, e.g., BLACK, *supra* note 1, at 39-42; Colin E. Bell, *What Happens When Majority Rule Breaks Down? Some Probability Calculations*, 33 PUB. CHOICE 121 (1978) (investigating the number of alternatives in a set of top cycles when no Condorcet winner is present); Mark B. Garmen & Morton I. Kamien, *The Paradox of Voting: Probability Calculations*, 13 BEHAV. SCI. 306, 315 (1968) (arguing that "[s]ocieties may exist in which the paradox is extremely likely"); William V. Gehrlein & Peter C. Fishburn, *The Probability of the Paradox of Voting: A Computable Solution*, 13 J. ECON. THEORY 14, 15-25 (setting forth a mathematical formula for computing the probability of the voting paradox); Kenneth A. Shepsle, *The Paradox of Voting and Uncertainty*, in PROBABILITY MODELS OF COLLECTIVE DECISION MAKING 252, 256 (Richard G. Niemi & Herbert F. Weisberg eds., 1972) (noting that many of the studies of the voting paradox conclude that "majority rule is extremely susceptible to the cyclical majority problem, especially when the number of alternatives and/or the number of voters is large"). *But see* Kiyoshi Kuga & Hirooki Nagatani, *Voter Antagonism and the Paradox of Voting*, 42 ECONOMETRICA 1045, 1046 (arguing "that the paradox gauge is less when there is less antagonism in a society").

n41 Many of the known examples of the paradox involve a contrived paradox caused by strategic voting that leads to the appearance of a cyclical majority even when one is not present. But even examples of contrived paradoxes of voting are rare. The best known example is Riker's

long-accepted claim that voting in the U.S. Congress on an amendment proposed by Adam Clayton Powell to the Education Bill of 1956 (H.R. 7535) involved a contrived paradox of cyclical majorities. See WILLIAM H. RIKER, *THE ART OF POLITICAL MANIPULATION* 117-28 (1986). Riker's claim has recently been challenged. Keith Krehbiel & Douglas Rivers, *Sophisticated Voting in Congress: A Reconsideration*, 52 J. POL. 548, 554-76 (1990). This does not mean that the paradox *never* occurs. In subpart I(E), I discuss one type of situation that is reasonably common in academic departments where a paradox of cyclical majorities might be expected with nontrivial frequency. See *infra* notes 107-10 and accompanying text.

n42 See *infra* notes 46-63 and accompanying text.

n43 See *infra* notes 95-106 and accompanying text.

n44 See *infra* notes 64-73 and accompanying text.

n45 See *infra* notes 74-88 and accompanying text.

n46 See, e.g., Garmen & Kamien, *supra* note 40, at 308-15; Richard G. Niemi & Herbert F. Weisberg, *A Mathematical Solution for the Probability of the Paradox of Voting*, 13 BEHAV. SCI. 317 (1968); Bell, *supra* note 40, at 122-24.

n47 See Richard G. Niemi, *Majority Decision-Making with Partial Unidimensionality*, 63 AM. POL. SCI. REV. 488, 494 (1969) (concluding that "for three alternatives and equally-likely rank orders . . . even a moderate degree of unidimensionality makes it unlikely that the paradox will prevent a transitive majority decision").

n48 See, e.g., Dean Jamison & Edward Luce, *Social Homogeneity and the Probability of Intransitive Majority Rule*, 5 J. ECON. THEORY 79, 80 (1972) (defining homogeneity as depending on "the amount of information an observer obtains from observing the preference orderings of several individuals in society -- and hence the amount he will alter his subjective probabilities"); Kuga & Nagatani, *supra* note 40, at 1046 (looking at homogeneity from the standpoint of "intensity of antagonism among the opinions of individuals").

n49 The basic theorem is in Amartya K. Sen, *A Possibility Theorem on Majority Decisions*, 34 ECONOMETRICA 491 (1966) (proving the consistency of majority decisions under general preference conditions); see also Scott L. Feld & Bernard Grofman, *Collectivities as Actors*, 2 RATIONALITY & SOC. 429, 438-42 (1990) [hereinafter Feld & Grofman, *Collectivities*] (arguing that group preferences tend to be clearly demarcated when sufficient differences between candidates exist); Feld & Grofman, *Ideological Consistency*, *supra* note 19, at 776 (noting that transitive results will occur if individuals have polarized preferences over every triple of alternatives); Scott L. Feld & Bernard Grofman, *Partial Single-Peakedness: An Extension and Clarification*, 51 PUB. CHOICE 71, 77-78 (1986) [hereinafter Feld & Grofman, *Partial Single-Peakedness*] (demonstrating the potential for stable majority orderings even when all possible preference orderings are represented in the electorate); Wulf Gaertner & Achim Heinecke, *Cyclically Mixed Preferences -- A Necessary and Sufficient Condition for Transitivity of the Social Preference Relation*, in DECISION THEORY AND SOCIAL ETHICS: ISSUES IN SOCIAL CHOICE 169, 169 (Hans W. Gottinger & Werner Leinfellner eds., 1976) (finding that transitivity will result only if the preference structure of society is cyclically mixed over every triple of alternatives); Nicholas

Miller, *The Structure of Collective Decisions: Committees, Elections and Parties* (1973) (unpublished dissertation, Dep't. of Pol. Sci., University of California, Berkeley) (on file with the *Texas Law Review*).

n50 Feld & Grofman, *Partial Single-Peakedness*, *supra* note 49, at 76.

n51 *See* Feld & Grofman, *Ideological Consistency*, *supra* note 19, at 779 (postulating that a relatively ideological elite may determine group preferences when counteracted only by the non-ideological masses).

n52 Scott Feld and I have also shown that the conclusions reached by Richard Niemi as to the inverse relationship between the frequency of single-peaked orderings and observable paradoxes can be duplicated for theorems on balance and the application of the law of large numbers. Feld & Grofman, *Partial Single-Peakedness*, *supra* note 49, at 76-77; *see* Niemi, *supra* note 47, at 492.

n53 Feld & Grofman, *Ideological Consistency*, *supra* note 19, at 781-82 (determining that group margins "perfectly reflect" the ideological continuum despite frequent ideological inconsistency in the preferences of individuals).

n54 *Id.* at 782-84.

n55 *Id.* at 786.

n56 *Id.* at 773.

n57 Feld & Grofman, *Collectivities*, *supra* note 49, at 437-42. The study encompassed 36 elections in professional associations in Great Britain with 4 to 18 candidates each. *Id.* at 437, 446 n.8. Each election utilized the Hare Single Transferable Vote System. *Id.* at 445-46 n.6.

n58 *Id.* at 441.

n59 *Id.* at 440-41.

n60 *Id.* at 439, 441 (Table 3: Reordering of Candidates).

n61 *Id.* at 441.

n62 *Id.* at 439-40.

n63 *Id.* at 441-42. More generally, Feld and Grofman argue that the voting pattern in these elections is consistent with what we have called judgments, rather than ideologically driven preferences. *Id.* at 442.

n64 *See supra* notes 46-47 and accompanying text.

n65 Amihai Glazer & Bernard Grofman, *Why Representatives Are Ideologists Though Voters Are Not*, 61 PUB. CHOICE 29, 32 (1989).

n66 *Id.* at 33.

n67 *Id.* at 36.

n68 Keith T. Poole & R. Steven Daniels, *Ideology, Party, and Voting in the U.S. Congress, 1959-1980*, 79 AM. POL. SCI. REV. 373, 397 (1985); Keith T. Poole & Howard Rosenthal, *A Spatial Model for Legislative Roll Call Analysis*, 29 AM. J. POL. SCI. 357, 368 (1985).

n69 *See* Glazer & Grofman, *supra* note 65, at 36-37 (explaining how reflecting "ideological" labels actually reinforces their importance to political success). As is well known, these various roll-call measures are correlated to an amazing degree. *See generally* Poole & Daniels, *supra* note 68, at 374-78 (discussing the outcome of a spatial model of interest-group ratings).

n70 The traditional leftist ideology supports a strong central government; the rightist ideology opposes it.

n71 Glazer & Grofman, *supra* note 65, at 37.

n72 *See id.* at 30 (stating that senators of opposing parties but from the same state are empirically on different ends of the left-right continuum "94% of the time").

n73 Glazer and Grofman do not purport to explain how an ideological dimension first arises. They merely claim that once such a dimension is in existence, candidates have an incentive to use ideological labels. *Id.* at 36-37. Other analyses, however, offer evidence of the strong connection between two-party competition and a single dimension of ideological competition, and they evaluate the evidence for Duverger's Law relating electoral type to party proliferation. *See generally* Rein Taagepera & Bernard Grofman, *Rethinking Duverger's Law: Predicting the Effective Number of Parties in Plurality and PR Systems -- Parties Minus Issues Equals One*, 13 EUR. J. POL. RES. 341 (1985) (reformulating Duverger's Law to use issue dimensions to predict the number of political parties). My own present thinking tends to emphasize the importance of the office of the President and the role of the electoral college and related voting mechanisms that make two-party politics more likely.

n74 The top cycle is the smallest set of alternative such that every alternative not in the set can be defeated in a pairwise contest by some alternative in the set. Bell, *supra* note 40, at 121; Richard

D. McKelvey, *General Conditions for Global Intransitivities in Formal Voting Models*, 47 *ECONOMETRICA* 1085, 1085 (1979) [hereinafter McKelvey, *Global Intransitivities*] (reaching the conclusion that all points are in the same cycle set and that it is therefore possible to construct a majority path to move from any one point to another); see McKelvey, *Intransitivities*, *supra* note 14, at 480 (concluding that the provable presence of all points in the same cycle set makes procedural effects on outcome possible); Schofield, *supra* note 14, at 161 (arguing that in political systems a core may exist in "a structurally stable fashion for a particular system but that a *sufficient* perturbation of preferences or in the 'rules of the game' can create an infinitesimal cycle set which is structurally stable" (emphasis in original)).

n75 See McKelvey, *Intransitivities*, *supra* note 14, at 481 (deducing that if a hypothetical "Chairman" has complete control over the agenda, she can construct an agenda to arrive at the ideal point); Thomas Romer & Howard Rosenthal, *Political Resource Allocation, Controlled Agendas, and the Status Quo*, 33 *PUB. CHOICE* 27, 35 (1978).

n76 See, e.g., Bell, *supra* note 40, at 121-22 (considering the number of alternatives existing in the top cycle set when there is no Condorcet winner and evaluating the effect on majority rule); Linda Cohen, *Cyclic Sets in Multidimensional Voting Models*, 20 *J. ECON. THEORY* 1, 1 (1979) ("A series of papers has established the lack of stability and consistency of majority-rule outcomes within the context of multidimensional policy spaces."); Cohen & Matthews, *supra* note 14, at 975 (observing that global cycling is "ubiquitous" because "the distribution of voters is rarely symmetric enough"); McKelvey, *Intransitivities*, *supra* note 14, at 472 (noting the severity of restrictions needed to generate an equilibrium policy outcome); Charles R. Plott, *A Notion of Equilibrium and Its Possibility Under Majority Rule*, 57 *AM. ECON. REV.* 787, 795 (1967) (concluding that "equilibrium under majority rule would seem to be an almost nonexistent phenomenon"); Schofield, *supra* note 14, at 114 (arguing that political processes are not "generally equilibrating" or "acyclic").

n77 Peter J. Coughlin, *Majority Rule and Election Models*, 3 *J. ECON. SURVEYS* 157, 164 (1990) (emphasis in original) (citing Gordon Tullock, *Why So Much Stability?*, 37 *PUB. CHOICE* 189, 189 (1981)).

n78 See *supra* notes 50-52 and accompanying text.

n79 See Richard D. McKelvey, *Covering, Dominance, and Institution-Free Properties of Social Choice*, 18 *AM. J. POL. SCI.* 283, 283 (1986) (concluding that "actual social choice may be rather insensitive to the choice of institutional rules"); Norman Schofield et al., *The Core and the Stability of Group Choice in Spatial Voting Games*, 82 *AM. POL. SCI. REV.* 195, 207-08 (1988) [hereinafter *Spatial Voting Games*] (showing that in weighted voting games it is possible to construct a structurally stable core, thus avoiding the instability results that allow agenda-based outcome manipulation); Norman Schofield, *Political Competition in Multi-Party Coalition Governments* (May 1992) (unpublished paper presented at the Conference on Rational Choice Models of Comparative Politics, University of California, Irvine, on file with the *Texas Law Review*).

n80 See Bernard Grofman, *The Theory of Committees and Elections: The Legacy of Duncan Black*, in *TOWARD A SCIENCE OF POLITICS: ESSAYS IN HONOR OF DUNCAN BLACK* 11-57 (Gordon Tullock ed., 1981).

n81 *See infra* subpart II(D).

n82 *See* Bernard Grofman & Carole Uhlaner, *Metapreferences and the Reasons for Stability in Social Choice: Thoughts on Broadening and Clarifying the Debate*, in 19 THEORY AND DECISION 31, 41 (1985) (noting that a low tolerance for disagreement is a rational basis for a metapreference that may reduce cycles).

n83 *See id.* at 38 (stating that a shift from a majoritarian to a supermajoritarian game creates a form of structure-induced stability).

n84 Such decision mechanisms create what Shepsle and Weingast refer to as structure-induced equilibria (SIE), as opposed to preference-induced equilibria (PIE). *See* Kenneth A. Shepsle, *The Role of Institutional Structure in the Creation of Policy Equilibrium*, in PUBLIC POLICY AND PUBLIC CHOICE 249, 267 (Douglas W. Rae & Theodore J. Elsmeyer eds., 1979) (describing SIE as "reflect[ing] a conspiracy between preferences of institutional actors . . . and institutional structure," and PIE as "rather delicate" and unlikely). SIE create Type II stability. Type II, or "choice set stability," occurs when a transitive social preference ordering exists in the set of alternatives that are actually voted on. *See* Grofman & Uhlaner, *supra* note 82, at 33, 36 (identifying Type II stability and the institutional mechanisms that promote it).

n85 As I clarify below, it is easy to misunderstand exactly what the McKelvey-Schofield agenda manipulation results imply about the realistic potential for agenda manipulation that would take outcomes outside the Pareto set. *See infra* note 124 and accompanying text.

n86 *See generally* Thomas H. Hammond & Gary Miller, *The Core of the Constitution*, 81 AM. POL. SCI. REV. 1155, 1157 (1987) [hereinafter Hammond & Miller, *The Core of the Constitution*] (arguing that the institutions of bicameralism and the executive veto induce stable outcomes despite the destabilizing impact of the legislative veto override); Gary J. Miller & Thomas H. Hammond, *Committees and the Core of the Constitution*, 66 PUB. CHOICE 201, 217-20 (1990) [hereinafter Miller & Hammond, *Committees*] (arguing that fundamental constitutional rules such as bicameralism, executive veto, and veto override interact with the committee system endowed with veto powers to create a set of points so large that even substantial change in the legislature's membership will be unlikely to upset the status quo); Schofield, *Spatial Voting Games*, *supra* note 79, at 197 (1988) (observing that for certain supramajorities, there is a core set of undominated outcomes that remain in place even if there are small variations in the location of ideal voter points).

n87 *Cf.* Grofman & Uhlaner, *supra* note 82, at 46 (explaining that an individual's evaluation of alternatives may depend upon the preferences of others, which become known to the individual only through the decision process).

n88 A classic example of this is the change in the set of legislators that occurred after the decision in *Baker v. Carr*, 369 U.S. 186 (1962) (holding that individuals subject to an unfair apportionment scheme have a cause of action for the violation of the Equal Protection Clause of the Fourteenth Amendment). Those elected under the new rules no longer wished to see the decision overturned, and support quietly vanished for Senator Dirksen's proposed constitutional amendment to take redistricting review out of the jurisdiction of the Supreme Court. *See* Gordon E. Baker, *Threading the Political Thicket by Tracing the Steps of the Late Robert G. Dixon, Jr.*, in REPRESENTATION AND REDISTRICTING ISSUES 21 (Bernard Grofman et al. eds., 1982) (calling the Dirksen amendment "ill-fated").

n89 See Shepsle, *supra* note 84; Shepsle & Weingast, *supra* note 11.

n90 See, e.g., KEITH KREHBIEL, INFORMATION AND LEGISLATIVE ORGANIZATION (1991); Keith Krehbiel, *Spatial Models of Legislative Choice*, 13 LEGIS. STUD. Q. 259, 269-88 (1988) [hereinafter Krehbiel, *Spatial Models*].

n91 Shepsle, *supra* note 84, at 268; Krehbiel, *Spatial Models*, *supra* note 90, at 260-63 (explaining that utility declines as decisions move from the legislature's ideal point). If there is a single-peaked ordering on a given dimension, then the preferences of the median voter will prevail and there will be a majority winner. BLACK, *supra* note 1, at 16; see also Scott L. Feld & Bernard Grofman, *Majority Rule Outcomes and the Structure of Debate in One-Issue-at-a-Time Decision-Making*, 59 PUB. CHOICE 239, 250 (1988) (concluding that one-issue-at-a-time decisionmaking "finds a majority winning alternative whenever one is present").

n92 See Hammond & Miller, *The Core of the Constitution*, *supra* note 86, at 1157; Miller & Hammond, *Committees*, *supra* note 86, at 217-20.

n93 Schofield, *supra* note 79, at 170 (concluding that supramajoritarian rules are popular because they guarantee a stable majority-rule core).

n94 See Matthew D. McCubbins & Thomas Schwartz, *The Politics of Flatland*, 61 PUB. CHOICE 45 (1985) (discussing the consequences of imposing a budget constraint); see also Glazer & Grofman, *supra* note 65 (discussing ideology as a means of structure and stability in the context of elite political debate); Craig Tovey, *The Instability of Instability: A Critique of Distributional Analysis in the Spatial Model* (Oct. 30, 1992) (unpublished manuscript, on file with the *Texas Law Review*).

n95 Scott L. Feld & Bernard Grofman, *Incumbency Advantage, Voter Loyalty and the Benefit of the Doubt*, 3 J. THEORETICAL POL. 115, 115-37 (1991).

n96 *Id.* at 122-23.

n97 *Id.*

n98 *Id.* at 126-27.

n99 See Bernard Grofman, *The Neglected Role of the Status Quo in Models of Issue Voting*, 47 J. POL. 230, 231-37 (1985).

n100 Scott L. Feld & Bernard Grofman, *The Impact of "No Quibbling" by Voters on the Potential for Stable Majority Rule Outcomes in Decisions over Multiple Issue Dimensions* 1 (Apr. 7, 1992) (unpublished manuscript, on file with the *Texas Law Review*).

n101 E. Hoffman & E.W. Packel, *A Stochastic Model of Coalition Formation with Exogenous Costs: Theory and Experiments*, in COALITIONS AND COLLECTIVE ACTIONS 283 (M.J. Holler ed., 1984); Roberta Herzberg & Rick K. Wilson, *Effects of Agenda Access Costs in a Spatial Committee Setting* (July 1990) (unpublished manuscript, on file with the *Texas Law Review*) (exploring the effect of decisionmaking costs on majority rule equilibrium).

n102 See Grofman & Uhlamer, *supra* note 82, at 41-42.

n103 Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 Q.J. ECON. 99, 104-06 (1955), reprinted in MODELS OF MAN 241, 246-48 (Herbert A. Simon ed., 1957).

n104 Roger G. Noll, *Downsian Thresholds and the Theory of Political Advertising*, in INFORMATION, PARTICIPATION AND CHOICE, *supra* note 7, at 55 (commenting that "voters would be expected to abstain if the differences between candidates were small compared to the costs of voting").

n105 See *Connor v. Finch*, 431 U.S. 407, 418 (1977) (enunciating the "under-10%" rule for legislative plans); see also Bernard Grofman, *Criteria for Districting: A Social Science Perspective*, 33 UCLA L. REV. 77, 83 (1985) (discussing the history of the 10% rule after *Connor*).

n106 More particularly, Scott Feld and I show that, when there is a no-quibbling norm such that differences less than $2r$ are disregarded, and when r is the radius of the yolk, then there exists an "absorbing zone" in the space such that once an alternative in that zone is chosen, it will be invulnerable to defeat. Feld & Grofman, *supra* note 100, at 3-6. Moreover, even if the "quibble magnitude" is smaller than $2r$, as long as there is a no-quibbling norm in place, the set of alternatives that can be considered is much reduced, as is the ease with which a cycle can be contrived. *Id.* at 5. See also Tovey, *supra* note 94, at 20-22 (arguing that stability exists if the cost of change or uncertainty exceeds the yolk radius). A concept closely related to no-quibbling is the "finagle radius." See A Wuffle et al., *Finagle's Law and the Finagle Point, a New Solution Concept for Two-Candidate Competition in Spatial Voting Games Without a Core*, 33 AM. J. POL. SCI. 348 (1989).

n107 This scenario was suggested by an example given by Philip Frickey in his remarks at the University of Texas School of Law Symposium, *Regulating the Electoral Process*, at which this Paper was first presented.

n108 I could complicate the scenario by allowing for three other types of preferences to be found, but there is no need to do so to make the basic point about the potential for a cycle. I should note that, in general, cycles are made likely when the underlying structure of preferences is trimodal. For example, if there are two large blocs that are not completely unified, but are relatively well balanced, with a few independents having potential swing power, then we can have a strong likelihood of cycles if there are multiple issue dimensions on which independent voters have differing preferences. Oral Communication from Tse-min Lin to Bernard Grofman (Sept. 1991).

n109 This is analogous to the benefit-of-the-doubt model, except now the benefit of the doubt is applied only with hindsight. Such an approach to resolving deadlock was taken by the

department members in the real-world example discussed by Professor Frickey. *See supra* note 107.

n110 The Borda count requires voters to rank alternatives. *See* BLACK, *supra* note 1, at 59-66. Each alternative in a voter's preference ordering is assigned one point for every alternative to which it is preferred. The point sum over all voters is an alternative's Borda score. The alternative with the highest Borda score is then chosen. The Borda winner need not coincide with the majority (Condorcet) winner; however, because we know that there is no majority winner in the above example, using the Borda count as a way of breaking ties is not at all unreasonable. The rule "Use the Borda count if there is no Condorcet winner, otherwise pick the majority winner" is what is called a "Condorcet extension method." *See* H.P. Young, *Extending Condorcet's Rule*, 16 J. ECON. THEORY 335, 348-49 (1977). *See generally* PHILIP D. STRAFFIN, JR., TOPICS IN THE THEORY OF VOTING 19-43 (1980) (describing various methods of voting for more than two alternatives).

n111 Central is defined relative to the center of the yolk. *See infra* note 127 and accompanying text.

n112 Trimodal distributions are most likely to create instability, but a dominant majority bloc may still be able to create a permanent minority. *See* Nicholas R. Miller, *Pluralism and Social Choice*, 77 AM. POL. SCI. REV. 734, 743 (1983) (arguing that there is a danger of permanent majority and minority blocs unless majority preferences are somewhat cyclic).

n113 *See* Peter C. Ordeshook & Thomas Schwartz, *Agendas and the Control of Political Outcomes*, 81 AM. POL. SCI. REV. 179, 179 (1987) ("A considerable theoretical literature argues that if everyone votes sincerely, then an agenda setter has near dictatorial influence on final outcomes. . .").

n114 *See* CRAVEN, *supra* note 33, at 78 (defining the Arrow and Gibbard-Satterthwaite Theorems in terms of dictatorship).

n115 The problem of misrepresentation of true preferences arises also when one desires to induce voters to indicate their true willingness to pay for public goods. In such situations, voters have an incentive to downplay their true willingness to pay in the hopes that others will provide the public good, allowing the voters a free ride. More generally, even when information is scattered and central authorities need to collect it in order to best achieve some social good, individuals may wish to conceal or misrepresent the information they have. *See, e.g.*, Theodore Groves & John Ledyard, *Optimal Allocation of Public Goods: A Solution to the "Free Rider" Problem*, 45 ECONOMETRICA 783, 784 (1977) (explaining that profit-maximizing consumers will manipulate the valuation of public goods communicated to the government so as to maximize the benefits they receive); Thomas R. Palfrey, *Implementation in Bayesian Equilibrium* (Dec. 1990) (Social Science Working Paper 760, Division of the Humanities and the Social Sciences, California Institute of Technology) (arguing that individuals may wish to withhold or misrepresent vital information to planners). These general problems fall under the related headings of demand revelation mechanisms, incentive compatibility, and implementation theory. A variety of clever procedures, such as double auctions, have been developed to get people to tell the truth about how much they are actually willing to pay for something. *See* Jean-Claude Milleron, *Theory of Value with Public Goods: A Survey*, 5 J. ECON. THEORY 419, 464 (1973).

n116 "True preference" is Craven's term. *See* CRAVEN, *supra* note 33, at 68. The more common terminology, introduced by Robin Farquharson, is "sincere preference." *See* FARQUHARSON, *supra* note 1, at 18.

n117 *See* FARQUHARSON, *supra* note 1, at 18 (describing sincere voting as choosing the subset highest on the voter's preference scale).

n118 *See id.* at 38-44.

n119 I am indebted to Scott Feld for calling this point to my attention. He did so many years ago, but only now am I finally persuaded by the logic of his complaint that sincerity was a misnomer for the choices voters made over sets of alternatives in situations of uncertainty.

n120 ALLAN FELDMAN, *WELFARE ECONOMICS AND SOCIAL CHOICE THEORY* 209-10 (1980) (questioning the legitimacy of outcomes in a world in which voters can misrepresent their preferences). My colleague A Wuffle has opined, only partly tongue-in-cheek, that "Politics is like chess; would we really want a chess game without strategy where players never looked ahead?" Oral communication from A Wuffle to Bernard Grofman (Apr. 30, 1992).

n121 Under single transferable voting systems, manipulation is very unlikely. John J. Bartholdi III & James B. Orlin, *Single Transferable Vote Resists Strategic Voting*, Paper Presented at the Annual Meeting of ORSA/Tims (Nov. 2-4, 1992). Similarly, while such systems may, in principle, be subject to paradoxes such as a lack of positive responsiveness under certain hypothetical voter preference profiles, I am skeptical that such examples have much real-world relevance. *See* Gideon Doron & Richard Kronick, *Single Transferrable Vote: An Example of a Perverse Social Function*, 21 AM. J. POL. SCI. 303, 307-08 (1977).

n122 A single voter has an incentive to vote strategically only if a single vote can change an outcome.

n123 Sophisticated voting requires strong assumptions about the voters' degree of knowledge of other voters' preferences and the existence of a fixed agenda. *See* FARQUHARSON, *supra* note 1, at 38-40. Moreover, strategically motivated behavior may be hard to explain to constituents if it requires voting against the constituents' true preferences on any given ballot, and it may have "reputational" costs among one's fellow legislators. *See* Arthur Denzau et al., *Farquharson and Fenno: Sophisticated Voting and Home Style*, 79 AM. POL. SCI. REV. 1117, 1118 (1985). Although optimal behavior is not truly possible without the elimination of all uncertainty, voters will not *always* vote optimistically. Of course, optimistic voting will occur when, as is commonly the case, sincere preferences coincide with sophisticated strategies. But voters will sometimes try to develop *expectations* of the preferences or choices of their fellow voters and to convert a decision under uncertainty into one under risk, especially when the voting method is one that, like plurality, is potentially unstable. This means that voters may vote "strategically" in plurality voting situations, as when they think that their first choice has no chance but that their second choice does. *See* Bruce E. Cain, *Strategic Voting in Great Britain*, 22 AM. J. POL. SCI. 639, 639-40 (1978) (describing both the practice of "squeezing," in which a voter forgoes support for the most preferred alternative when it has little chance of success in order to cast a vote for a less preferred alternative with a better chance of winning, and the phenomenon of the "wasted vote," in which a voter is discouraged from supporting a third party out of a belief that his or her vote would be wasted).

n124 See McKelvey, *Global Intransitivities*, *supra* note 74, at 1106 (predicting "essentially unlimited possibilities for agenda manipulation").

n125 See Cohen, *supra* note 76, at 10 (explaining that the top cycle set she investigates results in policy outcomes determined by factors other than voter preference).

n126 Scott L. Feld et al., *Limits on Agenda Control in Spatial Voting Games*, 12 MATHEMATICAL & COMPUTER MODELLING 405, 405 (1989).

n127 Central location is defined relative to the center of what is called the "yolk," the smallest sphere touching all median hyperplanes. See McKelvey, *Global Intransitivities*, *supra* note 74, at 1092; Scott L. Feld et al., *The Uncovered Set in Spatial Voting Games*, 23 THEORY AND DECISION 129, 134 (1987); Nicholas R. Miller et al., *The Geometry of Majority Rule*, 1 J. THEORETICAL POL. 379, 383-84 (1989). For a definition of median hyperplanes, see D.H. Koehler, *The Size of the Yolk: Computations for Odd- and Even-Numbered Committees*, 7 SOC. CHOICE AND WELFARE 231, 231 (1990).

n128. Feld et al., *supra* note 126, at 405.

n129 The reason the shortest path is a spiral involves the cardioid nature of the bounds on majority preferences. We cannot move directly outward because such points will not defeat those closer to the center. Steps are measured in terms of yolk radii. This result holds if the size of the yolk radius is small, as we have considerable reason to believe it will be. Scott L. Feld et al., *Centripetal Forces in Spatial Voting: On the Size of the Yolk*, 59 PUB. CHOICE 37 (1988); Koehler, *supra* note 127; Craig Tovey, *A Polynomial Time Algorithm for Computing the Yolk in Fixed Dimensions*, MATHEMATICAL PROGRAMMING (forthcoming 1993).

n130 Feld et al., *supra* note 126, at 416.

n131 We should note, however, that amendment rules more complex than simple amendment procedure can permit manipulation more easily. Ordeshook & Schwartz, *supra* note 113, at 194-95.

n132 Romer & Rosenthal, *supra* note 75, at 27, 35.

n133 Krehbiel, *Spatial Models*, *supra* note 90, at 267.

n134 *Id.* at 281.

n135 Nonetheless, where there is agenda control, those in charge of the agenda may be able to prevent change even if they are not able to achieve their own preferred outcomes directly. I also wish to make it clear that I am in no way casting doubt on the existence and potential importance of agenda manipulation. Indeed, my first published paper was an attempt to develop formal models, inspired by my own experiences as a student politician and frequent chair of mass meetings. From

this experience, I had noticed that choices of decision procedures and agenda sequencing were sometimes affecting outcomes in an important way. *See* Bernard Grofman, *Some Notes on Voting Schemes and the Will of the Majority*, 7 PUB. CHOICE 65, 74 (1969).

n136 Charles R. Plott & Michael E. Levine, *A Model of Agenda Influence on Committee Decisions*, 68 AM. ECON. REV. 146, 146 (1978); WILLIAM H. RIKER, THE ART OF POLITICAL MANIPULATION 18-24 (1986); *see also* Pildes & Anderson, *supra* note 6, at 2137-38 (questioning the ethical basis of the flying club voting scheme).

n137 Michael E. Levine & Charles R. Plott, *Agenda Influence and Its Implications*, 63 VA. L. REV. 561, 581 (1977).

n138 Their model does not use "standard amendment procedure." *See* BLACK, *supra* note 1, at 21, 51 (describing "ordinary committee procedure" for motions and amendments); HENRY M. ROBERT, ROBERT'S RULES OF ORDER: MODERN EDITION 51-54 (Darwin Patnode rev., Thomas Nelson Publishers 1989) (1876) (outlining the form, content, and voting procedures governing amendments to motions).

n139 Bruce Cain, Comments at the *Texas Law Review* Symposium, *Regulating the Electoral Process* (Nov. 13-14, 1992).

n140 *See* LEVINSON, *supra* note 2, at 46-50 (rejecting the notion that the courts' pronouncements should have superiority over other interpretations). I am unfashionably fond of the umpire metaphor because I regard the umpire's role as nearly indispensable to any high stakes game played according to a set of specified rules. I regard constitutional politics as one such game. For example, in many sports, umpires may eject players from the game for cheating (*e.g.*, violating the one-person, one-vote principle), or for unnecessary roughness (*e.g.*, segregation), or for other conduct "unbecoming to the sport," a term whose exact nature is not usually precisely defined.

n141 I use the plural "texts" in deference to Sanford Levinson's elegant distinction between what he calls Catholic and Protestant views of interpretation. The former emphasizes the sacredness of traditions; the latter, the primacy of a particular written text. *Id.* at 27-30.

n142 I would call attention here to Levinson's other distinction between Catholic and Protestant views of interpretation. The Catholic view of interpretation provides for a final arbiter of textual meaning, whereas the Protestant view allows for individual challenge to the judgments of the authoritative body. *Id.* at 27.

n143 I confine myself to dichotomous judicial choice in this Paper because I wish to keep the exposition simple and because dichotomous classification is very important for legal decisionmaking. The discussion below can, in principle, be expanded to cover the more general case of polychotomous classifications.

n144 *See* Pildes & Anderson, *supra* note 6, at 2153-54 (arguing that a mechanistic strategy cannot predict choices).

n145 *446 U.S. 55 (1980)*.

n146 *412 U.S. 755 (1973)*.

n147 *Bolden, 446 U.S. at 69*.

n148 *See, e.g., Zimmer v. McKeithen, 485 F.2d 1297, 1304 (5th Cir. 1973)* (holding that an apportionment scheme that, by design or otherwise, operates to minimize or cancel out the voting strength of racial or political elements of the voting population is sufficient to establish the existence of a constitutionally impermissible redistricting plan), *aff'd sub nom. East Carroll Parish School Bd. v. Marshall, 424 U.S. 636 (1976)*.

n149 *See, e.g., Bolden, 446 U.S. at 94* (White, J., dissenting).

n150 *See, e.g., Aviam Soifer, Complacency and Constitutional Law, 42 OHIO ST. L.J. 383, 387 (1981)* (describing *City of Mobile v. Bolden* as "startling").

n151 *See, e.g., Brown v. Thomson, 462 U.S. 835, 845 (1983)* (upholding a Wyoming apportionment plan and noting that "[e]ven a neutral and consistently applied criterion" can violate the Court's mandate of fair and effective representation, if population disparities are excessively high).

n152 *See, e.g., Batson v. Kentucky, 476 U.S. 79 (1986)* (overruling *Swain v. Alabama, 380 U.S. 202 (1964)*, and declaring unconstitutional the practice of striking jurors solely on the basis of race).

n153 For present purposes, we may think of this as a problem of constitutional interpretation, but from a purely technical point of view the analysis will be similar to the interpretation of a statute or a contract.

n154 Another possible way to think about the meaning of a value on a given dimension is as a threshold used to classify cases with respect to their constitutionality, with the choice rule expressed as a conjunctive or disjunctive coupling of the thresholds stated on each dimension. (Here we might assume that either all threshold rules are conjunctive or all are disjunctive, and that all parameters are continuous.) For example, with respect to abortion, one continuum might range from "conception" to "birthing," with intermediate points such as "first trimester," and a second continuum might range from "nonviable even with life support" to "viable even without life support." For a minority vote dilution case, one continuum might range from "complete exclusion of minorities from electoral office" to "maximum feasible minority representation," and another continuum might range from "voting patterns purely colorblind" to "voting patterns 100% polarized along racial lines." Note that an alternative can now be thought of as a decision rule. The idea of social choice over a space that consists of "rules" rather than "outcomes" is one that I am presently developing for future publication.

n155 Note that Arrowian problems arise even without requiring judges to replace legislators in determining what is best, *e.g.*, seeking justice *a la* Dworkin. Note also that these problems arise whether we interpret points as preferred interpretations or as possible decision rules.

n156 I also argue that one of the ways in which judicial decisionmaking is allegedly distinct from legislative decisionmaking -- namely that judges seek to uphold the Constitution through the application of legal principles while legislators seek to maximize their own constituents' interests (and thus their own re-election chances) -- is clearly overdrawn both in its idealized portrait of judging and in its caricatured portrait of the legislative process.

n157 Indeed, as Sanford Levinson points out, if no-quibbling is a major source of stability, and if jurists guided by principles are reluctant to accept compromises and insist on what, in other contexts, might be seen as quibbling, then majority agreement may be less attainable in judicial decisionmaking than in more explicitly political settings. Sanford Levinson, Comments at the *Texas Law Review* Symposium, *Regulating the Electoral Process* (Nov. 13-14, 1992); *cf.* Easterbrook, *supra* note 8, at 550-52 (describing generally the difficulty of forming consensus in judicial decisionmaking with respect to statutory construction).

n158 As noted earlier, an alternative way of avoiding Arrowian problems is to confine decisions to a single dimension such as liberal-conservative. This is a tack taken by various law-and-economics modelers. *See, e.g.*, William N. Eskridge, Jr. & John Ferejohn, *Making the Deal Stick: Enforcing the Original Constitutional Structure of Lawmaking in the Modern Regulatory State*, 8 J.L. & ECON. & ORGS. 165 (1965) (constructing a model of decisionmaking based on a unidimensional representation of the median preference of members of the House and Senate in relation to the status quo); William N. Eskridge, Jr. & John Ferejohn, *The Article I, Section 7 Game*, 80 GEO. L.J. 523, 529-33 (1992) (constructing a model of decisionmaking confined to changing the status quo in either of two opposite directions, generally corresponding to liberal or conservative); Linda Cohen & Matthew L. Spitzer, Solving the *Chevron* Puzzle (Feb. 24, 1993) (unpublished manuscript, on file with the *Texas Law Review*) (focusing on the conservative and liberal frameworks in understanding *Chevron, U.S.A., Inc. v. Natural Resources Defense Counsel*).

n159 Analogous nonconvexities are generated when the circles represent points regarded as unconstitutional. I am indebted to Professor Scott Feld, Department of Sociology, Louisiana State University, for helpful discussions about the nature of interpretive decisionmaking.

n160 In like manner, the same Arrowian problems also re-emerge if judges must agree on a rule rather than agree simply on an outcome. *See supra* notes 32, 33, 38 and accompanying text.

n161 This argument has certain parallels to William Riker's argument that we must be content with mechanisms that allow us to reject the unacceptable rather than guarantee the best. *See RIKER, supra* note 33, at 241-42 (concluding that the liberal interpretation of voting -- which is essential because it alone provides a defense for democracy -- is based on the "notion that voting permits the rejection of candidates or officials who have offended so many voters that they cannot win an election [but] does not require that voting produce a clear, consistent, meaningful statement of the popular will"). However, by now the reader should be aware that I reject most of the claims made by Riker and others as to the practical importance of the various theoretical flaws in majority rule and other democratic processes identified in Riker's book.

n162 *See supra* notes 1, 6 and accompanying text.

n163 *See supra* note 2 and accompanying text.

n164 Of course, I am a member of this wing of Public Choice. *See supra* note 26 and accompanying text.

n165 For my definition of that term, see *supra* note 7.

n166 This Institute was held during the summer of 1992 at the University of California, Santa Cruz. It was organized by Professors Charles Hedrick, Peter Euben, and John Lynch.

n167 My views on this point are very close to those recently expressed in FARBER & FRICKEY, *supra* note 6, at 57-59 (arguing that Public Choice and republicanism are not irreconcilable and identifying common features of the two theories).

n168 A common notion is not the same thing as identical perception. We can permit people to be more or less competent at perceiving what is in the public interest and how to reach tradeoffs among competing values. We cannot permit people to have fundamentally different views about what values we ought to promote without reintroducing the Arrowian problems caused by multiple evaluative dimensions.

n169 An alternative way to merge Public Choice and Civic Republican perspectives might be to emphasize the importance of what economists refer to as "common knowledge." This term refers to shared understandings and shared anticipations as to how people will behave. Ideological placements, for example, can be thought of as shared (albeit imperfectly) common knowledge, and the very notion of single-peaked, unidimensional ideological placements can be thought of as a common understanding that permits people to make sense of politics.

n170 DOWNS, *supra* note 1, at 82-95. Downs argues that voters' uncertainty leaves them open to persuasion by leaders. Because of their ability to influence other voters, these leaders have a disproportionate influence on policy formation despite the theoretically equal distribution of votes. *Id.* at 94-95.

n171 *See id.* at 83 (noting that persuaders provide facts that allow uncertain voters to establish a clear preference).

n172 *See id.* at 85; *see also* Grofman, *Models of Voting*, in 2 RESEARCH IN MICROPOLITICS: A RESEARCH ANNUAL 31, 33-35 (Samuel Long ed., 1987).

n173 *See* Bernard Grofman & Barbara Norrander, *Efficient Use of Reference Group Cues in a Single Dimension*, 64 PUB. CHOICE 213, 213 (1990) (demonstrating that if there are groups whose endorsements voters can use for cues regarding candidates, "voters do not need to know anything directly about candidate positions to be able to identify the candidate whose issue positions and performance [are] likely to be closest to the voter's own preferences"); Arthur Lupia, *Direct*

Democracy, Political Information, and the "Will of the Majority" (1990) (unpublished paper presented at the annual meeting of the American Political Science Association).

n174 See Richard D. McKelvey & Peter C. Ordeshook, *A Decade of Experimental Research on Spatial Models of Elections and Committees*, in *ADVANCES IN THE SPATIAL THEORY OF VOTING* 99, 116-17 (James M. Enelow & Melvin J. Hinich eds., 1990) (reporting that with poll results and interest group endorsements, voters correctly identified candidates' issue positions 34.9% of the time); Richard D. McKelvey & Peter C. Ordeshook, *Elections with Limited Information: A Multidimensional Model*, 14 *MATHEMATICAL SOC. SCI.* 77, 78 (1987) (analyzing the choices of voters who receive poll results); see also Bernard Grofman & Julie Withers, *Information-Pooling Models of Electoral Politics*, in *INFORMATION, PARTICIPATION AND CHOICE*, *supra* note 7, at 95 (noting that "individual voters may be able to decrease the perceived uncertainty about candidate platforms through interaction with or observation of other voters, or the electorate as a whole"); *INFORMATION AND DEMOCRATIC PROCESSES* (John A. Ferejohn & James H. Kuklinski eds., 1990) (providing articles discussing how information gets to the electorate).

n175 SAMUEL L. POPKIN, *THE REASONING VOTER: COMMUNICATION AND PERSUASION IN PRESIDENTIAL CAMPAIGNS* 13-15 (1991); see also Samuel L. Popkin, *Information Shortcuts and the Reasoning Voter*, in *INFORMATION, PARTICIPATION AND CHOICE*, *supra* note 7, at 29 (describing the impact of highly obtainable information on voters).

n176 Scott J. Thomas, *A Negative Advertising Theory of Campaign Expenditures*, in *PREDICTING POLITICS: ESSAYS IN EMPIRICAL PUBLIC CHOICE* 245 (W. Mark Crain & Robert D. Tollison eds., 1990).

n177 Thomas H. Hammond & Brian D. Humes, *"What This Campaign Is All About Is . . .": A Rational Choice Alternative to the Downsian Spatial Model of Elections*, in *INFORMATION, PARTICIPATION AND CHOICE*, *supra* note 7, at 220, 221-22.

n178 M. Steven Weatherford, *An Economic Theory of Democracy as a Theory of Policy*, in *INFORMATION, PARTICIPATION AND CHOICE*, *supra* note 7, at 333-34.

n179 Oral communication from Benjamin Page to Bernard Grofman (1990).

n180 Baye's rule involves direct conditioning patterns involving the probability of x given y, where x is an observable event whose occurrence can be established. In indirect conditioning patterns there are one or more intermediary stages in an inferential hierarchy such that x is only a possible inference, not a sure occurrence. In this situation, the inference task is hierarchical, or "cascaded." See David Schum, *The Behavioral Richness of Cascaded Inference Models: Examples in Jurisprudence*, in 2 *COGNITIVE THEORY* 149, 251 (N.J. Castellan et al. eds., 1977); Peter Tillers & David Schum, *Hearsay Logic*, 76 *MINN. L. REV.* 813, 833-36 (1992).

n181 See Schum, *supra* note 180, at 159; David Schum, *Current Developments in Research on Cascaded Inference*, in *COGNITIVE PROCESSES IN CHOICE AND DECISION BEHAVIOR* 179, 204-08 (T.S. Wallsten ed., 1980).

n182 The doctrine of instruction sees a democratic election as a binding order from a constituency to its legislator instructing that legislator how to vote. *See generally* Kenneth Bresler, *Rediscovering the Right to Instruct Legislators*, 26 *NEW ENG. L. REV.* 355 (1991) (defining the doctrine of instruction, explaining its historical development, and applying it to the case of Massachusetts state legislators in the twentieth century).

n183 *Cf.* DAVID MAGLEBY, *DIRECT LEGISLATION: VOTING ON BALLOT PROPOSITIONS IN THE UNITED STATES* (1984) (arguing that the use of the initiative has harmed the political process by weakening political parties and legislatures and by accelerating the growth of single-issue politics).

n184 For different but related critiques of standard economic and Public Choice models of politics as painting too dismal a portrait of the political process, see Donald Wittman, *Why Democracies Produce Efficient Results*, 97 *J. POL. ECON.* 1395, 1396 (1989) (arguing that economic analysis tends to exaggerate the informational costs of democratic decisionmaking); Michael A. Fitts, *Can Ignorance Be Bliss? Imperfect Information as a Positive Influence in Political Institutions*, 88 *MICH. L. REV.* 917, 920-21 (1990) (arguing that limiting political information can produce beneficial results). *See also* Arthur T. Denzau & Michael C. Munger, *Legislators and Interests Groups: How Unorganized Interests Get Represented*, 80 *AM. POL. SCI. REV.* 89, 103 (1986) (positing that unorganized groups of voters exercise greater influence over decisions than a demand-oriented theory of collective action would predict).

n185 Tyler Cowen et al., *Rent-Seeking May Promote the Provision of Public Goods* (1993) (unpublished manuscript, on file with the *Texas Law Review*).

n186 *See, e.g.*, Christopher T. Wonnell, *Contract Law and the Austrian School of Economics*, 54 *FORDHAM L. REV.* 507, 507-08 (1986) (discussing the basic tenets of the Austrian School of economics, which "include an emphasis on the division of knowledge among market participants, a theory of competition and of the market as a continuing process of learning and adaptation rather than an equilibrium state and a commitment to radical methodological individualism and subjectivism," and the school's relevance to contract law).

n187 James Buchanan and Gordon Tullock treat a constitution as a unanimous consent agreement that specifies the rules (including size of majorities) by which subsequent "lesser" decisions in various domains are to be made. This constitutional social contract could also be thought of as specifying when deliberation is required and what rules are needed for cloture. *See* BUCHANAN & TULLOCK, *supra* note 1, at 81-84.

n188 *See supra* note 26 and accompanying text. While the exact mathematics was not known until Condorcet, scholars as early as Aristotle and pseudo-Aristotle intuited that majorities could, by pooling their judgments, make "competent" decisions that might be even better than those that wiser individuals could make in isolation. *See infra* note 189 and accompanying text (identifying pseudo-Aristotle); ARISTOTLE, *THE POLITICS* 141 (Carnes Lord trans., 1984) (asserting that "all will deliberate better when they do so in common"). Thus, the Condorcet Jury Theorem and related results can be thought of as providing a justification for democratic decisionmaking procedures. *See Comment on "Democratic Theory," supra* note 27, at 102. However, issues of differential competence remain. *See, e.g.*, Shapley & Grofman, *supra* note 27, at 337-38 (considering how to achieve accurate group decisionmaking in light of variable individual competence); Nitzan & Paroush, *supra* note 27, at 289 (examining the "problem of selecting an optimal neutral decision

rule for a set of individuals with identical objectives but with possibly different abilities to identify the correct course of action necessary for the attainment of their common goal").

n189 The term "pseudo-Aristotle" is used in recognition that the authorship of the relevant works is disputed. *See, e.g.*, Kurt von Fritz & Ernst Kapp, *Introduction to ARISTOTLE, CONSTITUTION OF ATHENS* 3, 3-4 (Kurt von Fritz & Ernst Kapp trans., 1950).

n190 Aristotle makes the point that people may be better at judging the competence of others to make good recommendations than they would be at directly choosing among the recommended options themselves. *Id.* at 64-65; *cf.* Guillermo Owen, "Fair" Indirect Majority Rules, in *INFORMATION POOLING*, *supra* note 27, at 223 (discussing how an indirect majority rule may give a better result than a direct majority rule does).

n191 For related material and arguments, *see* Grofman, *Mathematical Models*, *supra* note 28, at 344-45; Grofman, *The Slippery Slope*, *supra* note 28, at 296-97.

n192 *See Gresham's Law of Legal Scholarship*, 3 *CONST. COMMENTARY* 307, 307-08 (1986) (explaining Gresham's Law and adverse selection in legal scholarship).

n193 One relatively recent review of that literature has been done by Reid Hastie. *See* Reid Hastie, *Review Essay: Experimental Evidence on Group Accuracy*, in *INFORMATION POOLING*, *supra* note 27, at 129; *see also* William Panning, *Information Pooling and Group Decisions in Nonexperimental Settings*, in *INFORMATION POOLING*, *supra* note 27, at 159 (discussing nonexperimental studies of group decisions); N.C. Dalkey, *Information Pooling as the Composition of Inquiry Systems*, in *INFORMATION POOLING*, *supra* note 26, at 73 (discussing the merits of deliberative rather than strategic democracy).

n194 It is important to distinguish between deliberation and the compulsion to give reasons for every decision. Lawyers and philosophers emphasizing the Civic Republican tradition have advocated a model of political decisionmaking that assigns a high value to giving reasons, and treats politics as a form of discourse. *See, e.g.*, Estlund, *supra* note 21 (discussing the merits of deliberative rather than strategic democracy). As a political scientist, I am extremely skeptical about models that do not treat politics as a multifaceted activity, of which discourse is only one part. Sometimes it is a very bad idea to give reasons for what we do; giving reasons will force out into the open conflicts over ideology, values, or distributions of payoffs that may best be left hidden. Similarly, it is probably a good thing, on balance, that jurors are not required to give reasons for the decisions that they reach.

n195 *See, e.g.*, Richard E. Wagner, *Parchment, Guns, and the Maintenance of Constitutional Contract*, in *DEMOCRACY AND PUBLIC CHOICE*, *supra* note 12, at 105, 117-18 (Charles K. Rowley ed., 1987) (assuming implicitly that institutions must be designed so as to accommodate citizens' inherent selfishness).

n196 *THE FEDERALIST* No. 10 (James Madison) (positing that the republican form of government is the only way of curbing the inherent evils of minority factions).

n197 DOWNS, *supra* note 1, at 290. Thus, Public Choice theory could be directed at how to add incentives to motivate legislators to be, among other things, more public-spirited. For example, it would be consistent with Public Choice approaches to emphasize information as a public good. This might provoke scholars to develop methods allowing the public to understand the true benefits and costs hidden in the boring but vital minutiae of legislation, with a view toward changing the incentive structure of legislators.

n198 See Geoffrey Brennan & James M. Buchanan, *Is Public Choice Immoral? The Case for the "Nobel Lie,"* 74 VA. L. REV. 179, 188 n.10 (1988).

n199 David Hume, *On the Independency of Parliament*, in 3 THE PHILOSOPHICAL WORKS OF DAVID HUME 117, 117-18 (T. H. Green & T. H. Grose eds., London, Longmans, Green, and Co. 1875) (1742) (emphasis in original).

n200 John Stuart Mill, *Considerations on Representative Government*, in 19 COLLECTED WORKS OF JOHN STUART MILL 371, 505 (J. M. Robson ed., 1977) (1861) (emphasis added).

n201 See, e.g., WILL, *supra* note 2, at 18 (describing pork-barrel expenditures as "among the means that members of Congress use to purchase perpetual incumbency").

n202 Compare WILLIAM K. MUIR, LEGISLATURE: CALIFORNIA'S SCHOOL OF POLITICS 191 (1982) (arguing that the California legislature has many legislators who are public-spirited and who are policy-oriented and describing them as "energetic, attentive, and informed") with William C. Mitchell & Michael C. Munger, *Economic Models of Interest Groups: An Introductory Survey*, 35 AM. J. POLK. SCI. 512, 515 (1991) (evaluating economic models of interest group behavior and pointing out the impact of interest groups on the democratic process). Cf. FARBER & FRICKEY, *supra* note 6, at 17-21 (examining views of the effect of interest groups on legislative decisionmaking).

n203 Of course, the usual view of Downs as standing for the proposition that political parties can be expected to converge to tweedledum-tweedledee-like identity misstates the remarkably nuanced picture of party competition portrayed by Downs. See generally DOWNS, *supra* note 1. For example, Downs, unlike many who followed him, recognized both that there is pressure for convergence to centrist policy positions, and also that there are centrifugal forces. See *id.* at 116-21 (contrasting the theory that parties in a two-party system have an incentive to converge ideologically in order to capture moderate votes with the theory that the behavior of extremist voters in a two-party system may pull the parties apart ideologically). In particular, Downs can be credited not just with modeling one-dimensional competition and convergence to the median, but also with modeling the politics of putting together a coalition of intense single-issue minorities.

n204 Like a true classic, even when Downs appears wrong, he is usually wrong in a useful way by raising the question of why things are not as the model he proposes suggests they ought to be. For example, confronting the questions "Why don't parties fully converge?" and "Why do voters vote even in situations when their vote has no discernible likelihood of influencing the outcome?" has forced political scientists to think through important conceptual and empirical issues that had not been thought about in any satisfactory way. See William C. Mitchell & Randy T. Simmons, *Public Choice and the Judiciary: Introductory Notes*, 1990 B.Y.U. L. REV. 729, 733 (1990) (stating that "[v]irtually all subsequent public choice analysis has followed the Downs example"); A. C. Pritchard, Note, *Government Promises and Due Process: An Economic Analysis of the "New*

Property", 77 VA. L. REV. 1053, 1069 n.74 (1991) (explaining that, since Downs introduced the paradox that rationally self-interested individuals vote, it has been an ongoing theoretical problem for Public Choice scholars).

n205 The bottom line of my work is that there is no good reason to expect tweedledum-tweedledee politics in the United States, although there certainly will be some pressures for convergence. Bernard Grofman, *Toward an Institution-Rich Theory of Political Competition with a Supply Side Component*, in INFORMATION, PARTICIPATION AND CHOICE, *supra* note 7, at 281 (reviewing the assumptions of the simplest Downsian model involving voters who choose between political parties based on their announced platforms, and considering the ways in which modifying each of the "standard" simplifying assumptions in this model can lead to a more empirically accurate picture of party competition in the United States and elsewhere).

n206 Attempts to "purify" political decisionmaking by debating policies behind a Rawlsian veil of ignorance in order to determine which ought to be preferred make for good philosophic theory but are implausible in political practice. For example, Rawlsian analysis of choice behind a veil of ignorance has only limited relevance to actual constitutional design because real constitutions are almost invariably drawn up by people all too conscious of their status (as, say, whites, males, property owners, or religious dissenters) and for whom comparison with previous institutional arrangements is the obvious baseline against which to evaluate proposed changes. Inevitably, the art of constitutional design involves retrospective analyses as well as prospective ones. Of course, there are aspects of constitutional choice in which actors will be uncertain of their place in the new scheme of things and will act under a kind of uncertainty that approximates a veil of ignorance, but these are likely to be with respect to consequences that will be seen as remote and thus heavily discounted. At best, we should think of choice as taking place behind what I call a "partially open venetian blind of ignorance." This description recognizes that people do know who they are, even though they cannot be certain what they or their children will become. *Cf.* Fitts, *supra* note 184, at 966-68 (noting a veil of ignorance may be created by introducing impediments to an identification of winners and losers with a particular social policy).

n207 In my view, the fault for mischaracterizing Public Choice results lies less in the lawyers than in the economists and political scientists who confuse mathematical results about what is or is not possible with empirical reality as to what is or is not probable; who neglect the factors that render certain models far too simplistic to capture messy political reality; who refuse to believe that anyone might be acting on the belief that there is a public interest other than the aggregation of individual preferences; and who appear to expect of political decisionmaking more than can reasonably be expected from decisionmaking of any sort, legal or otherwise.

n208 The centrality of cycling problems in the Public Choice literature is aptly captured in the remarks of Dennis Mueller, the author of the leading textbook in the field, when he says: "That majority rule leads to cycles is a (some would say *the*) major theme of the public choice literature." MUELLER, *supra* note 33, at 88.

n209 *See, e.g.*, BERNARD GROFMAN ET AL., MINORITY REPRESENTATION AND THE QUEST FOR VOTING EQUALITY 1-15 (1992) (detailing the 200-year struggle of African-Americans in the South to obtain equal representation); Kathryn Abrams, *Relationships of Representation in Voting Rights Act Jurisprudence*, 71 TEX. L. REV. 1409, 1435, 1434-35 (1993) (arguing for "'strong plurality' districts that will encourage interracial coalition building"); Lani Guinier, *Groups, Representation, and Race-Conscious Districting: A Case of the Emperor's Clothes*, 71 TEX. L. REV. 1589, 1617 (1993) (suggesting a system of cumulative voting to ensure enhanced minority representation); Bruce E. Cain, *Voting Rights and Democratic Theory: Toward a*

Color-Blind Society?, in *CONTROVERSIES IN MINORITY VOTING* 261, 277 (Bernard Grofman & Chandler Davidson eds., 1992) (suggesting that "attention should be given to . . . broader political challenges and to structural changes that move beyond voting rights per se"); Bernard Grofman & Chandler Davidson, *Postscript: What is the Best Route to a Color-Blind Society?*, in *CONTROVERSIES IN MINORITY VOTING*, *supra*, at 300, 316-17 (arguing that case-specific enforcement of the Voting Rights Act is the best way to achieve equal representation for minorities); Lani Guinier, *No Two Seats: The Elusive Quest for Political Equality*, 77 *VA. L. REV.* 1413 (1991) (proposing a restructuring of decisionmaking bodies that would avoid the effects of a "winner-take-all" system in which a majority wins disproportionate power); Lani Guinier, *The Triumph of Tokenism: The Voting Rights Act and the Theory of Black Electoral Success*, 89 *MICH. L. REV.* 1077 (1991) (criticizing as ineffective theories that focus on black electoral success and suggesting a new approach to electing representatives and making legislative decisions called "proportionate interest representation"); Kathryn Abrams, *"Raising Politics Up": Minority Political Participation and Section 2 of the Voting Rights Act*, 63 *N.Y.U. L. REV.* 449 (1988) (arguing that courts addressing § 2 of the Voting Rights Act should focus on political rights as a whole, not merely on the electoral phase of the political process). A number of mechanisms have been proposed to guard against permanent minorities, including rotation among positions of leadership, and the creation of heterogeneous constituencies with the size of competing groups carefully balanced so as to foster centrist political competition and a concomitant search for compromise. Pildes and Anderson discuss devices that reduce the perceived one-sidedness of political outcomes and craft acceptable compromises. *See* Pildes & Anderson, *supra* note 6, at 2166-75 (discussing neutrality, avoidance, and cycling as methods by which democratic institutions may reach decisions without resolving value conflicts).

n210 I am indebted to Bruce Cain for his remarks at the University of Texas School of Law Symposium, *Regulating the Electoral Process*, at which this Paper was first presented, posing the problem in this fashion. *See also* ROBERT A. DAHL, *A PREFACE TO DEMOCRATIC THEORY* 98 (1956) (noting that none of the constitutional checks and balances of the Madisonian constitution was sufficient to prevent the tragedy of the Civil War). *See generally* THE *FEDERALIST PAPERS AND THE NEW INSTITUTIONALISM* (Bernard Grofman & Donald Wittman eds., 1989). In my view, the central problem for democratic theory is not that we cannot figure out what majorities want, but that when we give majorities what they want, we may have some very upset minorities!