Social choice theory, populism, and popular control

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I

> Populism as a moral imperative depends on the existence of a popular
> will discovered by voting. But if voting does not discover or reveal a
> will, then the moral imperative evaporates because there is nothing to be
> commanded. If the people speak in meaningless tongues, they cannot utter
> the law that makes them free. Populism fails, therefore, not because it is
> morally wrong, but merely because it is empty.[1]

The emptiness of populism was in Riker's view a corollary of recent results in
social choice theory, a new mathematical branch of economics and political science.
The results of this new field seemed to show that references to "what the majority
wants" or "the will of the majority" were often vacuous, as meaningless as a reference
to the largest natural number or to a two-sided triangle. And if "the will of the majority"
often fails to refer to anything, then to argue that political institutions must respect the
will of the majority is to argue nonsense.

Riker's critique of populism echoed Schumpter's objections to what Schumpeter
called the "classical" conception of democracy and its preoccupation with the will of
the people.[2] While Schumpeter sought to demonstrate the incoherence of the popular
will by establishing the indeterminacy and incoherence of individuals' political opin-
ions, Riker's updated critique would go through even under the charitable assumption
that all individuals had fully formed, rational political opinions.

Recently Philip Pettit has argued of similar paradoxes—the so-called discursive
dilemma and its generalizations—that they pose a special problem for Rousseau's
model of direct democracy.[3] For Pettit, the conceptual blows that these paradoxes in-
flict on Rousseau's model of direct democracy redound, not to the benefit of anything
like Riker's liberalism but rather to a republican theory of democracy.

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1. William Riker, *Liberalism Against Populism* (New York: Waveland Press, 1982), 239.
2. Joseph Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper & Brothers, 1942), 42.
3. Philip Pettit, *On the People's Terms: A Republican Theory and Model of Democracy* (Cambridge:
Cambridge University Press, 2013), 191–194.

Riker's critique has elicited spirited rebuttals from political theorists. The main line of response, developed in greatest detail by Gerry Mackie, is to challenge the factual premise that social choice paradoxes occur frequently and unavoidably. Another common response is to claim that deliberation can prevent the paradoxes from arising or persisting. These responses do not challenge and sometimes implicitly concede Riker's argument that *if* these paradoxical situations were in fact frequent and unavoidable, then they would indeed pose problems for populist understandings of democracy.

In my view Riker's take on social choice paradoxes gets things backwards, but so too does the main line of response from political theorists. Mackie greatly overstates the case against Riker's premise, and there is neither good theoretical reason nor solid empirical evidence for thinking that deliberation has the hypothesized effect. But the implications are nearly the opposite of what Riker's discussion suggests. *Pace* Riker, the paradoxes are troubling for models of democracy that envision a limited role for ordinary citizens—such as Riker's liberalism—and much less troubling for models of democracy in which ordinary citizens determine policy themselves—such as the model of direct democracy that Rousseau describes in *On the Social Contract.*

I begin in the next section with a brief overview of the paradoxes, the reasons for thinking they occur regularly, and the reasons for thinking that, at least for some of the basic questions in democratic theory at issue here, the frequency of their occurrence is irrelevant. In section IV I take up the inference that Riker would have us draw from these paradoxes, as well as related ideas in Schumpeter and Pettit. I explain why, contrary to what Riker contends, these paradoxes do not pose any special problem for a Rousseauvian model of participatory, direct democracy, but they do create difficulties for any conception of democracy that accepts, or even recommends, the near total exclusion of ordinary citizens from government.

II

Spain threw its support behind the U.S. invasion of Iraq despite opposition from a large majority of its citizens. That seems like a deviation from how institutions of representative democracy are supposed to function: we should not regularly observe governments in well-constituted, healthy representative democracies joining wars of aggression that large majorities of their citizens strongly oppose. As Robert Dahl puts this widely shared view, "a key characteristic of a democracy is the continued responsiveness of the government to the preferences of its citizens, considered as political equals."[4] Since citizens' preferences will typically conflict, a natural interpretation of this idea is that the government should respect the wishes of majorities. But social choice theory seems to show that in some situations, this demand is incoherent.

Suppose that a choice must be made between escalating a war (the hawks' preference, h), ending a war (the doves' preference, d), and maintaining the current level of engagement (the status quo, q). Suppose that there are three prevailing views among the citizens: centrists, who believe maintaining the current policy would be best and ending the war would be the worst option, the doves, who believe it would be best to end the war and escalation would be the worst option, and the 'all-or-nothing' crowd,

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4. Robert Dahl, *Polyarchy: Participation and Opposition* (New Haven: Yale University Press, 1971), 1.

who believe that either the country should end the war or, better yet, ramp up its effort but that the status quo approach is worst:

$$\text{All-or-nothing: } h \succ d \succ q$$
$$\text{Doves: } d \succ q \succ h$$
$$\text{Centrists: } q \succ h \succ d$$

If any two of these groups constitutes a majority, then no matter which course of action the government takes, its choice will be opposed by a majority that believes that one of the other two options would have been better.

This situation is an example of *Condorcet's paradox*. As I use the term here, the defining feature of the paradox is the absence of what is called a *Condorcet winner*: there is no option which is at least as good as every other when the comparisons are made according to the preferences of majorities.[5] Equivalently: for every option, there is another option that some majority believes would be better.

It can happen that no option is at least as good as every other option even if the comparisons are made according to the preferences of supermajorities. If there are at least as many alternatives as there are individuals, then it can happen that no matter which option is chosen there will be another which everyone except a single person believes would be the better choice.[6]

The implications of Dahl's criterion are not unambiguous in these cases. If more people would rather end the war than continue with the current policy, then a responsive government that gives equal weight to each citizen's opinion should not continue with the current policy, or so one might think. But by that reasoning, a responsive government would choose none of the three options.

One can state the puzzle in more general terms. If a description of how the government responds to the preferences of its citizens covers cases in which no Condorcet winner exists, then, one can demonstrate, the description will imply one of the following:

  (i) the government does not treat citizens equally,

 (ii) the government sometimes chooses a policy y instead of a policy x, even though *everyone* thinks x is better than y, or

(iii) the government sometimes changes its policy from x to y after a change in citizens' preferences that results in x becoming *more* popular than y, *i.e.*, *more* people preferring x to y.

If the third condition obtains, then one can show that the government sometimes responds to a change in a citizen's preferences in a "perverse" way, *i.e.*, in a way that the

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5. This usage contrasts slightly with writers who take 'Condorcet's paradox' to refer merely to cases like the given example, in which majorities have "intransitive" or "cyclic" preferences over three options.

6. This follows from theorem 2.4 in David Austin-Smith and Jeffrey Banks, *Positive Political Theory I: Collective Preference* (Ann Arbor, MI: University of Michigan Press, 1999), and is also illustrated by their proof of the theorem, due originally to **Brown 1975**. Arrow's famous theorem states that for a large class of alternative methods of aggregating preferences into judgments about which policies are "best" (or at least as good as every other), paradoxes similar to Condorcet's can arise; Kenneth Arrow, *Social Choice and Individual Values* (New York: John Wiley & Sons, Inc., 1951).

citizen, to whose preferences it is responding, would rather it not respond. If a theory of representative democracy needs to supply some account of what it means for policy outcomes to be responsive to the wishes of the citizenry, then these facts raise a puzzle for theories of representative democracy.

Contrary to received opinion, these social choice paradoxes do not raise comparable puzzles for theories of participatory, direct democracy like Rousseau's, or so I'll argue in section IV. If, as Riker's arguments would have us believe, there is no satisfactory way to resolve this puzzle, then the implication, I argue, is that direct (or plebiscitary) democracy of the kind that Rousseau advocated is the only genuine means of institutionalizing democratic control over policy. Populists can get behind institutions like popular assemblies, referenda and citizens' juries even if their justification makes no reference to a collective will. But explaining how the institutions that Riker favored, in which citizens' political participation is limited mainly to elections, are desirable and genuinely democratic alternatives to these populist institutions becomes more challenging if we abandon the idea of a collective will in all its possible formulations. Riker's arguments about the implications of social choice paradoxes, if sound, help to shore up not a Madisonian theory of representative democracy but a "populist" theory of direct democracy that calls for just the institutions that Rousseau favored.

As a preface to the argument, however, I want to explain in section III why political theorists' most common response to social choice theory generally and Riker in particular are underwhelming. Among political theorists the most popular response to social choice theory is to dismiss situations like Condorcet's paradox as mere logical possibilities, or to argue that deliberation will prevent such circumstances from arising or persisting. Readers who find these responses satisfying are unlikely to take a strong interest in what I describe as a puzzle for theories of representative democracy, seeing as how the premise of the puzzle—and the point of departure for Riker's arguments—describes in their eyes merely a logical possibility and not actual politics. Before presenting my argument in section IV, I want therefore to show why these typical responses to social choice theory are less convincing than many political theorists think.

III

How might one establish empirically whether a Condorcet winner exists? When there are only finitely many possible alternatives that a group could choose, a survey of the group members' preferences, if believable, would settle the question. But this approach is infeasible if there are too many alternatives: if members of Congress are choosing the rate at which to tax capital gains, then there are, for all practical purposes, infinitely many choices, and we cannot administer a survey in which we directly solicit Congress members' preferences over each pair of feasible tax rates. Contexts in which a group faces infinitely many possible choices are routine in politics. Whenever a group must divide resources, choose a level of monetary expenditure or set tax rates, they are choosing from a continuum with infinitely many possibilities.

In these contexts one can make progress if one is willing to leverage *a priori* assumptions about preferences. For example, assume that each member of Congress

has an ideal capital gains tax rate and for any two other possible tax rates, she prefers whichever is closest to her ideal rate. Then we need only ask each member of Congress about her ideal rate. Given the assumption about the shape of their preferences, her answer entails a complete ranking of the infinitely many possible rates. From these extrapolated rankings we could then determine whether a Condorcet winner exists.

Without assumptions of this kind, we're unlikely to come to any empirically supported conclusions about whether Condorcet winners exist. If we do entertain assumptions of this kind, they may settle the question *a priori*. For a large class of decision problems in which the possible choices can be represented as points along a line, a seemingly minimal and plausible assumption about the shape of preferences implies that a Condorcet winner exists. The assumption is that preferences are "single-peaked" along this line. For another large class of decision problems in which the possible choices can be represented as points in a plane (or a higher-dimensional space), the same assumption implies that a Condorcet winner almost never exists.

Suppose members of a legislative assembly must choose how to divide a budget between three categories. That is, they must choose three numbers, each between 0 and 1, such that the numbers add up to 1 (the first number is the share of expendable resources going to the first category). There are infinitely many possible choices, so we cannot test for a Condorcet winner simply by asking the assembly members to state their preferences over all pairs.

But suppose their preferences are "single-peaked," in this sense: for any two possible divisions, d_1 and d_2, if a person thinks d_1 is at least as good as d_2, then she will think that a compromise between the two options is better than d_2. For example, consider these three possible divisions:

$$d_1 = (.5, .5, 0)$$
$$d_2 = (0, 0, 1)$$
$$d_3 = (.25, .25, .5)$$

Notice that d_1 and d_2 are each more "extreme," in a sense, than d_3; the third is a compromise between the first two in that it splits the difference between them: $d_3 = 1/2 d_1 + 1/2 d_2$. The assumption that someone has single-peaked preferences in this setting means that if she considers d_1 to be at least as good as d_2, then she will consider the compromise, d_3, to be strictly better than d_2. If each person inclines to compromises in this way then each will have an ideal division d^*, which one can imagine as the single peak of a hill, and for any lower point d on the slope of this hill, she will consider all of the points on the line running up the slope from d to the peak as preferable to d. Her preferences will be "single-peaked."

Remarkably, one can prove that if individual members' satisfy this assumption, then Condorcet winners *almost never exist*, in the following sense: should a Condorcet winner exist, it is possible to make an arbitrarily minor adjustment to individuals' preferences, after which no Condorcet winner exists.[7] Should a profile of preferences support a Condorcet winner, then infinitely many profiles that are arbitrarily similar to

7. Michel Le Breton, "On the Core of Voting Games," *Social Choce and Welfare* 4 (1987): 295–305; Charles R. Plott, "A Notion of Equilibrium and Its Possibility Under Majority Rule," *American Economic Review* 57 (1967): 787–806; Richard McKelvey, "General Conditions for Global Intransitivities in Formal

this one will fail to support a Condorcet winner. If we were confident that individuals' preferences are single-peaked in multidimensional settings, we would have no reason to bother looking for empirical evidence of a Condorcet winner.

The result is the mirror image of the more widely known and celebrated "median voter theorem." Suppose that the assembly must choose a capital gains tax rate, that is, a number between 0 and 1. Suppose preferences are "single-peaked" along the interval $[0, 1]$, so that each person has the same attitude toward compromise just described: for any two tax rates r_1 and r_2, if a person thinks that r_1 is at least as good as r_2, then she will think that a compromise between r_1 and r_2 is better than r_2. For example, if she thinks a rate $r_1 = 1/3$ is better than a rate $r_2 = 1/6$, then she will also think that the compromise solution of a rate of $1/4$ is better than r_2, since $1/4 = 1/2r_1 + 1/2r_2$. When preferences are single-peaked in this setting, there is sure to be a Condorcet winner, equal to the ideal tax rate of the median assembly member.

On reflection it should perhaps be unsurprising that Condorcet winners generally fail to exist when options vary along multiple dimensions and individuals have this disposition towards compromises. In order for an alternative to be a Condorcet winner, it must be impossible for any majority coalition to identify an alternative which all of its members prefer. The more dimensions along which alternatives vary, the more potential opportunities for "trade" among members of possible majority coalitions: I'm willing to cede ground along the dimension of less importance to me, in exchange for improvements on the dimensions that matter more to me, and if their importance is reversed in your mind, we can find mutually attractive alternatives to the status quo. The more dimensions, the easier it will be to assemble a majority coalition in favor of a change to the status quo, whatever the status quo happens to be. The logic here is parallel to the explanation for why, if there are at least two types of goods and each of two individuals prefers consumption bundles with moderate amounts of each to lop-sided bundles involving a lot of one good and little of the other, then mutually beneficial trade is typically possible, but if there is just a single good to allocate between the two of them, then the allocation is "zero-sum" and there will be no mutually desired change to the status quo allocation.

Gerry Mackie's *Democracy Defended* is a painstaking effort to refute Riker's critique of populism by arguing that situations like Condorcet's paradox rarely arise. The theorems on the multidimensional spatial model that I am describing are, he tells us, "normatively tangential, their predictions are falsified, and standing alone they are empirically irrelevant for understanding the world of politics."[174] The theorems formulate assumptions on preferences and the space of alternatives and then derive conclusions from the assumptions. The conclusions are true whenever the assumptions are true, as

Voting Models," *Econometrica* 47 (1979): 1085–1112; Richard McKelvey and Norman Schofield, "Generalized Symmetry Conditions at a Core Point," *Econometrica* 55 (1987): 923–933; Donald Saari, "The Generic Existence of a Core for q-Rules," *Economic Theory* 9, no. 2 (1997): 219–260. See also Austin-Smith and Banks, *Positive Political Theory I: Collective Preference*, ch. 5, 6 for a survey and exposition of the main results. Single-peaked preferences are also described as "convex," which is the more common name for the mathematical property in question. An additional assumption is that preferences "continuous": if you consider a proposed improvement over the status quo, then for proposals that are sufficiently similar to this one—*e.g.*, differing only by a penny here, a penny there—you will regard these proposals as improvements over the status quo, too.

174. Gerry Mackie, *Democracy Defended* (Cambridge: Cambridge University Press, 2003).

a matter of logic, so "falsifying" the "predictions" of the theorems must mean falsifying one or more their assumptions. What allegedly falsifies their predictions, Mackie tells us, are the results of laboratory experiments in which subjects play majority rule decision-making games. But the experiments that Mackie cites are not meant to test their assumptions. Just the opposite is true: the idea of the experiments is to construct laboratory settings in which the assumptions (and thus the conclusions) of the theorems are true, so that researchers can shed light on how committees using majority rule behave when no Condorcet winner exists.

The reason that Mackie thinks that the experiments falsify the predictions of the theorems is that he does not clearly distinguish between the two distinct phenomena each of which he and others often describe as "a majority cycle." The first phenomenon is a situation in which a group first chooses policy a, then chooses another policy b because a majority prefers b to a, then chooses another policy c because another majority prefers c to a, and so on, eventually choosing a again. Call this a cycle in the *dynamic* sense; it describes a process of "cycling" that unfolds in time. The second phenomenon that is sometimes described as a "majority cycle" is what I've been calling Condorcet's paradox: a majority prefers b to a, another majority prefers c to b, and another majority prefers a to c. Call this a cycle in the *static* sense. Whether a cycle in this sense occurs is a logical implication of a description of their preferences. Its occurrence does not depend on how people vote or otherwise behave. Static cycles do not, as a matter of logic, imply dynamic cycles. Conflation of the two phenomena is common in political theorists' discussions of the subject and responsible for much confusion.[8]

Mackie interprets the theorems as "predicting" cycles in the dynamic sense; some are merely statements about when Condorcet winners exist, some are statements about when cycles in the static sense exist, but none can be construed, strictly speaking, as a statement about cycles in the dynamic sense, as Mackie construes them. He takes the theorems' alleged prediction to be falsified by experiments in which, although the assumptions of the theorems hold true (and Condorcet winners fail to exist and static cycles occur), nonetheless "stability" and "equilibrium" are observed in the decision-making games that the experimental subjects play, *i.e.*, no cycling in the dynamic sense.

My concern is not with cycles in the dynamic sense but rather with what it means for policies to be responsive to citizens' preferences when no Condorcet winner exists: when, no matter which policy is adopted, there is another policy that a majority of citizens believe would have been the better choice. The theorems on the multidimensional spatial model provide speculative grounds for expecting that in some settings, Condorcet winners generally fail to exist. Mackie's remarks on the theorems, based on a misinterpretation, do not challenge that expectation.

Other studies that investigate the probability of (static) cycles also fail to undermine

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8. For example, Ian Shapiro, immediately after citing Mackie as evidence that "cycles are rare," writes that "in the area of tax policy, for instance, there is undoubtedly a potential coalition to upset every conceivable status quo, as one can see by reflecting on a society of three voting to divide a dollar by majority rule"— equivalently, in the area of tax policy, a Condorcet winner is unlikely to exist, precisely the implication of the theorems that Mackie, his source for the first claim, claims are "falsified" by evidence of "equilibrium" and "stability." Ian Shapiro, *The State of Democratic Theory* (Princeton, NJ: Princeton University Press, 2003), 15, 16.

this expectation because they do not address the contexts in which the theorems would be expected to apply. Regenwetter et al. use a statistical model to estimate majority preference relations in mass electorates. They "consider a number of real world preference distributions and find no conclusive empirical evidence that would substantiate the existence of [static] majority cycles."[9] But, as they acknowledge up front, all of their theoretical results and empirical evidence concern *finite* sets of alternatives and therefore do not speak to the results on the multidimensional spatial model.

After Mackie's line of response, the most popular among political theorists is to argue that deliberation might prevent situations like Condorcet's paradox from arising or persisting.[10] Jack Knight and James Johnson claim that successful deliberation "increases the likelihood of stable outcomes by inducing shared understandings of the dimensions of political conflict."[11] Christian List conjectures that deliberation should have a tendency to induce "agreement at the meta-level," by which he means agreement on the relevant dimensions of disagreement.[12]

But "agreement over the dimensions of conflict" does not eliminate (static) cycles or produce a Condorcet winner. If we all agree that the alternatives under consideration differ along two or more dimensions, but our preferences have the single-peakedness property described above, then Condorcet winners almost never exist. What is needed is not simply an agreement on the quantity and nature of the dimensions, but an agreement that the quantity of relevant dimensions is *one*.

Perhaps deliberation tends to produce such agreement. Even in cases where options vary along two or more "objective" dimensions—*e.g.*, allocating divisible resources to multiple categories or choosing a combination of tax rates—people might come to think that their *relevant* differences are captured by a single dimension—such as the Left-Right ideological dimension—and might come to have preferences that are single-peaked with respect to this single dimension. Why deliberation should have this effect seems mysterious to me, but the question should be answered empirically.

Cynthia Farrar and co-authors conducted an experiment to test this hypothesis, and they convincingly show that within the Deliberative Polling experiment that they analyze, deliberation increased approximations to preferences that are single-peaked along

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9. Michel Regenwetter et al., *Behavioral Social Choice: Probabilistic Models, Statistical Inference, and Applications* (Cambridge: Cambridge University Press, 2006), 5.

10. Joshua Cohen, "Deliberation and Democratic Legitimacy," in *Deliberative Democracy: Essays on Reason and Politics*, ed. James Bohman and William Rehg (Cambridge, MA: MIT Press, 1997); John Dryzek and Christian List, "Social Choice Theory and Deliberative Democracy: A Reconciliation," *British Journal of Political Science* 33 (2003): 1–28; John Dryzek, *Deliberative Democracy and Beyond* (Oxford: Oxford University Press, 2000); Jack Knight and James Johnson, "Aggregation and Deliberation: On the Possibility of Democratic Legitimacy," *Political Theory* 22, no. 2 (1994): 277–296; Christian List, "Two Concepts of Agreement," *The Good Society* 11, no. 1 (2002): 72–79; Mackie, *Democracy Defended*; David Miller, "Deliberative Democracy and Social Choice," *Political Studies* XL, no. special issue (1992): 54–67; Christian List et al., "Deliberation, Single-Peakedness, and the Possibility of Meaningful Democracy: Evidence from Deliberative Polls," *Unpublished manuscript* (2009); Cynthia Farrar et al., "Disaggregating Deliberation's Effects: An Experiment within a Deliberative Poll," *British Journal of Political Science* 40 (2010): 333–347.

11. Knight and Johnson, "Aggregation and Deliberation: On the Possibility of Democratic Legitimacy," 287, 288. Like many authors, Knight and Johnson treat "cycles" as interchangeable with "instability," which is justified if the concern is with dynamic cycling, but not if the concern is with what I'm calling static cycles, *i.e.*, the existence of a Condorcet winner.

12. List, "Two Concepts of Agreement."

a single dimension.[13] But their finding, while interesting in its own right, does not support the conclusion that deliberation helps to make preferences single-peaked along a single dimension *in contexts where preferences initially fail to support a Condorcet winner*. In their study, pre-deliberation preferences *already* supported Condorcet winners. As they write, "single-peakedness [along a single-dimension] matters because it affords an escape from the possibility of cyclical collective preferences in pairwise majority voting, as in Condorcet's paradox,"[14] but they study the effects of deliberation in a setting where there is nothing to escape from. If cycles are the ailment and deliberation the proposed remedy, one should test its effectiveness on patients suffering from the ailment. One should like in particular to study its effectiveness in contexts where preferences are initially single-peaked with respect to multiple dimensions, the context in which theory predicts an especially stubborn form of the ailment.

Political theorists' predominant responses to social choice paradoxes in general and Riker's critique in particular have been to deny that the paradoxes are more than logical possibilities or to appeal to the remedying powers of deliberation. The empirical and theoretical bases for these responses are weaker than political theorists have believed. Perhaps Condorcet's paradox is rare—equivalently, perhaps Condorcet winners generally exist—but there is no conclusive empirical evidence, and certainly no theoretical basis, for holding this view. In the absence of empirical evidence, there is no reason for it to be the default view. On the contrary, there is theoretical reason to presume instead that in settings like choosing combinations of tax rates or allocating divisible resources, Condorcet winners generally do not exist. Given the difficulty of verifying or refuting the premise of Riker's critique of populism—that situations like Condorcet's paradox occur with significant frequency in politics—it is worth inquiring into its implications. One would like to know whether basic concepts in democratic theory—representation, accountability, popular control over policy, etc.—can be defined so as to be robust to whether the premise holds.

In the next section I argue that the premise does not have the ideological implications that Riker claimed. On the contrary, if social choice theory discredits the idea of the "popular will," as Riker would have us understand it, then it makes it more difficult to understand how anything other than the institutions of direct or plebiscitary democracy could be thought to furnish citizens with democratic control over policy. If Riker's interpretation of social choice theory is correct, then it provides an additional arrow in the populist's quiver.

IV

The "essence of populism," as Riker defines it, is the pair of propositions:

1. What the people, as a corporate entity, want ought to be social policy.
2. The people are free when their wishes are law.[15]

Riker holds that social choice theory show that the idea of a popular will, or "what the people want," is empty. Suppose that we define "the popular will" (or "what the

13. Farrar et al., "Disaggregating Deliberation's Effects: An Experiment within a Deliberative Poll."
14. Ibid., 337.
15. Riker, *Liberalism Against Populism*, 238.

people want") in some way so that the definition has this implication: if an overwhelming majority of citizens believe that it would be a serious mistake—unjust, contrary to the common interest, or whatever—to enact policy x when policy y is available, then respecting the popular will requires that policy x not be enacted when y is available. But it can happen, as explained in section II, that for *every* policy x, an overwhelming majority of citizens believe it would be a serious mistake to adopt policy x, rendering it impossible to respect the popular will, as defined. If policies differ along sufficiently many dimensions and citizens' preferences are single-peaked with respect to those dimensions, then it will almost always be impossible to respect the popular will in this sense, rendering it "empty," as Riker likes to say.

The "liberal" theory of democracy that Riker favors imposes a much more minimal constraint on the political process. It requires nothing of the policy outcomes of the process—in particular, it does not require that they correspond to "what the people want." Instead, it presupposes that decisions on policy are taken by elected officials and requires only that elections permit citizens to remove officials from office.[16] This form of democracy is not "popular rule, but rather an intermittent, sometimes random, even perverse, popular veto."[17]

There is an association, in Riker's discussion if not his official definitions of populism and liberalism, between populism and support for models of democracy in which citizens participate more directly in politics. As a contemporary example of populism Riker offers Marcus Raskin's proposal for a "nationwide system of grand juries to instruct members of Congress."[18] He worries that populist proposals like this one and proposals for plebiscites in which "citizens will listen to debate [on statutes] and then vote by push button, supplanting thereby the need for any kind of legislature" will attract interest in the future as populist sentiment grows and technology advances, even if they now seem "bizarre."[19] He opposes the populist's preferred institutions, not simply their justification in terms of a popular will.

Under Riker's preferred liberal institutions citizens' participation would instead be limited to voting in elections and organizing electoral campaigns.[20] Since "officials are not responsive to some imaginary popular will," and cannot therefore be viewed as agents who carry out the citizens' preferred policies, this form of participation in elections "is not the making of policy." It is, at best, "the act of placing a curb on policy, a veto at the margin," since it allows voters to remove legislators from office.[21]

Riker is wrong to think that debunking the notion of a "popular will" undermines the case for populist institutions like popular referenda or citizens' juries while leaving intact the case for elections. If we follow his lead and reject the notion of a popular will, as well as related ideas like making policies responsive to citizens' preferences, the consequence is just the opposite. We do not need these ideas in order to understand the sense in which plebiscites or citizen juries give ordinary citizens a form of democratic control over policy. But one cannot plausibly account for how citizens of

16. Riker, *Liberalism Against Populism*, 9, 242.
17. ibid., 244.
18. ibid., 15.
19. ibid., 251, 252.
20. ibid., 244, 245.
21. ibid., 245.

an electoral democracy exercise (indirect, mediated) control over policy—whether this amounts to "popular rule" or merely a "popular veto"—unless one can show that the actions of elected officials are appropriately responsive to citizens' policy preferences. Defining "appropriately responsive" is equivalent to defining an Arrovian preference aggregation rule with desirable properties and raises the puzzles described at the outset; it was precisely the business that Riker wanted to avoid. If one goes Riker's route and tries to develop a theory of electoral democracy that makes no use of a criterion like Dahl's, the result is a theory, like Riker's (and Schumpeter's before his) with implausible implications about what can count as a form of democracy and unable to explain how citizens can control elected officials.

All that is necessary on Riker's conception of democracy is that it is *possible* for voters to remove officeholders from power. The theory therefore registers no democratic shortcomings in the following voting rule: each voter casts a ballot that states her preferred candidate, and after all ballots are cast, a hundred fair six-sided dice are rolled and the incumbent always retains his seat unless one of his challengers receives a majority of ballots *and* 100 sixes come up. Under this voting rule, it is *possible* for a majority of voters to remove the incumbent from office—conditional upon a challenger receiving a majority of ballots, he faces a 1-in-6^{100} chance of being removed. Under this rule, officeholders have no real electoral incentive to choose policies that their constituents want, because nothing they do has an appreciable effect on their probability of winning re-election. But this can hardly be an objection from Riker's standpoint, as references to "what the people want" are supposed to be incoherent.[22]

Instead of taking the theory as Riker states it, consider a charitable amendment in the spirit of the theory, which also serves to illustrate how the difficulties with Riker's position extend to a larger class of theories of representative democracy. Let's say that 'citizens are able to remove an incumbent from office' if, but only if, for any majority, its members can take actions that, jointly taken, ensure that the incumbent is removed from office.[23] The previous rule fails the amended test and thus poses no embarrassment to the amended theory. Like Riker's unmodified theory, the amended version does not require any particular functional relationship between policy outcomes and the preferences, opinions or values of citizens.

The amended theory, however, still has counterintuitive implications for what counts as a desirable, functioning form of representative democracy. Consider the following hypothetical regime:

> ***Class rule.*** Anyone is free to run for office but only members of a privileged social class do so. These candidates all share the same conception of good public policy, which differs in important respects from what everyone outside this privileged class accepts. None of these candidates cares about winning office for its own sake; they are entirely "public-spirited" and wish to win and retain office solely as a means of enacting good pub-

22. For a similar but much more thorough dismantling of Riker's liberal interpretation of democracy, see Mackie, *Democracy Defended*, 411–418; also, Jules Coleman and John Ferejohn, "Democracy and Social Choice," *Ethics* 97 (1986): 6–25.

23. We might add that each voter should have the same actions available, *e.g.*, each can cast the same ballot, can access polling stations and register to vote with comparable ease, and so on.

> lic policy. Voters can remove incumbents from office, but doing so serves
> little purpose, as they can only replace them with like-minded challengers.

According to Riker's theory (amended or not), there is nothing undemocratic about this regime. It lacks nothing in the way of democratic legitimacy or any of the other democratic values that his theory claims to interpret. Moreover, his theory issues this judgment no matter how unpopular the resulting policies may be. According to the theory but contrary to commonsense, citizens have here the same "popular veto" on policy that they have under any other regime in which citizens are able to remove officials from power.

Riker's theory is a *procedural* theory of democracy.[24] It formulates conditions on the procedures by which policy is enacted, which are supposed to be necessary and sufficient to classify a regime as democratic and credit its citizens with a popular veto: the condition is that key officeholders can removed from power in free and fair elections. It's unnecessary for there to be any particular functional relationship between policy outcomes and citizens' preferences.

It makes sense to try to understand democracy in procedural terms if social choice theory discredits the notion of a procedure-independent popular will, understood as a function of individual-level data (preferences, judgments about the common good, what have you). But the hypothetical example illustrates a problem for a procedural theory of *electoral* democracy. Whatever control over policy citizens of an electoral democracy might be said to have, it cannot be understood simply in terms of the procedures in place. The formal institutions and procedures of electoral democracy are in themselves consistent with scenarios in which officeholders pay no regard to citizens' wishes or interests and citizens have no meaningful choices among candidates for office. These outcomes may be unlikely in a properly constituted electoral democracy, given how actors typically respond to electoral incentives. But if our judgments about whether a regime counts as democratic, and whether its citizens can be credited with any form of control over policy, depend not simply on the procedures that are in place but also on the choices that actors are likely to make under the procedures, then we are not relying on a purely procedural account of democracy and popular control.

Riker identifies one form that a procedural theory of *electoral* democracy might take, but he ignores a direct-democratic, "populist" counterpart to his theory. The populist counterpart to Riker's theory requires that all legislation be enacted by an assembly in which each citizen has equal standing and equal rights of participation, but it imposes no additional requirements. It's the direct-democratic counterpart to Riker's theory because, like his, it makes no reference to the relationship between policy outcomes and citizens' preferences. Instead, it merely imposes constraints on the procedure by which collective decisions are made: whereas Riker's theory presupposes that legislation will be enacted by an assembly of elected legislators and imposes an (excessively minimal) constraint on the procedures determining their selection and retention,

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24. 'Proceduralism' is often used to mean something quite different from what I intend here: treating democratic procedures as preference aggregation rules, which are justified by their satisfaction of various axioms, is sometimes taken as an example of a "proceduralist" theory of democracy; *e.g.*, Coleman and Ferejohn, "Democracy and Social Choice." But by a 'political procedure' I mean an institution defined by the choices it makes available to individuals and how it maps their aggregated choices to collective decisions (a 'game form'); thus, it is not, by definition, associated with a particular preference aggregation rule.

the direct-democratic counterpart to his theory requires that legislation be enacted by an assembly in which all citizens have equal standing and rights of participation. Like the demands on procedures that Riker's theory makes, the demands that a procedural theory of direct democracy makes are perfectly intelligible (which is not to say reasonable), even if social choice paradoxes routinely occur.

The theory requires just the institution that Rousseau took as the basis of legitimate political association. On standard interpretations of Rousseau, his is of course not a purely procedural theory of democracy, because the general will is typically taken to have a substantive content that is independent of the assembly's decisions.[25] But one can also read Rousseau as offering something like this procedural theory of direct democracy.[26] On this reading, the general will is expressed by whatever statutes are enacted by an assembly in which each citizen has equal rights of participation, provided these statutes have the general form of laws.[27] I note the possibility of this reading in passing because Riker takes Rosuseau as the paradigmatic example of the kind of populism that social choice theory is alleged to discredit;[28] but a purely procedural theory of direct democracy retains its attractions, such as they are, and remains a coherent model of popular control even if social choice paradoxes routinely occur.

We can find a less ambiguous historical example of a procedural theory of direct democracy in Hobbes. A democracy, as Hobbes defines it, is a commonwealth "where sovereign power lies in an Assembly in which every citizen has the right to vote."[29] Hobbes uses the language of the "will of the people" that Riker associates with populism but explicitly rejects the idea of a collective agent whose will is simply a function of the desires or beliefs of its members. In a democracy the will of the people is the declared will of the popular assembly, as expressed in laws enacted with the consent of a majority of its members. Outside of this assembly, the citizens of a democracy, taken collectively, are merely a "crowd," to which, Hobbes says, one can attribute neither actions nor a will.[30]

Both Riker's theory and procedural theories of direct democracy are immunized against a certain kind of attack from social choice theory, since neither is premised on the possibility of a particular functional relationship between citizens' preferences and policy outcomes. But the direct-democratic counterpart to Riker's theory has two virtues that his lacks. It does not imply, against commonsense, that regimes like the hypothetical regime of class rule are perfectly legitimate democracies, and it preserves the intuition that in a democratic regime, citizens have some form of control over policy,

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25. For example, Charles Beitz, *Political Equality* (Princeton, NJ: Princeton University Press, 1989); Joshua Cohen, *Rousseau: A Free Community of Equals* (Oxford: Oxford University Press, 2010).

26. For example, see Richard Tuck, "Flathman's Hobbes," in *Skepticism, Individualitly and Freedom: The Reluctant Liberalism of Richard Flathman*, ed. Bonnie Honig and David R. Mapel (Minneapolis: University of Minnesota Press, 2002); Richard Tuck, "Hobbes and Democracy," in *Rethinking the Foundations of Modern Political Thought*, ed. Annabel Brett, James Tully, and Holly Hamilton-Bleakley (Cambridge: Cambridge University Press, 2006).

27. For Rousseau's explanation of this minimal requirement of abstract generality, see Jean-Jacques Rousseau, *The Social Contract and other later political writings*, ed. Victor Gourevitch (Cambridge: Cambridge University Press, 1997), Bk. II, ch. 6, para. 5–7.

28. Riker, *Liberalism Against Populism*, 9, 11; also, Shapiro, *The State of Democratic Theory*, 14.

29. Thomas Hobbes, *On the Citizen*, ed. Richard Tuck and Michael Silverthorne (Cambridge: Cambridge University Press, 1998), 91, 92.

30. ibid., 76.

whether it's merely a "popular veto" or rises to the level of "popular rule."

In the form of democracy that Hobbes and Rousseau describe, decisions on policies result from the actions that citizens take within the assembly. There is thus a straight-forward sense in which the assembly members collectively exercise a popular veto over policy, in addition to whatever other form of control their political rights may afford them. If enacting policy requires consent from a majority, then for any majority and any proposed policy, there are actions available to its members that, jointly taken, block the policy from being enacted. We do not need to inquire into the functional relationship between policy outcomes and citizens' preferences over policies in order to recognize that citizens of a direct democracy have this form of veto power. We can define the sense of 'power' or 'control' that they have simply in virtue of the direct-democratic procedures in place: under these procedures, policy is a function of their choices.

The same cannot be said of electoral democracy. Consequently, any procedural theory of electoral democracy will classify some regimes as exemplary forms of democracy even when their citizens are utterly powerless to influence policy. It is not some unique defect of Riker's theory that exposes him to the counterexample of the regime of class rule. It's simply the fact that his is a procedural theory of electoral democracy. The procedures of electoral democracy do not by themselves—and in abstraction from the incentives they create and policy outcomes that result from those incentives—give citizens any control over policy, not even indirect, mediated control or a "marginal curb on policy" in the form of a popular veto.

A procedural theory of electoral democracy is thus ill-suited to meet Rousseau's charge that under systems of representative government the citizens are free only on the days when they vote and no different from slaves at all other times. The natural way to refute Rousseau's charge is to explain how citizens of a representative democracy exercise control over the laws to which they are subject, even though they do not directly take part in choosing the laws. A good explanation would do more than point simply to the fact that they can choose the agents who in turn choose the laws. Citizens have this ability under the hypothetical regime of class rule, and we could imagine hypothetical forms of slavery in which individual slaves are able to choose their masters, but are no less enslaved for it. A good explanation would show how the power to choose these agents, which in itself is consistent with utter powerlessness to affect policy, tends to result in an indirect form of control or influence over policy, given how other actors (prospective candidates, officeholders) will typically react.

A typical explanation for how this happens is that the power to elect and re-elect legislators creates incentives for legislators to enact the policies that citizens want. Another possible explanation is that the power to elect legislators is akin to choosing a bundle of policies because citizens have a rough sense for how competing candidates for office would behave if elected and are able, among the field of candidates, to choose legislators who will enact the policies that they want.[31] There are of course variations on these explanations. But they all involve references to what the citizens want (or will want at the time of re-election, or what they would want after informed deliberation, or the goal and principles which they think should inform legislators' decisions, etc.). And

31. Adam Przeworski, Bernard Manin, and Susan Stokes, eds., *Democracy, Accountability, and Representation* (Cambridge: Cambridge University Press, 1999); Jane Mansbridge, "A 'Selection' Model of Political Representation," *The Journal of Political Philosophy* 17, no. 4 (2009): 369–398.

since there will never be unanimity in citizens' preferences, values, judgments, etc., this language always implicitly presupposes some rule for "aggregating" this disparate information into a summary statement about "what the citizens want" (or "what they judge to be in the common interest" and so on). That is precisely the kind of language that Riker would have us expunge from the lexicon of democratic theory.

Doing so does not, as Riker thought, shore up a Madisonian theory of democracy against the attacks of its populist detractors. Instead, it makes it more difficult to explain how democratic commonplaces are compatible with Madison's "total exclusion of the people from government." For if we cannot ask whether legislators are enacting the policies that citizens want (or would want after informed deliberation), or whether there are any viable candidates for office whose values and policy priorities reflect the values and priorities of the citizenry, then we will have no way to make sense of the idea that the citizenry exercises indirect control over the laws to which they are subject. We will have conceded that in an important sense Rousseau was right to deride the citizens of representative democracies as slaves to their elected legislators.

To better understand the predicament, it may help to consider an analogous question about what it means for a single individual to control what another individual does to him. Take a passenger of a taxi. Under what conditions can we say that it is the passenger who determines the taxi's destination, or that the passenger was in control of the destination? There is clearly a sense in which the passenger was powerless once he got into the car; the driver could have taken him anywhere he liked. It was the driver, not the passenger, with *direct* control over the vehicle and hence its destination. But we could also naturally say that, in a different sense, it was the passenger who determined the destination when the following condition or something like it holds: for any feasible destinations d (within limits), if the passenger wanted to go to d, then the taxi driver would take him to d. When these counterfactuals hold, we can say that the passenger's will determines their destination.

The sense in which the driver has *direct* control over the taxi's destination can arguably be understood without reference to his or the passenger's preferences. For any feasible destination d (within limits), there were actions available to the driver which, if taken, would bring him to destination d. In this sense of control, the driver can still be said to control the direction of the car, even if it turns out that he has intransitive preferences and finds himself driving in circles—it would still be *he* who executes the actions that result in driving around in circles.

There is an analogous sense in which the citizen-participants in a direct democratic assembly remain in charge, in control of their collective political life, even if their collective preferences are intransitive. For any law L (within limits), there is a listing of possible actions for the assembly members that, when taken, leads to the enactment of L. This form of direct control does not depend on the relationship between assembly members' preferences and enacted legislation; the assembly can be said to remain in control of legislation even if no Condorcet winner exists so that the members of some majority coalition will invariably deem the enacted legislation inferior to an alternative piece of legislation that the coalition could have enacted instead.

But in what sense can citizens be said to have indirect control over policy if it is neither true that they participate in decision-making nor true that legislators' decisions respond to or reflect their collective preferences over legislation? If "the people speak

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in meaningless tongues" and they exert no direct control over policy, then it's unclear how they could be said to control the direction of policy, just as it's unclear how a passenger could be said to control the direction of the taxi if he neither drives the taxi nor has consistent preferences over its possible destinations.

To say that direct democracy offers citizens a form of popular control over policy even in the presence of social choice paradoxes is not to say that it offers them a desirable form of control. Social choice paradoxes may tarnish the appeal of this notion of popular control even if they do not challenge its internal coherence. I conclude this section with some tentative thoughts on why the citizens of a Rousseau's popular assembly might value their direct control over policy, even if they do not know how the resulting policies will relate to their preferences.

One thought is that there is something intrinsically desirable about a political association in which each citizen has an equal measure of control over policies. Rousseau invokes the appeal of this form of equality when he introduces the social contract. What distinguishes the social contract from the forms of political servitude with which Rousseau begins his discussion in the *Social Contract* is that the alienation of the individuals' rights to the popular assembly is a condition "equal for all" and "all may prescribe what all ought to do, but no one has the right to require that another do what he himself does not do."[32] That form of equality is absent in an electoral democracy, where only a small group of citizens "prescribe what all ought to do." What's worse, the small group of citizens doing the prescribing come disproportionately from the wealthier, more advantaged layers of society. Not only is direct control over policy unequal in electoral democracies, but it resides largely in the hands of officeholders and policy-makers who look nothing like a statistically representative sample of the citizenry.

This may not detract from electoral democracy if officeholders are representative in some other sense—*e.g.*, if they are good "delegates" who respond to citizens' preferences, or good "trustees" who respond to facts about which policies serve citizens' true interests. If elected officeholders can be expected to do what the people want as well as or better than they could do it themselves through the institutions of direct democracy, then it makes sense for the people to delegate these responsibilities. We could concede to Rousseau that wide diffusion of roughly equal direct control over policy has a *presumptive* appeal, but argue that the presumption is overridden if widespread direct participation is costly and elected officeholders can well enough implement the policies that the people want, or if, whatever the costs of participation, they can more effectively identify and implement the policies that the people would want, if better informed.

But these would of course be just the kind of justifications for electoral democracy that are unavailable if, with Riker (or Schumpeter), we reject the idea of a popular will. The idea of the people as a collective agent with a well-defined, intelligible collective will may therefore be a fiction that is most useful, not for "populist" advocates for direct popular rule, but rather for defenders of what is sometimes described as "elite democracy," a regime in which decision authority is concentrated in the hands of a small number of elites, rotating office among themselves in accordance with the outcomes of

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32. Rousseau, *The Social Contract and other later political writings*, 116.

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free and fair elections. Riker and Schumpeter are each, more or less explicitly, asking their readers to settle for this minimal model of electoral democracy. For each, the key point in its favor is supposed to be that it does not appeal to the allegedly nonsensical concept of a popular will. But if the people could be viewed as a collective agent with a collective will, then elite democracy could be defended on the grounds that it implements this collective will more effectively than direct popular rule. If its superiority to direct, participatory democracy can't be defended along these lines—because we've rejected the notion of a popular will—there may be little left to say for it. Why favor institutions under which decision authority is concentrated in the hands of wealthy elites, if there is no intelligible or attractive sense in which the resulting policies respond to (some appropriate aggregation of) citizens' preferences or interests?

Certainly, a comparison that looks only at the procedural properties of each—*i.e.*, that under one type of institution, direct control over policy is broadly diffused and roughly equal, whereas under the other it is concentrated in the hands of elites—does not work in favor of the model that Riker and Schumpeter prefer. A reasonable thought is that, even for an agent who may have intransitive preferences, or who cannot be assured that there will be a rational basis for her future decisions, it's better for her to retain control over decisions that affect her than to cede control of these decisions to agents whose interests may well conflict with her own. Better for the passenger to drive himself, even if he has contradictory preferences over his possible destinations, than to get into a car whose destination he is powerless to control and whose driver consorts with criminals involved in human trafficking.

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A common thought, articulated most clearly by Schumpeter and Riker, is that if there is no way to make sense of the democratic citizenry as a collective agent, with a coherent collective will, then plebiscites and other "populist" institutions lose their luster and we must accept instead a form of elite-driven electoral democracy. Findings in social choice theory would seem to discredit the idea of a coherent collective will.

The most common response to Riker in particular and social choice theory generally has been either to deny that the scenarios underlying its paradoxes and impossibility results are more than mere logical possibilities or to contend that deliberation is the remedy. Neither response is convincing. In contexts where there are infinitely many possible choices, massive amounts of information would be required to establish Mackie's view that cycles are rare, unless we are willing to make *a priori* assumptions about the shape of individuals' preferences. But when alternatives differ along multiple dimensions—such as combinations of tax rates or divisions of resources among three or more categories—seemingly minimal, plausible assumptions about the shape of preferences entail that Condorcet winners almost never exist: no matter which policy is chosen in such contexts, it will have been chosen over a rival policy that a majority consider the better choice. Thus, in some contexts there are both good theoretical reasons to expect that Condorcet winners will not exist and also obstacles to refuting or confirming this expectation conclusively with empirical evidence. We should, therefore, ask how basic concepts in democratic theory—representation, popular control,

accountability, etc.—can be defined in these scenarios, and whether particular theories of democracy lend themselves more easily to formulations that are robust to whether these scenarios occur in practice. Instead of simply disputing the premise of Riker's arguments, we should ask whether they got the implications of these premises right.

Others have argued that Riker's theory of liberal democracy may fare no better than populism if his interpretation of social choice theory is correct.[33] But no one, to my knowledge, has suggested that Riker's account of the ideological implications of social choice paradoxes is not simply wrong but *backwards*. I've argued that in an important sense, Riker's interpretation of social choice theory imperils a theory of the kind of elite-driven electoral democracy that he favored, but not a theory of participatory, direct democracy or plebiscitary democracy. Without attending to the mapping between citizens' preferences and policy outcomes that a direct democracy induces, we can recognize the sense in which citizens of a direct democracy exercise a form of control over policy. Populists can sensibly value this form of direct control if the alternative is an elite-driven model of electoral democracy in which citizens exercise no intelligible form of control over elites. In an electoral democracy in which citizens' participation is limited to selecting the elites who choose policy, there is no obvious sense in which citizens have any control over policy—not even indirect control or a "popular veto"—unless we consider how policy outcomes respond to or reflect their wishes. But a rigorous definition of what it would mean for policy outcomes to respond to or reflect citizens' preferences, on its face, amounts to picking out and justifying a particular Arrovian aggregation rule: the rule that tells us which policy outcomes would be the appropriate "responses to" or "reflections of" citizens' preferences. The alleged hopeless of that task was just what motivated Riker's stripped down, minimal theory of electoral democracy.

The task is not trivial. However we specify this rule, if our rule is well-defined in scenarios like Condorcet's paradox, as it should be, then it will have the strange implication that citizens would sometimes rather not have policy outcomes respond to or reflect changes in their preferences in the way that this rule prescribes. But neither is the task hopeless. Empirical studies of representation and public opinion operationalize the idea of "policy responsiveness" in various plausible ways. The operationalizations are plausible because we have an intuitive, albeit hazy idea about what Dahls' criterion means, even if we lack a rigorous definition that shows all of these different context-specific operationalizations to be examples of a more general phenomenon. One aim of political theorists who want a rigorous theory of representation and what it means for policy outcomes to be appropriately responsive to or reflective of the values and opinions of a diverse citizenry, should be to provide a definition that serves this purpose even in cases like Condorcet's paradox.

References

Arrow, Kenneth. *Social Choice and Individual Values*. New York: John Wiley & Sons, Inc., 1951.

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33. Coleman and Ferejohn, "Democracy and Social Choice"; Mackie, *Democracy Defended.*

Austin-Smith, David, and Jeffrey Banks. *Positive Political Theory I: Collective Preference*. Ann Arbor, MI: University of Michigan Press, 1999.

Beitz, Charles. *Political Equality*. Princeton, NJ: Princeton University Press, 1989.

Cohen, Joshua. "Deliberation and Democratic Legitimacy." In *Deliberative Democracy: Essays on Reason and Politics*, edited by James Bohman and William Rehg. Cambridge, MA: MIT Press, 1997.

———. *Rousseau: A Free Community of Equals*. Oxford: Oxford University Press, 2010.

Coleman, Jules, and John Ferejohn. "Democracy and Social Choice." *Ethics* 97 (1986): 6–25.

Dahl, Robert. *Polyarchy: Participation and Opposition*. New Haven: Yale University Press, 1971.

Dryzek, John. *Deliberative Democracy and Beyond*. Oxford: Oxford University Press, 2000.

Dryzek, John, and Christian List. "Social Choice Theory and Deliberative Democracy: A Reconciliation." *British Journal of Political Science* 33 (2003): 1–28.

Farrar, Cynthia, et al. "Disaggregating Deliberation's Effects: An Experiment within a Deliberative Poll." *British Journal of Political Science* 40 (2010): 333–347.

Hobbes, Thomas. *On the Citizen*. Edited by Richard Tuck and Michael Silverthorne. Cambridge: Cambridge University Press, 1998.

Knight, Jack, and James Johnson. "Aggregation and Deliberation: On the Possibility of Democratic Legitimacy." *Political Theory* 22, no. 2 (1994): 277–296.

Le Breton, Michel. "On the Core of Voting Games." *Social Choce and Welfare* 4 (1987): 295–305.

List, Christian. "Two Concepts of Agreement." *The Good Society* 11, no. 1 (2002): 72–79.

List, Christian, et al. "Deliberation, Single-Peakedness, and the Possibility of Meaningful Democracy: Evidence from Deliberative Polls." *Unpublished manuscript* (2009).

Mackie, Gerry. *Democracy Defended*. Cambridge: Cambridge University Press, 2003.

Mansbridge, Jane. "A 'Selection' Model of Political Representation." *The Journal of Political Philosophy* 17, no. 4 (2009): 369–398.

McKelvey, Richard. "General Conditions for Global Intransitivies in Formal Voting Models." *Econometrica* 47 (1979): 1085–1112.

McKelvey, Richard, and Norman Schofield. "Generalized Symmetry Conditions at a Core Point." *Econometrica* 55 (1987): 923–933.

Miller, David. "Deliberative Democracy and Social Choice." *Political Studies* XL, no. special issue (1992): 54–67.

Pettit, Philip. *On the People's Terms: A Republican Theory and Model of Democracy*. Cambridge: Cambridge University Press, 2013.

Plott, Charles R. "A Notion of Equilibrium and Its Possibility Under Majority Rule." *American Economic Review* 57 (1967): 787–806.

Przeworski, Adam, Bernard Manin, and Susan Stokes, eds. *Democracy, Accountability, and Representation*. Cambridge: Cambridge University Press, 1999.

Regenwetter, Michel, et al. *Behavioral Social Choice: Probabilistic Models, Statistical Inference, and Applications*. Cambridge: Cambridge University Press, 2006.

Riker, William. *Liberalism Against Populism*. New York: Waveland Press, 1982.

Rousseau, Jean-Jacques. *The Social Contract and other later political writings*. Edited by Victor Gourevitch. Cambridge: Cambridge University Press, 1997.

Saari, Donald. "The Generic Existence of a Core for q-Rules." *Economic Theory* 9, no. 2 (1997): 219–260.

Schumpeter, Joseph. *Capitalism, Socialism, and Democracy*. New York: Harper & Brothers, 1942.

Shapiro, Ian. *The State of Democratic Theory*. Princeton, NJ: Princeton University Press, 2003.

Tuck, Richard. "Flathman's Hobbes." In *Skepticism, Individualitly and Freedom: The Reluctant Liberalism of Richard Flathman*, edited by Bonnie Honig and David R. Mapel. Minneapolis: University of Minnesota Press, 2002.

———. "Hobbes and Democracy." In *Rethinking the Foundations of Modern Political Thought*, edited by Annabel Brett, James Tully, and Holly Hamilton-Bleakley. Cambridge: Cambridge University Press, 2006.