Disagreement and epistemic arguments for
democracy*

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1 Introduction

Oregon Ballot Measure 73 increased minimum sentences for certain repeated sex crimes and repeated drunk-driving offenses. Before the 2010 election in which Measure 73 appeared on the ballot, two dozen Oregon citizens were selected at random to serve on a review panel, which heard expert testimony and weighed arguments for and against the proposal. After deliberating they drafted a statement summarizing their conclusions, which was published and included in voters’ pamphlets. Voters saw how many panelists supported the measure and how many opposed.

The Citizens’ Initiative Review is now part of the referendum process in Oregon. Why submit ballot initiatives to this pre-referendum audit? Perhaps because we care about the quality of referendum outcomes. We may fear that voters will not reach reasonable judgments on measures about which they know little and have spent little time deliberating. Since citizen panelists acquire information and deliberate about proposals, we might hope that their conclusions are likely to be

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sensitive to the reasons for and against proposals. When voters can see the panelists’ summaries of their conclusions and reasoning, their voting decisions are more likely to inherit this sensitivity, or so we might hope.

This line of thinking exemplifies an increasingly popular approach in democratic theory, according to which deliberative, democratic decision-making has “epistemic” properties. According to this view, decisions reached through deliberative forms of democratic decision-making will be not merely fair but also reasonable, according to some procedure-independent standard. For “epistemic democrats,” this alleged tendency is part of what justifies deliberative democratic procedures, part of what underwrites their legitimacy or explains their value relative to alternative procedures. What there is to be said for deliberative democratic procedures derives in part from what there is to be said for the quality of their decisions, according to this view.

I will argue that epistemic justifications for deliberative democratic procedures conflict with two widely shared intuitions about the nature and relevance of disagreement in politics. First, we ordinarily think that given the sources of political disagreements, we cannot expect disagreement among ostensibly rational citizens to disappear once decision procedures issue their verdicts, in the way that we might hope for the conclusions of well-designed scientific procedures of inquiry to produce consensus among rational observers. If a justification of a decision procedure has the counterintuitive implication that the political judgments of rational observers would converge to a consensus merely after observing the procedure’s verdict, then the justification is, if not ipso facto implausible, at least deserving of special scrutiny. I will treat respect for this intuition as a constraint on ade-

quate justifications, which for ease of reference I will call the non-convergence constraint. I will show that if an epistemic justification for a decision procedure is sound, then, contrary to ordinary intuition, there is a feasible decision procedure, the verdicts of which demand not simply obedience but the same sort of credence from rational observers as a well-designed scientific study.

Second, we ordinarily think that justifications for decision procedures should not presuppose substantive agreements on the outcomes of these procedures. Since Oregon citizens disagreed over the merits of Measure 73, a good justification for introducing the Citizens’ Initiative Review should not be premised on an assumption about the merits of Measure 73. Any such justification would be “sectarian,” convincing only for like-minded citizens. If the justification were addressed to individuals who disagree over this premise, it would appear question-begging. I will call this constraint on what counts as an adequate justification the constraint on evidence.\(^4\)

Epistemic justifications for deliberative democratic procedures violate the non-convergence constraint because, if the justifications were sound, democratic decisions would provide evidence for and against different political judgments, and with enough independent decisions on an issue the evidence would become overwhelming and beliefs would converge to a consensus. Epistemic justifications violate the constraint on evidence because, in order for these arguments to be convincing, democracy and scientific inquiry must admit analogous forms of justification, but they do not. Just as the justification of a method of scientific inquiry does not presuppose the hypotheses that the method aims to test, so, likewise, must the justification of democracy’s epistemic properties refrain from controversial assumptions about what the outcomes of the democratic process should be, if it is to satisfy the constraint on evidence. But, I argue, the analogy fails: redeeming democracy’s tendency to yield the right decisions would require controversial assumptions about which decisions are right.

The critical discussion of epistemic justifications of deliberative democratic procedures is not intended to undercut the ideal of deliberative democracy—much less democracy, needless to say. There are other strategies for justifying deliberative democratic procedures that can be deployed alongside or instead of epistemic justifications. The aim is simply to highlight an incompatibility between epistemic justifications and common intuitions about the nature and relevance of political disagreement.

Section 2 describes in more detail these constraints on justifications as well as what is meant by an epistemic justification for deliberative democratic procedures. Sections 3 and 4 explain, respectively, why epistemic justifications run afoul of the non-convergence constraint and the constraint on evidence. Section 5

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4. I consider a logically less restrictive version of this assumption in section 4.
concludes, and an appendix contains formal statements of some of the definitions and arguments.

2 Definitions

By an epistemic justification of deliberative democratic procedures, I will mean, roughly, a justification that rests partly on the premise that deliberative democratic procedures have some tendency to yield the right decisions. This gloss captures the basic, common feature of various accounts of “epistemic democracy” that one finds in the recent literature. The reference to “right” decisions is a placeholder and meant to be interpreted loosely for the purposes of classifying justifications as “epistemic.” Particular epistemic justifications might be concerned with more narrowly defined properties of decisions, such as compliance with justice, economic efficiency, congruence with the general will, or something narrower still. What matters for my purposes, as will become clear below, is that the standard for “right” decisions is such that citizens regularly find themselves disagreeing over which decisions are right.

What does it mean to say that decisions made by deliberative democratic procedures “tend” to be right or, in a similar vein, “track” truths about justice or the common good? Following Estlund and Landemore, I will say that a procedure has a minimal tendency to produce right decisions if it does so more reliably than choosing at random. More precisely, when there are two possible outcomes, a random procedure

5. The term “epistemic conception of democracy” was first introduced in Cohen’s “An Epistemic Conception of Democracy,” Ethics 97, no. 1 (1986): 29, to describe the view that votes express judgments about the common good and judgments of majorities are imperfect, but reliable indications of the general will. See also Jules Coleman and John Ferejohn, “Democracy and Social Choice,” Ethics 97 (1986): 6–25, who discuss an “epistemic” interpretation of voting that is Cohen’s point of departure. Later descriptions of “epistemic democracy” and related terms have been less closely tied to Rousseauvian language, but broadly similar. Estlund’s “epistemic proceduralism” is the view that “democratically produced laws are legitimate and authoritative because they are produced by a procedure with a tendency to make correct decisions” (Estlund, Democratic Authority, 8), where by “correct” he means consistent with requirements of justice. According to the “epistemic” conception of deliberative democracy presented by Martí, “decisions made through a democratic deliberative procedure are more likely to be right than those made through other democratic procedures” (Martí, “The Epistemic Conception of Deliberative Democracy Defended,” 35). From Goodin and List: “The hallmark of the epistemic approach, in all its forms, is its fundamental premise that there exists some procedure-independent fact of the matter as to what the best or right outcome is. A pure epistemic approach tells us that our social decision rules ought be chosen so as to track that fact” (Goodin and List, “Epistemic Democracy: Generalizing the Condorcet Jury Theorem”). Nelson describes an “epistemic defense of democracy” as one according to which “the fact that decisions are arrived at democratically will constitute evidence that they advance the common good” (Nelson, “The Epistemic Value of the Democratic Process”).

is defined as one that selects each outcome with probability .5 and a better-than-random decision procedure is defined as one under which the probability that an option will be selected, given that it is the right decision, is greater than .5. Generalizing this definition to cases involving more than two possible outcomes is unnecessary. It suffices for my purposes if I can show in the two-option case that epistemic arguments are inconsistent with how we ordinarily think about the nature and relevance of political disagreement.7

Thus, we can say that the majority opinion of the Citizens’ Initiative Review was better than random if, conditional on approval of Measure 73 being the right decision, the majority of panel members was more likely to approve it than not; and conditional on rejection being the right decision, the majority was more likely to reject it than not.8

Random procedures may not be politically viable options. But even if it was not politically feasible to decide on Measure 73 by flipping a coin, it impugns the rationality of the Citizens’ Initiative Review if its verdict enjoys no greater presumption of being right than a decision made by flipping a coin. Epistemic democrats—and deliberative democrats more generally—typically wish to claim that decisions made through deliberative democratic procedures enjoy some presumption of reasonableness or rationality.9 Such a presumption would be unwarranted if these decisions were no more reliable indicators of which decision is

7. See appendix for an explanation of how my definition differs from and is preferable to Es- tlund’s.

[Estlund’s benchmark] is unworkable, because there is no way to determine what a “chance” probability of choosing a just policy would be. There is no well-defined space of logically possible policies, from which we can estimate the chance that a randomly selected one is just or unjust, and thereby determine whether a given procedure is more likely than chance to choose a just policy and avoid an unjust one (p. 134).

The objection reaches too far. In any empirical research in which policy outcomes appear as a random variable—routine in the social sciences—the research only gets under way with some simplifying assumption that there is a “well-defined space of logically possible policies.” Such simplifying assumptions are needed to make sense of the probabilistic statements about policy outcomes that appear in empirical research. Once we have made such assumptions, it is straightforward to define a random procedure and better than random decision procedure.

right than the flip of a fair coin. In what follows, my focus will therefore be on
episodic justifications that claim that deliberative democratic procedures are at
least better than random.

You need not be any kind of Platonist in order to entertain episodic justifi-
cations. All that is required is that there is some desired procedure-independent
property, so that one can intelligibly ask whether a procedure tends to yield de-
cisions with the desired property. For example, perhaps what is important is that
decisions on laws and policies be faithful to culturally specific understandings of
freedom and dignity. Provided that one can make sense of probabilities of policies,
conditional on policies being supported or condemned by these culturally specific
values, one can define random and better-than-random decision procedures.

What makes episodic justifications problematic is not that they presuppose
the existence of procedure-independent standards for evaluating collective deci-
sions. Anyone who forms a judgment about the merits of a decision before learn-
ing its political fate concedes as much. The problem, I will argue, is that people
commonly disagree over what the relevant standards are. If they agree on the rel-
levant standards, they disagree over how particular decisions measure up against
those standards. Episodic justifications, I will argue, conflict with two common
intuitions about the nature and relevance of this disagreement, which I expressed
in the form of two constraints on what can be considered a plausible and adequate
justification of a decision procedure.

The non-convergence constraint rests on the assumption that there is no polit-
ical decision procedure such that merely observing its decision would rationally
compel an observer to concede the rightness of the decision. Political minorities
can rationally dissent from majority opinions; they may be obligated to obey, but
they are not rationally compelled to defer in judgment to majority opinions. If
episodic justifications are not meant to require a radical overhaul in our ordi-
nary understanding of political disagreement, then whatever episodic authority
deliberative democratic procedures may be said to have, it cannot be such over-
whelming episodic authority that dissent from their verdicts is always irrational.

The constraint on evidence eliminates justifications of decision procedures that
presuppose substantive agreements on the outcomes of these procedures. A sat-
satisfactory argument for subjecting Ballot Measure 73 to the Citizens’ Initiative
Review should be premised neither on the assumption that it was right to approve
the measure nor on the assumption that it was right to reject the measure. Relying
on a premise about how the issue should be decided would be either question-
begging, if addressed to all citizens, some of whom would reject the premise, or
sectarian, if addressed only to like-minded citizens who accept the premise.

Two metaphors can be helpful in this context. One might start from assump-
tions about which decisions are right and then, on the basis of empirical evidence
or theoretical speculation, defend the conclusion that deliberative democratic in-
stitutions tend to produce these desired decisions. From this perspective, these institutions are the solution to a problem of political engineering: we want to show that they are effective instruments for achieving what we already know to be the right result.

Alternatively, one might start from a state of ignorance or agnosticism about what count as the right decisions, but defend a decision procedure as a reliable method of figuring out which decisions are worth taking. This perspective treats democratic procedures as analogous to well-designed scientific research. A particular research design can be defended as a fallible but reliable method of determining the truth on some question, and this defense need not presuppose answers to the question under investigation. Like the selection of a method of inference or research design, we might hope to defend deliberative democratic procedures, not by establishing their tendency to produce a particular result to our liking, but rather by identifying the properties in virtue of which they tend to produce reasonable decisions, whatever decisions are in fact reasonable.

The constraint on evidence clearly rules out the first, “political engineering” perspective. But the epistemic arguments for democracy that one finds in the recent literature resemble, not those of an engineer with a predetermined vision of what outcomes should result from democratic procedures, but rather those of a researcher defending a particular method of inquiry. They seek to defend the epistemic virtues of a deliberative democratic process without recourse to assumptions about what the specific outcomes of that process should be. Instead of such assumptions, they point to formal properties of deliberation and democratic voting rules, the epistemic benefits of diversity of perspective, and seemingly minimal assumptions about citizens’ cognitive abilities.

To sum up: epistemic arguments claim that deliberative democratic procedures are “better than random,” as defined above. The nature of political disagreement is plausibly taken to impose two constraints on how we justify decision procedures, which I labeled the non-convergence constraint and the constraint on evidence. We might hope that modest epistemic arguments, which claim only that deliberative democratic procedures are better than random, can satisfy the non-convergence constraint. And we might hope to satisfy the constraint on evidence by developing epistemic justifications on the model of justifications of methods of scientific inquiry, as opposed to the blueprints of a political engineer.

Whether we should accept the validity of these constraints is a question outside the scope of the paper, but they or variations on them are sufficiently widely accepted that it is worth asking whether they rule out epistemic arguments for democracy. The next two sections argue that epistemic arguments can satisfy neither constraint.
3 Convergence towards consensus

The democratic pedigree of a law may obligate citizens to obey, but it does not compel citizens to concede the law’s merits. The mere revelation that a majority approved Measure 73 did not automatically render opposition to the measure irrational, or so we are ordinarily inclined to think. This fact derives not from a limitation of majority rule in particular, but simply from the nature of political disagreement. There is no feasible political procedure such that merely observing its decision would compel the judgments of rational observers to converge to a consensus. I will argue that epistemic justifications of deliberative democratic procedures are hard to square with this ordinary intuition.

Defenses of majority rule that appeal to Condorcet’s jury theorem afford an especially clear and illustrative example of how this intuition conflicts with the logic of epistemic justifications. Assume that each referendum voter was more likely to support Measure 73 than not, if passing the measure was the right decision, and more likely to oppose it than not if rejecting it was the right decision; i.e., assume that each voter’s judgment was more reliable than a completely unreliable coin flip. Assume, further, that each voter’s judgment was probabilistically independent of the next voter’s. The jury theorem states that under these assumptions, it becomes increasingly likely, and approaches a certainty, that a majority of the referendum voters would support the right decision, as the number of referendum voters increases. In the case of the Oregon referendum, in which 1,410,238 voters participated, the assumptions imply that, if approving Measure 73 was the right decision, it was almost certain to be approved, and if rejecting Measure 73 was the right decision, it was almost certain to be rejected. They imply that on this matter the majority opinion was nearly infallible.

The problem with the jury theorem is that it proves too much to be a plausible basis for an epistemic defense of majority rule. Its immodest conclusion not only makes it a dubious resource for defending the epistemic value of majority rule under realistic conditions. It also means that any appeal to the jury theorem will conflict with the ordinary intuition that someone who dissents from majority opinions is not necessarily irrational. Given normal electorate sizes, accepting the jury theorem’s assumptions means crediting majority opinions with near infallibility. The jury theorem violates the non-convergence constraint because it entails the intuitively implausible conclusion that political judgments should quickly converge to a consensus merely upon observing majority opinions.

Epistemic democrats typically want to credit democratic decisions with a more modest epistemic value. A more modest conclusion, based on a more realistic, less flattering portrait of majority rule, might respect the non-convergence constraint. What is the lowest grade of epistemic value that a decision procedure could possess? At the extreme, a decision procedure might be just barely better than a
random decision procedure, *i.e.*, just slightly more reliable than a completely unreliable coin flip. Then the reliability of the procedure might allow us to say that democratic decisions enjoy a weak presumption of being right, in virtue of their democratic pedigree; but since minimal reliability would underwrite only a weak, defeasible presumption, we could still explain the possibility of rational dissent and persisting disagreement.

But the modesty of this stance will in many cases prove superficial. For once we grant that a decision procedure has *some* epistemic value, however modest, we have implicitly conceded that there also exists, at least in theory and often in practice, another decision procedure, derived from the original, that would possess near infallibility. This derivative procedure consists in the repeated, independent application of the original procedure to the same question. Upon observing the outcomes of this preposterously accurate derivative procedure, the political judgments of rational observers would quickly converge to a consensus.

For example, suppose that we wanted to say that the citizen panels created by the Oregon Citizens’ Initiative Review are better than random, but just barely so. Conditional on passage of a ballot initiative being the right decision, the citizen panel is slightly more likely to support it than not, and conditional on rejection being the right decision, the panel is slightly more likely to oppose it than not. Now imagine that, instead of convening just one of these panels to review Measure 73, the state convenes thousands of panels. Each deliberates in isolation from the next and forms a verdict, which is more reliable than a coin flip and probabilistically independent of the next panel’s verdict, conditional on the facts being judged. If enough panels were convened, they would provide in the aggregate a nearly infallible indication of whether it was right to pass Measure 73. With many panels, it is all but certain that a majority of the panels will support Measure 73, if passing the measure is the right decision, and all but certain that a majority will oppose Measure 73, if rejecting the measure is the right decision. For if passing the measure is the right decision, then the probability of each panel supporting the measure exceeds .5, because each panel is better than random; hence, as the number of panels increases, it becomes increasingly certain that the fraction of approving verdicts will exceed .5. Were this process carried out, there would be little basis for disagreement over the measure once the panels’ verdicts are revealed and everyone is presented with a nearly infallible signal of its merits.

Thus, if an epistemic justification for a decision procedure such as Oregon’s Citizen Initiative Review is sound, then all that would stand in the way of achieving political consensus is the practical difficulty of executing the procedure repeatedly and independently. This conclusion follows even if the decision procedure is just barely better than random and just barely responsive to facts about which decisions should be taken. Epistemic justifications assert in effect that the stochastic process that has political decisions as its outcome also has these facts as parame-
ters. With enough observed realizations of the stochastic process we can identify those parameters conclusively. Political disagreements result merely from small samples.

Note, moreover, that if an epistemic argument for a procedure is sound, the point is not merely that there is a long-run tendency towards convergence, such that consensus is achievable in the limit but never in finite, actual time. Consensus could be achieved in whatever span of time is needed to execute the decision procedure in question. For example, if all citizens recognizes the epistemic power of citizen panels, then they might be in deep disagreement over Measure 73 on Friday evening, convene several thousand panels, allow these panels to deliberate in isolation from each other over the weekend, and then, upon learning the panels’ verdicts Monday morning, they would all be faced with a mountain of evidence pointing towards one conclusion. If most of the better-than-random panels favored the measure, that would be overwhelming evidence that approving the measure is the right decision, and if most of the panels opposed the measure, that would be overwhelming evidence that rejecting the measure is the right decision.

It might sound strange to describe the panels’ verdicts as “evidence” for normative judgments about whether the measure should be passed. We normally think that what count as reasons for such judgments are claims about fairness, moral desert, deterrent effects, and so on, not empirical observation. But we normally hold this view because we assume that these normative judgments do not have empirical implications. Epistemic justifications contradict this assumption. If each citizen panel is better than random, then the judgment that Measure 73 should be passed implies that with probability close to 1, most of the citizen panels will support it. Under the assumption that each panel is better than random, evidence is precisely what the panels’ verdicts provide, and extremely strong evidence when taken together.

The argument thus far: if a decision procedure is better than random, then there exists, in theory and often in practice, a derivative procedure that consists in repeated, independent executions of the original. By merely observing its outcome, observers would receive a nearly infallible indication of which decision is right and would be compelled to adopt a common conclusion on the matter, contrary to what I’ve called the non-convergence constraint. That, anyway, is the conclusion we must accept unless we can explain how rational disagreement is possible among people who all recognize a nearly infallible font of truth.

I conclude this section by considering one possible explanation in this vein. Robert Goodin proposes an explanation for how rational dissent from majority opinions might be reconciled with Condorcet’s jury theorem, which, as explained

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above, credits majorities with extreme accuracy. Goodin distinguishes between non-evaluative judgments of shared facts, on the one hand, and evaluative assessments, on the other. We have good reasons to revise our beliefs about shared facts upon learning others’ beliefs about these facts, but no comparable reasons to revise our evaluative assessments upon learning others’ evaluative assessments. The distinction, Goodin suggests, allows us to reconcile rational, persistent opposition to majorities with the epistemic value of majority rule. “The epistemic power of majorities, when dealing with intersubjectively shared facts, is what underwrites the rationality of majority rule. Their lack of any epistemic authority, when it comes to matters of evaluations, is what underwrites the rationality of persisting opposition.”

One might take Goodin to be suggesting that the rationality of majority rule can be defended only when we can view majority decisions as reflecting purely factual judgments, without any evaluative assessments mixed in, as we might (ideally) view the verdicts reached by juries. But a restriction to such contexts would render epistemic defenses of majority rule uninteresting. It is hard to think of any consequential political problems for which all disagreements about the appropriate course of action are simply disagreements about factual questions, with evaluative assessments playing no role.

I interpret Goodin’s argument instead along the following lines. Majority decisions do not force adjustments to observers’ beliefs, because these decisions inevitably reflect evaluative assessments. But since citizens’ factual beliefs reliably track the truth, it is unlikely that the majority decision rests simply on erroneous factual judgments. So jury theorem-like arguments can rule out at least one potential source of irrationality in majority opinions.

But even if the theorem’s assumptions hold true for factual questions, regular factual errors may still undermine the rationality of majority rule. As an example, suppose that on the question of whether the new minimum sentences would deter crime, each voter in the Oregon referendum formed beliefs that were correct with probability .55 and probabilistically independent, conditional on the truth. Suppose that 10% of voters invariably vote for increasing the minimum sentences, no matter their beliefs about deterrent effects, and everyone else votes for the increased sentences if and only if she believes that they will have a deterrent effect. Assume that increasing the sentences would not have a deterrent effect. Then we would expect a majority to support the increase: 10% will always support it, and we would expect 45% of the remaining voters to conclude, wrongly, that increased sentences would have a deterrent effect and to support the increase as a result. Thus, we would expect a majority of 50.5% to support the increase, with

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12. Ibid., 145.
most of them doing so on account of a false belief about its deterrent effects. If the number of voters is large enough, then with probability close to 1 the actual number will be close to the expected value. In this example, we can be sure that the majority will irrationally support the increased sentences even though they have no deterrent effects, and most of them will do so because of false beliefs about their deterrent effects. Thus, even if we are prepared to grant the jury theorem’s assumptions in the domain of purely factual questions, the assumptions do not “underwrite the rationality of majority rule.”

There may be other viable explanations for how rational individuals could dissent from the verdicts of what they recognize as a nearly infallible epistemic authority, but I leave their investigation as a future task.13

4 The constraint on evidence

What of the other constraint, which rules out justifications of democratic procedures that presuppose substantive agreement on their outcomes? For illustrative purposes let us start again with Condorcet’s jury theorem. An appeal to the theorem may seem on its face to satisfy this constraint, since it does not invoke any disputed assumptions about which decisions are right. It assumes only that democratic citizens pick the better of two alternatives more reliably than a coin flip.

But we should demand evidence for this assumption, and the demand for evidence cannot be met without presupposing disputed political judgments. To see why we should demand evidence, consider the Oregon referendum from the perspective of a member of the minority. If an observer of the Oregon referendum grants that the assumptions of the jury theorem were met, then, as explained above, he must conclude that approval of Measure 73 was almost certainly the right decision.

But he might just as well invoke the logic of the jury theorem to draw an inference in the opposite direction, from the observed outcome to a conclusion about individual competence. A member of the minority could evaluate the observed referendum outcome in light of an assumption about which of the two alternatives was the right decision. Conditional on approval of Measure 73 being the wrong decision, the observed referendum outcome was extremely improbable if individual voters were competent judges of the matter.14 For members of dissent-

13. One possibility worth mentioning briefly: rationality requires only that observers update their subjective degrees of confidence according to Bayes’ rule. Rational disagreement could persist after observing even a nearly infallible signal if some individuals hold their prior opinions with absolute certainty—they attach the probability 1 to their prior opinion—or something close to absolute certainty.

ing minorities, the jury theorem can just as well explain why members of opposed majorities are unlikely to be reliable as it can explain why the majority opinion is likely to be right. Condorcet’s modus ponens is, as it were, Plato’s modus tollens.

If the jury theorem is to be part of an explanation of the epistemic value of democratic institutions, one that is meant to be convincing even for citizens who often find themselves in the minority, then what is needed is independent, compelling evidence of the reliability of the typical citizen’s judgments. The evidence must be strong enough that it compels us to acknowledge the epistemic value of even those disagreeable majority decisions that we would otherwise treat as symptoms of voters’ unreliability.

The challenge is to produce this evidence without violating the constraint on evidence. Suppose one wanted to gather direct empirical evidence that someone’s judgments about such things as minimum sentencing guidelines are probabilistically dependent on whether it is right to impose the sentencing guidelines. That requires identifying particular instances in which it is right to impose a given minimum sentence, so that one can assess the probability that the individual believes it is right to do so. That is, identifying evidence of reliability presupposes that one can already identify which decisions are right in particular instances, but appeals to such claims are what the constraint on evidence rules out as question-begging or sectarian.

The problem may be most vivid when the facts being judged are moral facts or intertwined with moral facts, but even non-moral facts are often the subject of deep disagreement in politics. For example, there would be no way to gather uncontroversial evidence that voters form reliably accurate judgments about the effects of fiscal policies on economic growth. Evidence of reliability would be evidence that voters’ judgment about a given policy are probabilistically dependent on truths about the policy’s effects. But since there is no consensus on their effects, there can be no consensus on what counts as evidence that voters’ judgments about these effects are reliably accurate.

The jury theorem offers an account of the logic of majority rule that is free of any controversial assumptions about which decisions are right. But its assumption of individual competence should not be accepted without evidence, and any evidence would appear to presuppose just such controversial assumptions.

The problem is not unique to the jury theorem. Democratic decisions result from the individuals’ judgments, and these decisions cannot be responsive to facts about which decisions are right unless these individuals’ judgments are probabilistically dependent on these facts. As a condition for accepting any epistemic argument we should therefore demand evidence for this probabilistic dependence.

inferred from vote outcomes. But, importantly, they assume that juror competence is better than random (p. 248).
But what counts as evidence depends on disputed judgments about which decisions are right. Validating the reliability of democratic procedures, as methods of figuring out the “right answers” to political problems, would therefore seem to presuppose that we already know the answers.\(^{15}\)

A reasonable suspicion with the discussion so far is that this quandary resembles a common and entirely surmountable challenge to empirical inquiry. Perhaps epistemic democrats are in no worse a position than scientists who routinely need to validate the reliability of some method of measurement even when the existence or values of the quantities to be measured are in dispute. Since it’s possible to redeem the epistemic properties of thermometers and particle accelerators, perhaps the prospects for epistemic arguments for democracy are not so bleak after all.

Consider, for example, the use in economics of satellite images of luminosity as a measure of economic output.\(^{16}\) If reliable, this indirect measure of economic output would be useful for measuring output in countries in which government records are not considered trustworthy or in subnational units where no records are kept. To determine the accuracy of the measure for these cases, in which there is no way of directly measuring its correlation with actual economic output, researchers consider how well it correlates with economic output in countries where independent and reliable measures of economic output are available.

Epistemic democrats might consider an analogous strategy.\(^{17}\) Disagreement may be widespread and deeply rooted in democracies, but some matters are plausibly not subject to any disagreement among “right-thinking” or “reasonable” people. All right-thinking people can agree, for example, that slavery is unjust. We might therefore reformulate the constraint on evidence as a weaker, but more sensible constraint: justifications of democratic procedures should not presuppose any substantive agreements on the outcomes of democratic procedures, except possibly in those cases where all right-thinking people would agree anyway.

Suppose we have some list of points on which such agreement can be expected: famines should be avoided, wars of aggression are wrong, economic growth is all else equal a good thing. Grant, for the sake of argument, that we can even expect agreement on which policies contribute to famines or economic growth, which wars count as wars of aggression, etc. With such a list, we could test for probabilistic dependence between democratic decisions on these issues and facts about which decisions should be taken on these issues. Perhaps tax cuts

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15. A version of the problem is discussed in Coleman and Ferejohn, “Democracy and Social Choice.” They draw attention to the difficulty of reconciling an epistemic argument, not with what I call the constraint on evidence, but rather with the assumption that democratic procedures are necessary for uncovering the general will.


are less likely to meet with democratic approval, when they would trigger disas-
trous government shut-downs, democracies are less likely to declare war, when
self-defense is not a valid pretext, etc., and any “reasonable” or “right-thinking”
person can appreciate the evidence for these probabilistic relationships.

With this evidence, we might think to develop an epistemic argument for
democratic procedures in much the way that social scientists might defend the use
of luminosity as a measure of economic output. In each case, the goal is to defend
the conclusion that two variables—luminosity and economic output, democratic
decisions and the facts about which decisions should be taken—are in general
probabilistically dependent, despite the fact that one of the variables—economic
output, the facts about which decisions should be taken—can be uncontroversially
“observed” in only a subset of cases. If there is a way to make the inference work
in social science, then there should be a way to make it work for epistemic democ-
racy, or so the thought might go.

In the economic measurement example, the inference is defensible only if we
think that whatever the relationship between luminosity and economic output, it
does not depend on whatever factors explain why we do not have access to inde-
pendent measures of economic output. For the inference to work, what explains
why data on economic output are missing cannot also be an unobserved determi-
nant of the strength of the relationship between luminosity and economic output.
Suppose you thought that output in some sector of the economy is both hard to
measure and also requires little electricity. Then you would not be warranted in
using luminosity as a measure of economic output when direct measurements on
the latter are missing; the fact that they are missing would mean that the unob-
served economic output is of the kind that does not correlate well with luminosity
anyway. For the inference to be valid, we must be willing to assume that the places
where direct data on economic output are available and the places where this data
are missing are similar with respect to the factors determining the relationship
between luminosity and economic output.

An analogous assumption is needed if epistemic arguments are to rest on an
analogous inference, but the assumption that epistemic democrats need is unwar-
ranted. Suppose that we verify that when it comes to the issues on which all
right-thinking people support the same decisions, democratic procedures perform
better than random. If we wish to infer from this fact that democratic procedures
are in general better than random, then we have to assume that the issues on which
right-thinking people unanimously agree and those on which they do not are simi-
lar with respect to the factors determining the outcomes of democratic procedures.

But that assumption is implausible. Here is one reason the assumption might
be false: when it comes to issues on which there is general agreement among right-
thinking people, (almost) everyone benefits from making the right decision, but
issues on which there is no such agreement tend to be issues on which majorities
just as often benefit as lose out from doing the right thing. These patterns conspire
to make majority opinions responsive to the right reasons in the first set of cases,
but not the second. An inference from the first to the second domain would be
unjustified. Here is another possible story for those of a more rationalist bent: the
issues on which we find general agreement are the easy problems, and here we can
expect majorities to reason their way to the truth, but the issues on which right-
thinking people disagree present hard problems and the relevant considerations are
too subtle or complicated for most citizens to appreciate. In these cases, majorities
are more often wrong than right. Once again, extrapolating from one domain to
the other is unwarranted.

It is not difficult to think up variations on these stories that would defeat the
strategy of extrapolation under consideration. It is hard even to imagine how the
presence or lack of (reasonable) disagreement within each domain could be un-
correlated with the factors that determine majority decisions, and hence determine
the epistemic value of majority rule, in each domain. But without some plausible
story along these lines, there is no reason to think that the epistemic properties of
democracy within one domain are suggestive of its epistemic value in the other.

5 Conclusion

Epistemic arguments for democracy sit uneasily with two widespread views about
the nature and significance of disagreement in democratic societies. First, if
an epistemic argument for a democratic procedure is sound, then there would
exist nearly infallible democratic procedures, capable of producing overwhel-
making evidence for judgments about which decisions are right. The judgments of
rational observers of these nearly infallible procedures would rapidly converge
to a consensus. Epistemic arguments therefore run afoul of what I have called
the non-convergence constraint on justifications of democratic procedures. Sec-
ond, any convincing epistemic argument for democratic procedures would have
to presuppose—objectionably—answers to divisive political questions. Everyone
could accept an epistemic argument for democracy only if they already found
themselves in substantive agreement about which collective decisions should be
taken. Epistemic arguments therefore run afoul of the evidentiary constraint on
democratic theory.

Two observations: first, these critiques extend to parallel epistemic arguments
for non-democratic procedures. They apply, in particular, to rationalizations of
political exclusion and rule by elites, in so far as the power of elites is defended as
a means of ensuring good policy-making and in so far as there is the relevant kind
of disagreement about what constitutes good policy. Moreover, the constraint on
evidence and the non-convergence constraint would be just as difficult to reconcile
with charges that democracies tend to make bad decisions as with claims that they
make good decisions.
Second, I have not defended the validity of these constraints, although their intuitive plausibility and widespread acceptance is the motivation for the paper. Thus, for all I claim to have shown, one might still justify democratic institutions as instruments for achieving desirable, but controversial social policy, or even as instruments for realizing the platform of one’s preferred party. Such “sectarian” or “partisan” justifications of democratic institutions are incompatible with the constraint on evidence. But in so far as I have simply taken the constraint for granted, I have not given the reader any explanation for why sectarian or partisan justifications might be deemed unsatisfying.

What I hope to have shown in this paper is instead that the strategy of justification found in the recent literature on epistemic democracy is not a genuine alternative to the sectarian strategy. Epistemic democrats try to defend the epistemic properties of democracy without invoking any substantive, controversial assumptions about what makes for good outcomes, and without committing themselves to the view that disagreements in democratic societies are merely the product of citizens’ irrationality or ignorance of the epistemic properties of democracy. The arguments of this paper suggest that they are bound to fail on both counts.

6 Appendix

This appendix defends my preferred definition of a ‘better-than-random’ decision procedure against several alternative possibilities and makes precise the sense in which rational observers’ political judgments would have to converge, if they observed the outcomes of a better-than-random decision procedure.

Consider a case like the Oregon referendum, in which a proposal can be rejected or approved. Let \( Y = 0 \) refer to the case where the proposal is rejected, \( Y = 1 \) to the case where it is approved. Let \( R \) be an indicator for which of the two options is the right decision, with \( R = 1 \) indicating that approval \( (Y = 1) \) is the right decision and \( R = 0 \) indicating that rejection \( (Y = 0) \) is the right decision.

I defined a random procedure as one for which \( P(Y = 1) = P(Y = 0) = 1/2 \). I defined a better-than-random procedure as one for which

\[
P(Y = 1| R = 0) < 1/2 < P(Y = 1| R = 1)
\]

(1)

If the referendum is better than random in this sense, then observing \( Y = 1 \) entails, by an application of Bayes’ rule, that one revise upwards the probability assigned to \( R = 1 \).

An alternative rendering of ‘better-than-random’ would treat it as equivalent to the assumption that

\[
P(Y = 1, R = 1) + P(Y = 0, R = 0) > 1/2,
\]

(2)

i.e., the decision is more likely than not to be correct. This condition is equivalent to

\[
P(Y = 1| R = 1)P(R = 1) + P(Y = 0| R = 0)P(R = 0) > 1/2.
\]

Thus, 1 entails 2, but the converse is false. Since 2 is the logically weaker property, one might ask whether I have stacked the deck against epistemic arguments by assuming that they aim to establish the stronger property. I think not, because the only basis for granting 2 but denying 1 is a claim about the probability \( P(R = 1) \), i.e., the probability that approving the measure is the right
decision. That is precisely the subject of the controversy and disagreement which, I have argued, creates trouble for epistemic arguments. So an argument for the logically weaker property 2 will not have any easier a time satisfying the constraint on evidence than an argument for 1.

One might ask why we should be concerned with inequalities like 1 or 2, instead of with the expected value, or expected “social utility,” of decision procedures, defined relative to the unconditional probabilities of the four possible outcomes. But epistemic democrats typically are concerned with arguments, like the jury theorem, for the claim that democratic decisions are “responsive to” decision-relevant facts (such as the guilt or innocence of the defendant), and for the claim that this responsiveness contributes to their value. Describing this responsiveness requires the use of conditional probabilities and inequalities like 1, not simply calculations of expected social utility relative to unconditional probabilities. One should note, however, that in the two option case, if a decision procedure is better than random in my preferred sense, then its expected utility must exceed the expected utility of a fifty-fifty lottery over the actions, provided that the utilities of the outcomes $Y=1, R=1$ and $Y=0, R=0$ exceed the utilities of $Y=0, R=1$ and $Y=1, R=0$, respectively.

How does definition 1 compare to Estlund’s (2008) characterization of the ‘better-than-random’ property? Estlund describes a random procedure by:

- **Random Requirement Sensitivity**: The probability, given that legislating $x$ is a requirement of justice, that the procedure legislates $x$ is no different from the unconditional probability that the procedure legislates $x$.

- **Random Permission Discrimination**: The probability, given that the procedure legislates $x$, that $x$ is permitted is no different from the unconditional probability that $x$ is permitted. (Equivalent to: The probability, given that $x$ is not permitted, that the procedure legislates $x$ is no different from the unconditional probability that the procedure legislates $x$.) (p. 115)

Estlund proceeds: “Being better than random is a little more complicated. Certainly, if a system is no worse than random in either respect but better in one respect, then it is better than random. But if it is better than random in one respect and worse in the other, there is no simple answer to whether it is, in some sense, better than random overall” (pp. 115-6).

I have couched things in the deliberately vague language of “right” decisions and implicitly assumed throughout that of two possible decisions exactly one is right, while Estlund formulates his properties in terms of permitted/required legislation. For two actions, there are at least three moral states of the world, when we use the latter concepts: both actions may be permitted, the first permitted and the second not permitted, or vice versa. But there is an important set of cases, which we can use as test cases for both definitions and the critiques that I present, in which the two terminologies each produce two moral states of the world (and are thus formally identical): cases in which there are two options—passing legislation $x$, or not passing legislation $x$—exactly one of which is permitted. Let $Y=1$ indicate that $x$ is passed, $Y=0$ that is not passed. Let $R=1$ indicate that passing $x$ is permitted and failing to pass $x$ is not permitted—or, passing $x$ is just, failing to do so is unjust—and let $R=0$ indicate that passing $x$ is not permitted and failing to pass $x$ is permitted—or, passing $x$ is unjust, failing to do so is just. Estlund’s definition, using this notation, then comes to this:

$$P(Y=1|R=1) = P(Y=1), \quad \text{(Random Requirement Sensitivity)}$$

$$P(R=1|Y=1) = P(R=1), \quad \text{(Random Permission Sensitivity).}$$

In this special case where exactly one option is permitted, these two conditions are equivalent, as
are the two corresponding senses in which a procedure can be better than random:

\[ P(Y = 1|R = 1) > P(Y = 1), \quad (5) \]

\[ P(R = 1|Y = 1) > P(R = 1). \quad (6) \]

The equivalence of the two equalities or of the two inequalities follows from the definition of conditional probabilities, \( P(A|B) = P(AB)/P(B) \).

Estlund’s definition (in the general case or the special case in which the framework is isomorphic to mine) expresses the idea that outcomes are responsive to the facts about justice: whether the legislation is just or unjust makes a difference to its probability of passage. But showing that they are minimally responsive in this sense accomplishes little if the goal is to explain why democratic procedures are preferable to the random flip of a coin. They could be minimally responsive, and yet a coin flip could be unambiguously better. Put differently, inequalities 5 and 6 could hold, yet the probability of a correct decision could be less than 1/2. As a concrete example, set

\[
\begin{align*}
P(Y = 1, R = 1) &= a(1 - \varepsilon) \\
P(Y = 1, R = 0) &= (1 - b)\varepsilon \\
P(Y = 0, R = 1) &= (1 - a)(1 - \varepsilon) \\
P(Y = 0, R = 0) &= b\varepsilon
\end{align*}
\]

with \(0 < 1 - b < a < 1/2, \quad 0 < \varepsilon < 1, \quad \text{and} \quad \varepsilon < \frac{1/2 - a}{b - a}. \) Then,

\[ P(Y = 1|R = 1) = a > a(1 - \varepsilon) + (1 - b)\varepsilon = P(Y = 1), \]

because \(a > 1 - b. \) Thus inequality 5 (and therefore inequality 6) are satisfied, and the procedure is ‘better than random’ in Estlund’s sense. Yet

\[ P(Y = 1, R = 1) + P(Y = 0, R = 0) = a - a\varepsilon + b\varepsilon < 1/2, \]

because we stipulated \( \varepsilon < \frac{1/2 - a}{b - a}. \) Thus, a coin-flip would be more likely to produce a correct decision.

For that reason, the properties Estlund defines do not seem like the right benchmark, given his own arguments. By contrast, if a decision procedure is better than random in my preferred sense, then it always performs better than a random coin flip, whatever the right decision may be.

### 6.1 Convergence with better-than-random procedures

In section 3 I claimed that, if a democratic procedure, such as a citizens’ assembly or a referendum, were known to be better than random (as defined above), then citizens observing its outcomes would not only be compelled to update their political judgments, but their judgments would also gradually converge, if multiple, independent assemblies were convened or multiple, independent referenda were held. Here is the mathematical explanation.

Suppose that we observe multiple assembly decisions (or referenda), \(Y_1, \ldots, Y_n\), each of which is either a ratification (\(Y = 1\)) or rejection (\(Y = 0\)) of the same measure. Each assembly outcome is assumed identically and independently distributed conditional on a probability \(\Theta = \theta\) of ratification. The value of \(\Theta\) is unknown, but an observer has a prior belief about \(\Theta\) given by the density function \(f\), which, I assume, is continuous with \(f(\theta) > 0\) for all \(\theta \in [0, 1]\).
Let \( \theta_0 \) be the true realized value of \( \Theta \). Let \( \Pi(\theta|Y_1,\ldots,Y_n) \) be the posterior distribution of \( \Theta \), given outcomes \( Y_1,\ldots,Y_n \). The sequence of posterior distributions, \( \Pi(\cdot|Y_1,\ldots,Y_n) \), is consistent at \( \theta_0 \)—meaning, for every neighborhood \( U \) of \( \theta_0 \), \( \Pi(U|Y_1,\ldots,Y_n) \to 1 \) as \( n \to \infty \), with probability 1.\(^{18}\)

The more assembly decisions observed, the more certain an observer is of the true value of \( \Theta \)—the posterior probability that she places on \( \Theta \) lying in any given region converges to 1, if \( \Theta \) actually lies in that region. If she believes that the assemblies are better than random, then this increasing certainty will be equivalent to increasing certainty about whether the measure should be approved. For example, if \( \theta_0 < .5 \), then she will become increasingly certain that the measure should be rejected—because, by the assumption that the referenda are better than random, \( \Theta \in [0, .5) \) if and only if the measure should be rejected. Since this conclusion is independent of the choice of prior \( f \)—save for assuming that \( f(\theta) > 0 \) and \( f \) is continuous—it follows that all observers’ judgments about whether the measure merits ratification will converge, if enough assemblies (or referenda) are held.

References


