

The Federalist's Conjecture Revisited. A Critique of
the Goodin-Spiekermann Model of Relative
Epistemic Performance by Trustee and Delegate
Representatives.

Parliament is not a congress of ambassadors from different and hostile interests, which interests each must maintain, as an agent and advocate, against other agents and advocates; but Parliament is a deliberative assembly of one nation, with one interest, that of the whole – where not local purposes, not local prejudices, ought to guide, but the general good, resulting from the general reason of the whole. You choose a member indeed; but when you have chosen him, he is not member of Bristol, but he is a member of Parliament. If the local constituent should have an interest or should form an [sic] hasty opinion evidently opposite to the real good of the rest of the community, the member for that place ought to be as far as any other from any endeavour to give it effect.

Edmund Burke, Speech to the Electors of Bristol, 1774 (1887)

I – Introduction

In his 1774 speech to the citizens of his Bristol constituency, Edmund Burke anticipated one of the central conflicts in late twentieth century normative political theory: the role of the representative in society. While his ideal-type dichotomy between delegates and trustees has been supplemented by more sophisticated taxonomies in the empirical political sciences, it has retained the analytical interest of political theorists.

In a 2012 paper, Goodin and Spiekermann (311) describe four mechanisms "by which deliberation might make a small group – such as a parliament – collectively more competent" than a larger group – what they term the "Federalist's Conjecture". They apply these to an epistemic comparison of trustee-style and delegate-style representation systems, concluding that the former merely "could perform almost as well" (Goodin and Spiekermann, 2012: 318) as the latter. Their model of delegate-style assemblies employs the Condorcet Jury Theorem, which suggests that, under modern constituencies of magnitudes in the tens of thousands, delegates' collective probability of voting 'correctly' in reference to an external standard of truth on an issue approaches one.

This paper expands Goodin and Spiekermann's set-up, arguing that a more sophisticated model lends stronger support to their hypothesis of small-group epistemic competence. Specifically, they do not stipulate whether the alternatives put to the vote on the assembly floor are fixed or to be determined, and whether, in case of the former, the pre-determined alternatives are well- or ill-defined. Investigating their model in a broader range of institutional settings shows that the scenario they assume is merely one of multiple possibilities.

More importantly, even under the conditions required by their model of epistemically superior delegates (closed-rule, well-defined alternatives), their conclusions are premised on an implausible voter model.

We investigate two possible objections to their voter model: voters may be more selfish, or less well informed, than Goodin and Spiekermann posit. Following the empirical literature on voting behaviour, which rejects the former but supports the latter conclusion, we present an alternative model grounded in more realistic cognitive assumptions: rather than tracking a unique *independent standard of truth*, cognitive limitations and imperfect information determine that citizens track a *local belief* about such a global standard of truth, on any given issue.

This more plausible model of ‘informatively myopic’ citizens has two important conclusions for Goodin and Spiekermann’s model. Firstly, if constituencies track distinct local standards of truth, delegate-style representative assemblies are no longer necessarily epistemically superior; in fact, the Condorcet Jury Theorem *no longer tells us anything at all* about the collective competence of a delegate assembly in reference to the *global* standard of truth. Secondly, this has direct consequences for their investigation into the Federalist’s Conjecture: if in institutional contexts wisdom of crowds arguments may not hold, this warrants a reassessment of the merits of the Selection and Deliberation Effects underlying small-group epistemic performance.

The paper thus contributes to filling a gap in the representation literature: epistemic defences of representative democracy are a rare exception among the norm of procedural defences. Goodin and Spiekermann’s original conclusion that trustees can merely perform “almost as well” is in line with the tradition in normative political theory that sees representation as nothing more than a “defective substitute for direct democracy” (Mansbridge, 2003: 515).^{1 2} In essence, then, they adhere to what one could term the ‘orthodox epistemic hierarchy of decision-making systems’: direct democracy is epistemically superior to delegate representation, in turn superior to trustee representation. Arguably, such a ‘second-best’ justification along the substantive dimension of epistemic validity is normatively unfavourable.

¹ This debate has a long historical pedigree, with supporters of representation’s intrinsic positive benefits dating back as far as John Stuart Mill (Brink, 2013). Cf. Goodin (2008) for an overview.

² Although Urbinati (2005: 194) rightly points out that representation “pre-dates democratic states, and can also exist in non-democratic states.”

By concluding that under most institutional settings the epistemic superiority of delegates is not axiomatic, and that under at least some settings trustees should even be a priori expected to epistemically outperform delegates, we suggest that representative democracy, rather than a “defective substitute”, may provide intrinsic epistemic benefits.

Following this introduction, this paper will first situate the Goodin and Spiekermann model in the normative literature on representation, going on to identify the assumptions of both the alternative and original models. The fourth section provides a summary of their paper “Epistemic Aspects of Representative Government” and their epistemic comparison of delegate and trustee representatives. The fifth section introduces the caveats of agenda rules and the quality of alternatives, investigating how Goodin and Spiekermann’s model holds up in different institutional settings. The sixth section focuses on the specific scenario assumed by Goodin and Spiekermann, delegate-representation with fixed, well-defined alternatives, and discusses the impact of voter behaviour, offering the informative myopia model as a more realistic alternative. The seventh section briefly reassess how trustee-style representation may constitute an epistemically superior answer to this challenge, and considers the implications for the Federalist’s Conjecture. The final section provides a summary and conclusion of the paper’s findings.

II – Trustees and Delegates in the Representation Literature

The distinction between trustee and delegate representation dates back to Edmund Burke (Aten, 2009). Two elements distinguish trustee representatives from delegates. Burke’s admonition of his Bristol constituents evinces how they differ in their frame of reference when voting: trustees consider the welfare of the entire political unit in question. Delegates, on the other hand, subjugate this to the immediate will of their constituents.

In Burke’s conception, which anticipated our contention of the myopic constituency, it follows directly from this that trustees exercise discretion, i.e. a trustee votes “on the basis of his or her own independent judgment as to what is best” (Goodin and Spiekermann, 2012: 317). This is pitted against delegates who vote “strictly according to instructions given by his or her electors” (Goodin and Spiekermann, 2012: 317). Delegates thus presuppose representation as collective action, trustees as collective *interaction*.

The delegate-trustee conflict is analogous to broader theoretical debates on representative behaviour, encompassing an empirical (“How *do* representatives behave?”) and a normative (“How *should* representatives behave?”) question. In case of the former, to our knowledge no studies have so far explicitly tested for delegate versus trustee behaviour. Following Miller and Stokes (1963), though, a number of scholars have tested for responsiveness of congressional voting behaviour to constituency preferences (with higher responsiveness assumed to indicate that legislators take a delegate attitude to their office). In line with the assumption of preference communication from constituents to representatives which underlies the model, Griffin and Newman (2005) and Martin and Claibourn (2013) find that non-voters are excluded from preference congruence. Findings on representative responsiveness are divided. On one hand, a large group of scholars claim that “members of Congress die in their ideological boots” (Poole, 2007: 435). Contrary to that, others find evidence that “legislators demonstrate responsiveness, adjusting their behaviour in office to reflect the changing needs of their districts and the shifting policy preferences of their constituents” (Hayes, Hibbing and Sulkin, 2010: 91).³ Furthermore, Minta and Sinclair-Chapman (2013) support the conception that representatives consider wider interests than those of their myopic constituents.

Normative theorists have dealt more explicitly with different modes of representation. The initial accounts on representative government by Burke in 1774 and Mill in 1861, informed by a scepticism of the ‘common man’, were adamant that representative office should function as a trusteeship. Mill, in his *Considerations on Representative Government*, contends that a vote “is strictly a matter of duty; [the voter] is bound to give it according to his best and most conscientious opinion of the public good” (2008: 121).

With the advent of behavioural research in political science in the 1950s, principal-agent theory became the dominant framework for representation theory. Following Pitkin’s formative 1967 book *The Concept of Representation*, a number of studies conceived of representation as such a dyadic interaction between the constituent and the representative (Weissberg, 1978; Page and Shapiro, 1992; Hill and Hurley, 1999; Soroka, Penner and Blidook, 2009), more or less explicitly supporting the delegate model.

Modern political theory has developed a more complex taxonomy of representative behaviour, aided by a reassessment of the classic texts. Disch claims that Pitkin’s summary statement that “representing here means

³ See Lo (2013) for an overview of the debate.

acting in the interest of the represented, in a manner responsive to them” (1967: 208), is “read out of context” (Disch, 2011: 108). Instead, she sees Pitkin as refuting any analogy between representation and a principal-agent relationship, given that “constituents seldom hold articulate and well-formed preferences [on specific bills; and] when they do, the discrete preferences of the members of a district would not add up to a ‘single interest,’ and so lack the unity of a principal” (Disch, 2011: 106). Pitkin thus “effectively redefines democratic representation from an interpersonal relationship to a systemic process that is anonymous, impersonal, and not seated in intent” (Disch, 2011: 107).

Mansbridge (2003) further disentangles representation into four possible behavioural models. With reference to Mansbridge’s framework, the present model of trustee-style representation exhibits aspects of *gyroscopic* (decision-making in reference to exogenous value-standards) and *anticipatory* (anticipating constituents’ future preferences) behaviour; as well as *surrogate* representation (representing voters outside the constituency – present here in the sense of Burkean ‘virtual representation’).⁴

Significantly, epistemic considerations are almost completely absent from the debates among representation theorists. Epistemic arguments thus represent a gap in the representation literature. One paper that contributes to filling this gap is Goodin and Spiekermann’s “Epistemic Aspects of Representative Government”. Their analysis, framed in terms of the Condorcet Jury Theorem, is ostensibly favourable to delegate-representatives (attributing them a higher expected epistemic performance). By challenging their conclusion, we thus indirectly weigh in on the normative debate on the side of trustee representation.

Epistemic arguments about representative behaviour are subject to a number of assumptions. The next section identifies these assumptions, underlying both Goodin and Spiekermann’s original model as well as the refined version of their model presented below.

III – Assumptions

Modelling representatives as exhibiting either a delegate or a trustee attitude to their office, and further comparing their respective performances according to epistemic criteria, requires a number of assumptions.⁵

⁴ Exposing Mansbridge’s claim (given without further support in her text) that “the forms of representation identified here do not map well onto the traditional dichotomy of [‘delegate’] and ‘trustee’” (2003: 515) as premature.

⁵ Goodin and Spiekermann’s model makes three further specific assumptions which we consider implausible; these will not be addressed here as they are dealt with extensively in sections V and VI below.

Specifically, we assume that representatives vote in accordance with social welfare concerns rather than private gain; that an external standard of truth exists; that such a standard of truth can be modelled as the total social welfare function; and that total social welfare is an aim normatively superior to individual constituency welfare.

We assume that representatives vote according to (their conception of) public, not private interest, irrespective of whether they consider local (constituency) or global (comprising the entire polity) welfare functions as their standard of reference – what Oliver (2010) calls the *public service principle*. The public service principle is foundational to both delegate and trustee system of representation (and indeed represents one of the criticisms often levelled against the latter – Hardin (2004: 83) claims that “although some representatives may be very well grounded in their constituencies, many representatives are far more likely to view their fellow ‘aristocrats’ as their reference group than their respective electorates.”)

Importantly, it does not presuppose that representatives are self-less actors. Rather, the assumption only requires representatives to act *as if* they were self-less when they cast votes on the assembly floor. It is plausible that their electoral accountability suffices as an incentive to behave as such, following the Madisonian conception of representative motivation (Hardin, 2004).⁶

Having established delegate- and trustee-style systems as valid possible behavioural models for representatives, we turn to the assumptions inherent to our epistemic analysis of their relative performance. At the most fundamental, epistemic comparisons require the existence of an external standard of truth. Goodin and Spiekermann present three reasons to consider the existence of such a standard analytically valid. Firstly, they argue that, if the original Federalist’s Conjecture posited that a smaller number of voters can be more competent at making a ‘correct’ choice, it is only reasonable to start from the same premise. Secondly, they distinguish between ‘facts’ and ‘values’; admitting that some political decisions are taken in reference to the latter rather than the former, accurate information about the facts should nevertheless positively impact even value-based decisions. Thus institutional mechanisms to improve factual knowledge are normatively

⁶ This implies the further assumption that representatives can convincingly communicate the rationality of their decisions back to voters in instances where they may vote against the perceived immediate interest of their constituency, given that they are electorally accountable to their constituency as opposed to the aggregate of voters. Provided that constituents lack information rather than morality (see section VI below), there is no reason to believe that representatives should not be able to sway constituents with convincing reasoning (Mansbridge, 2003).

desirable. Thirdly, they point out that, rather than agreement over factual dimensions, all that the Jury Theorem strictly requires is that a standard of correctness independent of individuals' votes *exists*.

We model this standard of truth as a social welfare function with an identifiable optimum for any given policy question, permitting an ordinal ranking of policy alternatives according to their welfare impact. Naturally, any real-life policy question is likely to cut across a number of welfare functions. We do not suppose that individuals can accumulate enough information or gain access to every private welfare function through deliberation to hold a perfectly accurate estimate of the total function; nor do we consider this desirable given the prohibitive costs it would impose on representative government. Instead, we make the weaker assumption that increased information and deliberation allow individuals to better approximate the 'true' social welfare function than they could under conditions of less and biased information. This weaker ordinal assumption respects cognitive and physical limitations but is simultaneously sufficient for our revised model of delegate and trustee epistemic performance.

Finally, our revised model requires that overall social welfare is considered normatively superior to the welfare of any individual constituency. This assumption is reasonable insofar as the total social welfare function represents the aggregation of constituents' private welfare functions; it thus incorporates the constituencies by definition (although any number of constituencies may be worse off than they would have been had their local collective preference been the plurality position in the legislature). The idea that this normative framework should inform representatives' behaviour dates back to the original accounts by Burke and Mill.

The picture of representatives that emerges is one of rational actors who do not require altruism as a behavioural assumption, and who formulate decisions in reference to an external standard of correctness that, firstly, *can be identified*, and secondly, *can be modelled as the total social welfare function*; and whose behaviour is therefore normatively desirable.

This ostensibly supplies all necessary preconditions for a choice situation modelled by the Condorcet Jury Theorem. The next section describes how Goodin and Spiekermann employ the Condorcet Jury Theorem in their investigation of the epistemic aspects of representative government, arriving at the conclusion that delegate systems have an a priori epistemic advantage over trustee systems.

IV – “Epistemic Aspects of Representative Government”: Goodin and Spiekermann’s Model

Goodin and Spiekermann’s point of departure is the “Federalist’s Conjecture”, taken from Alexander Hamilton. Writing on the subject of the Electoral College in the *Federalist Papers No. 68*, Hamilton proposes that “a small number of persons, selected by their fellows from the general mass, will be most likely to possess the information and discernment requisite to so complicated an investigation [as electing the President]” (cited in Goodin and Spiekermann, 2012: 303). From this Goodin and Spiekermann (2012: 304) extract a working definition of the Federalist’s Conjecture such that it “is the proposition that a smaller group of more competent people is epistemically superior to a larger group of less competent ones.” Their paper’s stated aim is to “define the parameters within which, and the reasons for which, it may or may not be true” (Goodin and Spiekermann, 2012: 303).

Goodin and Spiekermann restrict their subsequent investigation to two possible causal mechanisms: the *Selection Effect* (drawing on Vermeule, 2009), i.e. “the supposed fact that members of the smaller group will be more ‘capable’” by value of having been selected to office in the first place; and the *Deliberation Effect*, “the supposed fact that, as a smaller group, electors would be ‘acting under circumstances favorable to deliberation’” (Goodin and Spiekermann, 2012: 304).

The authors pose Hamilton’s hypothesis against the lessons of the Condorcet Jury Theorem. The Jury Theorem, despite its attribution to the Marquis de Condorcet, was first formally proven by Laplace in 1812 (Dietrich and Spiekermann, 2013), and was introduced to social epistemology by Black (1958). The theorem’s conclusion that, under certain assumptions, large groups are virtually certain to arrive at epistemically ‘correct’ answers, poses a major challenge to the Federalist’s Conjecture.

Goodin and Spiekermann apply their Jury Theorem analysis to a number of institutional set-ups that present potential “epistemic bottlenecks” (see below), including “smaller upper chambers in bicameral legislatures and small pivotal parties in parliament” (Goodin and Spiekermann, 2012: 305). Where we take issue is with their inclusion of parliamentary representatives taking a trustee attitude to their office (or to any particular vote) in this list. We further find that their conclusion that trustees may consequently perform merely “almost as good” (Goodin and Spiekermann 2012: 305) in epistemic terms is not generally applicable, but rather limited

to specific scenarios.⁷ We thus seek to expand on their attempt to define the parameters in which the Conjecture may be true.

Both accounts are thus situated at the intersection of the literature on representation, and that on social epistemology; and therefore investigate to what extent representative democracy is more than a 'defective substitute' for direct-democratic alternatives.

The idea that the benefits of representative democracy surpass matters of size is again a concept that dates back to Mill (Brink, 2013), while the term "epistemic democracy" in its modern usage is generally traced back to Cohen (1986), whose account introduced the idea of an *independent standard of truth* (that is, truth is not endogenous to the outcome of a vote, as e.g. Rousseau's General Will is; see also section VI below).

Democratic theorists have traditionally viewed epistemic and procedural accounts as a priori antagonistic: Copp (1993) determines a Platonic *knowledge and power* principle, and a fairness-motivated *democratic principle*, claiming that they are irreconcilably opposed. Urbinati (2005: 197) goes as far as to diagnose a fundamental "paradox of the instrumentalist [i.e., epistemic] view of representation, which on the one hand refers to the people's opinion as the source of legitimacy, and on the other claims that representatives make good and rational decisions as long as they shield themselves from 'a forever-gullible popular opinion.'"

In consequence, more recent epistemic defenders of democracy have trodden more carefully, maintaining awareness that a consequentialist, purely instrumental conception of epistemic democracy is unlikely to gain acceptance amongst democratic theorists, especially given that some epistemic benefits are believed to be *inherent* to the democratic process. The consequently developed hybrid models comprising both strands are generally termed "epistemic proceduralism" (Estlund, 1997; Anderson, 2006; Peter, 2008).⁸ This implies that instruments of social choice theory, such as the Condorcet Jury Theorem, take centre-stage in most modern accounts of epistemic democracy (Thompson, 2013).

⁷ Goodin and Spiekermann (2012: 305) go on to state that "'almost as good' might be good enough, because once again trustees would be capable of benefiting from the Deliberation Effect in the assembly, in a way electorally bound delegates would not." Nevertheless, we flip their conclusion on its head: by offering a more discriminating model that concludes that cases in which trustees' epistemic performance is superior to delegates' is the norm, rather than the exception, the burden of proof is placed on supporters of the delegate model.

⁸ For a criticism of epistemic democracy that also addresses the modern turn to epistemic proceduralism, see MacGilvray (2014). Conversely, for a rare example of a neo-Platonic purely instrumental argument for epistocracy, see Brennan (2011).

The Condorcet Jury Theorem states that, under certain assumptions (primarily voter competence and independence) the probability that the majority decision is ‘correct’, in reference to an exogenous standard, increases as group size increases (non-asymptotic conclusion) and converges on one as group size approaches infinity (asymptotic conclusion). Attracting much attention for its seemingly sweeping legitimization of democracy, the Condorcet Jury Theorem has invited criticism for its apparently shaky premises (Estlund, 2009). This criticism has generated a number of revised versions of the theorem with sufficiently defensible premises for its continued valid usage in the social epistemology literature (Dietrich and Spiekermann, 2013).

The use of the Condorcet Jury Theorem enhances present theories of representation insofar as it provides an answer to the question of preference aggregation among the constituents, as pointed out by for example Young (2002: 130), who challenges the view that “a constituency is an already formed cohesive group with a single will that can be conveyed to the representative as a mandate... Instead, in a well-functioning process a public sphere of discussion sets an issue agenda and the main terms of dispute or struggle.”

Goodin and Spiekermann base their epistemic comparison of delegate and trustee representatives on the Condorcet Jury Theorem. They conceptualise representative institutions as first and foremost an *epistemic bottleneck* (Vermeule, 2009). This follows directly from the Jury Theorem: devolving decision-making power exclusively to a sub-group of the total electorate, and thus de facto reducing the number of competent decision-makers, invariably dilutes aggregate competence.

Goodin and Spiekermann are well aware that “making public decisions through a legislative assembly composed entirely of representatives who take a delegate-style attitude toward their task is different from direct democracy” precisely because “representatives represent particular constituencies” (2012: 317) – yet they consider the resultant status as epistemic bottlenecks as the only such difference relevant for their model. To calculate the probability that delegate representatives will reach a correct collective decision in a constituency setting, they apply their Jury Theorem calculation twice – first to calculate the probability that the constituents reach the correct collective decision, and then a second time at the level of the legislators. With constituency magnitudes in the tens of thousands, even moderate assumptions of individual competence render extremely high collective constituency correctness probabilities, which then translate into delegate’s individual competence. Consequently they conclude that “there *is virtually no epistemic difference* between

delegate-style representative government and direct democracy, where electorates are of the size we typically see in real-world politics” (Goodin and Spiekermann, 2012: 318).⁹

Arguably, though, dividing the electorate into constituencies, to whom representatives are exclusively accountable, introduces greater epistemic complexity to representation than Goodin and Spiekermann admit. The following two sections provide a restatement of Goodin and Spiekermann’s model with more plausible premises. They show that, under this new model, the conclusion that delegate assemblies are superior in their epistemic performance is no longer axiomatic.

V – Open-Rule and Closed-Rule Agendas, and the Definition of Alternatives

Goodin and Spiekermann’s model makes a number of crucial simplifications that impact the epistemic conclusions they draw. Firstly, they do not specify agenda-setting rules on the assembly floor; specifically, it is of relevance to the model whether delegates (and thus, constituents) vote on a fixed set of alternatives or can suggest new alternatives. Implicitly, they suggest that for trustee scenarios there is an open rule in place when they suggest that one of the benefits of trustees is that they can lead to a better definition of alternatives; yet they seem to reason backwards here, adapting the rules of the game to the needs of the model.

Secondly, they do not specify *how* voters vote; specifically, it is of relevance whether all voters vote according to a *common* standard of truth. Goodin and Spiekermann make this assumption implicitly, as it is a pre-requisite for the Condorcet Jury Theorem to act as a meaningful tool of social choice aggregation. Yet, as we will show, this assumption is not a given – there are a number of possible alternatives to voter behaviour.

Agenda Rules

Beginning with delegate representatives, considering the impact of different agenda rules suggests three possible scenarios. Firstly, under an open-rule agenda, citizens may express their preferences on a high (theoretically infinite) number of alternatives. While the two-alternative assumptions of the classical Condorcet Jury Theorem can be relaxed (List and Goodin, 2001), this results in a restatement of the theorem’s asymptotic and non-asymptotic claims merely in reference to a *plurality* win (no longer a majority win). In the words of Estlund (2009: 227), this is an “underwhelming result... not much use when there are several other

⁹ Emphasis added.

alternatives, since their probabilities of winning are cumulative. Even if the correct answer has a better chance than any other answer, the chance of it winning might be far less than the chance of *some* erroneous answer *or other* winning.”¹⁰ Further, even if the correct alternative wins, the number of alternatives resulting from an open-rule agenda potentially results in a plurality winner with a very small percentage of overall votes – smaller than would be acceptable under the conventional procedural standards of democratic decision-making processes. The Jury theorem, then, is not a satisfactory social preference aggregation tool.

Alternatively, a closed-rule agenda may prescribe a fixed set of alternatives. Yet this does not permit the automatic conclusion that the alternatives are well-defined (Goodin and Spiekermann, 2012). Ill-defined alternatives equally challenge the usefulness of the Jury theorem to aggregate the preferences of constituents, as they are likely to result in a “disjunction problem” (Estlund, 2009: 228): assuming k alternatives are put to a vote, the Jury Theorem requires competence that is just better than random, that is, the probability of choosing correctly $p > 1/k$. Yet consider the disjunction of any of the alternatives: in this case, better-than-random competence really only implies that $p > 1/(k+n)$, where n denotes the number of sub-alternatives contained within the ill-defined alternatives put to the vote on the floor. Therefore, “an assumption of random competence over k alternatives is, in effect, also an assumption of *better* than random competence for the embedded $k+n$ alternatives” (Estlund, 2009: 229). Furthermore, “if the number of disjuncts is significant as compared with k , then a competence of $1/k$ is *much* better than random for the set of $k+n$ ” (Estlund, 2009: 229).

Estlund (2009: 229-230) illustrates the disjunction problem by drawing on the fable of the blind men and the elephant:

If they are asked whether the animal before them is an elephant, they are given a binary choice: yes/no. But “no” is the answer they should give if they think it is any animal other than an elephant. “No” means “hippo, or rhino, or mule, or horse, ...” To choose “yes” at the “random” rate of .5 they would need some strong suspicion that it is an elephant rather than *any* of the other possibilities. A competence of .5 would be quite high given that there might be dozens of animals it could be given the little each of them knows... A random device would perform at .5, but a thinking person might well perform well below that, and for good reasons.

Nevertheless, for the sake of argument, it is not impossible to imagine a scenario under which constituents vote on a set of both fixed and well-defined alternatives. This scenario reflects the decision-making setting of Goodin and Spiekermann’s delegates. Our main objection to their model, though, is not that it reflects only

¹⁰ Emphasis added.

one of a number of possible alternatives. Goodin and Spiekermann rely on unreasonably optimistic behavioural assumptions about constituents, as the following section illustrates.

VI - The Impact of Voter Behaviour: Moral Myopia and Informative Myopia

Concluding that a delegate assembly voting on a fixed set of well-defined alternatives is routinely almost certain to choose the correct alternative makes the further assumption that voters all vote according to a common standard of truth. On first sight, this assumption seems uncontested. It is certainly explicitly acknowledged, much less challenged, by few social epistemologists.¹¹

Yet it is far less obvious than it seems. Disaggregating the assumption into its component parts, it implies that i) voters are actually knowledgeable enough to recognise the external standard of truth, and ii) given that voters can determine the standard of truth, they are willing to vote according to that and not some other standard they deem more appropriate.¹²

Social epistemologists dealing with the Condorcet Jury Theorem anticipate both these objections – under the headings of “the ‘competence’ assumption” and “the ‘sincerity’ assumption” – but they only relate them to voters’ votes, not to the actual standard of reference itself (Goodin and Spiekermann, 2012: 307-309).

In other words, defenders of the Condorcet Jury Theorem have generally defended voters’ probability to find and choose the *answer*; they have rarely addressed whether voters are competent to get the *question* right.

We derive two possible objections to the belief that voters vote on a common standard of truth from the aforementioned assumptions: voters may be *selfish*, that is voters consciously disregard the true global standard in their vote in order to maximise a local welfare function. Alternatively, voters may be *imperfectly informed*, that is voters unconsciously disregard the true global standard in their vote in favour of an incorrect local estimate of the global welfare function.

¹¹ Miller (1986) is a rare exception.

¹² Importantly, Goodin and Spiekermann point out that truth must be *exogenous* to the peoples’ votes. If there existed no possibility that the collective decides wrong, the theorem becomes a truism. This is the central point of distinction between Condorcet’s Jury Theorem and Rousseau’s theory of the General Will, which is discovered through the votes of the people. For an overview of the relationship between Condorcet and Rousseau, see Grofman and Feld (1988).

If proven to be accurate, either assumption suggests that voters (consciously or unconsciously) vote according to local rather than global standards of truth – a phenomenon that one could term *myopic voting*. Depending on the underlying motivation, voters may therefore be *morally myopic* or *informatively myopic*.

Selfishness – Moral Myopia

Intuitively, the selfishness objection appears more plausible to explain socially sub-optimal welfare distributions. Under this scenario, constituents are accurately aware of the global standard of truth, but consider their votes on alternatives in reference to a *normatively* defined local standard of truth. In other words, they consciously optimise the *local social welfare function*. Since under a delegate system the assembly-level vote is a majority contest with fixed votes, the effects of selfish constituencies on total social welfare will be contingent on the payoff structure at hand.

If welfare output is a zero-sum competition over fixed quantities of a finite resource between constituencies, assuming equal payoffs, the majority position indeed reflects a socially optimal allocation.¹³ Yet given path-dependent systematic differences over a number of dimensions, such as inter alia geography, demographics, ethnic composition or affluence, it is implausible to expect constituencies to be homogenous in their group preferences; as a result, they are bound to value identical quantities of the same resource differently. If payoffs are not equal there is no a priori reason to expect the outcome to be socially optimal.

The same result holds if the payoff-distribution alternatively mirrors a ‘tragedy of the commons’ (Ostrom, 1990).¹⁴ In this case, a simple majority contest at the assembly tier, with morally myopic constituencies and representatives ‘locked’ in their vote by the nature of the delegate system, produces socially suboptimal outcomes. The nature of the delegate system is prohibitive to either internally negotiated or externally enforced cooperation, required to resolve the cooperation dilemma.

Such utility-maximising ego-centric individual or, as in this case, group actors, form a staple of rational choice theory. Yet they are not necessarily consistent with developments in empirical political science over the last twenty years, increasingly disregarding rational in favour of sociotropic voting models.

¹³ This phenomenon was first described by Rae (1969) and Taylor (1969).

¹⁴ Note that the relevant parallel to the tragedy of the commons scenario here is only the *payoff-distribution* as we have not yet established that constituencies are selfish collective actors.

In accordance with classical public choice theory, the traditional image of voters has been that of the rational, self-interested actor. Sears and Funk (1990: 148) define a citizens' self-interest as "the (1) short-to-medium term impact of an issue (or candidacy) on the (2) material well-being of the (3) individual's own personal life (or that of his or her immediate family)." As a result, most investigations into voter behaviour have tested the hypothesis of "pocketbook voting", the concept that citizens' policy (or candidate) choices are influenced by their expected impact on citizens' personal economic situation (Sears and Funk, 1990: 156).

Evidence for sociotropic voting in these analyses is overwhelming (Kinder and Kiewiet, 1979, 1981; Kiewiet, 1983; Markus, 1988).¹⁵ Additionally, where policies imply a direct threat to citizens' self-interest, sociotropic norms at least moderate the impact of self-interest (Funk, 2000). Lewis-Beck (1986) finds that the same results about sociotropic voting hold in Western European contexts, challenging the caveat that sociotropic voting on economic issues may be a culturally-induced phenomenon unique to the United States (as Feldman, 1982, claims). Finally, Sears and Funk (1990) extend the analysis to other issue dimensions, finding strong evidence for sociotropic voting in policy areas including crime, war, and racial issues. To sum up, "thirty years' testing of the public choice assumption that people vote for their pocketbook has resulted in a great mass of disconfirming evidence" (Udehn, 1996: 85).

How do these findings relate to the model of morally myopic constituents? Importantly, each of these studies relates citizens' voting choices to their *perception* of the state of the world (in this case in an economic sense) rather than to exogenous markers (for example, unemployment or inflation rate). Kramer (1983) challenges the sociotropic voting hypothesis on this point, claiming that incumbents' real economic performance should be expected to have greater explanatory power. Yet this has not been generally accepted; in the words of Udehn (1996: 80-81), "real economic performance is important, more important than perceived performance, but the immediate determinant of voting is perception rather than reality, no matter how erroneous perceptions might be." Additionally, Kinder, Adams and Gronke (1989), responding to another criticism by Kramer, tested sociotropic voting against pocketbook voting *and* group voting – the hypothesis that people, while not strictly self-interested, vote to further the collective self-interest of 'their group' (e.g. their constituency). Importantly for our model, they found even stronger support for the sociotropic model than in Kinder's earlier analyses.

¹⁵ See Udehn (1996) for an exhaustive overview.

Therefore, on the question of voter *motivation*, we conclude with Caplan (2002: 417) that “while people may be selfish in private life, when they enter the political sphere it is ideas, not interests, that dominate.” We therefore turn to the second question, namely, how accurate such ideas are.

Imperfect Information – Informative Myopia

How plausible is the second objection that voters vote according to different standards of truth because they are insufficiently knowledgeable to assess the global standard correctly? Given that voters are found to be voting sociotropically, they must hold an estimate of the total social welfare function. At the same time, for voters to possess enough information to effectively assess a global standard that aggregates the preferences of thousands or, in most cases of modern nations, millions of individuals, seems incompatible with human cognitive limitations.

Again one can therefore conceptualise a local standard of truth distinct from the global standard, which sociotropic voters refer to when voting. Rather than the total social welfare function, this local standard denotes citizens’ *belief* over what the function looks like. This belief is highly conditional on the set of locally available ‘knowledge-bits’, and on local cues.

The local standard of truth can thus be described as the total social welfare function *as perceived* by a subgroup of the total population – in this case represented by proxy of the constituency.¹⁶

Assuming that citizens vote with reference to the local standard presupposes a knowledge condition that is easier to satisfy: voters must have sufficient information (including, possibly, none at all) to *estimate* the social welfare function. We term this phenomenon, grounded in more modest and realistic epistemological assumptions, *informative myopia*.¹⁷

Under this scenario, local conditions are the *empirical* standard of reference for constituents, rather than the normative one as under the moral myopia model.

¹⁶ Naturally, one can create n further subdivisions, where n is bounded by the total population size of the constituency. Yet as the end of applying the Jury theorem in this case is communicating a policy position to inform the vote of the delegate representing exactly every constituent in the district, the constituency represents the most logical analytical subdivision.

¹⁷ The use of the adjective form highlights the distortive nature of such spatial limits to people’s perception: their myopic information-uptake itself *informs* their belief in some systematic fashion rather than merely limiting the *amount* of evidence available to them in an unbiased fashion (as “information myopia” would suggest).

What does the informatively myopic voter mean for Goodin and Spiekermann's model of virtually infallible delegates? Following their calculations, delegates' individual competence is informed by the collective competence of their constituents, aggregated via the Jury Theorem. Under these changed assumptions about voters' frame of reference, then, what the Jury theorem ultimately predicts is that delegate representatives will be individually competent with a probability p , converging on 1, to vote correctly on an issue according to an independent standard of truth – but for each delegate, this standard of truth may be different. In fact, then, the Condorcet Jury Theorem *does not allow us to make any prediction at all* about how competent the delegates are with reference to the *global* standard of truth.

This second criticism proves to be empirically much more plausible than the first. Political scientists' assumptions about levels of voter *information*, in contrast to voter *motivation*, have been relatively stable since the introduction of the rational ignorance model by Downs in 1957. Downs' dogma (1957: 259) that "it is irrational to be politically well-informed because the low returns from data simply do not justify their cost in time and other resources" has not only been widely accepted on a theoretical level, but continuously empirically verified (Converse, 1975; Bennet, 2003; Caplan, 2001, 2008; Paldam and Nannestad, 2000, for a non-US dataset).¹⁸

Low information levels do not remain without consequences or cancel out in the aggregate as some have suggested (see below). Althaus (2003) predicts that a low level of information systematically affects policy preferences; and Arnold (2012) shows that it has long-term practical implications for policy outcomes under democratic systems.

Much attention has in recent years been devoted to the question of how voters then form their political beliefs, if they do not do so evidentially.¹⁹ A possible answer lies within what has been dubbed a "cognitive revolution" in the social sciences – moving into focus how heuristics, and conscious and subconscious cues, function as shortcuts to belief formation and decision-making (Lau and Redlawsk, 2001: 951). Evidence of their presence is wide-spread: voters rely on heuristics (Lau and Redlawsk, 2001; Kam, 2005; Dancey and Sheagley, 2012) and are influenced by cues in their political beliefs (McDermott, 1998; Valentino, Hutchings and White, 2002; Kam, 2005) and decision-making strategies (Shah, Domke and Wackman, 1996).

¹⁸ Paldam and Nannestad explicitly use the term "myopic" to refer to low levels of information.

¹⁹ As low levels of information by no means discourage voters from holding opinions about the state of the world, and to do so with conviction (Caplan, 2001).

The initial presumption that heuristics are uniformly beneficial to voters' belief formation through a function as a value-neutral shortcut in face of uncertainty is not corroborated by available evidence (Lau and Redlawsk, 2001): errors made by voters under uncertainty are not random (which would suggest that they would cancel out in the aggregate) but systematic (Althaus, 1998; Caplan, 2001). Thus, heuristics can "go bad" (Dancey and Sheagley, 2012: 312). Furthermore, while reliance on and susceptibility to heuristics and cues *is* influenced by information levels (Kam, 2005), being better informed is no panacea: both experts and non-experts are at risk of heuristics going bad. In fact, "voters' preexisting values interact with political sophistication such that politically knowledgeable voters develop systematically distorted empirical beliefs" (Wells et al., 2009: 953).

Past scholarship has generally focused on ideologically (e.g. partisanship) rather than spatially delimited cognitive distortions (which thus exceed the scope of this paper). Two models nevertheless add direct support to our theory of an informative local standard of truth.²⁰

Ansolahehere, Meredith and Snowberg's (2012) theory of *macro-economic voting* is analogous to our model of the informative local standard of truth, but they focus on the economic dimension. They investigate how "voters' perceptions of macro-economic performance are affected by economic conditions of people similar to themselves" under incomplete information, finding that "state-unemployment is robustly correlated with national economic evaluations" (Ansolahehere, Meredith and Snowberg, 2012: 1). This leads them to conclude that "individuals' economic perceptions respond to the economic conditions of people similar to themselves" and that "these perceptions associate with individuals' vote choices" (Ansolahehere, Meredith and Snowberg, 2012: 1). In a similar analysis, Cho and Gimpel (2009) examine the impact of local (county-level) economic conditions on the 2008 Presidential vote. Significantly, while they find that economic circumstances have a strong effect on local voting outcomes, their variables' impact is *not uniform* – suggesting, in line with our argument, locally idiosyncratic varieties of interacting factors determining local standards of truth.

Summary of the Closed-Rule Delegate System with Well-Defined Alternatives

Ironically, voters voting sociotropically but systematically mistaken in their beliefs over the total social welfare function *necessarily* arrive at a collectively wrong decision with reference to the global standard of truth

²⁰ Other studies investigating the spatial dimension of cognitive influences are e.g. Dyck and Pearson-Merkowitz (2012), who find conditional support that the presence of a gay population affects local attitudes towards gay marriage; Kohfeld and Sprague (1995), who report similar findings for racial issues; and Gimpel et al. (2008), who find distance-decay patterns in support for local candidates (consistent with friends-and-neighbours-voting hypotheses).

(where wrong translates as ‘suboptimal’). Caplan (2002: 416) points out that “sociotropic voters with biased economic beliefs are more likely to produce severe political failures than are selfish voters with rational expectations.” Voters that are sociotropic but misinformed about the social welfare function are bound to unintentionally make wrong choices precisely *if* they vote sincerely – and in doing so they do not even formally violate the competence assumption.

Table 1 summarises our findings:

Assumption	Plausibility
Sociotropic voting behaviour	Plausible
Perfect information	Not plausible
Sociotropic voting outcome	Not plausible

Table 1

Of course, Goodin and Spiekermann’s conclusion can still hold in spite of these altered premises in the case where local and global standards of truth coincide. To make effective predictions towards the assembly’s collective competence, though, local and global standards would have to coincide *in every constituency* on a given issue.²¹

While the objection of morally myopic constituents does not appear to bear out empirically, if non-selfish informatively myopic voters optimise an incorrect welfare function this presents a significant challenge to Goodin and Spiekermann’s conclusion of virtually infallible delegate assemblies. The Condorcet Jury Theorem no longer allows any predictions about the collective competence of delegate representatives, who cast their votes – informed by the prior votes of their constituents – in reference to a number of distinct local standards of truth.

The next section revisits Goodin and Spiekermann’s two-fold causal mechanism for the Federalist’s Conjecture, and suggests that the Deliberation Effect may imply that trustees are better equipped to overcome this epistemic challenge.

²¹ Exploring conditions under which it may be sufficient for local and global standards of truth to coincide in a smaller number of constituencies to still achieve an epistemically desirable output, while exceeding the scope of this paper, may be an interesting alley for further research.

VII – Trustee Representatives and the Federalist’s Conjecture Revisited

Goodin and Spiekermann offer two possible mechanisms to salvage the Federalist’s Conjecture from their conclusion of epistemically superior delegates: a Selection and a Deliberation Effect (see section IV above). They plausibly demonstrate that the first of these, the contention that, by the nature of having been chosen in the first place, representatives are more likely to be highly competent than constituents, would need to be unrealistically powerful to compensate the collective competence of constituencies numbering in the tens of thousands. Taking the example of the 2008 US presidential election, they show that, had the President been elected by the 539 members of the Electoral College (Hamilton’s initial contention) rather than the 131,000,000 voters casting their votes, to match the collective competence of the total electorate at a moderate assumed individual competence of $p = 0.510$, each member of the Electoral College would have required an unlikely competence of $p = 0.976$. Alternatively, they argue, small groups, by virtue of their size, can harness the epistemic benefits of deliberation.²²

The “deliberative turn” within political science (Palumbo, 2012: 2), and in turn the “empirical turn” within deliberative theory (Bächtiger et al., 2010: 32) have moved the concept of deliberation to the centre of political science research. At its simplest, a “process is deliberative [if] it provides informative and mutually respectful discussion in which people consider the issue on its merits” (Fishkin, 2013: 51). Further, “ideal deliberation aims to arrive at a rationally motivated consensus” (Cohen, 1989: 23). Deliberative democracy thus has its normative roots in Habermasian communicative action (Feld and Kirchgässner, 2000; Bächtiger et al., 2010). Steiner (2012) illustrates the nature of ideal-type deliberative democracy by contrasting it with the ideal-type of strategic bargaining, where participants enter with *fixed preferences* and an expected outcome as close to their ex ante preference as possible, rather than a to-be-determined social welfare function.

²² Of course, both of these effects apply to delegate scenarios as well; yet as representatives are ‘locked’ in their vote by the prior vote at the constituency level, these effects have no impact on the assembly’s group epistemic performance.

Goodin and Spiekermann (2012: 312) speculate that deliberation could improve group competence in three distinct ways:²³

- i. *Uncovering new evidence*
- ii. *Premise-probing*
- iii. *An improved definition of alternatives*

Each of these alternatives has direct consequences for the argument that trustee-style representatives can overcome the problem posed by informative myopia. In the following section we relate each of their three mechanisms to the informative myopia hypothesis by assessing how they impact trustee's ability to approximate the *global* standard accurately, or at least more so than delegates; and consider the practical evidence for each mechanism.

If one consequence of deliberation is systematically uncovering new evidence, this has clear implications for the information-deficiency component of local standards of truth. That deliberation makes good on its promise that discussants are willing to acknowledge opposite and alternate viewpoints and thereby show information uptake rather than adhering to fixed preferences is a common theme in the empirical literature on deliberation (Steiner, 2012). Additionally, deliberative political scientists have especially emphasised the role of *story-telling*, allowing participants to authoritatively communicate experiences (in this case most likely of constituents) that exceed others' (local) information horizon (Polletta and Lee, 2006; Ryfe, 2006). A potential counter-argument is that stories may be manipulative and perpetuate biases (Hansen, 2004).

On the other hand, Hansen also argues that stories may make premises explicit. This premise-probing (Goodin, 2008) has implications for the second, cognitive distortion component. While Goodin and Spiekermann only consider that individuals may reassess the factual validity of their premises, in light of the revised model smaller groups may derive even greater epistemic benefit from individuals probing the manner in which subconscious premises perhaps impinge upon their reasoned judgment.

Thirdly, Goodin and Spiekermann posit that deliberation leads to better-defined alternatives, which under this model arise directly from the previous two deliberative benefits (assuming that representatives have power to determine what alternatives are on the voting agenda). Empirical studies of deliberation have found that it

²³ They purposefully disregard potential deliberative improvements to *individual* competence for the same reason as dismissing the Selection Effect above.

indeed fosters the presence of consensus (Steiner, 2012), and, importantly, what Niemeyer and Dryzek (2007) term a *metaconsensus* – agreement about what the actual issue at hand is, irrespective of the outcome. This is equivalent to an agreement on what the global standard is (rather than n disagreeing local standard perceptions of what it is) and is thus prerequisite to representatives forming new policy consensuses.

Agenda and Alternative-Definition Implications for Trustees

Comparing trustees to delegates under the same scenarios as described in section V under consideration of the Deliberation Effect suggests that the burden of proof in matters of epistemic competence indeed falls on the latter.

Again a closed-rule assembly offers two possibilities, dependent on whether alternatives are well-defined or ill-defined. In the former case, the Deliberation Effect leads us to expect that trustees would perform better epistemically relative to delegates. Under the zero-sum scenario where delegates' epistemic performance may have indeed proved adequate, trustees may not be the superior alternative under the idealised assumption of preference-homogenous constituencies; but given the de facto difference in inter-constituency experience and hence preference composition (see section VI), trustees' ability to communicate such differences to their fellow representatives becomes a relevant asset. When faced with an inter-constituency equivalent of the tragedy of the commons, trustees demonstrably have an epistemic advantage: given that voters are sociotropic, socially sub-optimal allocations here do not result from selfish collective actors (as assumed under the original tragedy of the commons problem), but from mistaken extrapolations from the local to the global social welfare function. If deliberation permits trustees to better approximate an accurate global welfare function (by implicitly agreeing on a metaconsensus, see above), the assembly-level vote results in an allocation closer to the optimum than under a delegate system.²⁴

If on the other hand alternatives are ill-defined, the challenge of the disjunction problem raised by Estlund reappears. As Goodin and Spiekermann point out, the Deliberation Effect may help trustees to define a better set of alternatives, directly contravening the effect described by Estlund. Again, therefore, trustees have an

²⁴ Trustee superiority is conditional on the existence of some kind of feedback loop between the representative and the constituency: a trustee must be able to credibly communicate to her constituents that her vote reflects their *true* interest to avoid ex post sanctions.

expected epistemic edge over delegates. Nevertheless, this is irrelevant for their collective epistemic performance if they are still constricted to vote on the given ill-defined alternatives by a closed-rule agenda.

This reflects the conspicuous tension between the closed-rule and trustees as institutional choices. The Deliberation Effect argument is a stronger commendation for trustees under the open-rule scenario. Deliberation entails a more accurate approximation of the global standard of truth, and, under open-rule agendas, permits trustees to agree on new alternatives. Therefore, trustees under an open-rule system can vote on a new alternative that is the point of socially optimal allocation according to a new welfare function closer to the global standard of truth than constituents and by implication delegate assemblies can be expected to achieve.

Given this tension, it is a plausible question why the set of alternatives should be closed under a trustee system in the first place. Alternatively to institutional design, one could imagine external, problem-specific constraints limiting the agenda to a specific set of alternatives (the proverbial problem of being 'caught between a rock and a hard place'). In this case, deliberation may still allow the assembly to maximise social welfare *conditional on the circumstances*, i.e. considering an adaptive welfare function that accounts for the externally imposed conditions.

Agenda rules remain as a caveat to trustees' supposed epistemic superiority. When considering epistemic performance in terms of social welfare optimisation, a closed-rule introduces an upper limit to epistemic performance at the level of welfare output expected from the best of the available alternatives. Contingent on the problem structure, trustees may still be collectively more competent to choose this optimal allocation than delegates, but it is when voting on an open-rule agenda that the difference in relative expected epistemic performance between trustees and delegates becomes most significant.

Interestingly this conclusion moves the normative conflict between epistemic and procedural democrats, seemingly overcome in modern democratic theory by the turn to epistemic proceduralism (see section IV) back into focus. If representatives perform best when they exercise discretion in voting and can furthermore determine their own set of alternatives over which they vote, proceduralists such as Urbinati ("[Procedural democracy] election turns out to be a mechanism to authorize a professional class (a new aristocracy) to

deliberate over the heads, or behind the backs of the citizens”; 2005: 197) would charge that constituents’ role in the political process is conspicuously minimised.

It is important to remember, though, that the global standard of truth that forms representatives’ normative reference point is not abstract but rather the aggregation of citizens’ private welfare functions (section III). Secondly, trustees’ epistemic superiority as derived from the Deliberation Effect results directly from their mutual communication and evaluation of (myopic) local standards of truth. Conceiving of trustees as aware and respectful of their constituents’ preferences is therefore not elitist window-dressing, but rather a fundamental condition for the conclusions about epistemic performance our model draws.

VIII – Summary and Conclusion

Goodin and Spiekermann’s investigation into the validity of the Federalist’s Conjecture introduces tools of the social epistemology literature to the normative debate on delegate vs. trustee representative behavioural models. By drawing on Vermeule’s argument to identify representatives as epistemic bottlenecks, and overcoming the subsequent analytical problem for epistemologists by introducing the two-tier Condorcet Jury Theorem calculation, they create a useful framework for comparing the epistemic performance of different ideal-types of representative systems. Their paper thus fills an important gap at the intersection between representation theory, and epistemic, non-procedural defences of democracy.

Nevertheless, Goodin and Spiekermann’s conclusions are unsatisfactory for supporters of representative democracy, adding tentative support for an expectation of superior relative performance by delegates. Their findings are in line with the ‘orthodox epistemic hierarchy of decision-making systems’ and appear to buttress the attribute of representative democracy as a ‘defective substitute’ for direct democracy.

We raise two major objections to their methodology. Firstly, Goodin and Spiekermann do not specify the institutional scenario(s) under which they apply their calculations of delegates’ epistemic performance. We focus on two institutional variables: agenda rules (open-rule or closed-rule), and the quality of alternative-definition (well-defined or ill-defined).

Our second objection concerns their underlying voter model. We suggest that most social epistemologists’ assumption that voters vote across a common standard of truth is premature, and that the division of the

electorate into constituencies with non-homogenous preference distributions implies that distinct standards of truth have significant impact at the assembly tier.

We consider two caveats to the assumption of a common standard of truth. While our initial consideration of constituencies as selfish collective actors is not borne out by the available evidence, we find strong support for an informatively myopic voting model, with the disproportionate importance given to locally available information in forming beliefs about the state of the world implying distorted local approximations of the global standard of truth.

Both objections have significant implications for Goodin and Spiekermann's paper. The Condorcet Jury Theorem turns out to be an unreliable method of preference aggregation under an open-rule agenda as well as under a closed-rule agenda with ill-defined alternatives. Furthermore, the informatively myopic voter model suggests that even under a closed-rule, well-defined alternatives scenario the Condorcet Jury Theorem allows no conclusions about the collective epistemic competence of delegate assemblies; Goodin and Spiekermann's calculations are invalidated if representatives vote in reference to a number of distinct standards of truth rather than a common one.

Goodin and Spiekermann's conclusion of axiomatic delegate superiority is therefore significantly challenged. We expand their suggestion of a Deliberation Effect epistemic 'bonus' for trustee representatives, showing how deliberation suggests that trustees should be expected to perform better epistemically across a number of different welfare-problem structures.

Comparing trustees and delegates under specified agenda rules, problem structures and qualities of alternative-definition, renders somewhat different conclusions for relative epistemic performance. Delegates' greatest strength under Goodin and Spiekermann's original model, their avoidance of acting as epistemic bottlenecks by seeing their vote informed by the collective competence of their constituents, becomes a decisive weakness under the assumptions of divergent local standards of truth. Trustees on the other hand are not mere "'transmission belts' for constituent opinion" (Mansbridge, 2003: 515): the Deliberation Effect described by Goodin and Spiekermann provides a series of causal mechanisms suggesting the conclusion that trustees can approximate the 'true' global social welfare function more accurately. Given that the available empirical evidence strongly points towards sociotropic voting models (our objection of morally myopic voters

proving to be unfounded), a closer approximation of the 'true' welfare function correlates with an improved voting output in epistemic terms.

Our overall conclusion turns theirs on its head: while the legislature's actual epistemic performance is subject to a number of variables in every case, we find that trustees, not delegates, can be a priori expected to perform better epistemically. Rather than presenting an argument for epistocracy, though, our model of epistemically competent trustees is fundamentally grounded in, and dependent on, constituents' private welfare functions. We are therefore in line with the recent tradition in democratic theory to challenge the dichotomy between procedural and epistemic commendations for representative democracy.

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