



2012

Talking It Out With Others vs. Deliberation Within and the Law of Group Polarization: Some Implications of the Argumentative Theory of Reasoning for Deliberative Democracy

Hélène Landemore

Hugo Mercier

University of Pennsylvania, hmercier@sas.upenn.edu

Follow this and additional works at: <http://repository.upenn.edu/goldstone>

 Part of the [Psychology Commons](#)

Recommended Citation

Landemore, H., & Mercier, H. (2012). Talking It Out With Others vs. Deliberation Within and the Law of Group Polarization: Some Implications of the Argumentative Theory of Reasoning for Deliberative Democracy. *Analise Social*, XLVII (205), 910-934. Retrieved from <http://repository.upenn.edu/goldstone/18>

This paper is posted at ScholarlyCommons. <http://repository.upenn.edu/goldstone/18>
For more information, please contact libraryrepository@pobox.upenn.edu.

Talking It Out With Others vs. Deliberation Within and the Law of Group Polarization: Some Implications of the Argumentative Theory of Reasoning for Deliberative Democracy

Abstract

Talking it out with others vs. deliberation within and the law of group polarization: Some implications of the argumentative theory of reasoning for deliberative democracy. This paper argues that a new psychological theory—the argumentative theory of reasoning—provides theoretical support for the discursive, dialogical ideal of democratic deliberation. It converges, in particular, with deliberative democrats’ predictions about the positive epistemic properties of talking things out with others. The paper further considers two influential objections to democratic deliberation: first, that “deliberation within” rather than deliberation with others carries most of the burden in terms of changing people’s minds; and second, that the so-called “law of group polarization” casts serious doubts on the value of democratic deliberation and, more generally, the ideal of deliberative democracy. Keywords: deliberative democracy; argumentative theory of reasoning; epistemic democracy; law of group polarization.

Resolução de diferenças com os outros através do diálogo vs. deliberação interna e a lei de polarização do grupo: Algumas implicações da teoria argumentativa do pensamento na democracia deliberativa.

Este artigo defende que uma nova teoria psicológica – a teoria argumentativa do pensamento – fornece uma base teórica ao ideal discursivo e dialógico da deliberação democrática. Converte, em particular, com as previsões dos democratas deliberativos acerca das propriedades epistémicas positivas da resolução de diferenças através do diálogo. O presente artigo considera ainda duas objeções importantes à deliberação democrática: em primeiro lugar, que a “deliberação interna”, mais do que a deliberação com outros, tem uma maior responsabilidade em termos da alteração das ideias dos indivíduos; e, em segundo lugar, que a chamada «lei de polarização do grupo» coloca sérias dúvidas acerca do valor da deliberação democrática e, de uma forma mais geral, acerca do ideal da democracia deliberativa.

Keywords

deliberative democracy, argumentative theory of reasoning, epistemic democracy, law of group polarization, democracia deliberativa, teoria argumentativa do pensamento, democracia epistémica, lei de polarização do grupo

Disciplines

Psychology



Talking it out with others vs. deliberation within and the law of group polarization: Some implications of the argumentative theory of reasoning for deliberative democracy. This paper argues that a new psychological theory—the argumentative theory of reasoning—provides theoretical support for the discursive, dialogical ideal of democratic deliberation. It converges, in particular, with deliberative democrats’ predictions about the positive epistemic properties of talking things out with others. The paper further considers two influential objections to democratic deliberation: first, that “deliberation within” rather than deliberation with others carries most of the burden in terms of changing people’s minds; and second, that the so-called “law of group polarization” casts serious doubts on the value of democratic deliberation and, more generally, the ideal of deliberative democracy.

Keywords: deliberative democracy; argumentative theory of reasoning; epistemic democracy; law of group polarization.

Resolução de diferenças com os outros através do diálogo vs. deliberação interna e a lei de polarização do grupo: Algumas implicações da teoria argumentativa do pensamento na democracia deliberativa. Este artigo defende que uma nova teoria psicológica – a teoria argumentativa do pensamento – fornece uma base teórica ao ideal discursivo e dialógico da deliberação democrática. Converte, em particular, com as previsões dos democratas deliberativos acerca das propriedades epistémicas positivas da resolução de diferenças através do diálogo. O presente artigo considera ainda duas objeções importantes à deliberação democrática: em primeiro lugar, que a “deliberação interna”, mais do que a deliberação com outros, tem uma maior responsabilidade em termos da alteração das ideias dos indivíduos; e, em segundo lugar, que a chamada «lei de polarização do grupo» coloca sérias dúvidas acerca do valor da deliberação democrática e, de uma forma mais geral, acerca do ideal da democracia deliberativa.

Palavras-chave: democracia deliberativa; teoria argumentativa do pensamento; democracia epistémica; lei de polarização do grupo.

Hélène Landemore » helene.landemore@yale.edu » Yale University.

Hugo Mercier » hugo.mercier@gmail.com » CNRS Researcher, L2C2, Lyon.

HÉLÈNE LANDEMORE

HUGO MERCIER

**Talking it out with others vs. deliberation
within and the law of group polarization:
Some implications of the argumentative theory
of reasoning for deliberative democracy**

The ideal of democratic deliberation at the heart of theories of deliberative democracies has been criticized from many fronts since its first formulation in the late 1980s. As a normative ideal, it is often attacked for being too demanding and too utopian to be worth pursuing. At one extreme, critics argue that democratic deliberation, in practice, does not do as much to change people's minds as the monological reflection of "deliberation within" (Goodin and Niemeyer, 2003; Goodin, 2000, 2003 and 2008); at the other extreme, others argue that it changes minds, but for the worse due to "the law of group polarization," whereby like-minded groups simply tend toward more extreme versions of their own starting points (Sunstein, 2002). Given the extent of this problem, we have good reasons for preferring simple judgment aggregation to deliberation (Sunstein, 2002; Surowiecki, 2004).

Empirical results in political science and social psychology seem to buttress this skeptical view. Sometimes group deliberation homogenizes attitudes, sometimes it polarizes them; sometimes group decisions are better than individual decisions, sometimes not (see *e.g.* Kerr, MacCoun and Kramer, 1996). As Dennis Thompson (2008, p. 499) remarks, when it comes to evaluating what democratic deliberation does and whether it does anything good, "the general conclusion of surveys of the empirical research so far is that taken together the findings are mixed or inconclusive." Even the results observed in James Fishkin's (2009) deliberative polls—conducted with success across the globe, including in societies divided along religious or linguistic lines—do not entirely settle the question. Deliberative polls are designed in such a way that they give us only the roughest of indications

that post-deliberative views are “better” than pre-deliberative views, in the sense that the usual suspects for poor epistemic outcomes (group polarization, lack of information, lack of diversity, lack of single peakedness, etc.) have not afflicted the deliberations.¹

Few democratic theorists, it seems fair to assume, would be willing to claim that the normative ideal of democratic deliberation can remain immune to empirical challenges. Most of them are or ought to be bothered by the remaining uncertainty regarding the epistemic properties of democratic deliberation, particularly on salient issues.² Part of the problem with the current literature lies in the fact that “deliberation” is not always properly construed in the experiments aimed at measuring its effects; moreover, the standards by which the transformative and epistemic properties of deliberation are measured (ranging from various factual and logical standards to more vague notions of “betterness”) are often inconsistent across experiments or even irrelevant.³ Perhaps conducting more specifically designed experiments in the future might yield more definitive results, one way or the other. Thus, one way to resolve the current ambiguity of empirical results might be to keep running experiments and, for example, more explicitly epistemic studies of deliberative polls.

Another approach, which is not exclusive of the empirical route, consists of going back to the theory of deliberative democracy to confront the model of democratic deliberation at its normative core, using theoretical insights from other disciplines. Deliberative democracy has undeniably benefited from engagement with the results of empirical studies of deliberation in political

1 For a recent effort at identifying more precisely what does the transformative work in deliberative polls, see Farrar et al. (2010). The results presented in this article go some way toward demonstrating that deliberation has epistemic properties but they are far from conclusive. Indeed, what the results show is that something happens during the formal, face-to-face deliberation in contrast with the informal deliberation phase that precedes it. The study, however, does not really open the black box of deliberation *per se*. Furthermore, it remains to be shown that more informed opinions contribute to better judgments overall, as measured against a procedure-independent standard of correctness that is not purely factual. While it is indeed likely that more informed opinions correlate with better political judgments, this is not necessary. In order to verify this assumption, the experiments would have to be framed in explicitly epistemic terms rather than in terms of measuring a variation in pre-deliberative and post-deliberative opinions.

2 As to the deliberative democrats who care about deliberation for strictly non-epistemic reasons, they should at least care that deliberation not wreak epistemic havoc.

3 In Farrar et al. (2010; see above), the experiment does not prove that people actually used arguments—as we insist that deliberation properly construed requires—simply that they changed their views on some issues.

science and psychology.⁴ Similarly, deliberative democracy can be enriched by considering other disciplines' theoretical approaches to deliberation. Such a confrontation could help isolate different aspects of deliberation, helping us to better understand what the epistemic benefits (if any) of deliberation are, and where they lie.

Arguably, one discipline that has not been properly tapped is psychology—particularly evolutionary psychology. Deliberative democrats that have turned to social psychology have for the most part simply borrowed the conclusions of laboratory or natural experiments, without questioning the theoretical framework behind the experiments themselves. One assumption behind these experiments, however, can no longer be taken for granted. According to what Mercier and Sperber (2011a and 2011b) have dubbed the “classical theory of reasoning”, the main function of reasoning is to help individuals improve their beliefs by reflecting upon them. This theory, however, fails to make sense of much of the available empirical evidence. A more promising alternative now exists: the “argumentative theory of reasoning” (Mercier and Sperber, 2011a and 2011b; Mercier and Landemore, 2012; Sperber, 2001; see also Billig, 1996; Gibbard, 1990). The argumentative theory of reasoning posits a new evolutionary function for reasoning: argumentation with others, rather than private ratiocination.⁵ Our paper seeks to derive some of the implications of this new psychological theory for the theory of deliberative democracy.

The first section of the paper presents the argumentative theory of reasoning and clarifies the nature of the implications it may have for democratic theory and, specifically, for the debate between advocates and critics of the deliberative ideal. The two subsequent sections aim to refute two major objections to the application of the argumentative theory of reasoning to the case of democratic deliberation's epistemic properties, and show that these objections are, ultimately, weak. The two objections considered are, first, Goodin and Niemeyer's argument against so-called “external deliberation” and in favor of “deliberation within,” and, second, Cass Sunstein's influential critique of deliberation based on the alleged existence of a “law of group polarization.”

4 See reviews of this literature in, e.g., Mendelberg (2002); Delli Carpini, Cook and Jacobs (2004); and Ryfe (2005). This empirical literature has tested some of the implicit predictions contained in the normative model of deliberative democracy and brought to the attention of theorists the real-life constraints weighing on their ideal.

5 See also Mercier and Landemore (2012), in which the authors show how this new theory can make sense of contradictory data on the successes and failures of deliberation.

THE ARGUMENTATIVE THEORY
OF REASONING AND DELIBERATIVE DEMOCRACY

The argumentative theory of reasoning defines reasoning as a specific cognitive mechanism that aims at finding and evaluating reasons, so that individuals can convince other people and evaluate their arguments.

This definition may seem quite intuitive and obvious, but it is, in fact, a marked break from another theory of reasoning that continues to dominate contemporary psychology, in particular the psychology of reasoning and decision-making. According to this more “classical” view of reasoning, reasoning allows us to improve our epistemic status by correcting our own beliefs and intuitions, and building on these foundations to reach knowledge and improve the correctness of our judgments and decisions (Evans and Over, 1996; Kahneman, 2003; Stanovich, 2004). Although dominant in psychology, this theory runs into problems at the empirical level, where it cannot account for a wealth of data about the imperfections of individual reasoning.

Indeed, it is well established in psychology that when reasoning is used internally to generate knowledge and make better decisions, its performance is often disappointing. People have trouble understanding simple arguments in abstract, de-contextualized form (Evans, 2002; Wason, 1966; Wason and Brooks, 1979). Reasoning often fails to override intuitions that are blatantly wrong (Denes-Raj and Epstein, 1994; Frederick, 2005). In some cases, more reasoning can even lead to worse outcomes: it can make us too sure of ourselves (Koriat, Lichtenstein and Fischhoff, 1980), allow us to maintain discredited beliefs (Guenther and Alicke, 2008; Ross, Lepper and Hubbard, 1975), and drive us toward poor decisions (Dijksterhuis, 2004; Shafir, Simonson, Tversky, 1993; Wilson and Schooler, 1991). On the classical approach to reasoning, these empirical findings are profoundly disturbing because it seems that human reasoning is deeply flawed and in need of correction. A major problem for the classical theory, in particular, is the existence of the “confirmation bias,” a well-established tendency to seek arguments that bolster the side that the reasoner already favors (Nickerson, 1998).

As a tool for individual use, reasoning thus does not appear to be particularly compelling. The argumentative theory of reasoning proposes to abandon the classical theory and replace it with an hypothesis generated with a different method, that of evolutionary psychology. Evolutionary psychologists rely on the heuristic value of evolutionary theory (Barkow, Cosmides and Tooby, 2002) to make and test predictions regarding behavior and psychological mechanisms, some of which may seem otherwise puzzling, such as lapses in memory (Klein et al., 2002). Evolutionary psychologists thus seek functional explanations—

that is, explanations that account for features of a trait by appealing to its function, i. e., the production of certain beneficial consequences (see also Elster, 2007; Hardin, 1980). Such functional explanations are particularly appealing when a psychological mechanism introduces some apparent systematic distortion rather than random error (which could plausibly be explained by limited capacity). Reasoning certainly exhibits such systematic biases, most strikingly in the aforementioned case of the confirmation bias.

Evolutionary theory suggests that if individual reasoning is rather bad at figuring out the truth when used internally, then this cannot be its main function. Based on ideas introduced by Dan Sperber (2000 and 2001), the argumentative theory of reasoning has thus been developed to account for reasoning's features, including its biases, in a way that makes evolutionary sense of them. Instead of assuming, as the classical theory does, that the function of reasoning is to allow lone reasoners to improve their epistemic status through ratiocination, proponents of the new theory hypothesize that the function of reasoning is to find and evaluate reasons, so that individuals can convince other people and evaluate their arguments in dialogic contexts (Mercier and Sperber, 2011a and 2011b; Mercier and Landemore, 2012; Sperber, 2001; see also Billig, 1996; Gibbard, 1990).

The argumentative theory of reasoning thus breaks with the classical view first in the way it reaches its main hypothesis and, second, in the content of this hypothesis. By so doing, the argumentative approach is able to interpret what seemed like vices as virtues. If the goal of reasoning is to convince others, then the confirmation bias is actually useful, since it leads to the identification of arguments that can be used to achieve this goal. Likewise, we can make sense of the fact that people are generally good at falsifying statements that oppose their own views.

The relationship of the argumentative function to truth-finding is complex and worth emphasizing, especially in contrast to the more straightforward classical theory according to which one of the functions of reasoning in individuals is to figure out the truth about the world. In the argumentative theory of reasoning we need to distinguish between the complementary tasks of the argumentative function of reasoning, namely that of producing arguments for one's beliefs and that of assessing the arguments advanced by others. As far as the production of arguments is concerned, reasoning has (and should have) little concern for the pursuit of objective truth since its main function is to derive support for beliefs already accepted as true. When individuals wish to convince others of a given proposition, they generally do not check if the proposition is true since they already believe it. All they are interested in is finding good arguments to support the proposition and convince the listener.

By contrast, as listeners and receivers of arguments, individuals want to be able to evaluate arguments—that is, assess their epistemic soundness—in order to decide whether they should accept their conclusions or not. As far as this evaluative task of reasoning is concerned, it is indirectly concerned with the truth since individuals want to be able to change their mind when it is epistemically warranted.

One implication of the argumentative theory of reasoning is that the normal conditions for reasoning are social and, more specifically, deliberative. Here it should be noted that the term “normal” has no normative/moral connotations, but simply refers to a set of facts about the conditions in which we claim that reasoning evolved (as in Millikan, 1984). The normal conditions for the use of reasoning are, according to the argumentative theory of reasoning, those of deliberation with at least another person and the abnormal ones those of the solitary mind or non-deliberating groups. This emphasis of the theory on the social, intersubjective dimension of reasoning makes it particularly congenial with the core elements of deliberative democracy.

Deliberative democracy is a general umbrella in democratic theory for various theories that trace the legitimacy of political authority and political laws and decisions to deliberation among free and equal citizens (e.g., Cohen, 1989, p. 22). Deliberative democrats emphasize democracy as government by discussion and, specifically, rational deliberation, by which is meant a process of reason-giving among citizens about matters of the common good. While the term “deliberative democracy” itself was coined by Joseph Bessette (1980 and 1994), the theory has been elaborated by a number of authors (e.g., Benhabib, 1996; Cohen, 1989; Dryzek, 2000; Elster, 1986; Gutmann and Thompson, 1996 and 2002; Habermas, 1991 and 1996 and Rawls, 1971 and 1993⁶). The roots of the theory can be traced as far back as Aristotle, through Kant and J.S. Mill,

6 Rawls is arguably a slightly ambiguous deliberative democrat to the extent that the model of the original position in *A Theory of Justice* (1971) involves individuals placed behind a veil of ignorance that turns them into rational clones. As a commentator remarked, “[t]his is deliberation of a sort but only in terms of the weighing of arguments in the mind, not testing them in real political interaction... [It] downplays the social or interactive aspect of deliberation” (Dryzek, 2000, p. 15). By contrast, Habermas and others put forward the ideal of a more explicitly dialogical and intersubjective exchange in which the participants are supposed to maintain their concrete differences even as they seek a rational consensus (Habermas, 1995, p. 113). In his later work, Rawls substituted his own arguably overly monological ideal of deliberation among rational individuals placed under a veil of ignorance and seeking unanimous agreement with the more realistic and dialogical ideal of deliberation among “reasonable” individuals seeking an “overlapping consensus.” In its latest formulations, Rawls’ deliberative ideal arguably came to converge toward that of Habermas. See Rawls (1995); see also the analysis by McGann (2006, pp. 161-166).

although the most interesting heritage for our purpose is probably classical American pragmatism.

Pragmatists, more so even than contemporary deliberative democrats, have perceptively emphasized the psychology of the individual mind as essentially dialogical and intersubjective, emerging and constructed in large part in discursive interactions with others. John Dewey thus thought that “social intelligence” would emerge from direct deliberation among the members of the public, in their concomitant use of the embodied knowledge of past generations, rather than be produced by lone minds, whether of geniuses or political elites (Dewey, 1954 [1927], p. 218). George Herbert Mead specifically contended that “we must regard mind ... as arising and developing within the social process, within the empirical matrix of social interactions” (Mead, 1934, p. 133). The deliberative pragmatic tradition can thus be said to anticipate in crucial ways the core insight of the argumentative theory of reasoning that the normal context of reasoning is deliberative and fundamentally social.⁷

The boundaries of what counts as deliberation have been the object of some contestation among contemporary deliberative democrats—arguably pitting “Type I” deliberation theorists, who stick to a narrow concept of deliberation as an exchange of arguments in search of a rational consensus, against “Type II” deliberation theorists, who pursue a more empirical agenda and favor a more flexible and inclusive definition (Bächtiger et al., 2010). The disagreement between the two groups should not, however, overshadow what they have in common. Both “Types” favor the role of reasoning and argumentation in deliberation. Even “Type II” theorists, who argue for more inclusive definitions of deliberation that make room for non-rational discourse like story-telling or emotional language (e.g. Mouffe, 1998; Sanders, 1997; Young, 2000), in the end reserve a certain normative priority for argumentation over other forms of communication (see Dryzek, 2000, p. 48). The core definition of deliberation thus remains stable across both Type I and Type II deliberation theorists, as “an exchange of arguments for or against something” (as per Aristotle, 1991, I. 2). In deliberative exchanges, it is assumed that one of the main goals is to convince others through rationally persuasive arguments.

7 Note, however, that whereas classical pragmatists liked to talk about the “mind” as “social,” the argumentative theory of reasoning more modestly but also more accurately focuses on one specific mechanism of the mind, namely reasoning. The argumentative theory of reasoning thus integrates conceptual findings (such as evolutionary theory and the modularity of mind) as well as empirical data that were simply not available to these early predecessors.

In keeping with this focus on reasoning arguably shared by deliberative democrats from the classical pragmatists to their contemporary heirs, the new psychological theory of reasoning proposed here offers the following definition of deliberation: an activity is deliberative to the extent that reasoning is used to gather and evaluate arguments for and against a given proposition (see also Mercier and Landemore, 2012). This definition makes reasoning a centerpiece of deliberation. First, the cognitive activity of reasoning—the usage of “central” as opposed to “peripheral” routes—is crucial. Thus, the content of the utterances being exchanged is not all that matters; the way they are generated is important as well (two actors reciting from memory the scripted text of a deliberation would not be deliberating *per se*). Second, the definition stresses the necessity of an exchange, or more precisely, a feedback loop between reasoning from at least two points of view. Assuming that two people each hold one point of view, the following chain of events is required for genuine deliberation to take place: person A uses reasoning to make an argument from point of view a; person B uses reasoning to examine A’s argument from point of view b, which is at least partially opposed to point of view a; person B then uses reasoning to create an argument that partially or fully opposes the previous argument from the point of view b; A uses reasoning to examine B’s argument from point of view a. Notice that the definition of deliberation presented here allows for the possibility of “internal” as well as “external” deliberation, since it is possible—although often difficult—for even a lone reasoner to find arguments for an opposite point of view than hers.⁸ The definition of deliberation embraced by the argumentative theory of reasoning thus draws a sharp distinction between proper deliberation, which centrally involves the mental activity specified above (reasoning), and conversation or discussion, which may not involve this specific mental activity at all.⁹

In its relation to deliberative democracy, the general implications of the argumentative theory of reasoning are the following:

8 If A internally engages in such an exchange of arguments between the two points of view *a* and *b*, then this person is truly deliberating, in her head, with her internal representation of B’s point of view. Notice, importantly, that if A finds arguments supporting her own point of view only, then she will still be reasoning, but deliberation will not have taken place. Similarly, a group of people who all think like A and find arguments supporting the point of view a are not properly deliberating, even if these arguments are different from theirs, as long as they support the same position.

9 Manin (2005) has himself called “debate” the type of argumentative deliberation that we embrace, by contrast with discussion. We do not use that term but simply narrow down our concept of deliberation to exclude mere discussion from it. Notice also that we are not saying that in the phenomenon of group polarization, people do not reason, simply that they do not deliberate.

1. The theory predicts that even genuinely truth-oriented individuals—that is participants in the deliberation animated by a sincere desire to figure out the truth (for example, about what the public good requires or the implications of a given policy) in contrast to partisans, ideologues, or strategic rhetoricians—will have a hard time fighting their hard-wired confirmation bias. What the argumentative theory of reasoning implies, therefore, in a non-normative and purely prudential way, is that if deliberative democrats care about the epistemic properties of democratic deliberation, they should ensure that deliberation is conducted in such a way as to ensure that individual confirmation biases do not produce epistemic damages.
2. Reasoning is more likely to yield epistemic benefits for both the individual and the group—that is, to be conducive to true or truer individual and collective beliefs—when it takes place in its normal, deliberative context.¹⁰ The idea is that even if the function of reasoning is argumentative—to produce and evaluate arguments—rather than purely epistemic, it should still lead to an improvement in epistemic status, at both the individual and collective level. Otherwise there would be no point in listening to other people's arguments—and then no point in making any argument.

Before proceeding any further, two potential sources of misunderstanding must be dispelled. First, the claims made by the argumentative theory of reasoning are descriptive; they can be true or false, but they have no direct implications in terms of what is morally right or wrong or in terms of the norms that ought to guide deliberators. In fact the argumentative theory of reasoning is compatible with many normative views of politics and does not carry a normative agenda by itself. In particular, even though the argumentative theory of reasoning claims that reasoning has evolved primarily in order to convince others and assess their arguments, it does not mean that the theory advocates for a policy of power struggle, partisanship, or manipulation. Despite its lack of a normative agenda, however the argumentative theory of reasoning provides theoretical ammunition for advocates of deliberative democracy who argue

10 Of course, the claims made here are only probabilistic. It is possible for an individual to apply herself and successfully think up counter-arguments to her prior views. Similarly, it is possible for like-minded groups to do the same thing, for example by assigning someone the role of the devil's advocate. The theory simply posits that given what we know of the strength of the confirmation bias and the mental discipline it requires for people to fight it, solitary reasoning or reasoning with like-minded people is less likely to lead to good epistemic outcomes.

on the basis of the epistemic properties of democratic deliberation. The argumentative theory of reasoning is thus not only compatible with an epistemic, deliberative approach to democracy but, as this paper argues, its predictions converge with the predictions of deliberative democrats.

Second, as mentioned above, the argumentative theory of reasoning does not divorce reasoning entirely from truth-seeking. Truth remains on the horizon of the argumentative theory of reasoning: reasoning also has the purpose of evaluating arguments, which forces arguers to make (mostly) sound arguments. People may occasionally be fooled by rhetoric and well-phrased lies, but it is ultimately easier to convince people when what you say is true and can sustain cool and reflective examination. Convincing others is conceptually distinct from merely persuading them. Persuasion has to do with the package in which a message comes (the rhetoric of it), whereas conviction has to do with the substance of the argument. Regarding evaluation, reasoning seeks truth either in the recognition of the force of the opponent's argument (what Habermas calls "the unforced force of the better argument") or, less directly, through attempts at falsifying it. There is thus no necessary disconnection between truth seeking and the function of reasoning, although the relationship is, the theory argues, first and foremost through the function of arguing with others.

In the same way that the empirical findings about the properties of democratic deliberation may help reformulate or reconsider various ideals of deliberative democracy, using the right theory of reasoning may help deliberative democrats to better understand when and where deliberation is likely to work, and thus help refine the deliberative democracy ideal.

The rest of this paper seeks to demonstrate that the argumentative theory of reasoning is a promising candidate for such a task by outlining the theory's predictions for the epistemic properties of deliberation in response to two classical objections to deliberative democracy—in particular, the claim that democratic deliberation does not do much to change people's minds, or that (when it changes them), it changes them for the worse. In the next section, we first consider the case on which Goodin and Niemeyer build their recommendation against external deliberation and for "deliberation within."

DELIBERATION WITHIN VERSUS DELIBERATION WITH OTHERS

The argumentative theory of reasoning predicts that it is usually deliberation with others, rather than solitary reasoning, which will have the desired transformative and epistemic properties. Specifically, the theory predicts that external-collective processes, rather than internal-reflective processes, should be at least as central to the process of democratic deliberation as deliberative

democrats commonly suppose. Some democratic theorists, however, have advanced the opposite thesis.

Goodin and Niemeyer (2003; see also Goodin, 2008) thus bemoan the fact that since the deliberative turn in the 1990s, most theorists have moved away from the monological ideal of deliberation at the heart of Rawls' early model of the original position, instead embracing Habermas' later emphasis on actual, interpersonal engagements. For Goodin and Niemeyer, this move away from hypothetical imagined discourse toward actual deliberation is misguided because, for them, it is "deliberation within" rather than talking with others—or "external deliberation"—that should be the focus of theories of deliberative democracy.¹¹

Goodin first coined the expression "deliberation within" as a way to capture the pondering of reasons that goes on in an individual's mind prior to and during his engagement in deliberation with others. This pondering of reasons involves an exercise in reflection and imagination, in which one is supposed to put oneself in other people's shoes and imagine what their arguments might be. In that sense, deliberation within is not unlike the hypothetical, monological type of ratiocination defended by Rawls. By contrast, Goodin labels "external deliberation" the type of discursive exchanges whereby a group collectively ponders the reasons defended by different individuals.¹²

One of the motivations for this embrace of deliberation within over deliberation with others is, importantly, the unfeasibility of group deliberation on the mass scale of existing democracies and, conversely, the obvious feasibility, at any scale, of deliberation within. If it can be shown that—even in the "minipublics"¹³ studied by Goodin and Niemeyer—what does most of the work is actually a form of internal ratiocination rather than discursive

11 While the original article by Goodin and Niemeyer is from 2003, all the citations in this section will be to its latest version as a chapter in Goodin (2008).

12 The choice of "external" to characterize the deliberation that goes on in social settings is slightly misleading in that it suggests that in deliberation with others, ideas are processed in the ether, outside of anyone's heads. Of course, the actual processing of arguments is always taking place in someone's head, not in some fictitious 'group mind'. But the idea expressed by 'external deliberation' is that when many individuals deliberate, their parallel individual reasoning takes as an input the output of at least one other person in the group, rather than functioning in autarky and generating all the arguments pro and con from the inside. To avoid the ambiguity, this paper uses the expression "deliberation with others."

13 A minipublic is "a deliberative forum consisting of 20-500 participants, focused on a particular issue, selected as a representative sample of the public affected by the issue, and convened for a period of time sufficient for participants to form considered opinions and judgments. Examples of minipublics include deliberative polling, citizen juries, consensus conferences and citizen assemblies." See Warren (2008, p. 1).

exchange, there would be reason to think that where group deliberation is not feasible, it can easily be replaced by internal deliberation. Thus, on a large scale (especially), the ideal of deliberation would have to be less discursive and interpersonal, and more self-reflective and intra-personal.

The other main reason why Goodin and Niemeyer think we should return our focus to hypothetical/monological rather than actual/dialogical deliberation is that as far as changing people's minds, deliberation within is also where the action is. Asking "When does deliberation begin?", they answer that not only does deliberation begin in the head of individuals prior to their engagement in social and interactive deliberation, but that much of the work of deliberation ends there. Whatever is later externalized or talked out does not do as much as what happened earlier in the privacy of people's minds. For Goodin and Niemeyer, there seems to be both a chronological and epistemic priority of deliberation within over deliberation with others. In fact, they argue that the point of external deliberation is largely democratic legitimation, beyond which it does not do much, epistemically speaking (Goodin, 2008, pp. 39-40). According to them, "much (maybe most) of the work of deliberation occurs well before the formal proceedings [of public deliberative processes]—before the organized "talking together"—ever begin" (p. 40).

Goodin and Niemeyer's claim relies on the case study of a specific "mini-public," an Australian citizen's jury convened in January 2000 to discuss policy options for a controversial road, called the Bloomfield Track, running through an Australian rainforest. The issue was, roughly, to decide how to reconcile the problem of community access and environmental concerns for the unique combination of rainforest and coastal reef endangered by the track. Without going too much into the specifics of the citizen's jury organization, what the analysis brings into relief is how most of the attitudinal changes in jury members took place prior to actual formal deliberation with other jury members. During this "information" phase, jurors visited the rain forest and the Bloomfield track, and were given background briefings and presentations by an assembly of witnesses. Though the phase allowed for verbal exchanges between jurors, on site, and over tea and lunch at different points, none of them were as organized as the official deliberation phase. As Goodin and Niemeyer explicitly define deliberation in the narrower sense of "*collectively organized* conversations among a group of coequals aiming at reacting (or moving towards) some joint view on some issues of common concern," casual interpersonal exchanges during the information phase do not qualify as external deliberation (p. 48, our emphasis).

Substantively speaking, what happened during the information phase is that jurors initially concerned about the impact of the Bloomfield Track on the nearby coral reefs were no longer so worried halfway through it. Similarly,

jurors who initially worried about the importance of the track for tourism and as an access road for people living in remote northern towns were largely reassured. By contrast, during the discussion phase, a similarly large change occurred in attitudes toward only one proposition: "I will be made worse off by any decision about the Bloomfield Track." While the jurors worried that this might be true throughout the information phase, their fear started to dissipate over the course of the formal deliberation.

According to Goodin and Niemeyer's reading of the experiment, the information phase was much more important than the deliberation phase in transforming jurors' policy preferences:

the simple process of jurors seeing the site for themselves, focusing their minds on the issues, and listening to what experts had to say did all the work in changing jurors' attitudes. Talking among themselves, as a jury, did virtually none of it (pp. 58-59).

This would seem to establish the crucial importance of deliberation within and the lesser importance of external deliberation.

Such a finding, they argue, has potentially important implications for deliberative democracy. To the extent that it is possible to extrapolate from the micro-deliberation of a jury to the macro-deliberations of mass democracy, there are lessons to be drawn from the first to improve the practice of the second. Goodin and Niemeyer thus invite us to speculate that much of the change of opinions that occurs in mass democracy could be due not so much to any formal, organized group discussion—presumably those in national assemblies between representatives as well as those taking place in town-hall meetings or during such events as *AmericaSpeaks* or *Deliberation Day*—but to the internal reflection individually conducted ahead of those, "within individuals themselves or in informal interactions, well in advance of any formal, organized group discussion" (p. 59). This is a rather good thing, in their view, if actual, mass scale group deliberation is unfeasible.

Goodin and Niemeyer's argument runs directly counter to the predictions of other deliberative democrats and the proponents of the argumentative theory of reasoning, that deliberation is more likely to have positive epistemic properties in the dialogical context of group reasoning than in the monological context of individual reasoning. Their argument, however, relies on a relatively weak empirical case.

First, even if one case study were enough to support the case for deliberation within against external deliberation, it would not be clear that the example shows as much as Goodin and Niemeyer say it does. To start, the informational phase is far from pure and in fact contains many deliberative features

that could be credited for the change of jurors' minds, rather than any internal deliberation. Indeed, Goodin and Niemeyer themselves grant that much of the work of the first (informative) phase was done discursively.¹⁴ Insisting, then, on keeping the information and deliberation phases separate and attributing all the merit of opinion change to the first phase, seems artificial. To be sure, the "formal official task of the citizens' jury" was in one case gathering information and, in the other, deliberating (p. 48). But the fact that much of the reasoning that prompted the jurors' changes of minds occurred in the first phase cannot be attributed to internal deliberation alone, to the extent that informal and formal exchanges between jurors at that point contained arguments for or against keeping the track. Since none of the content of the exchanges during that first information phase is documented—only the content of opinions at different points in the experiment is measured—it is very difficult to judge whether this information phase should not instead be recast as informal deliberation.¹⁵

Related to this, a second problem arises with the construction of the experiment itself: the fact that jurors themselves perceived that their preferences had changed more during the information phase¹⁶ may be an artifact of

14 "Witnesses talked, they were interrogated, and so on. There was also much talking among jurors themselves, both informally (over lunch or tea) and formally (in deciding what questions to ask of witnesses)" (p. 47).

15 To be fair, Goodin and Niemeyer take that objection into account when they remark that the fact that some discussion took place in the first phase of the jury discussion might make it "a model of deliberation in the public sphere of 'civil society.'" In other words, they admit that the experiment did not so much juxtapose an information and a deliberation phase, as an informal with a formal deliberative phase. We think this is a rather powerful objection. Goodin and Niemeyer, however, simply counter it by claiming that the Bloomfield track had long been a contentious issue within the public sphere of which jurors were already part prior to engaging in that particular jury, so that "something in that initial phase of the jury must have made a difference to them, that informal discussions in the public sphere had previously not." A critique may well grant the point and yet deny that that "something" had anything to do with deliberation within and all to do with a higher motivation to listen to what is said in the minipublic sphere of the jury than to what was ever said in the larger public sphere. The higher motivation itself could be explained by, say, a heightened sense of efficacy in the smaller rather than the larger public sphere. The same analysis about the role of motivation as a stimulant to reasoning could be applied to a recent paper by Muhlberger and Weber (2006), which seems to support Goodin and Niemeyer's conclusion in establishing the superiority of information over deliberation. In both reported experiments, all participants are anticipating the prospect of group deliberation, even if they have not yet taken part in group deliberation or will not formally do so. In both cases, it could very well be this motivating factor that does the work, rather than deliberation within.

16 Three quarters of the jurors thought discussion was the least important factor in explaining their change of mind (Goodin, 2008, p. 51).

the way the experiment was presented to them. Even if informal deliberation took place during the first phase, jurors were encouraged by the questionnaire to conceptualize the first phase not as discussion but instead as information, which might plausibly affect their perception of what occurred during each phase.

These limitations, partially acknowledged by Goodin and Niemeyer themselves, cast some doubt upon the general validity of their conclusion. As a result, it can be argued that Goodin and Niemeyer's results do not make a strong case for deliberation within as preferable to deliberation with others, at least where deliberation with others is feasible. Thus, in spite of the case they present, the argumentative theory of reasoning remains unharmed, along with its prediction of the epistemic superiority of deliberation with others over deliberation within.

The claim put forward by the argumentative theory of reasoning that the normal condition of reasoning is deliberation with others rather than deliberation within does not mean that people can never properly reason by themselves. In fact, recent results show that it is both possible and sometimes desirable to stimulate deliberation within where there is an anticipation that an individual might at least have to participate in group deliberation and defend their arguments to others (Muhlberger and Weber, 2006; see also the literature on accountability reviewed (for instance) in Lerner and Tetlock, 1999). Conversely, it is likely that after experiencing deliberation with others in a minipublic on one subject, individuals are then more capable of replicating the process of reasoning from different perspectives. It is perhaps even possible to prime individuals to reason alone in an argumentative sense, despite a natural tendency for them not to do so.

Nonetheless, the argumentative theory of reasoning does suggest a certain priority, if not superiority, of deliberation with others over internal deliberation: while human beings do not need an actual collective deliberation to be able to reason properly, the fact that the normal conditions of reasoning are those where one naturally encounters a variety of points of view makes it more likely that reasoning—in particular the part of it that has to do with the evaluation of arguments—will occur when individuals talk things out with others than when they try to think it through by themselves.

Talking things out with others, however, is not foolproof, and group deliberation will not always have the hoped-for epistemic properties. Let us now see how the argumentative theory of reasoning fares when confronted with another classical objection raised against democratic deliberation: the so-called "law of group polarization." The next section explains what the challenge is and how the theory is equipped to answer it.

THE OBJECTION FROM THE “LAW OF GROUP POLARIZATION”

In different books and in an influential article, Cass Sunstein (2002) has argued that a major problem for democratic deliberation and, more generally, deliberative democracy, is what he calls “the law of group polarization” or the tendency for a group already sharing some views to become more extreme in these views following joint discussion. Of course, among polarizing groups, there might be some that actually converge on the truth, so polarization need not always indicate that deliberation makes things worse. However, if polarization is a law that applies no matter what the original consensus, it is highly doubtful that in most cases the polarization effect is connected to any epistemic improvement. In fact, even occasional convergence toward the truth might be achieved accidentally, and thus would fail to provide an argument for deliberation. As Sunstein suggests, if group polarization is such a routine phenomenon, it would seem to provide a strong argument for turning away from democratic deliberation, even where it is feasible, toward either a mere aggregation of individual judgments, toward individual deliberation within, or a combination of both. Furthermore, this alleged law apparently contradicts our prediction that reasoning with others is good at improving the epistemic status of individuals and indirectly that of the group as well.

According to Sunstein, the law of group polarization accounts for why, after discussion, a group of moderately pro-feminist women will become more strongly pro-feminist; why citizens of France become more critical of the United States and its intentions with respect to economic aid; or why whites predisposed to show racial prejudices offer more negative responses to the question of whether white racism is responsible for conditions faced by African-Americans in American cities.¹⁷

In order to explain group polarization in such cases, Sunstein turns to two well-established (theoretically and empirically) mechanisms underlying group polarization. The first involves social influences—that is, the fact that people wish to be perceived favorably by other members of the group. Such tendencies create a pressure to conform to the perceived dominant norm. The result is to press the group’s position toward one or another extreme, and also to induce shifts in individual members—particularly if they hold minority views.

The other mechanism is the limited pool of persuasive arguments to which members of the group are exposed, and the path-dependence that this creates toward more extreme versions of foregone conclusions. To the extent that individuals’ positions are partly a function of which arguments they are exposed

17 All examples are from Sunstein (2002, p. 178).

to, and to the extent that a group already prejudiced in one direction will produce a much greater amount of argument for one side than for the other, group discussion is likely to reinforce individuals' prior beliefs. In Sunstein's words, "the key is the existence of a limited argument pool, one that is skewed (speaking purely descriptively) in a particular direction" (p. 159).

Among the general conclusions that Sunstein derives from "the law of group polarization" is that deliberation is overrated. In his view, the underlying mechanisms of group deliberation "do not provide much reason for confidence" (p. 187). He even suggests that since we do not have any reason to think that deliberation is "making things better rather than worse," and given the mechanisms prevailing behind the law of group polarization, "the results of deliberative judgments may be far worse than the results of simply taking the median of pre-deliberation judgments" (p. 187). In other words, and in contrast to Goodin and Niemeyer, Sunstein believes that deliberation not only changes people minds, but changes them for the worse. Are Sunstein's warnings about the risk of group polarization a reason to give up on deliberation with others and instead embrace deliberation within or an aggregation of those views? In other words, should we give up on the ideal of deliberative democracy? We think not.

First, the problem of group polarization does not constitute a reason to embrace deliberation within over external deliberation because, even if the pressure to conform had no effect on the lone reasoner (which nothing guarantees), the limited pool of arguments present within her own head certainly would. Second, such a case against deliberation with others suffers from the fact that this law of polarization applies only to a type of communication that fails the standard of deliberation as the proponents of the argumentative theory of reasoning and most deliberative democrats define it.

Recall that according to our definition, deliberation must involve a genuine consideration of arguments for and against something. An interpersonal exchange in which arguments for both sides are not properly considered does not count as "deliberative." From that point of view, many of the discursive exchanges among like-minded people described by Sunstein—be they groups of feminists, Anti-American French, or racist Americans—are likely to fall short of the requirements of deliberation. The fact that such exchanges lead to polarization is therefore not an indictment of deliberation properly construed, but of something else which at best deserves the name "discussion."¹⁸ The key

18 Manin (2005) makes a similar point. He further insists that, contrary to what many authors besides Sunstein emphasize (e. g., Bohman, 2007), diversity of views is not enough since even people with different perspectives may fail to engage each other's arguments in the kind of adversarial manner conducive to epistemically satisfying deliberation.

is not just to have diverse arguments, but arguments that respond to each other in critical, even conflicting ways.

Sunstein (2002, p. 177) calls exchanges among like-minded people “enclave deliberation” (presumably after Mansbridge, 1994). Yet, even among like-minded people, there is a difference between an argumentative exchange—that is, an exchange that genuinely pits arguments against each other—and an exchange of diverse but self-reinforcing views. It is not just the starting point of the deliberation that matters; deliberative exchanges must be based on arguments that oppose each other. As with individuals, not all like-minded groups are bound to polarize. The advantage of a group over an individual, however, is that the greater the number of people in the group, the less likely they are to be all perfectly like-minded, hence increasing the chances that a conflicting perspective can trigger genuine deliberation.¹⁹

If we consider only the cases of real deliberation (where arguments for and against something are debated), the results are much more positive. Such deliberation does tend to produce good reasoning, which in turn produces good outcomes, in terms of improving beliefs and related decisions (see Mercier and Landemore, 2012). For instance, when people have different and conflicting opinions on issues about which there exists a factual answer, deliberation improves performances, sometimes dramatically (see e.g. Sniezek and Henry, 1989). This also applies when there is no strictly superior answer but one can distinguish between better and worse arguments offered in support of a given alternative (Laughlin, Bonner and Miner, 2002). The good performance of reasoning in the context of genuine deliberation is also supported by many studies on teamwork in the workplace and at school (e.g. Michaelsen, Watson and Black, 1989; Slavin, 1996), as well as in studies of deliberating citizens in various contexts (e.g. Fishkin, 2009; Warren and Pearse, 2008). The consensus

19 Sunstein briefly raises the possibility that the kind of group exchanges among like-minded people that he considers—“enclave deliberation”—does not qualify as proper deliberation. To this objection, his terse reply is that, “[i]f deliberation requires a measure of disagreement, this is a serious question” (2002, p. 186). He nonetheless goes on to argue that “even like-minded people will have different perspectives and views, so that a group of people who tend to like affirmative action, or to fear global warming, will produce *some kind of exchange of opinion*. I will urge that in spite of this point, enclave deliberation raises serious difficulties for the participants and possibly for society as a whole” (p. 186, our emphasis). We take it that in fact, at this point in the paper, and regardless of whatever problems arise from group polarization for individuals and society, Sunstein has conceded the main issue: Discussion among like-minded people who fail to consider arguments pro and con is not deliberation *per se* and the law of polarization, which turns out to apply only to groups of like-minded people who do not properly deliberate, can no longer be used as an argument against democratic deliberation.

is that the deliberating groups of citizens in these cases ended up with better-informed beliefs and, where relevant, more compelling policy proposals.²⁰

When we shift the focus from the starting point of deliberation or discussion (whether or not there is a like-minded group) to its content (whether or not there is a real exchange of arguments), we can see that not all groups of like-minded people are doomed to polarize. Therefore, against what Sunstein suggests, the threat of polarization might not be well-addressed by diversifying the pool of opinions to include “full information”—knowledge of all the relevant facts, values, options, and arguments that might affect a decision (2002, pp. 191-192). Such a requirement, as Sunstein points out, would indeed be daunting, should we have to meet it in order to realize the epistemic benefits of deliberation. While more information is undoubtedly better than less, it is just as important (and perhaps more important) to ensure that people treat this information correctly, that is, seek and build opposing arguments on the basis of the available information. Depolarization can then occur even if the pool of arguments and information is far from exhaustive.²¹ And even if we have access to full information, there is still value to be had in talking things out with others.

The argumentative theory of reasoning thus predicts that, more important than the initial distribution of information, is the role of participants’ confirmation biases. Even full information cannot guarantee depolarization if everybody’s confirmation bias points in the same direction to begin with. Many different confirmation biases can be put to good use, however. When group members disagree, each of them is still more likely to find arguments for her own side of the issue, but the combined effects of their respective biases guarantees a more exhaustive individual exposure to arguments for and against a given issue. As a bonus, there is no need for full information prior to the debate: full (or at least, more complete) information is precisely one of the main achievements of the debate. Far from being a nuisance, the confirmation bias ensures a division of cognitive labor within the group.

In our view, Sunstein’s argument blows out of proportion an epistemic failure that affects only groups of strictly like-minded people that do not engage

20 Gerry Mackie (2006) provides an important methodological caveat for these studies. He notes that the effects of deliberation are “typically latent, indirect, delayed, or disguised,” and that therefore some studies may fail to observe them even though they are real. This argument therefore strengthens any positive results actually obtained.

21 Of course, if information—the argument pool—is too limited and too biased, deliberation based on it will not achieve miracles. But between the extremes of seriously limited and biased information on the one hand and full information on the other, there is a space in which deliberation can have transformative and epistemic properties, even among initially like-minded people.

in genuine deliberation *per se*; his argument also fails to see that there is something more fundamentally problematic than social homogeneity. Thus, the real question is: Why do like-minded people fail to consider other arguments, and how can we institutionalize collective decision-making so as to remedy this phenomenon? The theory of reasoning as arguing predicts that only discursive exchanges among like-minded people that do not involve a proper weighing of the pros and cons will lead to polarization, but not necessarily discussion among people who start with the same information and argument pool but engage in proper deliberation, even on a skewed informational basis.

CONCLUSION

The argumentative theory of reasoning used in this article yields predictions regarding the transformative properties of deliberation that should give pause to advocates of deliberation within or sheer judgment aggregation, and give heart to advocates of external deliberation. The theory allows us to predict where deliberation is likely to work well—in contexts that fulfill or approximate the normal circumstances for which reasoning was designed, i. e., argumentative, social contexts—and when it is likely not to—in abnormal contexts, i. e., solitary reasoning or non-deliberative discussion among like-minded people.

Most importantly for deliberative democrats, if this theory of reasoning is correct, it lends plausibility to the claim implicit in the normative ideal of deliberative democracy, that deliberation with others has more epistemic virtues than reasoning on one's own.

Finally, the argumentative theory of reasoning also suggests that there is nothing utopian about the demands placed by deliberative democrats on individual reasoning. In its normal, dialogical context, reasoning performs its function well; in this context, confirmation biases are actually harnessed to epistemic benefits. There is no need to deplore or try to fix the limitations of individual reasoning. What matters is to set up the optimal conditions for it: genuine deliberation with others.

REFERENCES

- ARISTOTLE (1991), *On Rhetoric: A Theory of Civic Discourse*, G. Kennedy (trans.), Oxford, Oxford University Press.
- BÄCHTIGER, A., et al. (2010), "Disentangling diversity in deliberative democracy: Competing theories, their blind spots and complementarities". *Journal of Political Philosophy*, 18 (1), pp. 32-63.
- BARKOW, J., COSMIDES, L., TOOBY, J. (2002), *The Adapted Mind*, Oxford, Oxford University Press.
- BENHABIB, S. (1996), *Democracy and Difference. Contesting the Boundaries of the Political*, Princeton, Princeton University Press.
- BESSETTE, J.M. (1980), "Deliberative democracy: The majority principle in republican government?". In R. Goldwin and W. Shambra (eds.), *How Democratic is the Constitution?*, Washington DC, AEI, pp. 102-116.
- BESSETTE, J.M. (1994), *The Mild Voice of Reason: Deliberative Democracy and American National Government*, Chicago, University of Chicago Press.
- BILLIG, M. (1996), *Arguing and Thinking: A Rhetorical Approach to Social Psychology*, New York, Cambridge University Press.
- BOHMAN, J. (2007), "Political communication and the epistemic value of diversity: Deliberation and legitimation in media societies". *Communication Theory*, 17 (4), pp. 348-355.
- COHEN, J. (1989), "Deliberative Democracy and Democratic Legitimacy". In A. Hamlin and P. Pettit (eds.), *The Good Polity*, Oxford, Blackwell, pp. 17-34.
- DELLI CARPINI, M. X., COOK, F., JACOBS, L. (2004), "Public deliberation, discursive participation, and citizen engagement: A review of the empirical literature". *Annual Review of Political Science*, 7, pp. 315-344.
- DENES-RAJ, V., EPSTEIN, S. (1994), "Conflict between intuitive and rational processing: When people behave against their better judgment". *Journal of Personality and Social Psychology*, 66 (5), pp. 819-829.
- DEWEY, J. (1954 [1927]), *The Public and Its Problems*, Chicago, Swallow Press.
- DIJKSTERHUIS, A. (2004), "Think different: The merits of unconscious thought in preference development and decision making". *Journal of Personality and Social Psychology*, 87, pp. 586-598.
- DRYZEK, J. (2000), *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*, New York, Oxford University Press.
- ELSTER, J. (1986), "The Market and the Forum". In J. Elster and A. Hylland (eds.), *Foundations of Social Choice Theory*, Cambridge, Cambridge University Press, pp. 103-132.
- ELSTER, J. (2007), *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*, Cambridge, Cambridge University Press.
- EVANS, J. (2002), "Logic and human reasoning: An assessment of the deduction paradigm". *Psychological Bulletin*, 128 (6), pp. 978-996.
- EVANS, J., OVER, D. (1996), *Rationality and Reasoning*, Hove, Psychology Press.
- FARRAR, C., et al. (2010), "Disaggregating deliberation's effects: An experiment within a deliberative poll". *British Journal of Political Science*, 40 (2), pp. 333-347.
- FISHKIN, J. (2009), *When the People Speak: Deliberative Democracy and Public Consultation*, Oxford, Oxford University Press.
- FREDERICK, S. (2005), "Cognitive reflection and decision making". *The Journal of Economic Perspectives*, 19 (4), pp. 25-42.

- GIBBARD, A. (1990), *Wise Choices, Apt Feelings: A Theory of Normative Judgment*, Cambridge, Harvard University Press.
- GOODIN, R. E. (2000), "Democratic deliberation within". *Philosophy and Public Affairs*, 29 (1), pp. 81-109.
- GOODIN, R. E. (2003), *Reflective Democracy*, Oxford and New York, Oxford University Press.
- GOODIN, R. E. (2008), *Innovating Democracy: Democratic Theory and Practice after the Deliberative Turn*, Oxford, Oxford University Press.
- GOODIN, R. E., NIEMEYER, J. S. (2003), "When does deliberation begin? Internal reflection versus public discussion in deliberative democracy". *Political Studies*, 51 (4), pp. 627-649.
- GUENTHER C., ALICKE, M. (2008), "Self-enhancement and belief perseverance". *Journal of Experimental Social Psychology*, 44 (3), pp. 706-712.
- GUTMANN, A., THOMPSON, D. (1996), *Democracy and Disagreement*, Princeton, Princeton University Press.
- GUTMANN, A., THOMPSON, D. (2002), *Why Deliberative Democracy?*, Princeton, Princeton University Press.
- HABERMAS, J. (1991), *Moral Consciousness and Communicative Action*, Cambridge, MA, MIT Press.
- HABERMAS, J. (1995), "Reconciliation through the Public Use of Reason: Remarks on John Rawls's Political Liberalism". *Journal of Moral Philosophy*, 92 (3), pp. 109-131.
- HABERMAS, J. (1996), *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (trans. William Rehg), Cambridge, MA, MIT Press.
- HARDIN, R. (1980), "Rationality, irrationality and functionalist explanation". *Social Science Information*, 19, pp. 755-772.
- KAHNEMAN, D. (2003), "A perspective on judgment and choice: Mapping bounded rationality". *American Psychologist*, 58 (9), pp. 697-720.
- KERR, N. L., MACCOUN, R., KRAMER, G. P. (1996), "Bias in judgment: Comparing individuals and groups". *Psychological Review*, 103, pp. 687-719.
- KLEIN, S., et al. (2002), "Decisions and the evolution of memory: Multiple systems, multiple functions". *Psychological Review*, 109, pp. 306-332.
- KORIAT, A., LICHTENSTEIN, S., FISCHHOFF, B. (1980), "Reasons for confidence". *Journal of Experimental Psychology: Human Learning and Memory*, 6 (2), pp. 107-118.
- LAUGHLIN, P. R., BONNER, B. L., MINER, A. G. (2002), "Groups perform better than the best individuals on letters-to-numbers problems." *Organizational Behavior and Human Decision Processes*, 88 (2), pp. 605-620.
- LERNER, J. S., TETLOCK, P. E. (1999), "Accounting for the effects of accountability". *Psychological Bulletin*, 125, pp. 255-275.
- MACKIE, G. (2006), "Does democratic deliberation change minds?". *Philosophy, Politics and Economics*, 5 (3), pp. 279-303.
- MANIN, B. (2005), "Democratic Deliberation: why we should focus on debate rather than discussion". Paper delivered at the Program in Ethics and Public Affairs Seminar, Princeton University, 13 October.
- MANSBRIDGE, J. (1994), "Using power/fighting power". *Constellations*, 1 (1), pp. 53-73.
- MCGANN, A. (2006), *The Logic of Democracy*, Ann Arbor, MI, Michigan University Press.
- MEAD, G. H. (1934), *Mind, Self and Society*, Chicago, University of Chicago Press.
- MENDELBERG, T. (2002), "The deliberative citizen: Theory and evidence". *Political Decision Making, Deliberation and Participation*, 6 (1), pp. 151-193.

- MERCIER, H., SPERBER, D. (2011a), "Argumentation: its adaptiveness and efficacy". *Behavioral and Brain Sciences*, 34 (2), pp. 94-111.
- MERCIER, H., SPERBER, D. (2011b), "Why do humans reason? Arguments for an argumentative theory". *Behavioral and Brain Sciences*, 34 (2), pp. 57-74.
- MERCIER, H., LANDEMORE, H. (2012), "Reason is for arguing: Understanding the successes and failures of deliberation". *Political Psychology*, 33 (2), pp. 243-258.
- MICHAELSEN, L. K., WATSON, W. E., BLACK, R. H. (1989), "A Realistic test of individual versus group consensus decision making". *Journal of Applied Psychology*, 74 (5), pp. 834-839.
- MILLIKAN, R. (1984), *Language, Thought, and Other Biological Categories: New Foundations for Realism*, Cambridge, MIT Press.
- MOUFFE, C. (1998), "Deliberative democracy or agonistic pluralism?". *Dialogue International Edition*, 7-8, pp. 9-21.
- MUHLBERGER, P., WEBER, L. M. (2006), "Lessons from the Virtual Agora Project: The effects of agency, identity, information, and deliberation on political knowledge". *Journal of Public Deliberation*, 2 (1), pp. 1-39.
- NICKERSON, R. S. (1998), "Confirmation bias: A ubiquitous phenomenon in many guises". *Review of General Psychology*, 2 (2), pp. 175-220.
- RAWLS, J. (1971), *A Theory of Justice*, Cambridge, Massachusetts, Belknap Press of Harvard University Press.
- RAWLS, J. (1995), "Political Liberalism: Reply to Habermas". *The Journal of Philosophy*, 92 (3), pp. 132-180.
- RAWLS, J. (1993), *Political Liberalism. The John Dewey Essays in Philosophy*, 4, New York, Columbia University Press.
- ROSS, L., LEPPER, M., HUBBARD, M. (1975), "Perseverance in self-perception and social perception: Biased attributional processes in the debriefing paradigm". *Journal of Personality and Social Psychology*, 32, pp. 880-892.
- RYFE, D. M. (2005), "Does deliberative democracy work?". *Annual Review of Political Science*, 8, pp. 49-71.
- SANDERS, L. (1997), "Against deliberation". *Political Theory*, 25 (3), pp. 347-376.
- SHAFIR, E., SIMONSON, I., TVERSKY, A. (1993), "Reason-based choice". *Cognition*, 49 (1-2), pp. 11-36.
- SLAVIN, R. E. (1996), "Research on cooperative learning and achievement: What we know, what we need to know". *Contemporary Educational Psychology*, 21 (1), pp. 43-69.
- SNIEZEK, J., HENRY, R. (1989), "Accuracy and confidence in group judgment". *Organizational Behavior and Human Decision Processes*, 43, pp. 1-28.
- SPERBER, D. (2000), "Metarepresentations in an evolutionary perspective". In D. Sperber (ed.), *Metarepresentations: A Multidisciplinary Perspective*, Oxford, Oxford University Press, pp. 117-137.
- SPERBER, D. (2001), "An evolutionary perspective on testimony and argumentation". *Philosophical Topics*, 29, pp. 401-413.
- STANOVICH, K. (2004), *The Robot's Rebellion*, Chicago, University of Chicago Press.
- SUNSTEIN, C. (2002), "The law of group polarization". *Journal of Political Philosophy*, 10 (2), pp. 175-195.
- SUROWIECKI, J. (2004), *The Wisdom of Crowds: Why the Many are Smarter than the Few and How Collective Wisdom Shapes Business, Economies, Societies, and Nations*, New York, Doubleday.

- THOMPSON, D. (2008), "Deliberative democratic theory and empirical political science". *Annual Review of Political Science*, 11, pp. 497-520.
- WARREN, M. E. (2008), "Two trust-based uses of mini-publics in democracy". Paper delivered at Conference on Democracy and the Deliberative Society, University of York.
- WARREN, M. E., PEARSE, H. (2008), *Designing Deliberative Democracy: the British Columbia Citizens' Assembly*, Cambridge, Cambridge University Press.
- WASON, P. C. (1966), "Reasoning". In B. M. Foss (ed.), *New Horizons in Psychology*, New York, Penguin.
- WASON, P. C., BROOKS, P. G. (1979), "THOG: The anatomy of a problem". *Psychological Research*, 41 (1), pp. 79-90.
- WILSON, T., SCHOOLER, J. (1991), "Thinking too much: Introspection can reduce the quality of preferences and decisions". *Journal of Personality and Social Psychology*, 60, pp. 181-192.
- YOUNG, I. M. (2000), *Inclusion and Democracy*, Oxford, Oxford University Press.

Received 29-06-2012; Accepted for publication 27-09-2012.

LANDEMORE, H., MERCIER, H. (2012), "Talking it out with others vs. deliberation within and the law of group polarization: Some implications of the argumentative theory of reasoning for deliberative democracy". *Analise Social*, 205, XLVII (4.º), pp. 910-934.