Change for the Better?
Linking the Mechanisms of Deliberative Opinion Change to Normative Theory

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Abstract: The case for institutional deliberative reform does not go through unless we assume that it changes opinions via mechanisms congruent with normative theories of deliberation. Yet little research addresses this assumption head-on. I bridge deliberative theory and practice by making explicit several causal claims implicit in the theory literature, and then testing them in three policy domains. I use hierarchical statistical techniques to more adequately model the intrinsic dependence of deliberative data, and include social network effects to test interpersonal paths of influence. The results provide substantial, though qualified, support for several of deliberative theory's claims.

Key Words: Deliberation, public opinion, attitude change, democracy.

Deliberative democracy is on the march. Political theorists are focusing an enormous amount of attention on the normative case for deliberation. (Habermas, 1996; Guttman & Thompson, 2004) Governments and private foundations are sponsoring a proliferating range of applied deliberative forums. (Ryfe, 2002; Milner, 2005) And activists and academics alike are calling for ambitious deliberative reforms to politics as usual. (Ackerman & Fishkin, 2004; Leib, 2004; Gastil, 2000)

The case for deliberative reform proceeds from two well-supported claims. First, as a theory, deliberative democracy has some very attractive normative properties. (Habermas, 1996; Guttman & Thompson, 2004) Second, in practice, deliberation tends to change things – e.g., opinions, rationales, intensity, attitudes toward opposing views, etc. (Fishkin & Luskin, 1999; Gastil, 2000) From these two premises, it may seem reasonable to infer that we should move toward implementing deliberative institutions. But there is a buried premise here. The conclusion does not follow unless we also assume that deliberation changes opinions primarily *via mechanisms specified in the normative theories.* Otherwise the argument gives us no warrant for believing that the changes are for the better. For, if the real sources of opinion change are morally inert, deliberation would, at best, waste social resources. (Lupia, 2002) And worse, if those sources include such mechanisms as social power, group conformity, etc., deliberation would magnify social inequality and pervert its own goals. (Sanders, 1997)

Thus, we must carefully investigate the mechanisms of deliberative opinion change not only because the scientific questions raised are intrinsically interesting, but also because the normative argument for deliberative reform does not go through without it. The injunction to "first, do no harm" surely applies *a fortiori* to the body politic as well. Moreover, even if we do decide that deliberative institutions deserve our support, we will want to know how to design them so as to further the normative goals of deliberation most effectively.[1]

Below, I bridge deliberative theory and practice by making explicit the causal claims implicit in

[1] For an excellent, recent attempt to specify a theory of deliberative opinion change, see Barabas (2004). Barabas's approach does a very good job relating his theory to traditional public opinion research, especially Zaller (1992). I take a different, but complementary, approach, deriving my hypotheses directly from normative theories

the normative theory. Doing so generates a rather large set of linked hypotheses, and I test each in three policy domains. This rich set of tests is important because some of the hypotheses, taken individually, might be consistent with various social-psychological or rational choice explanations. However, no alternate theory naturally generates the whole set. Thus, taken together, they constitute a highly differentiating test.

Of course, deliberative theory is not monolithic, so in cases of differential emphasis I have chosen to stay closest to Habermas's early and highly influential version of the theory. However, I will be citing widely across the literature because most of the implicit causal claims that I identify are widely shared when interpreted ceteris paribus.

I. Theory & Hypotheses

So what are the causal claims implicit in normative theories of deliberation? First, and most basically, deliberative decisions should differ from decisions made by anonymous voting. If decisions under deliberative democracy do not differ from aggregative democracy, then it is more difficult (though not necessarily impossible) to justify spending the time, money, and social resources to change the status quo.[2] The *talk matters hypothesis* predicts that a significant number of deliberating groups will come to decisions different from what they would have decided by voting without deliberation. (Estlund, 1997)[3] However, recent critiques of deliberative theory argue that such talk-based differences may not be good for democracy if they exhibit "group polarization." (Sunstein, 2002) Much research in social psychology suggests that groups often make decisions that are merely more extreme versions of their pre-talk tendencies. Against this, *the valence hypothesis* predicts that deliberation will tend to produce

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of deliberation in an attempt to link the results more closely to debates in political theory, and to questions about whether and when deliberative institutions can improve the policy process.

[2] One line of deliberative thought (e.g., Mill, Arendt, and Dewey) empahsizes deliberation's salutary effects on people, rather than on discrete decisions. Indeed, many deliberative theories do not *necessarily* require changes in aggregate opinion as long as there are changes in rationale, perceived legitimacy, opinion intensity, respect for others, trust in government, etc. I agree that these secondary benefits can be quite significant, and should be valued. Indeed, I am pursuing such claims in other research. However, in the present context, lacking long-term longitudinal data, I cannot test these hypotheses.

[3] Here, as elsewhere, I cite normative political theorists for their philosophical claims, and then try to operationalize that claim. I do not mean to imply that the theorist makes the operational claim as I state it.

unidirectional shifts in opinion rather than polarization. (Habermas, 1990)

In addition to the claim that deliberation ameliorates polarization, normative theorists argue that deliberation helps to expand our perspective on public problems and their solutions. Each of us is necessarily informed by our experiences and personal characteristics in a way that makes our perspective both socially valuable *and* problematically partial. For any given issue, men and women may tend to weigh various considerations differently. Alternatively, people of different races may tend to apply wholly different frames to policy problems. And some citizens may just be unaware of information that others think is crucial. If deliberation is operating as advertised, subjects will share their own perspectives, and try to understand their interlocutors' perspectives. (Dryzek, 1990) If successful, differences based on the sources of those perspectives will shrink. Thus, the *expanded perspective hypothesis* predicts that demographic characteristics such as age, race, and gender, as well as differences in political knowledge will play a smaller role in explaining post-deliberative opinions than pre-deliberative opinions.[4]

Similarly, deliberative theory argues that a public mode of reasoning tends to filter out publicly unjustifiable influences on opinion such as racism and affective dislike more generally. (Rawls, 1993) Thus the *filter hypothesis* predicts that such antipathy (as expressed in feeling thermometers here) will have a weaker effect on post-deliberative opinion than pre-deliberative opinion. It differs from the expanded perspective hypothesis in that it does not predict that racists and non-racists, for example, will incorporate part of each other's perspectives, but rather that racial hostility will be filtered out by deliberation. It would not be a normative improvement for non-racists to meet racists halfway. Thus, the filter hypothesis predicts that those who have feelings of racial antipathy will move toward those who do not (i.e., a significant pre-test regression line will flatten on the post-test by pivoting up from one end), rather than both groups moving toward each other (i.e., flattening the line by pivoting at the center).

[4] Under very particular circumstances we could imagine deliberative theory predicting that certain ascriptive characteristics would become more influential rather than less. For example, if we had good reason to believe that some group was laboring under false consciousness about a lack of oppression, deliberation could make the group characteristic more salient, and jutly so. However, note that even here, everyone else would have to fail to appreciate the justly increased salience, otherwise, the characteristic would not be more influential in predicting post-deliberative opinion. Thus, ceteris paribus, the original hypothesis holds, especially as the deliberative quality of the exchange increases.

On a standard rational choice interpretation of deliberation, changes in a subject's information state account for any changes in their expressed opinion. After deliberating, subjects have more information at their disposal for correctly mapping their fundamental preferences onto their expressed preferences. On this reading, we would expect a subject's ideology to have a *stronger* influence on their post-deliberative opinion relative to their pre-deliberative opinion since they could better map their fundamental political beliefs onto policies. Deliberative theory, on the other hand, hypothesizes that a shift from a market frame ("what is it that *I*, as an individual, *prefer*?") to a forum frame ("what is it that *we*, as a group, *should do*?") drives much deliberative opinion change. (Elster, 1997) If deliberative opinion change were more a matter of frame shifting rather than ideological clarification, then we would expect a subject's ideology to have a *weaker* influence on post-deliberative opinion relative to pre-deliberative opinion (the *market-forum hypothesis*).[5]

If affect, ideology, and demographics all recede as determinants of a subject's post-deliberative opinions, then what might take their place? Presumably, the social influence dynamics within deliberation itself will play a significant role. In ideal discourse, one is moved by the force of the better argument alone, the source of an argument being irrelevant. (Habermas, 1990) Thus, the *impersonal influence hypothesis* predicts that there will be no social network mediation of influence. However, deliberative theory must be robust to moderate deviations from ideal discourse, and the impersonal influence hypothesis represents a very stringent standard. If deliberative influence were socially mediated, we would at least want the nature of such mediation to be relevant to efficiently processing information under non-ideal conditions. The *priority-of-respect hypothesis* predicts that in social network mediation, respect networks will trump other social network influences, such as familiarity, friendship, and trust, which have less distinctly cognitive value in a deliberative setting.[6]

[5] One could construct a similar exception to this hypothesis as in footnote 4 above. However, the same response holds as well. On the other hand, one could construct a rational choice account of the market-forum hypothesis by claiming that deliberation is clarifying a subject's fundamental preference for making social decisions on the basis of fair and reasoned cooperation. This possibility is why I stipulated a "standard" rational choice interpretation. I think that it is fair to say, though, that ideological clarification is a more natural interpretation. The other, while plausible, is the kind of expansive interpretation that threatens rational choice with unfalsibiability and operational vacuity if invoked too often.

[6] There has been much recent research in both political theory and empirical political science on trust. The prompts for my trust network instrument specified "someone you trust, or would go to for help," which has an

However, respect could be mediating deliberative opinion change in at least two different ways, both of which might be operative. The *respect-as-heuristic hypothesis* predicts that subjects will merely cue off of those whom they respect, irrespective of the arguments that they make. The *respect-as-attention hypothesis* predicts that subjects will pay special attention to the arguments of those they respect, and so should be influenced by them only to the extent that the quality of the deliberative exchange is high. The idea here is that no matter how much one respects one's fellow group members, they cannot affect your opinion on substantive grounds if you sat around and talked about baseball instead of public policy.[7]

However, it is possible that normatively problematic processes make certain people more likely to be the objects of respect in the first place, which would invalidate respect based mediation as a second-best solution from a deliberative perspective. (Young, 2000) Thus, the *fair influence hypothesis* predicts that individual level characteristics such as race and gender, and personality tendencies toward dominance or conformity will have either null or counter-stereotypical effects on influencing one's group and being influenced by it.

Finally, in addition to individual level influence, deliberative theory argues that some people will be motivated to move toward their group because they think that the process leading to the group's decision lends it legitimacy, whether or not they agree with the decision as a private individual. (Cohen, 1993) The *proceduralism hypothesis* predicts that people will move toward what their group decided,[8]

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inflection that is less relevant to argumentative persuasion than "someone whose opinions you respect, whether or not you agree with them." In my experience, in most *non*-elite deliberative settings, people seem to take it for granted that their interlocutors are trustworthy in the sense that they would not deliberately lie to them, even if they might not think that their information is reliable (which would be captured more by respect).

[7] Ideally, I would have liked to interact several other variables with Deliberative Quality (described below), since theory suggests that many of the hypotheses should hold more strongly given higher deliberative quality. However, the limited sample size and the amount of co-linearity induced by such interaction terms made the models impossible to estimate. Nevertheless, the meta-hypothesis comparing across issues (below) helps get more traction on this issue.

[8] Some versions of deliberative democratic theory would dispute the way that I operationalize the proceduralism hypothesis since it implies that the degrees of consensus is an indicator of deliberative success. Though I cannot defend it at length, I think that Habermas (1996) argues persuasively that *ceteris paribus*, consensus must be such an indicator. In my view other theorists' legitimate concerns with this idea are rooted in "other things" *not* being equal. However, I do not rely on a bivariate analysis. I test the proceduralism hypothesis controlling for a whole host of the most theoretically important ways that consensus could lead us astray.

even controlling for substantive individual level influence processes.[9]

A final note on the hypotheses: during the qualitative coding, it became clear that the deliberative quality of the discussions (see below) for one of the issues (the Flat Tax) was much lower relative to the other two (Affirmative Action and Gays in the Military). With hindsight, this pattern is unsurprising given that the tax policy question requires more technical background and information to make meaningful arguments. Such information was generally lacking in most groups, and most of the discussions floundered as a result. Though I cannot claim that I intended it, such a difference across issues allows me to test a kind of *meta-hypothesis* generated from deliberative theory. That is, deliberative theory predicts that the main hypotheses specified above will hold more strongly for Affirmative Action and for Gays in the Military than for the Flat Tax, since the prerequisites for effective deliberation were largely absent in the latter.

Table1: Summary of Hypotheses

Name	**Short Description**	**Results Found In**
Talk Matters	Difference Between Deliberation & Voting	Text Preceding Table 2
Valence	No Polarization / Significant Net Shifts Post Delib.	Tables 2(AA), 3(GIM), & 4(FT)/Text
Expanded Perspective	Demographics Have Weaker Effects Post Delib.	Tables 5(AA), 6(GIM), & 7(FT)
Filter	Negative Affect Filtered Out Post Deliberation	Tables 5(AA), 6(GIM), & 7(FT)/Text
Market-Forum	Frame Shift / Ideology Weaker Post Deliberation	Tables 5(AA), 6(GIM), & 7(FT)
Impersonal Influence	No Social Network Effects	Text Preceding Table 8
Priority of Respect	Respect Strongest If Social Network Effects	Text Preceding Table 8
Respect-as-Heuristic	People Cue Off of Those They Respect	Table 8
Respect-as-Attention	People Persuaded by Those They Respect	Table 8
Proceduralism	Fair Process / People Follow Group Decision	Table 8
Fair Influence	Demographics Etc. Don't Predict Influence	Table 9
Meta-Hypothesis	Other Hypo's Hold More for AA & GIM than FT	Distributed Throughout

II. Design Innovations

There are many ways to do deliberative experiments, some much more elaborate than others. The present data come from a very simple design. Individuals were asked their opinions on public policy

[9] The proceduralism hypothesis may seem problematically similar to group polarization in that it allows for movement toward one's group, whatever the group decides. Nonetheless, they are importantly different. Group polarization is thought to originate in two tendencies. First, minorities in the group socially conform to the majority. And, second, a skewed argument pool reinforces pre-deliberative tendencies. However, the proceduralism hypothesis operates in tandem with the valence hypothesis, which predicts a much weaker association between a group's pre-deliberative tendencies and their final group decision. It hypothesizes that social conformity will be minimal, that argument pools will be large, and that individual arguments will be weighed more on their merits than on the number of group members to whom it occurred pre-deliberation.

questions, five weeks later they were put into groups to talk about those questions, and then, five weeks after the deliberation, they were each asked again for their individual opinions. So far, this may sound like a poor man's version of previous deliberative research. However, as per the discussion above, I will be trying to disaggregate the mechanisms of deliberative opinion change in an effort to test specific hypotheses generated by deliberative theory. For this purpose, a simpler deliberative treatment helps.[10]

Moreover, although simpler in design than some previous deliberative treatments, this study has several important innovations. First, I went to no great effort to keep the deliberative sessions on track and high quality (e.g., no moderators). Most deliberation research puts in an artificial floor on the quality of discussion. For purposes of making public policy recommendations this is quite sensible. However, for purposes of the social science necessary to warrant *using* deliberation for policy recommendations, it is crucial to know the causes and consequences of variation in deliberative quality. Artificially restricting the variance on such a key variable puts us in a poor position to evaluate these questions, which are all the more crucial when we consider that large-scale deliberation will not be able to afford highly trained moderators. Moreover, the idea of highly structured and closely moderated conditions is at least partly in tension with other deliberative goals, because such provisions can foreclose deliberative creativity and enact the biases and assumptions of elites. (Of course, there are considerable advantages to using moderators as well, and some prestructuring is necessary to get the process moving. However, the trade-offs involved need to be taken more seriously than previous research, including my own, has done.)[11]

The deliberators in my sample also differ from previous research in that they come from existing social networks, and so know each other well. It is generally assumed that random samples are inherently superior to the cluster samples employed here. For many purposes random samples are, indeed, superior. However, deliberative democratic theory harbors aspirations beyond the worthy goal of emulating the

[10] Future work may want to extend the analyses here into more complicated deliberative environments. However, the thick web of causal interaction in such settings means that we will have to interpret the results from them in light of the cleaner demonstrations available in simpler designs such as this.

[11] Even if input from elites is "balanced," that very balance implies strong second-order assumptions about the structure of the problem and possible solutions that can be quite different from what non-elites generate themselves. In Author (n.d. (a)), I show how subjects unexpectedly developed a superior policy solution than those already on offer, by rejecting the elite set-up of the policy problem presented to them in the deliberation.

counter-factual of opinion polls on an informed citizenry. A broadly deliberative culture will involve people embedded in real social networks doing much of the deliberation. (Neblo, 2005) Since deliberation facilitates social influence, for both scientific and practical purposes, we must understand how social networks mediate such influence. Random samples simply cannot give us much leverage here. Therefore, I gathered friendship, trust, respect, and raw-contact data for all of my subjects to test for how such networks mediate social influence.

In addition to isolating mechanisms, using naturally existing groups, and allowing deliberative quality to vary freely, I also differ from much previous research in that I ask my deliberating groups to come to a *group* decision. James Fishkin's influential Deliberative Opinion Poll™ model operationalizes deliberative democracy as, in a sense, highly informed aggregative democracy. Subjects talk in groups, but they do not make decisions *as* a group. While this is surely an important normative model of deliberation, there are other important models as well. Habermas, for example, has a subtle, but crucially different, theory of public opinion. He argues that it is ironic to ask people their private preferences (no matter how well informed), add them together, and call it *public* opinion. Habermas thinks that there is a potentially important difference between implicitly asking people "what action should we, as a group, take?" and "what do you, as an individual, prefer?" (Habermas, 1989) By measuring group level decisions, I am able to both estimate the effect that such a frame-shift has on individual posttest opinion and test whether deliberating groups make decisions different from what they would have decided had they voted without deliberation.

Finally, to my knowledge, this is the first time that deliberative data have had a statistical model that captures the central feature of the theoretical model. All of deliberative theory's core ideas presume that people talking together will affect each other. Yet standard statistical models assume just the opposite because they treat post-deliberative opinions as independent observations. I employ hierarchical techniques to explicitly model such statistical interdependence, and to test hypotheses about group influences on individual opinion.

III. Data

My sample consists of 270 subjects from six midwestern universities. In order to test for network effects, all of the treatment subjects[12] at a given site were part of a real social unit and knew each other well.[13] Moreover, participation rates within these social units was unusually high (over ninety percent at each site) such that the social network data is nearly complete. I collected the data in four stages. In stage one I administered a questionnaire containing demographic and personality questions, as well as political knowledge and opinion questions. Three items are particularly important because they became the subjects of the group deliberations: 1) affirmative action; 2) gays in the military; and 3) flat versus progressive taxation. (These data were gathered in 1995 when all three issues were salient.) The choice categories (see below) were constructed from a small pilot project with open-ended responses. In the main study, subjects were asked to choose the response that was closest to their view, but could provide qualitative information that refined it.

Affirmative Action

(1) Affirmative action in all its forms is always illegitimate.
(2) Affirmative action is legitimate only when limited to soliciting a diverse *applicant* pool for consideration.
(3) Race, gender and other affirmative action criteria are sometimes legitimate considerations, as long as overall merit is the most important consideration.
(4) Given the history of discrimination in our country, it is important to establish balance in the workplace by making it a priority to hire and promote minority candidates for most types of positions.

Gays in the Military

(1) Homosexuals should not be allowed to serve in the military.
(2) As long as they are discreet about their orientation, homosexuals should be allowed to serve in the military. ("Don't Ask, Don't Tell Policy")
(3) Homosexuals should be allowed to serve like anyone else.

Flat Tax

(1) The government should move to a strictly flat tax.
(2) The tax system should move toward a flat tax, but not completely.
(3) The tax system is about right with regard to progressive versus flat taxes.

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[12] I also gathered contemporaneous data from a convenience sample of non-deliberating subjects to control for intervening events, and to check the test-retest reliability of my key items absent exposure to deliberation. However, they do not constitute a true control group because I could not randomly assign subjects to the control condition without disrupting the social networks necessary for testing the social influence hypotheses. Though clearly not ideal, they do provide reason to believe that intervening events are not driving the observed differences. Without deliberation, intra-subject stability is much higher pre/post, and what instability there is, is not systematic.

[13] All of the subjects at a given site lived together in a real, self-governing social unit. Unlike fraternities and sororities, though, these groups did not choose their own members, and all of them had both men and women. As with all student samples, one has to be cautious in generalizing to broader populations. Beyond general concerns about student samples, the only standard selection criterion that I could not control for statistically was class. Subjects came from a relatively tight SES range, mostly lower-middle class to working poor. Thus, I do not include income as an independent variable.

(4) Wealthy people and businesses should be taxed at a more progressive rate than is currently the case.

In stage two, I gathered social network information. From among the other subjects at their site, I asked each participant to identify: 1) their friends; 2) those whose opinions they respect; 3) those with whom they interact the most; and 4) those whom they trust or would go to for help. For each site, on each criterion, I formed an NxN matrix, representing a social network.

In stage three, subjects were sorted into groups of five.[14] Each group discussed the three policy questions and came to a group decision on them.[15] Groups were asked how they arrived at their decision,[16] if anyone dissented, and what issues proved especially controversial. Group discussions were recorded, and coded for the deliberative "quality" of the discussion. Deliberative quality was assessed on four criteria (scored 0-4): task focus, participation & equality, respect & civility, and information & reason giving. The four were summed to yield an overall deliberative quality score for each group.[17] Stage four consisted of an individual-level post-test on the three policy questions. I administered the individual post-tests about five weeks after the group deliberations, which were themselves administered about five weeks after the individual pre-test. Thus, there was plenty of time for replication effects to fade.

The following are the main dependent variables used in the analyses below. For "Opinion" simply substitute either Affirmative Action (AA), Gays in the Military (GIM), or Flat Tax (FT) for any particular analysis:

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[14] Groups were formed on two criteria and otherwise randomly assigned. Groups had at least one member who self-identified as liberal and one as conservative. This was to ensure that there was something to talk about in the discussions. Second, groups were chosen to achieve either high or low intra-group affiliation using the friendship network data. That is, half the groups were chosen to include mostly friends, half few friends. Affiliation density did not prove relevant, perhaps because all members knew each other well, whether or not they were friends.

[15] I do not think that it is devastating that subjects were not deliberating over topics that their deliberations would directly affect (and I do have evidence that they were surprisingly ego-involved with most of the tasks). To see that this is the case, imagine that my subjects were, in fact, participating in a national referendum which would decide the questions on which they deliberated. Given about one hundred million voters, the infinitesimally small likelihood that my subjects' deliberations would be decisive makes the difference between my experiment and a "real" discourse situation negligible. Voting studies are not rendered moot by the logic of the voter's paradox.

[16] Groups were not instructed on how to come to a group decision. Nearly all chose majority vote if they could not come to consensus. Two reverted to what they saw as the real social status quo in the face of dissensus.

[17] Two coders scored the tapes, the author and an assistant unaware of the hypotheses. Inter-rater reliability on the overall index was in the "fair" range with an ICC of .605.

Opinion_{t0}	=	Top-of-the-head opinion (PreTest).
Opinion_{t1}	=	Deliberative opinion (PostTest).
Opinion_{ig}	=	Person i's group's decision.
$\lvert \text{Opinion}_{ig} - \text{Opinion}_{t0} \rvert$	=	Raw Influence *on* Group
$\lvert \text{Opinion}_{ig} - \text{Opinion}_{t1} \rvert$	=	Deliberative Influence *on* Group
$\lvert \text{Opinion}_{ig} - \text{Opinion}_{t0} \rvert - \lvert \text{Opinion}_{ig} - \text{Opinion}_{t1} \rvert$	=	Influenced *by* Group

What I am calling deliberative influence on one's group may seem a bit odd since the individual measure is after the group deliberation. I use this label because the tapes revealed many cases in which a group member changed his or her opinion in the course of the discussion, and then proceeded to influence the group's decision. The Raw Influence measure cannot capture this phenomenon, whereas Deliberative Influence does take account of those who do not change their views. Moreover, the final measure more accurately captures being influenced by one's group, since it takes into account whether one had room to move toward the group in the first place.

IV. Results

The Talk Matters Hypothesis: Do deliberating groups make the same decisions that they would have made had they just voted without deliberating? To find out I compared each group's pretest median to its actual deliberative choice.[18] If these two almost always agree, deliberation would not be doing much substantive work. On the Gays in the Military (GIM) issue, 37% of the groups made a choice different from what they would have decided had they not deliberated. This is quite a sizable difference, since we would expect 33% to make the same choice by chance (i.e., there are three choice categories for this question). This pattern is even more pronounced for the Flat Tax (FT), where exactly half of the deliberating groups made a choice different from what they would have chosen by voting. And a whopping 78% of the deliberating groups made a different decision on Affirmative Action (AA), *more* than would be expected if the two choice mechanisms had nothing to do with each other. Clearly, talk matters.

[18] I also compared the actual group decisions to the nearest integer rounding of the pretest mean to simulate voting that takes account of preference intensity. The results are quite similar.

The Valence Hypothesis: Talk might matter in a negative way, however. If talking in groups causes people to go to extremes (Sunstein, 2000), then we should observe greater variance in their post-deliberative opinions than their pre-deliberative opinions. However, the data show otherwise. In the case of Affirmative Action and the Flat Tax, the difference between the pre and post variances is not significant (*variance ratio test* p = .650 and p = .353 respectively). For Gays in the Military, while the two variances are significantly different, it is the *post-test* variance that is smaller (p = .032). Far from polarization, we see convergence. Moreover, a group's pre-deliberative tendency does not influence the post-deliberative opinions of its members. Controlling for the group's actual decision, its pre-test median does not significantly predict subjects' individual post-deliberative choices for any of the three issues (AA p = .810; GIM p = .267; FT p = .466). Thus, there is no evidence of group polarization.

But deliberative theory does not only claim that there will be a lack of polarization. It also argues that we should generally observe unidirectional shifts in opinion – i.e., that the balance of arguments in deliberation will have a valence.[19] And in fact, for two of the three issues, we observe just that. Tables 1-3 present transition matrices of subjects' pre-deliberative opinions by their post-deliberative opinions, along with the distribution of group decisions.

Table2: Affirmative Action Transition Matrix: Individual Pre (Rows) x Post (Columns)

	Always Wrong	**Applicant Pool**	**Some Consideration**	**Establish Balance**	**Total**
Always Wrong	*52*	37	24	0	*113*
Applicant Pool	15	*48*	40	1	*104*
Some Consideration	1	11	*27*	2	*41*
Establish Balance	0	1	1	*10*	*12*
Total	*68*	*97*	*92*	*13*	*270*
Wilcoxon Test p < .0005					
Group Decisions	9	10	35	0	54

These data for Affirmative Action rather dramatically confirm the valence hypothesis. On the pre-test the number responding in each category was strictly declining — that is, the modal category was that affirmative action is "Always Illegitimate in All Its Forms." Yet sixty-five percent of the groups (35 out of 54) chose "Some Consideration," a response two steps down the list. Perhaps even more

[19] Habermas (1990) claims that such valences are indicators of "generalizability," a key term of art in his discourse ethics. I am highly sympathetic to this theory, but in the present context I am not prepared to defend this more ambitious interpretation of my results.

interesting is that this movement was sharply censored — that is, despite a dramatic shift down the response list, zero out of fifty-four groups chose the fourth category. Individual post-tests followed the group pattern with those answering in the third category more than doubling. A Wilcoxon signed-rank test confirms the statistical significance of this shift from pre to post, with a probability value less than .0005.[20] The censoring result also held on the individual post-tests with only three individuals overshooting their group into the fourth response category.

In analyzing the transcripts of the deliberations, the reasons for both the strength and censoring of the results becomes clear. Those advocating the "Always Wrong" category almost always led with an attack on quotas. While, as one subject put it, "Everybody agrees that quotas are wrong," it was fairly easy for advocates of the other choices to show that the "Diverse Applicant Pool" and "Some Consideration" options did not involve quotas. The "Establish Balance" option, though, could be read as advocating quotas, so its few supporters had to settle for the "Some Consideration" option. The "Always Wrong" people seemed remarkably disarmed once they did not have quotas to fight against. Many were even willing to move two categories down to the "Some Consideration" option. In the face of pointed questions like "How can you say that they [employers] shouldn't even try to find qualified blacks to apply?" only one person was openly defiant. Otherwise the strongest response was, "They should, you know, like morally, but they shouldn't have to, like the government shouldn't make them."

It is important to point out that these *Affirmative Action* results do not rely on mere compromise or movement toward the middle. Few of the "Establish Balance" subjects changed their minds in the post-test, and the number choosing "Some Consideration," more than doubled. Recall that the post-test was administered individually more than a month after the group deliberations, and the subjects were given strong assurances of privacy. Thus, simple social desirability cannot be driving these results.

Table 3: Gays in the Military Transition Matrix: Individual Pre (Rows) x Post (Columns)

[20] The Wilcoxon test assumes that the steps between categories are approximately equal, which appears to be true for all the steps for all three issues, except going from Some Consideration to Establish Balance on Affirmative Action. However, less powerful tests that relax this assumption still show a highly significant shift.

	Not Allowed to Serve	~ Ask / ~ Tell	Serve Like Anyone Else	Total
Not Allowed to Serve	*25*	18	12	*55*
~ Ask / ~ Tell	6	*75*	20	*101*
Serve Like Anyone Else	2	25	*87*	*114*
Total	*33*	*118*	*119*	*270*
Wilcoxon Test p = .013				
Group Decisions	6	32	16	54

The *Gays in the Military* question demonstrates a similar, if less dramatic, pattern. On the pre-tests "Serve Like Anyone Else" was the modal response with declines as we move up the category list. Group choices focused in on the middle category "Don't Ask, Don't Tell" which seems to have drawn attention as a compromise position. What is interesting is that most of the action occurred among those who chose "Not Allowed to Serve" on their pretest. That is, "Should Be Allowed to Serve" and "Don't Ask, Don't Tell" exchanged roughly equal numbers of subjects depending on what their group decided, with a few trickling down to the first category. However, over half of the "Should Not Be Allowed to Serve" responders appeared to be convinced by what they heard in their group discussions. It is this group which drives the significant result on the Wilcoxon test, indicating a net shift down the choice list. Thus, the valence might best be interpreted as a movement away from disallowing service, rather than toward a specific plan for allowing it.

The most effective argument responding to those opposed to homosexuals serving was a comparison to Truman desegregating the army. This comparison came up frequently, and seemed to disarm the morale argument against serving. Arguments in favor of "Don't Ask, Don't Tell" were of a more prudential nature: "For their [homosexuals'] own safety it should probably be 'Don't Ask, Don't Tell', until people get more used to the idea of being around gays." The net result is statistically and substantively significant movement supporting the valence hypothesis.

For the *Flat Tax* question the heavily modal choice in all three test situations was the status quo option, "Keep It [the Tax System] About the Same." The Wilcoxon test suggests no net movement between the categories, and indeed, there was little gross movement as well. Analysis of the tapes indicates that subjects stayed put because they felt that they did not have enough information to make an

informed decision. And even when they did not feel confused, they often were. For example, more than a third of the groups confused tax simplification (in the sense of deductions and "loop-holes") with the flat versus progressive issue. Of course, the two issues were often packaged together by politicians and the media. Nevertheless, subjects believed that tax simplification, in itself, would make effective tax rates flatter (which is likely backwards).

Table 4: Flat Tax Transition Matrix: Individual Pre (Rows) x Post (Columns)

	Flat Tax	**Toward Flat Tax**	**Status Quo**	**More Progressive**	**Total**
Flat Tax	*21*	9	3	0	*33*
Toward Flat Tax	10	*41*	3	3	*57*
Status Quo	1	12	*92*	3	*108*
More Progressive	0	3	12	*57*	*72*
Total	*32*	*65*	*110*	*63*	*270*
Wilcoxon Test p = .136					
Group Decisions	2	13	32	7	54

The Expanded Perspective, Market-Forum, and Filter Hypotheses: For these three hypotheses, we see fairly strong support on the first two policy questions, with weaker results, as expected, on the Flat Tax. To test them, I regressed subjects' pre-deliberative opinions on their age, gender, political knowledge, ideology, and race, as well as issue appropriate feeling thermometers,[21] and compared the results to identical specifications on subjects' post-deliberative opinions. Tables 4-6 present the coefficients and standard errors for the pre and post-deliberative model.[22] While it is notoriously difficult to concisely convey the substantive significance of ordinal regression coefficients, Long (1996) recommends $\overline{\Delta}$-Range as a useful summary indicator. This statistic averages the absolute values of the min/max first differences across each of the dependent variable's categories. For example, holding all other variables at their mean, how much does going from being maximally liberal to maximally conservative change the probability of observing each Affirmative Action answer category, on average? To convey a sense of the substantive reduction in each coefficient's impact, I report the absolute and

[21] I included religiosity for Gays in the Military because of its presumed salience on sexuality issues.

[22] I include this specification of the post-deliberative model only for purposes of having a comparable specification to test the reduced influence hypotheses. In Table 8 below I present the full specification, which includes subjects' pre-deliberative opinions, their group's choice and deliberative quality, and the respect-mediated influence terms.

percent change in this statistic from the pre to the post models. For a formal significance test of the difference between the pre and post coefficients, I pooled the time points, and included interaction terms for each independent variable and a pre/post dummy. Significant interaction coefficients in the pooled model indicate that the coefficients for the pre and post models differ significantly. (Hardy, 1993)[23]

Table 5: Affirmative Action (Ordered Logit)

	Pre Test Coef. (Stand. Error) [$\overline{\Delta}$-Range]	**Post Test Coef. (Stand. Error)** [$\overline{\Delta}$-Range]	**$\overline{\Delta}$ Pre – $\overline{\Delta}$ Post (% Reduction)**	**Pooled Model Interaction Coef. (Stand. Error)**
Age	.074 (.111)	-.036 (.103)	.013 (41.9%)	-.066 (.148)
Gender	.199 (.300)	.074 (.286)	.010 (52.6%)	-.567 (.384)
Race	2.341*** (.387)	1.611*** (.379)	.074 (28.1%)	-.739+ (.393)
Political Knowledge	.293* (.136)	.297* (.125)	-.028 (+22.4%)	.127 (.136)
Ideology	-.696*** (.196)	-.130 (.174)	.248 (73.6%)	.765*** (.137)
Feeling Thermometer: **Blacks**	.010+ (.006)	.006 (.006)	.022 (22.9%)	-.020*** (.005)
Feeling Thermometer: **Women's Movement**	.011+ (.006)	.002 (.006)	.081 (76.4%)	-.021*** (.006)
Psuedo-R^2	*.350*	*.108*		

+ p < .10 * p < .05 ** p < .01 *** p < .0005

For the Affirmative Action question, Age, Gender, and Race all shrink as predictors, though only race reaches standard levels of significance on the pooling test. (The large percentage reductions in $\overline{\Delta}$ on Age and Gender result from cutting already insignificant effects in half.) There is virtually no change in Political Knowledge's effect. Thus, the *expanded perspective* hypothesis garners moderate support on Affirmative Action. The *market-forum* hypothesis gains very solid support, with ideology going from a strong predictor of one's position before deliberation, to insignificance post deliberation. The statistical significance of the pooling test and the large substantive and percent reduction in $\overline{\Delta}$ confirm this change

[23] I clustered the errors for the two observations per subject to account for the fact that I am really pooling two panels, rather than two cross-sections. The Gays in the Military model did not converge under this specification, so the results presented here are from the model without clustered errors. However, I also ran the Affirmative Action and Flat Tax models without clustering the errors, and the results were effectively identical to the models with clustered errors. Thus, it is unlikely that the Gays in the Military results would change either. Similarly, there was so much co-linearity with a pre/post interaction term for each variable simultaneously that I ran models with one interaction at a time to obtain the pooling test results presented here. I use this pooling test rather than Zellner's (1962) Seemingly Unrelated Regression tests to avoid burdening these data with further assumptions, though the results do not differ dramatically.

resoundingly. A $\bar{\Delta}$ Pre – $\bar{\Delta}$ Post of .248 for Ideology means that the average change in the probability of being in a given response category, when moving from being maximally liberal to maximally conservative, drops by .248 from pre to post.[24] Thus, the extent to which a respondent's ideology governs their policy choice decreases dramatically from pre to post.

The *filter hypothesis* also fares well, with a subject's dislike toward Blacks and the Women's Movement losing much of their force. Recall, however, that the filter hypothesis specifies that subjects with negative affect toward these groups will 'level up,' rather than subjects who were high and low converging toward each other. To test this refined hypothesis, I added dummy variables for whether a subject was above or below the median on each feeling thermometer. Multiplying the median split dummy by the original interaction between the feeling thermometer and the pre/post dummy yields a three-way interaction term that tests for whether those high or low are driving the significant pre/post differences. And, indeed, I do find that those who displayed negative affect on the feeling thermometers leveled up to those who had positive feelings. For Blacks the three-way interaction yielded a coefficient of .019 (s.e. = .007) with p = .005. And for the Women's Movement the coefficient was .018 (s.e. = .011) with p = .108. Thus, the specific form of the filter hypothesis was borne out.

On the Gays in the Military question, Age and Gender both increased slightly in their effect, while Religiosity diminished, though none of them significantly. Political Knowledge, again, did not change, though it was insignificant from the beginning. Race switched signs from a highly significant negative predictor to a moderate positive. As a result, the relatively modest change in $\bar{\Delta}$ (.069) is somewhat misleading here. For purposes of testing the expanded perspective hypothesis, the absolute magnitude of the substantive effect *was* reduced by a little more than half. However, given the coefficient's sign change, the net difference in effect is actually the sum of the pre and post $\bar{\Delta}$'s, a fairly

[24] Note that all interpretations of $\bar{\Delta}$ hold all other variables at their means. For space purposes, I could not include all of the post-estimation scores. However, for an extended example of how $\bar{\Delta}$ Pre – $\bar{\Delta}$ Post works consider the following: On the pre-test, the coefficient for Ideology implies that moving from being maximally liberal to maximally conservative increases the probability of choosing the "Always Wrong" option by .208 and "Applicant Pool" by .466, while decreasing "Some Consideration" by .027, and "Establish Balance" by .647. The average of these changes is .337, or $\bar{\Delta}$ Pre. The corresponding average for the post-test ($\bar{\Delta}$ Post) is only .089. The difference between these two (.337-.089) equals .248, or a 73.6% reduction (.248/.337) in Ideology's substantive effect averaged across the response categories.

sizable .193. Clearly race plays a substantially different role in the two models. From listening to the tapes, it is apparent that this change was driven by black subjects relaxing their opposition to allowing homosexuals to serve in the military, especially when confronted with the racial resonances of the Truman comparison mentioned above. Thus, the *expanded perspective* hypothesis gains moderate, but mixed, support here.

Table 6: Gays in the Military (Ordered Logit)

	Pre Test Model Coef. (Stand. Error)	**Post Test Model Coef. (Stand. Error)**	**$\overline{\Delta}$ Pre – $\overline{\Delta}$ Post (% Reduction)**	**Pooled Model Interaction Coef. (Stand. Error)**
Age	-.052 (.111)	-.074 (.111)	-.014 (+46.7%)	-.041 (.153)
Gender	.557+ (.320)	.744* (.322)	-.049 (+67.1%)	.192 (.422)
Race	-1.012** (.380)	.456 (.394)	.069 (52.7%)	1.423** (.534)
Religiosity	.042 (.101)	-.004 (.101)	.022 (91.7%)	-.051 (.013)
Political Knowledge	.058 (.134)	-.074 (.135)	-.010 (+27.8%)	-.128 (.178)
Ideology	-.598*** (.158)	-.406** (.154)	.086 (21.2%)	.271 (.193)
Feeling Thermometer: **Homosexuals**	.026*** (.005)	.018*** (.005)	.134 (36.3%)	-.013* (.006)
Psuedo-R^2	*.316*	*.207*		

+ p < .10 * p < .05 ** p < .01 *** p < .0005

The *market-forum* hypothesis also fares reasonably well again. Ideology becomes less important post deliberation, though its effect is not completely wiped out, as it was with Affirmative Action. The pooling test was not quite statistically significant, but a moderate substantive reduction in $\overline{\Delta}$ of .086 is not trivial either (representing a 21.1% reduction in Ideology's effect). At first blush, it looked like the *filter hypothesis* was also supported on this issue. Affect toward homosexuals played a smaller role post deliberation, and to a statistically and substantively significant degree. However, the three-way interaction coefficient was neither statistically nor substantively significant (though it was of the expected sign). This suggests that people who felt both positively and negatively toward homosexuals both moderated. Thus the mechanism of change looks more like expanding perspectives, rather than filtering publicly questionable motives. This result is not entirely surprising. It indicates that the perceived political legitimacy of negative affect toward homosexuals continues to be much more of an open

question than with blacks.

In contrast to the other two policy questions, the Flat Tax did not bear out the present hypotheses. Because the overall quality of the Flat Tax discussions was quite low, not much happened. There is little evidence either way for the *expanded perspective* hypothesis here since Age, Race, and Political Knowledge were all trivial on the PreTest. Gender moved in the right direction, though the effect was quite modest. Even under these circumstances, though, the *market-forum* hypothesis gains a bit of support, with the coefficient on Ideology smaller. However, the difference is not statistically significant, and the change in $\overline{\Delta}$ of .057 is fairly modest. Such weak and null results, though, do provide evidence for the meta-hypothesis that absent much high quality deliberation (compared to the Affirmative Action and Gays in the Military questions), we observe fewer of the effects attributed to deliberation.

Table 7: Flat Tax (Ordered Logit)

	Pre Test Model Coef. (Stand. Error)	**Post Test Model Coef. (Stand. Error)**	**$\overline{\Delta}$ Pre – $\overline{\Delta}$ Post (% Reduction)**	**Pooled Model Interaction Coef. (Stand. Error)**
Age	.047 (.102)	.136 (.102)	-.044 (+91.3%)	.154 (.183)
Gender	.649* (.278)	.500+ (.275)	.015 (21.1%)	.364 (.458)
Race	.064 (.348)	-.213 (.345)	-.018 (+22.5%)	-.124 (.587)
Political Knowledge	.125 (.123)	.141 (.123)	-.008 (+12.3%)	.043 (.217)
Ideology	-.516*** (.125)	-.397** (.123)	.057 (18.9%)	.158 (.223)
Psuedo-R^2	*.093*	*.067*		

+ p < .10 * p < .05 ** p < .01 *** p < .0005

The Impersonal Influence Hypothesis: This hypothesis received a surprising amount of support. For each subject, I constructed network influence variables by averaging the post-deliberative opinions of those group mates whom they respected, trusted, identified as friends, and interacted with most. In analyzing the four networks' relationship to each other, Respect stood out as the least like the others.[25] This result might depend on the prompt that I used: "those whose opinions you respect, even if you disagree with them." The final clause might have prompted subjects to think of people unlike themselves,

[25] I used Quadratic Assignment Procedure (Borgatti et. al., 2002) to measure the intercorrelations between the four matrices for each of my six sites. Friendship, Contact, and Trust tended to correlate at about .6, whereas, Respect was typically below .3.

thus weakening its link to the friendship, contact, and trust networks. Nevertheless, such a prompt is especially interesting from a deliberative perspective, since deliberation seeks to bridge differences.

For the contact, friendship, and trust networks, none of the coefficients significantly predicted one's post-deliberative opinion for any of the three issues, controlling for the group's decision. However, the Respect network coefficients were significant for Gays in the Military and the Flat Tax questions. That is, individuals' post-deliberative opinions moved toward the opinions of the people in their group that they respected for these two issues. This pattern of partial support for the impersonal influence hypothesis also confirms, *ipso facto*, the *priority-of-respect hypothesis*. Since none of the other networks were significant, respect trumped friendship, contact, and trust as mediators of social influence.

But *how* does respect mediate deliberative opinion change? Table 8, below, presents the full post-deliberative models for all three issues.[26] Notice that the models here use hierarchical specifications. So far I have analyzed only individual level variables. However, the whole premise of deliberation is that people talking in groups will affect each other. Thus, for post-deliberative models, the standard statistical assumption of independent observations would contradict our central theoretical premise. Moreover, there are theoretically important variables that can only be measured at the group level – i.e., group decisions and deliberative quality. Hierarchical models allow us to account for dependency among observations within groups, and to properly analyze how the group-level variables operate. (Raudenbush & Bryk, 2002) Hence, the link between the statistical models and deliberative theory is much more satisfying.[27]

The first thing to note about these models is that not much is happening with the independent variables that we have looked at so far. Age, Gender, Race, Political Knowledge, Religiosity, and the Feeling Thermometers have neither statistically nor substantively significant effects on post-deliberative

[26] All of the independent variables are grand-mean centered in these models (other than the binary variables, race and gender). This choice is significant because centered and uncentered models are *not* generally equivalent in a hierarchical context. (Kreft, et. al., 1995) Uncentered specifications yield nonsensical results here because we model the β'*s* of the level one specification at level two, which would mean that β_{0j}, for example, would be the expected value for a subject in group *j* who was zero years old, and whose group and pretest choices were zero, etc. (none of which are meaningful). Also, for Gays in the Military, I had to recode the pre-test variable into binary form to get the model to converge.

[27] I did not specify hierarchical models on the post-test data in the previous section because I needed identical specifications to make comparing across the pre and post models meaningful.

opinion once we account for a subject's pre-deliberative opinion and social influence variables. So far, all of this is consistent with deliberative theory, and the pooling tests above.

Table 8: Full Post-Deliberative Models (Hierarchical Ordered Logit)

	Affirmative Action	**$\overline{\Delta}$ Range**	**Gays in the Military**	**$\overline{\Delta}$ Range**	**Flat Tax**	**$\overline{\Delta}$ Range**
Age	-.048 (.097)	.024	-.128 (.146)	.079	.114 (.124)	.026
Gender	-.005 (.297)	.001	.631* (.312)	.103	-.147 (.368)	.009
Race	.368 (.437)	.045	.459 (.598)	.065	-.277 (.445)	.016
Political Knowledge	.205 (.133)	.108	-.131 (.153)	.083	.130 (.121)	.031
Ideology	.218 (.187)	.148	-.364* (.178)	.294	-.092 (.132)	.028
PreTest	1.671*** (.252)	.385	2.058*** (.290)	.514	3.113*** (.335)	.486
Group Decision (Level 2)	.239 (.152)	.059	1.254* (.523)	.168	.465* (.221)	.085
Deliberative Quality (Level 2)	-.001 (.048)	.002	.069 (.086)	.097	-.068 (.047)	.038
Respect Weighted Average	1.482* (.640)	.391	4.731** (1.847)	.651	.599 (.540)	.112
Respect x Deliberative Quality	.163+ (.095)	.180	.542* (.238)	.516	.048 (.075)	.052
Feeling Thermometer: **Blacks**	.001 (.008)	.017	X	X	X	X
Feeling Thermometer: **Women's Movement**	-.004 (.006)	.053	X	X	X	X
Feeling Thermometer: **Homosexuals**	X	X	.004 (.005)	.063	X	X
Religiosity	X	X	-.073 (.115)	.044	X	X

+ p < .10 * p < .05 ** p < .01 *** p < .0005

At first blush, though, Ideology seems disconfirming since its coefficients for the Affirmative Action and Gays in the Military models are substantively significant. Notice, however, that the sign in the Affirmative Action model has flipped from the pretest. This suggests that it is canceling out some of Ideology's effect carried via the PreTest term, which is not inconsistent with deliberative theory. Ideology's strong substantive effect for Gays in the Military is a more complicated case. It seems to suggest that Ideology has a reinforcing effect beyond its representation in the PreTest term. However, we know from the pooling and matched specification tests on the market-forum hypothesis above that Ideology's effect was weakened post deliberation. Thus, we should interpret this term as tempering the

group and respect influences.

The Respect-as-Heuristic & Respect-as-Attention Hypotheses: Unsurprisingly, one's PreTest position is both statistically and substantively significant for all three issues. Remarkably, however, it is not the largest substantive effect in either the Affirmative Action or Gays in the Military models. For both of these, the respect-weighted average of one's fellow deliberators is more important. This means that the considered opinions of those I respect drive my considered opinions even more than my own initial opinion. The substantive effects are quite large, with $\overline{\Delta}$ = .391 and .651 respectively. Thus, for Affirmative Action, if those I respect choose "Always Wrong" versus "Establish Balance" (or vice versa) the probability that I will choose a given response category changes by almost .4 on average, holding all other variables at their mean. Similarly, for Gays in the Military, if those I respect choose "~Serve" instead of "Serve," my choice probabilities change by an enormous .651. These results are quite striking given that Affirmative Action and Gays in the Military were well known issues implicating fundamental values. Moreover, in both cases, interacting the Respect term with Deliberative Quality also yields statistically and substantively important effects, meaning that people are being persuaded by those they respect, and not merely cueing off of them. Thus, both the *respect-as-heuristic* and *respect-as-attention* hypotheses garner solid support. People do cue off of those whom they respect, but they also open themselves to substantive persuasion by them ($\overline{\Delta}$ = .180 and .516 respectively).

Deliberative Quality was not significant as a main effect, however, which suggests an interesting interpretation for the *valence hypothesis*. As we saw above, the valence hypothesis garnered substantial support. Deliberating groups showed no signs of polarization, and yet aggregate opinion shifted significantly post deliberation on the first two issues. Nevertheless subjects who participated in high quality discussions were not substantially more or less likely to move up or down the choice list. I interpret this to mean that the issues allowed wide scope for reasonable disagreement.[28] That is, people

[28] Reasonable disagreement is a technical term in Rawlsian political philosophy. (Rawls, 1993) So it is with some trepidation that I use it here. Many theorists may think that there is *not* room for reasonable disagreement on these issues. However, if we think about how to evaluate whether there is room for reasonable disagreement on a given issue, one criterion must surely be whether people of good will, who think carefully about an issue and engage with each other still sincerely disagree. This criterion is defeasible, of course, but if it does not create a *prima facie* case for reasonable disagreement, I do not see how Rawls's interpretation of his theory as deliberative can stand.

had a tendency to weigh arguments in a way that led to aggregate shifts, but those who dissented from this trend were able to articulate cogent and publicly recognizable reasons for why they viewed the matter differently.

The Proceduralism Hypothesis: Yet, we do see some evidence that people who may not have been convinced as a private matter were nonetheless willing to follow what their group decided because they thought that the process by which their group made its decision was fair. In addition to the qualitative evidence to this effect (several people came out and said such things in the group discussions), all three of the Group Decision coefficients are positive (even controlling for cueing and substantive persuasion), with the Gays in the Military and Flat Tax significantly so. The substantive effects are not overwhelming, but they are not trivial either ($\overline{\Delta}$ = .059 for AA, .168 for GIM, and .085 for the FT). Thus the *proceduralism hypothesis* also gains substantial support.

The Fair Influence Hypothesis: However, many critics of deliberative democracy have rightly cautioned that such respect and proceduralism effects are all well and good *if* we assume that everyone is equally likely to influence their group. But if deliberating groups have a tendency to reproduce common power asymmetries in society, then group members may, for example, condescend to women, ignore minorities, and allow dominant personalities to wield undue influence.

Table 9 (below) presents the results for tests of the *fair influence hypothesis*. The models test for deviations from deliberative equality by estimating the effects that various characteristics have on the likelihood of influencing and being influenced by one's group.[29] Age, Gender, and Political Knowledge generally had small substantive effects. However, it is somewhat concerning that the coefficients on Gender were negative for all six models, meaning that women were consistently, if only slightly, less likely to influence and be influenced by their groups. This combination may indicate a weak tendency to withdraw from deliberation relative to men. Certainly, though, this Gender effect is much smaller than those reported in a wide variety of other social settings. (Carli, 1999) In this model, Ideology serves more

[29] The influence *on* and *by* group variables are scaled so that higher values represent more influence.

as a control variable than a test variable since we would expect liberals or conservatives to have somewhat more influence depending on the deliberative valence of the issue at hand.

Table 9: Influence* On / *Influenced* By *One's Group (Hierarchical Ordered Logit)

Coef. *(s.e.)* *[$\bar{\Delta}$ Range]*	**AA: *On* Group**	**AA: *By* Group**	**GIM: *On* Group**	**GIM: *By* Group**	**TAX: *On* Group**	**TAX: *By* Group**
Age	.188+ (.097) [.087]	.080 (.111) [.026]	.074 (.109) [.047]	.061 (.134) [.018]	-.034 (.099) [.015]	-.257+ (.141) [.044]
Gender	-.116 (.280) [.013]	-.504+ (.297) [.046]	-.194 (.303) [.030]	-.404 (.353) [.034]	-.333 (.310) [.040]	-.061 (.372) [.003]
Dominance	.007 (.116) [.004]	-.055 (.137) [.024]	.119 (.113) [.097]	-.252+ (.141) [.093]	.483*** (.131) [.257]	-.091 (.165) [.023]
Race	.294 (.358) [.034]	-.326 (.390) [.030]	.993* (.478) [.141]	1.168** (.414) [.107]	-.946* (.379) [.094]	-.137 (.639) [.006]
Political Knowledge	.123 (.137) [.059]	-.049 (.145) [.018]	.063 (.133) [.043]	.022 (.158) [.007]	-.186 (.138) [.090]	.074 (.149) [.015]
Ideology	.049 (.107) [.031]	.420** (.130) [.186]	.147 (.158) [.129]	.088 (.149) [.036]	-.052 (.131) [.033]	-.054 (.177) [.015]

+ p < .10 * p < .05 ** p < .01 *** p < .0005

Interestingly, racial minorities were both more likely to influence and be influenced by their groups for Gays in the Military. While this combination may seem like a paradox, the dynamics surrounding the Truman example explain it. Minority subjects started out opposing Gays in the Military more than whites, were persuaded at higher rates by the comparison to Truman in deliberation, and went on to advocate allowing service even more than whites. Despite the racial effects here, I do not think that this case need be normatively troubling from a deliberative point of view. First, the sign of the influence effect is counter to typical power dynamics (as it was for Affirmative Action as well). And second, the "influenced by" effect might be a reasonable attempt by blacks, Latinos, and Latinas to balance their cultural conservatism against a kind of minority solidarity that had not occurred to them.

Unsurprisingly, people with Dominant personalities were consistently less likely to be persuaded *by* their group, though the effects were fairly modest. However, their ability to influence their groups

unduly exhibits an interesting pattern.[30] They were not too successful on Affirmative Action and Gays in the Military ($\bar{\Delta}$ = .004 and .097; n.s.), but were very influential on the Flat Tax issue ($\bar{\Delta}$ = .257; $p < .0005$). Recall that the Flat Tax deliberations were generally low information environments. Thus people who merely seemed to have evidence, or put their opinions forth strongly, were not easily countered. Perhaps even more troubling, racial minorities had significantly less influence on their groups for this issue ($p < .05$; $\bar{\Delta}$ = .094). All of this is consistent with the meta-hypothesis, and suggests an important lesson for designing deliberative institutions. In situations where subject's personal experiences and background knowledge are not adequate to the question at hand, other substantively irrelevant, but socially powerful, factors may rush in to fill the vacuum.

Table 10: Summary of Support for Hypotheses [31]

Hypotheses	**Affirmative Action**	**Gays in the Military**	**Flat Tax**
Talk Matters	Very Strong	Moderate	Strong
Valence	Very Strong	Strong	Moderate
Expanded Perspective	Moderate	Weak	None
Filter	Strong	Weak	– NA –
Market-Forum	Very Strong	Moderate	Weak
Impersonal Influence	Moderate	Moderate	Very Strong
Priority of Respect	Strong	Strong	– NA –
Respect-as-Heuristic	Strong	Very Strong	Weak
Respect-as-Attention	Moderate	Strong	Weak
Fair Influence	Strong	Strong	Weak
Proceduralism	Weak	Strong	Moderate
Meta-Hypothesis	← Strong →		

V. Conclusion

Deliberative democratic theory has matured as a normative theory. No longer an upstart, it is one of the most important normative models of democracy on offer today. Indeed, proposals for deliberative

[30] I scaled personality questions that measure a subject's tendency to behave in aggressive, attention getting, or insistent ways in social situations. The other pole of the factor might be labeled "Submissiveness" or "Conformity." For details, see the supplemental appendix. Dominance's effect here is controlling for Political Knowledge, and I take it as uncontroversial that aggressive people should not have greater influence merely because they are aggressive.

[31] I intend these labels only as a convenient overview of the large number of discrete tests discussed more adequately in the body of the text. Since there were qualitatively different (and sometimes multiple) tests across hypotheses, I could not use a uniform standard. However, "Very Strong" generally required ($p < .01$), "Strong" ($p < .05$), "Moderate" ($p < .10$), and "Weak" only required the expected sign. "Very Strong" and "Strong" also generally required considerable substantive significance. The Filter and Priority-of-Respect hypotheses did not apply to the Flat Tax because there were no feeling thermometers, and no significant social network effects respectively.

reform of democratic institutions abound. However, since deliberative theory makes implicit claims about what happens when we deliberate, it is not purely a normative theory. Consequently, if we are to warrant claims for institutional reform, deliberative theory will have to prove that human institutions – with all of their imperfections – can channel, to some significant extent, its attractive normative features.

For my experiments, I stipulated twelve hypotheses derived from deliberative theory. And while some of the results have plausible alternate interpretations, I am aware of no other single theory that can account for them all. Thus, taken as a set, they constitute a fairly differentiating test of deliberative theory. On the whole, the tests support deliberative theory's claims for deliberative practice, conditional on subjects having enough information to make the process work. Deliberative decision-making was quite different from what would have happened had subjects merely voted without deliberating. Rather than polarizing opinion, deliberative opinion change had a valence. Deliberation tended to change opinions by enlarging subjects' perspectives, prompting a shift from a market to a forum frame, and in some cases, by filtering out affective dislike as a basis for decision-making. Deliberative influence was only mediated by respect networks, rather than less cognitively plausible categories such as friendship and familiarity. Deliberative influence did not seem to replicate standard power relations very much, unless the deliberative encounters failed for lack of adequate information and background. And people assigned at least some value to the procedural legitimacy of deliberative decision making.

These findings complement previous deliberative research by deriving the mechanisms of deliberative opinion change from the normative theory, and then isolating them in deliberative practice. They go some way toward warranting the assumption that Deliberative Opinion Polls and other deliberative forums improve opinion quality in ways specified by the normative theory. This step is crucial for arguments in favor of deliberative reform. They also suggest that a broader deliberative culture, involving deliberation among friends, neighbors, and antagonists, will not necessarily founder on the habits of mundane social life. With further research, applied deliberative democracy may be able to follow the path of normative deliberative theory, moving from the experimental fringes of political practice, into a position to make powerful claims on policy makers and fellow citizens alike.

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Appendix

Coding Criteria for Deliberative Quality:

Task Focus

0 Group unengaged and more often off topic than on

1 Group relatively unengaged and often off topic

2 Group well focused and engaged with substantial exceptions

3 Group well focused and engaged with minor exceptions

4 Group exceptionally well focused and engaged

Participation & Equality

0 Discussion almost completely dominated by the same member

1 Discussion skewed substantially towards the same one or two members

2 Discussion often skewed towards the same one or two members

3 Discussion generally well distributed – usually only one or two members not participating

4 Discussion very well distributed – almost always all members participating equally

Respect & Civility

0 Members consistently interrupt each other, speak aggressively, and acknowledge only their own reasons, perspectives, and positions.

1 Members often interrupt each other, speak aggressively, and acknowledge only their own reasons, perspectives, and positions.

2 Members occasionally interrupt each other, speak aggressively, and acknowledge only their own reasons, perspectives, and positions.

3 Members typically allow each other to speak, address each other with respect, and acknowledge each other's reasons, perspectives, and positions.

4 Members consistently allow each other to speak, address each other with respect, and acknowledge each other's reasons, perspectives, and positions.

Information & Reason-Giving

0 Group discussion badly informed, and members merely assert their positions

1 Group discussion somewhat badly informed, and members offer only pro forma rationales

2 Group discussion moderately informed, and members offer simple rationales

3 Group discussion well informed, and members offer decent rationales

4 Group discussion exceptionally well informed, and members offer sophisticated rationales.

Political Knowledge

This index was constructed from the first principal component of nine identification items and four interest and media use items. (Recall that these data were gathered in the spring of 1995.)

Identification Items: Robert Dole, Clarence Thomas, Ted Kennedy, Boris Yeltsin, Newt Gingrich, Al Gore, Alan Greenspan, and the two U.S. senators from the subject's home state.

Interest & Engagement:

1. Some people seem to follow what's going on in government and public affairs most of the time, whether there's an election going on or not. Others aren't that interested. Would you say that you follow what's going on in government and public affairs: most of the time; some of the time; only now and then; not at all.

2. How often would you say that you discuss politics with your family or friends?
   Every day; three or four times a week; once or twice a week; never

3. How many days in the past week did you read a daily newspaper?

4. How many days in the past week did you watch the news on TV?

Dominance

This index was constructed from the first principal component of the following six items.

1. My friends would say that I am more polite and accommodating than assertive and aggressive.
2. When I think that someone or something needs to be criticized, I don't hesitate doing it.
3. I become easily embarrassed when I am the focus of attention.
4. I tend to speak my mind even when I am around people with more experience or authority than me.
5. I am often called on to informally motivate and lead a group.
6. I generally feel uncomfortable exercising authority over others.