

"Deliberation and Net Attitude Change"

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## ABSTRACT

Few would doubt that deliberation, defined roughly as serious, informative, civil discussion changes some individual-level opinions and vote intentions. *Gross change*—by individuals, in one direction or the other—figures to be appreciable. But if about as many people change about as much in each direction, the *net change* may still be nil. And from the standpoint of democracy it is the net change that is the more important. No doubt it has some normative value for everyone to reach his or her own considered or authentic preferences. But if the polls and election results still read exactly the same, it makes no difference policy or election outcomes, nor to democracy as a decision-making process.

This paper reviews the net change in policy attitudes and electoral preferences across a sizable number of Deliberative Polls in a variety of settings. We first show that statistically significant net change is far more the rule than the exception but that it varies across issues and settings. We then estimate a model aimed at explaining the magnitude of net change, in terms of the location (country), salience of the issue, mode (face-to-face versus online), heterogeneity of the sample, and other factors.

One of the saddest but most widely acknowledged truths about mass politics is that most people's attitudes on most policy issues rest on very little thought and information. There are too many issues, too many other demands on time and attention. Even the most rudimentary pieces of information for evaluating the consequences of given policy alternatives are frequently lacking (Luskin 1987, Delli Carpini and Keeter 1996, Price 1999).

Deliberation can therefore be expected to change many policy attitudes. Not all. Whether by means of careful consideration, groping in the dark with the aid of heuristics and simple cues, or purely random responding, some people may already arrived at attitudes appropriate to their values and interests. Those people's attitudes should not change. They are already where they "should" be. But many of those who previously had no meaningful attitude can be expected to acquire one, and many of those who previously had a more meaningful but ill-fitting attitude, at odds with their values and interests, can be expected to change it.

This is a matter of individual-level or *gross* attitude change. But from the perspectives of both democratic theory and practical politics, the more important question is aggregate or *net* attitude change. For some people, adopting an attitude (more) in keeping with their values and interests will mean moving one direction, for others in the opposite direction. To the extent that these opposing movements are about equally frequent and sizable, the result will be a wash. And if that is what generally happens, deliberation cannot be expected to make much difference to public opinion or policy outcomes. "Deliberative democracy," in that case, is just democracy.

This question is the crux of the ongoing debate over citizen competence (compare, e.g., Lupia and McCubbins xxxx or Popkin xxxx with Bartels xxxx, Delli Carpini and Keeter xxxx, or Luskin 2002). *Extenuationists* contend that widespread public ignorance (which they concede) has no effect on policy attitudes or electoral choices, at least in the aggregate, *consequentialists*,

that it does so, even in the aggregate. In its stronger and more common version, the extenuationist claim is that the great majority of people have already used heuristics and simple cues to approximate their “full information” opinions. In its weaker version (advanced chiefly by Page and Shapiro xxxx), it is that while many people may mistake their full information opinions, those mistakes largely cancel out, so that the *distribution* of opinions is nonetheless close to the full information distribution. If the stronger version is true, deliberation should not produce much gross, never mind net, attitude change. If the weaker version is true, it may produce a good deal of gross change, but still not much net change.

So how frequently and how much does deliberation change the balance of opinion? This paper reviews the net changes in the 58 policy attitude indices afforded by 9 DPs. As we shall see, some policy attitudes show much more net change than others. Thus the next question is what accounts for that variation. What is it about the issue, the deliberators, or the structure of the deliberations that promotes or inhibits net attitude change?<sup>1</sup>

### **Data**

The basic (face-to-face) DP design starts by interviewing a random sample, then inviting them to attend a weekend discussing the issues at a common site. Before the weekend, they are sent carefully balanced briefing materials laying out arguments for and against policy alternatives. During the weekend, they alternate between discussions in randomly assigned small groups led by trained moderators and plenary sessions in which they put questions shaped by the small group discussions to panels of experts, policy makers, or politicians. At the end, the participants answer the same questions as at the beginning. Frequently a separate random sample, answering the same questions at the end of the process, provides a control group. (For

more on the face-to-face design, see Fishkin 1997; Fishkin and Luskin 1999; Luskin, Fishkin, and Jowell 2002.)

The online design is broadly similar. The mode is voice, not text, so what is lost is the physical presence and company of others, as well as the nonvocal communication entailed. The discussions are spread over a period of weeks. The assignment to small groups is nonrandom, dictated instead by possible meeting times. These are the main differences. But the participants still “meet” in small groups, still led by trained moderators, and still question panels of policy experts and policy makers. They still receive briefing materials. They are still randomly sampled offline, with “nonusers” receiving free access, including free equipment, to get them online.<sup>2</sup> (For more on the online design, see Luskin, Fishkin, and Iyengar 2006 and Iyengar, Luskin, and Fishkin 2006.)

This study is based on nine DPs, affording 58 policy attitude indices. The DPs, conducted between 1995 and 2004, concerned topics ranging from Britain’s role in the E.U. to the choice candidates in the U.S. presidential nomination campaign of 2004. Two were online, the remainder face-to-face. Their sample sizes ranged from 238 to 347. The policy indices ranged from E.U. expansion to the tradeoff between lower taxes at the cost of fewer services and more services at the cost of higher taxes to protecting human rights. The indices contain from one to seven items. Appendix A describes the DPs and the indices.

### **How Much Net Change?**

Let us first of all be clear about what we are talking about. Let the  $i$ th individual’s pre- to post-deliberation change on the policy attitude index  $X$  be  $X_{i2} - X_{i1}$ . The net change is simply the difference of the pre- and post-deliberation means, across individuals,  $\bar{X}_2 - \bar{X}_1$ . This may be

either positive or negative, but here we are interested in its magnitude, the absolute net change,  $|\bar{X}_2 - \bar{X}_1|$ .<sup>3</sup> All the policy indices have been linearly translated to the [0,1] interval.

The relationship between absolute net and mean gross change is worth noting. The mean gross change, in the same notation, is the mean of  $|\bar{X}_{i2} - \bar{X}_{i1}|$ . (The absolute value is taken before averaging across individuals, instead of after.) The absolute net change must perform be less than or equal to the mean gross change—and in practice must almost always be substantially less, since the two quantities are equal only if everyone who changes, changes in the same direction. That, needless to say, almost never happens, or comes close to happening.

Table 1 presents the mean absolute net attitude change, both across the policy indices in each DP and, in the final row across the nine DPs, as well as the proportion of the policy indices that are statistically significant (by a two-tailed test, at the .05 level), again for each DP and across all nine DPs. Overall, the results show that statistically significant net change is not only common but very common—far more the rule than the exception. 72.4% of the 58 indices show statistically significant net attitude change. The magnitudes are also impressive. The mean absolute net change, on the 0 to 1 scale to which all these indices have been normed, is .096.

To appreciate this number, consider that by no means everyone can ever be expected to change very much. One reason is that some sizable fraction of most samples must start off somewhere near their “full information” position—either knowingly or by lucky guessing (giving a non-attitudinal response that happens to be close to what their fully informed attitude would be). In neither case can we expect much change. These respondents are already where they “should be.”

The other reason concerns the translation to numbers. The maximum absolute net change of 1.0 occurs only when everyone starts at one extreme (the same extreme for everyone) and

moves clear across the scale to the opposite extreme. This is, as Luskin and Globetti (xxxx) put it, “the sort of thing that happens only in Gilbert and Sullivan operettas.” In actuality, not everyone starts at the same point, and many start near the middle.

Take the example of an index consisting of a single five-category item, say an agree-disagree item. The possible values on the 0-1 scale are 0, .25, .5, .75, and 1. If 40% of the sample change, by an average of two categories, in a positive direction (say from neutrality to strong agreement or from disagreeing somewhat to agreeing somewhat), while only 20% change, by an average of only one category, in a negative direction, that is a very decided aggregate shift. Almost half the sample changes positively, and those doing so are twice as numerous and average changing twice as much as those changing negatively. Yet even this striking result translates to an absolute net change of only .15. (The mean gross change is .25.) Absolute net changes of half that size—as would occur in this example if those changing positively averaged changing only the same amount but were still twice as numerous, or if they were no more numerous but still averaged changing twice as much—are still quite notable.

**[Paragraph on variation (standard deviation) across indices, both overall and within each study.]**

### **Net Change and Salience**

One obvious possible reason for the variation in absolute net change is the salience of the issue. The more salient the issue, the more it will tend already to have been deliberated, however imperfectly. The deliberations may tend to be mostly with people of similar background and views (the largest part of what would make them imperfect), but the hotter the topic, the more

people should already have learned, thought, and talked about it, and the more fully developed their attitudes should already be.

Salience can be proxied at the level of the DP by the mean T1 knowledge score or at the level of the policy attitude index by the by the proportion of respondents giving “no opinion” (NO) responses to the items composing that index. Table 2 juxtaposes these measures of salience (aggregated up to the DP level, in the case of NO responses) with the mean absolute net change, reprised from Table 1. The strong negative relationship between T1 knowledge and the mean absolute net attitude change is apparent to the naked eye. Across the nine DPs, the correlation between the T1 mean knowledge and the mean absolute net change is  $-.583$ . Surprisingly, the correlation between the T1 proportion of NO responses and the mean absolute net change is positive, at  $.272$ , but his anomaly vanishes in he multivariate context (read on).

### **A Multivariate Model**

But salience is probably not the only thing affecting the absolute net change. Let us consider the net change exhibited by a given discussion group on a given policy. The unit of analysis is thus the group-policy combination. What follows is highly preliminary, but the variables that may plausibly affect the absolute net change include:

**The salience of the topic (SALIENCE).** We have already made the case for salience’s effect and for its operationalization as either the mean pre-deliberation level of knowledge or the proportion of pre-deliberation NO responses. The effect should be negative under the first operationalization and positive under the second (an inverse measure). The greater the salience, the smaller the absolute net change.

**The substance of the topic (FOREIGN).** The absolute net change may depend on any number of dimensions having to do with the substance of the topic, but there is one that both



leaps out and can be measured with our data: whether the topic concerns domestic or foreign policy. The variable here is a dummy distinguishing the two. A good deal of literature suggests that people tend to have less well developed attitudes about foreign than domestic policies. If so, the absolute net change should tend to be smaller on foreign policy issues, although whether the dummy variable distinguishing the two sorts of issues should have a nonzero effect in a model also containing the issue's salience is less clear.

**The group's initial diversity of opinion (DIVERSITY).** A discussion group's aggregate inertia should be greatest, other things being equal, when every member starts off with exactly the same opinion. The more diverse the initial opinions, the easier it should be for the group to shift its center of gravity. We operationalize a group's initial diversity of opinion by the standard deviation of its members' pre-deliberation policy attitudes.

**The group's initial extremity of opinion (EXTREMITY).** A group's initial mean policy attitude may lie either closer to or further from the scales's midpoint, representing neutrality. One could in this case imagine an effect of either sign. According to Sunstein (xxxx), groups routinely tend to "polarize—to move further out on the same side of the midpoint as they start on. This does not appear to be the case for the balanced, non-consensus-seeking deliberations of a DP, in contrast to the mock juries from which Sunstein draws his evidence, but there does not appear to be any tendency in the opposite, depolarizing direction either (Luskin, Fishkin, and Jowell 2002, Luskin, Fishkin, and Hahn 2007). So let us assume that any net change is either about as likely to take the group in one direction as the other, as found by Luskin, Fishkin, and Jowell (2002) and Luskin, Fishkin, and Hahn (2007) or tends to take it further away from the midpoint, as Sunstein (xxxx) contends. In that case, groups further from the midpoint may either (a) tend to show larger absolute net attitude change because the

imbalance in the argument pools behind Sunsteinian polarization is greater or (b) tend to show smaller absolute net attitude change because of ceiling effects: there is only so much further out they can go.

**The mode of deliberation (ONLINE).** Some DPs (and real world deliberations) are face to face. Others, these days, are online. The variable here is a dummy distinguishing the groups in the two DPs of this set that were conducted online. At least in the DPs to date, online deliberations has tended to have effects similar to but fainter than those of their face to face counterparts. Other things being equal, we might therefore expect the absolute net change to be smaller in online deliberations.

**The culture or setting (U.S.).** As with the substance of the topic, the absolute net change may plausibly depend on many different aspects of the culture or setting. The still relative small number of countries in which these DPs were sited, however, limits us to one variable under this rubric: a dummy distinguishing DPs conducted in the U.S. from those conducted abroad. The sign of any such effect is frankly unclear; it just seems plausible that there could be one—that the absolute net change could be larger or smaller in the U.S. or elsewhere.

The model, incorporating, in this first cut, only linear, additive effects, is then

$$\begin{aligned} \text{NET} = & \beta_0 + \beta_1 \text{SALIENCE} + \beta_2 \text{FOREIGN} + \beta_3 \text{DIVERSITY} \\ & + \beta_4 \text{EXTREMITY} + \beta_5 \text{ONLINE} + \beta_6 \text{U.S.} + u, \end{aligned}$$

where NET is the absolute mean net change, the  $\beta$ 's are coefficients, and  $u$  is a disturbance. In line with the reasoning just given, we expect that  $\beta_1 < 0$  when SALIENCE is measured as the mean pre-deliberation knowledge but that  $\beta_1 > 0$  when SALIENCE is measured as the pre-

deliberation proportion of NO responses, that  $\beta_2 > 0$ , that  $\beta_3 \text{ DIVERSITY} > 0$ , and that  $\beta_5 < 0$ . We are unsure about the signs of  $\beta_4$  and  $\beta_6$ .

The ordinary least squares estimates are reported in Table 3. The two block-columns give the estimates with SALIENCE proxied by the pre-deliberation mean knowledge score and by the pre-deliberation proportion of NO responses. The choice does not make much difference. The SALIENCE coefficient estimate is slightly sharper and the overall fit slightly tighter with SALIENCE measured as the mean pre-deliberation knowledge score. The other coefficient estimates are not hugely affected, although two are statistically significant only with SALIENCE proxied by the proportion of NO responses.

Note that in this analysis SALIENCE varies only by group, not by issue, when proxied by pre-deliberation knowledge but by issue as well as group when proxied by the pre-deliberation proportion of NO responses. In this light it is rather surprising that using the latter as the proxy does not produce distinctly nicer results than using the former.

In any case, the issue's salience, however, proxied, is very important. The more salient the issue, the smaller the absolute net attitude change. The diversity of the group's initial opinion, whether the deliberations are online, and whether the topic concerns foreign policy all have the expected effects (although, in the last case, it is significant only with salience proxied by the proportion of NO responses). The more diverse the group's pre-deliberation opinions, the greater the absolute net change, and online deliberations and issues of foreign policy tend to involve more absolute net change than face-to-face deliberations and issues of domestic policy. The extremity of the group's pre-deliberation opinions seems to have a negative effect—the more extreme the pre-deliberation opinions, the smaller the absolute net change, consistent with ceiling effects—although this too is significant only with salience proxied by the proportion of

NO responses. Whether the deliberations take place in the U.S. or elsewhere has no effect.

**[More to be added about the magnitudes of these estimated effects.]**

**Table 1**  
**Absolute Net Change**

<b>Study</b>	<b>Number of Indices</b>	<b><i>n</i></b>	<b>Mean</b>	<b>Proportion Significant</b>
<b>Primaries (Online)</b>	<b>4</b>	<b>317</b>	<b>.151*</b>	<b>1.000</b>
<b>Australian Referendum</b>	<b>5</b>	<b>347</b>	<b>.094*</b>	<b>1.000</b>
<b>British General Election (1997)</b>	<b>4</b>	<b>276</b>	<b>.115*</b>	<b>1.000</b>
<b>Europe</b>	<b>4</b>	<b>238</b>	<b>.117*</b>	<b>.500</b>
<b>National Health Service</b>	<b>13</b>	<b>230</b>	<b>.069*</b>	<b>.692</b>
<b>Foreign Policy</b>	<b>9</b>	<b>340</b>	<b>.107*</b>	<b>.778</b>
<b>Foreign Policy (Online)</b>	<b>9</b>	<b>283</b>	<b>.097*</b>	<b>.667</b>
<b>Monarchy</b>	<b>4</b>	<b>258</b>	<b>.099*</b>	<b>.750</b>
<b>General Election (2004)</b>	<b>6</b>	<b>299</b>	<b>.068*</b>	<b>.167</b>
<b>Overall</b>	<b>58†</b>	<b>287.6</b>	<b>.096*</b>	<b>.724**</b>

\*Significantly different from 0,  $p < .01$ .

\*\*Significantly different from 0,  $p < .001$ .

†Total; all the other entries in this row are means.

**Table 2**  
**Mean Absolute Net Change and Salience**

Study	Mean Absolute Net Change	T1 Knowledge	T1 NO Responses
<b>Primaries (Online)</b>	<b>.151</b>	<b>.478</b>	<b>.091</b>
<b>Australian Referendum</b>	<b>.094</b>	<b>.520</b>	<b>.053</b>
<b>British General Election (1997)</b>	<b>.115</b>	<b>.470</b>	<b>.038</b>
<b>Europe</b>	<b>.117</b>	<b>.514</b>	<b>.029</b>
<b>National Health Service</b>	<b>.069</b>	<b>.656</b>	<b>.080</b>
<b>Foreign Policy</b>	<b>.107</b>	<b>.453</b>	<b>.025</b>
<b>Foreign Policy (Online)</b>	<b>.097</b>	<b>.348</b>	<b>.033</b>
<b>Monarchy</b>	<b>.099</b>	<b>.647</b>	<b>.075</b>
<b>U.S. General Election (2004)</b>	<b>.068</b>	<b>.723</b>	<b>.113</b>
<b>Correlation<sup>†</sup></b>		<b>-.583</b>	<b>.272</b>

<sup>†</sup>Between mean absolute net change and salience.

**Table 3**  
**Determinants of Absolute Net Change (OLS Estimates)**

	T1 Knowledge			T1 NO Responses		
	Coeff.	s.e.	<i>p</i>	Coeff.	s.e.	<i>P</i>
<b>Constant</b>	<b>.064</b>	<b>.014</b>	<b>.000</b>	<b>.103</b>	<b>.038</b>	<b>.008</b>
<b>Saliency</b>	<b>-.054</b>	<b>.020</b>	<b>.008</b>	<b>.064</b>	<b>.037</b>	<b>.081</b>
<b>Diversity</b>	<b>.219</b>	<b>.028</b>	<b>.000</b>	<b>.184</b>	<b>.030</b>	<b>.000</b>
<b>Extremity</b>	<b>-.031</b>	<b>.023</b>	<b>.180</b>	<b>-.049</b>	<b>.023</b>	<b>.033</b>
<b>Online</b>	<b>-.040</b>	<b>.006</b>	<b>.000</b>	<b>-.044</b>	<b>.007</b>	<b>.000</b>
<b>US</b>	<b>.001</b>	<b>.007</b>	<b>.921</b>	<b>.005</b>	<b>.007</b>	<b>.414</b>
<b>Foreign</b>						
<b>Policy</b>	<b>.006</b>	<b>.006</b>	<b>.296</b>	<b>.013</b>	<b>.006</b>	<b>.020</b>
<b>Adj. <math>R^2</math></b>	<b>.107</b>			<b>.101</b>		
<b><i>n</i></b>	<b>966</b>			<b>931</b>		

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NOTES

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<sup>1</sup>The direction of net change is another question. Here we consider only its magnitude.

<sup>2</sup>All three online DPs relied on the online polling firm Knowledge Networks for sampling and recruitment.

<sup>3</sup>Although we phrase this discussion in sample terms, all these quantities can be understood as estimators of population counterparts.