Can Online Deliberation Improve Politics? Scientific Foundations for Success

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Interest in deliberative democracy grows. Its appeal is understandable. Deliberation, with its emphasis on distributed speech rights and information exchange, has the potential to increase the quality and quantity of political interest and participation (Habermas 1996).

While the benefits of deliberative democracy are easy to imagine, they can be hard to achieve. Like any form of civic education, the success of a deliberative endeavor depends on choices made by its designers. For a deliberative endeavor to increase participation, or affect how a target audience thinks about an important political matter, its informational content must, at a minimum,

• attract the audience's attention and hold it for a non-trivial amount of time,

• affect the audience's memories in particular ways (not any change will do), and

• cause them to retain subsequent beliefs – or choose different behaviors – than they would have had without deliberation (Lupia 2002).

A problem for the deliberative democracy movement lies in its tendency to ignore these requirements. Consider, for example, deliberation practitioners who have rushed into grand attempts to demonstrate the effectiveness of deliberative democracy. They base their designs, and claims about the likely impact of their endeavors, on folk theories about information, communication, and choice. They proceed as if decades of scientifically validated evidence about human thinking and learning do not apply. Henceforth, I refer to such scholars collectively as deliberation practitioners.¹

The claims that many deliberation practitioners make about what citizens will pay attention to, what parts of a conversation or presentation citizens will remember, and the conditions under which people will find relevant the kinds of information that deliberative democrats favor are incorrect. These errors are problematic for those who contribute their time, money, or energy to deliberative endeavors, because when deliberative strategies are based on such claims (or the unstated presumption that deliberation participants will simply learn what an

¹ Professor Habermas, to the best of my knowledge, has not rushed into such endeavors and would not be included in this group.

practitioner wants them to learn), the consequences can include indifference (by driving people further from political participation), can heighten socially unproductive feelings about others (by adding to or reinforcing false beliefs or unjustified stereotypes), lower competence at key democratic tasks (by highlighting false or biased information) or, more likely, it can be inconsequential (ignored by the target audience or completely forgotten soon after the deliberative gathering). Even the most basic of findings about human thinking and learning from fields such as psychology, the neurosciences, sociology, and political science are sufficient to convert the grand claims of deliberation's most vocal practitioners into empty promises.

Online deliberation, the focus of this book, is promising because of its ability to bring people together for the purpose of information exchange without the difficulties caused by physical distances between participants. Can practitioners in this field succeed where others have failed? I argue that it can. The blueprint for success is involves a commitment to consider objective and scientifically validated evidence about the conditions under which bringing people together in a deliberative setting can produce specific kinds of cognitive and behavioral changes.

This essay describes practices that people interested in making online deliberation succeed should follow. First, I offer a brief discussion about how to evaluate the success of a deliberative democratic exercise. Next, I continue by describing a set of *necessary conditions for deliberative success*. These conditions apply basic scientific findings about attention, memory, and learning to the question of when deliberation can increase change participants' beliefs and/or behaviors. Throughout the essay, discussions of measurement and conditions learning are unified by a commitment to objectivity, replicability, and transparency – hallmarks of the scientific method. Practitioners and scholars who make such commitments are more likely to realize online deliberation's substantial potential. As is also true in the domain of shareware, people who follow such practices are also in a better position to provide credible advice to others who wish develop effective deliberative utilities, and to contribute to important ongoing conversations about the conditions under which deliberation is effective.

Measuring Success

To speak about necessary conditions for successful online deliberation requires a measure of success. Since people pursue deliberative strategies for different reasons, an identical metric will not work for everyone. To keep this essay brief, I will focus on one kind of metric, pertinent to task-specific competence, that many people find useful.

Many deliberative strategies are put forward to increase a civically relevant form of competence (e.g., a citizen's ability to accomplish well-defined tasks in her role as voter, juror, or legislator). The task in question can include voting, speaking, or participating as one would if they possessed certain kinds of information. In such cases, the measure of success should capture the extent to which online deliberation increases the targeted skills.

If deliberation is to increase a civic competence, it must cause specific kinds of changes in how participants think about targeted aspects of politics – not any change will do. Suppose, for example, that we can define a "competent vote" as the one that a person would cast if she knew where a specific set of candidates stood with respect to a well-defined list of major policy debates. For deliberation to *increase* a voter's competence, she must not be voting competently initially. Deliberating must *cause* her to do so.

To measure success in such cases, we need reliable data on how the voter would have behaved absent deliberation and data on how she would have behaved if she had the information listed above, so that we can compare those estimates to what actually happened during the deliberative setting. If we have only data on how she would have behaved absent deliberation, we can document that deliberation induced behavioral change, but not necessarily whether the change constitutes an increase in competence.

The task of accumulating such data is achievable, but it is not always easy. Difficulties inherent in measuring what a voter would have chosen if she were better informed sets traps into which practitioners regularly fall. Many people simply presume that if others were more

informed, they would see the world as they -- the practitioners – do.² They then proceed as if the voter's competence should be measured by the extent to which the voter, after deliberating, reaches the practitioners' preferred types of conclusions. But when the presumption is incorrect (e.g., "what is good for the participants is not the same as what is good for the practitioners" or "the information that practitioners presume relevance has less or no relevance to the practitioners"), then deliberation that leads people to mimic the practitioners can stifle -- or even reduce -- competence. Such possibilities raise questions about the value of deliberative democracy, such as that voiced by Posner (2005:42):

"I think that what motivates deliberative democrats is not a love of democracy or a faith in the people, but a desire to change specific political outcomes, which they believe they could do through argument, if only anyone could be persuaded to listen...I sense a power grab by the articulate class whose comparative advantage is – deliberation."

To parry such critiques of deliberative endeavors, it is helpful to offer not only concrete evidence about what behaviors constitute competent performance in advance of the deliberation, but also to be very direct about who such increased competence is supposed to benefit. With such evidence, claims about the success, failure, and value of a deliberative endeavor can be more effectively and objectively evaluated.³

Necessary Conditions for Deliberative Success

Once designers of a deliberative enterprise agree on what they want to accomplish and how to measure it, the question becomes, when can online deliberation increase the desired competence? Designers can choose to answer this question effectively or ineffectively. An

 $^{^2}$ See Hewstone and Fincham 1996 for a general and accessible discussion of this topic. See Lupia 2006 for a discussion that focuses on questions of voter competence.

³ Others simply presume that any change in opinion that follows a deliberative endeavor must be evidence of increased civic competence or social value. There are two problems with such claims. First, if the opinion changes cannot be tied strongly and directly to changes in a person's ability to accomplish concrete and socially valuable tasks, then the extent to which they constitute evidence of increased civic competence is questionable, at best. Second when such data is offered as evidence of the value of deliberation to participants, it is question begging. Without a transparent and objective way to determine the kinds of opinion changes that are of value, such changes cannot be easily distinguished from the kinds of opinion change (following exposure to 30-second advertisements or political cartoons), than many deliberation practitioners abhor.

effective answer can begin with just a few scientifically-validated findings about how people think and learn from others. Many deliberation practitioners do not take this step. Instead, they describe deliberation as if it is a place where ideas travel from one mind to another unadulterated – as if listeners interpret ideas exactly as speakers intend to convey them. *This is incorrect*.

In human communication, all but the simplest utterances and stimuli are parsed. People pay attention to only a tiny fraction of the information available to them, and they can later recall only a tiny fraction of the things to which they paid attention (see. e.g., Kandel et. al. 1995: 651-694). To keep this essay brief, I will attempt to draw your attention to a short set of necessary conditions for deliberative success that follow directly from basic attributes of the process by which information is parsed. Lupia (2002, 2005a, b) offers a more detailed treatment of this topic. *The Battle for Attention/Working Memory*

Working memory is the aspect of cognitive function that regulates and processes our conscious thought at any given moment. Its capacity is very limited. Regardless of how hard we try, we can pay attention to relatively few things at any one time (Baddeley and Hitch 1974, Kandel et. al. 1995: 664-5). As a result, we must ignore almost everything around us.

To get our attention, an utterance made during the course of deliberation must fend off competitors such as a person's preoccupation with certain prior or future events, the simultaneous actions or utterances of others, and even the color of the wallpaper. So, for online deliberation to increase competence the key is not simply putting people in a place where others speak, it is putting them in situations where they want to pay attention to information that will help them acquire the kinds of competence that motivated the deliberative enterprise in the first place.

I was reminded of the challenges of gaining attention during the conference from whence this book emanated. The conference organizers were considerate enough to ensure that everyone had Internet access in the main conference room. I chose to sit in the back of the auditorium during some of the sessions. From there, I verified that many people who, from the stage, may have appeared to be attentive to the lecture were, instead, checking e-mail and surfing the web.

This outcome should not be at all surprising. In everyday conversations, we vary in the extent to which they pay attention to what others are saying. Many scientific studies document and verify a range of cognitive and contextual factors that lead to substantial variations in the parts of conversations to which we attend (see, e.g., Kitayama and Burnstein 1988). At the same time, an important social skill that we gain is to feign interest in a conversation even though our thoughts have drifted elsewhere. We learn to take in key words and to nod at appropriate times even though we are focusing most of our mental energies elsewhere. Sitting behind a room full of laptops only verifies the cognitive multitasking in which we all regularly engage.

The challenge posed for online deliberation is that even if a person is online, their attention can wander. It can wander off the screen to other topics or it can wander to any of the billions of colorful diversions that the Internet offers. For an online deliberative attempt to succeed at increasing a participant's competence, it must be structured in a way that allows the endeavor to win the battle of attention for a period of time sufficient to accept and process the focal content. Simply "being there" is not enough. As Lupia and Philpot (2005) demonstrate in experiments on how variations in the content and design of news websites affect participants subsequent interest in politics, the structure of a online deliberation website must give participants an incentive to engage – an incentive strong enough to defeat participants' urges to attend to other stimuli when parts of the interaction are of less than immediate relevance to participants.

The Battle for Elaboration/Long-Term Memory⁴

Other research reveals deep problems in grand claims about deliberation's transformative effects. In short, participants in a deliberative democracy session are going to remember precious little of what happened during the session. And the small fragments of the session that they retain may be quite different than what designers anticipated or practitioners led them to believe.

Even if a piece of information is attended to (wins a spot in short-term memory), it can only increase competence if it is processed in a particular way that leaves a unique cognitive

⁴ The content of this section is drawn primarily from Lupia (2005).

legacy in long-term memory, or LTM. If it is not processed in these ways, it is – from a cognitive perspective – gone forever. LTM depends on chemical reactions within and across specialized cells in the brain, with a particular reliance on each cell structure's "activation potential" (Churchland and Sejnowski 1992: 299-305, Kandel, et. al. 1995: Chapter 35, Schacter 2001). Activation potentials correspond to probabilities of recalling things once noticed, and what we usually call learning involves changing these activation potentials. The physical embodiment of learning that smoking is highly correlated with lung cancer, for example, is a change in activation potentials that makes you more likely to associate pain and death with smoking.

Two facts are important here for understanding the impacts of deliberation. First, if a speaker's attempt to increase another person's competence does not lead to a change in that person's activation potentials, then the attempt does not increase competence. Second, not every change in activation potentials is sufficient to increase competence – the change must be significant enough to help someone accomplish a task that she couldn't before.

These facts imply that it is hard to get participants in a deliberative setting to walk away from deliberation remembering what practitioners might want them to remember. To see why, think about the most important events in your life: your marriage, the birth of a child, times spent with your best friends, personal accomplishments, and depressing disappointments. Chances are that most of these events took place over a series of hours or days. How much do you remember about them? Even if you focus with all of your might, you can probably generate only a few seconds of distinct memories, tiny fragments of these critical events. Recall from LTM is not like bringing up an old document on your computer – which comes back exactly the way you saved it. There is significant decay. Deliberation practitioners who ignore how citizens think about politics are often surprised to learn about how little they can control what participants will remember. "The better argument," a construct that deliberative practitioners have used to characterize what participants will recall from a deliberative setting can easily be crowded out in LTM by something else, such as an outrageous statement or gossip conveyed between sessions. To

scientists who have worked in laboratories, conducted experiments on thinking or learning, or who have rigorously engaged the evidence and logic of such literatures, the facts about cognition listed above are core elements of the common knowledge. The same should be true for deliberation practitioners, but it is not.

The competition among stimuli for a place in the working memory of any conscious human is fierce and everpresent. Once a stimulus enters working memory, subsequent effort must be devoted towards processing it if the stimulus is to leave a cognitive legacy in LTM. Stimuli that are novel and of immediate relevance are privileged in such competitions (see, e.g., Kandel, et. al. Chapter 21) For deliberation scholars and designers, the implications of these attributes of attention and memory is that success requires a relationship between the goals of the deliberative enterprise and the desires of participants. Regardless of how important deliberation designers or scholars perceive their own activities or worldviews to be, deliberative presentations will "fall on deaf ears" if they ignore, or discount as unenlightened, the desires or worldviews of participants.

An Alternate View

Deliberation, in its online or conventional guise, is a form of civic education. In this and other writings, I have argued that such endeavors can more effectively and efficiently achieve civic-oriented objectives if they embrace, rather than run from, the underlying science of thinking and learning. I conclude this essay by offering a parallel argument from a different set of references – the social marketing literature. Social marketing is defined as: "the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behavior of target audiences in order to improve their personal welfare and that of their society. (Andreasen 1995: 7)

Andreasen (1995) offers a simple way of distinguishing civically oriented informational efforts that fail from those that succeed in their efforts (pp. 41-48, where the definitions of success and failure are analogous to the competence-based definitions I offered above). He

distinguishes effective from ineffective social marketers in several ways. Five of these ways are

as follows.

1. Effective: "The organization's mission is seen as bringing about behavior change by meeting the target market's needs and wants."

Ineffective: "The organization's mission is seen as inherently good."

2. Effective: The customer is seen as someone with unique perceptions, needs, and wants to which the marketer must adapt. "The assumption is made that customers have very good reasons for what they are doing."

Ineffective: Customers are the problem. Here, the customer (or in the case of deliberation, citizens) are "seen as the source of the problem. The customer is seen as deficient in one of two ways.

• Ignorance. Because the social marketer knows what a good idea it is to practice safe sex or put campfires out carefully, he or she assumes that the reason other people don't do this is that they simply do not know how desirable the marketer's favorite behavior is. Customers who are not complying are just too ignorant of the virtues of the proposed action."

• Lack of Motivation. Every once in a while, social marketers who are convinced that customer ignorance is the main source of their lack of success are confronted by research data showing that customers are not all as ignorant as the marketers thought. They then turn to their backup explanation: the real problem must be a character flaw."

3. Ineffective: "Marketing research has a limited role." "Formative research (before the campaign gets underway) is typically limited to finding out the extent of consumer ignorance or apathy...But they do not look at what customers want, what they actually do, or what is keeping them from acting."

Effective: Marketing research is vital. "[I]n evaluating overall program, good social marketers look to long-run behavioral impact and not to such potentially transient factors as information learned or attitudes changed...[to] give some assurance that there will be effects lasting well-beyond the limited span of the social marketing program."

4. Ineffective: "Customers are treated as a mass." Organizers "tend not to see the need for segmenting consumers into meaningful subgroups...They tend to treat customers as a mass, saying things like "We want to reach everyone with our program," or to divide their customers into two of three elementary segments (men and women, urban and rural, young and old) and treat them essentially all alike with "the one best approach." Effective: Customers are grouped in segments.

5. Ineffective: "Competition is ignored." Organizers "seldom really get inside the heads of their target consumers....Now, if you mention this to [an organizer], the response will probably be something like "Well the competition is the consumer's ignorance and lack of motivation." But this attitude both misses the point and is patronizing to consumers. Target consumers in most behavior-change situations have very good reasons for maintaining the behavior patterns they have held – often for a lifetime. As experience has shown, a great many of these behavior patterns are not the result of ignorance but of conscious choice."

Effective: Competition is seen to be everywhere and never ending.

Items 1-3 parallel my discussion of measurement above. The items stress the importance of being objective and transparent about the purpose of a deliberative endeavor – particularly when it comes to distinguishing deliberation participants' best interests from a deliberation practitioner's (possibly self-centered view) of how the world should be. When rationalizing why people do not now engage in the particular form of deliberation that a particular practitioner prefers, broad – and untested – claims about the public's ignorance or lack of information are offered. Citizens are often portrayed in such appeals as simple-minded, not because the practitioner has conducted any research on what people want but because the potential audience has made different choices about how they use their time. Good intentions can become demagoguery if deliberation practitioners fail to take the concerns of participants seriously.

Items 4 and 5 speak to the conditions under which deliberation can succeed. It reminds us that people pay attention to and remember different things. Therefore, a deliberative endeavor is more likely to succeed if it recognizes the challenges of winning the battles for participants' attention and memory – in particular the conditions for success stated above along with an understanding of how easy (or difficult) such conditions are to satisfy for particular individuals or groups. If deliberation practitioners are not discussing, or if deliberation designers are not thinking about, the conditions under which certain kinds of people will pay attention to, and be influenced by, certain kinds of presentations; that is, if they are claiming that deliberation would be good for everyone without a mention of the conditions, this is a sign that the practitioners are either unaware of – or chosen to ignore – the underlying science of human thinking and learning. As utopian wordplay, such grand and universal claims can be quite stimulating. As a foundation for the actual practice of deliberation, they have the unstable properties of quicksand.⁵

⁵ Dickson, Hafer, and Landa (2006) provide another recent example of research that distinguishes goals of deliberation practitioners from the conditions under which they can be achieved. The authors integrate insights from cognitive science, formal logic, and clever experiments to demonstrate that participants with different political ideologies will affect participants' willingness to speak and willingness (and ability) to attend to what others say. The results further document the often unexpected outcomes that deliberative democracy can produce and reinforce the importance of understanding deliberation's scientific foundations.

Conclusion

The Internet makes possible kinds and quantities of communication and coordination that are unprecedented in human history. Through these portals people can learn about others in exciting new ways. The Internet domain has great untapped potential for transforming social life. Yet how and when such transformations will occur is governed, in part, by forces of Nature that are better recognized than ignored. Chief among these forces are basic properties of human cognition and perception – and in particular their implications for attention and memory.

For decades, a wide range of scholars has built a base of scientifically-validated claims about human learning. The most effective among them have constructed evaluations of their research projects in a clear and transparent manner, and have been vigilant in remaining open to credible third-party evaluations of their projects' performance. Deliberation scholars have been inconsistent, at best, in following these practices. The field of online deliberation can improve do better by using science's findings and evaluative practices as foundations of their own efforts. The promise of online deliberation is more likely to be achieved if its practitioners commit to transparency, replicability, and objectivity as the foundations of their endeavors. The field can become more effective in less time by making their procedures transparent and sharing their data and designs as scientists do.

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