

Introduction

The Blossoming Field of Online Deliberation

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E-democracy may be the 21st century's most seductive idea. Imagine technology and democracy uniting to overcome distance and time, bringing participation, deliberation, and choice to citizens at the time and place of their choosing. Goodbye, then to 'attack ads' and single-issue politics—and to dimpled chads. E-democracy will return the political agenda to citizens. Or so the dream goes. —Keith Culver (2003)

1 Why 'Online Deliberation'?

The present decade has seen a blossoming of software tools, research projects, and everyday practice that can loosely be characterized under the heading of 'online deliberation'. A community has formed around this concept, and has met in international conferences, workshops, and special interest group sessions. The present volume, which grew out of the Second Conference on Online Deliberation in 2005, is an edited collection of research, experience, and insights that I, along with Beth Noveck (who helped select the papers) and Seeta Gangadharan (the coeditor of this volume), felt should be preserved and organized as a record of that conference and as a snapshot of the field during its early years. The chapters of this book do not include all of the work that has come to define the field, but several of the prominent early advocates of 'online deliberation' are represented here, along with a few of their critics.

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The online deliberation community was born of both frustrations and possibilities. Some of these are touched on in the quotation above from Keith Culver. In large-scale ‘democracies’, for example, the complexity and reach of political decisions appears to be overwhelming the capacity of most citizens to make well-informed voting choices and to have an acceptable level of influence on governments. Even at much smaller scales—neighborhoods and organizations for example—the pace of contemporary life in industrialized societies, and the globalized forces of control that seem to dictate much of life around the world, can leave one feeling alienated from decisions that affect one’s life. In these circumstances, the Internet in particular has seemed to many of us to be a potential antidote. The 20th Century saw a massive centralization of power over flows of information, through one-way mass media such as radio and television. The Internet, by contrast, is a two-way, many-to-many medium with the potential, now arguably being realized, to open communication to almost everyone in a medium that is not centrally controlled and that is flexible enough to facilitate citizen action (Rheingold 1999; Shane 2004).

Whether the Internet will continue to be maintained and developed as an open medium conducive to democracy is an important question, and is far from settled.¹ Online deliberation advocates generally rely on the vision of a communication network that is relatively unencumbered for deliberative activity, but many now realize that topics such as Internet governance and communication law and policy have profound implications for the dream of e-democracy. Another crucial issue is the ongoing existence of ‘digital divides’—inequalities of access and capacity that reflect and can exacerbate social and economic inequity between individuals, groups, and politics (Norris 2001; Riley 2007). Again, the online deliberation field has become identified with some assumptions about the future course of such divides, namely that they can be overcome sufficiently so that online deliberation does not amplify inequalities. But this too must be watched and acted upon by online deliberation advocates.

The focus of this book is not the Internet, society, and politics generally, but rather work that is especially related to online deliberation tools and their use. ‘Deliberation’ denotes ‘thoughtful, careful, or lengthy consideration’ by individuals, and ‘formal discussion and debate’ in groups (Collins English Dictionary 1979). We are therefore primarily interested in online communication that is reasoned, purposeful, and interactive, but the power and predominance of other influences on political decisions (e.g. mass me-

¹ For some different possible futures, see Benkler (2006), Lessig (2004), and Zittrain (2008).

dia, appeals to emotion and authority, and snap judgments) obviously make them relevant to the prospects for deliberative e-democracy.²

The term ‘online’ is difficult to define precisely, but could be read to include any electronic communication medium that augments our usual abilities to see or hear information separated from us in time or space and to communicate with other people, and that does so on demand. In addition to the Internet, this would include telephone and teleconferencing systems, broadcasting, and electronic tools for presenting information in face-to-face meetings.

A focus on *deliberation*, as opposed to the many other forms of communications that occur online and that bear on democracy (e.g. social networking, Internet campaigning), reflects another set of frustrations and possibilities. The possibility comes from the flexibility of information and communication technology, which appears to make deliberation online possible and even, possibly, superior to offline deliberation in cases where information access, time demands, and other constraints limit deliberation’s potential face-to-face. But the frustration is that deliberative activity of the kind defined above has been slow to gain traction on the Internet relative to communication that is more geared toward entertainment and toward personal rather than collective needs.

Deliberation online turns out to be a hard problem. Perhaps because it runs against the grain of how people naturally spend time online (and offline), or because deliberative democracy has not been high on the agenda for people designing tools for profit or personal gain, or because it is a more complex task that requires more technology than the early Internet made available, the dream that technology can facilitate a more deliberative society has been at best slow to be realized. The challenges, though, appear exciting for many. Hence the field, and this book.

2 Out of Many Communities

A common question underlies the work represented in this book: Can online tools be designed and used in ways that significantly enhance the quality of our discussion and decision making? But there are many communities and individuals who have been addressing this question, often without awareness of each other. As a first cut, we might classify efforts as primarily concerned with one or more of the following endeavors:

- *design*—the creation of online tools for deliberation;

² This paragraph is slightly adapted from the call for participation distributed prior to OD2005.

- *research*—studying the effects of online tools for deliberation via theories, observations, or experiments; and
- *practice*—using online tools as a participant in or facilitator of deliberative activity.

Although there is much overlap between them, these endeavors tend to draw people from different communities, with different sets of goals. Design typically involves software developers, user interface and human-computer interaction specialists, and a growing set of people interested in both deliberation and tool creation. Research is spread across various disciplines, including communication, information science, political science, computer science, sociology, psychology, organizational behavior and management science, philosophy, and public policy, and takes place in universities, corporate laboratories, nongovernmental organizations, and government agencies. The practice of online deliberation can of course involve anyone with the necessary access and skills to use available tools, but is especially common among politically active citizens and those whose work involves deliberation online, including online facilitators and dialogue and deliberation professionals.

Each of the fields mentioned above has a large and growing body of artifacts and literature relating to online deliberation. In the call for participation for OD2005, we noted:

Human-computer interaction approaches emanating from computer science tend to emphasize tool design and the use of networked computing by teams of problem solvers,³ while more theoretical work in computer science has focused on designs for secure voting systems.⁴ Political communication researchers, on the other hand, tend to study the effects of Web access or messaging software on civic engagement or voting among citizens outside of their work environments.⁵ Social choice theorists have developed powerful aggregation procedures that are now feasible given the storage and computing capacity of the Internet.⁶ Meanwhile, there is a great deal being done and written by practitioners outside of academia that is changing how people work and dialogue together online.⁷

³ See, e.g., the proceedings of the Computer Supported Cooperative Work (CSCW) conferences and the CRIWG—International Workshop on Groupware series.

⁴ See Helger Lipmaa's electronic voting links. Available at <http://web.archive.org/web/20050407054759/http://www.tcs.hut.fi/~helger/crypto/link/protocols/voting.html> (last accessed January 24, 2009)

⁵ See for example the online journals *IT & Society* (especially Price and Capella (2002)) and *Journal of Computer Mediated Communication*.

⁶ See Casella, Gelman, and Palfrey (2003) and Shah (2003).

⁷ See Rheingold (2002) and Allen (2004).

The challenge in creating a field for those involved in online deliberation is to identify, bring together, and organize the many strands of work that bear on this topic. Doing so has many potential benefits. When our work is fragmented and we are isolated from those who could influence us, we are much less likely to take advantage of what has been learned by others. Efforts are duplicated, and we may fail to see which problems have already been solved, which ones we may contribute to solving, and which ones have proven intractable after much work. Bringing communities together under these circumstances helps facilitate communication and organization needed for the field to progress, fostering relationships, collaboration, and institutional infrastructure that includes funding, professional recognition, and stable venues for sharing.

Recognizing the potential impact of bringing people together from these different communities related to online deliberation and electronic democracy, several initiatives with this aim have appeared in the last six years. From academia, U.S. efforts were spearheaded by Peter Shane, Peter Muhlberger, and Robert Cavalier at Carnegie Mellon University. With funding from the Hewlett Foundation, Shane and Muhlberger organized the ‘Prospects for Electronic Democracy’ conference in September 2002, which resulted in an edited volume that included several chapters focused on online deliberation specifically (Shane 2004). A National Science Foundation grant funded Cavalier, Muhlberger, and Shane to organize the first conference on online deliberation, titled ‘Developing and Using Online Tools for Deliberative Democracy’ at Carnegie Mellon in June 2003. This has been followed by online deliberation conferences at Stanford in May 2005 and Berkeley in June 2008 (Foster and Schuler 2008).

Other organizations aimed at bringing together dialogue and deliberation practitioners with academic researchers have also sponsored working groups, documentation of practice, and meetings related to online deliberation. These organizations include the Deliberative Democracy Consortium and its online working group (the ODDC), the National Coalition on Dialogue and Deliberation (NCDD), the Canadian Community for Dialogue and Deliberation (C2D2), the International Association for Public Participation (IAP2), the Online Community Research Network (OCRN), and various initiatives associated with e-democracy pioneer Steven Clift (Publicus.net).

In Europe, online deliberation has been a topic within several initiatives, including the Towards Electronic Democracy (TED) program of the European Science Foundation, the Council of Europe’s Ad-hoc Committee on E-Democracy (CAHDE), DEMO-net—the eParticipation Network of Excellence (funded by the European Commission), the eParticipation Trans-

European Network for Democratic Renewal & Citizen Engagement (funded by eTEN), and the recently formed Pan-European e-Participation Network (PEP-NET).

The above paragraphs illustrate the confusing and evolving landscape of terms and acronyms revolving around online deliberation: e-democracy, e-participation, online community, and so on. A definitive catalogue would be foolish to attempt, and would in any case be out of date in short order. Many of the more common terms (including 'online deliberation' itself) have entries on Wikipedia, and others can be found easily on the Web, with links that form an association network. Situations like this impel us toward synthesis—discovering what is common in the work of many communities and individuals, and toward the discovery of gaps between goal and achievement, where no one seems to have an answer yet. It also calls for attempts to identify what has been learned that will have lasting value. Developing a field to the point where it easily generates this kind of synthesis and analysis takes a long time. The early conferences on online deliberation and related concepts have initiated this process.

3 Organizing Questions

At OD2008 in Berkeley, James Fishkin said that one of the most important potential outcomes of bringing together people working in online deliberation is that it helps us clarify what are the organizing questions that define the field. These questions should help guide us in our future work, and a common recognition of them helps to tell us when progress has been made. What follows is one attempt to list and organize such questions.

We can begin by noting several sources of variety in the online deliberation community, a multiplicity of...

- *disciplines*—design, research, practice, and the various academic fields mentioned above;
- *institutional settings*—governments, formal and informal organizations, unorganized citizens, schools, businesses, and consultative forums that bring two or more of these together;
- *modalities*—speech, text, images, video, and immersive virtual environments;
- *technologies*—the Web, Usenet, IRC, email lists, message boards, wikis, blogs, cell phones, land lines, teleconferencing systems, smart rooms, low- or no-tech communication, etc.;
- *use contexts*—home, office, transit, etc.;
- *designs*—interfaces, facilitation structures, system features, etc.;
- *goals*—planning, law making, conflict resolution, commerce, learning, citizen action; and, of course,

- *populations*—ages, ethnicities, genders, etc.

A useful way to classify questions involves the distinction (Baron 2008) between the *normative* (how things should be ideally), the *descriptive* (how things are empirically), and the *prescriptive* (how we can change things for the better given real constraints). Each of the above sources of variety in online deliberation suggests normative, descriptive, and prescriptive questions.

We might imagine a matrix of these questions based on combinations of the above categories. Normatively, each source of variety can be translated as a ‘Which is best?’ question, especially when specifying a context. We might ask, for example, whether communication by voice or by text is preferable for some type of deliberation based on *a priori* criteria, such as the ability of the modality itself to convey complex information, assuming users are fully competent at speaking, listening, writing, and reading. As we let go of the ideal and focus on systems and people as they are, questions become more descriptive: Do real populations of deliberators achieve more with voice or text? Prescriptively, we can ask questions like: How can we design or facilitate text- (or voice-) based deliberation so that a target population will get the most out of the experience?

Throughout this space of possibilities, here is one progression of question types that illustrates how design, research, and practice can inform each other:⁸

What problems arise in practice and/or theory? This type of question can arise at any point in work on online deliberation, but seems especially likely to be informed by the experience of those who practice it in settings with real stakes, or whose work in the field is motivated by problems people face. A Deliberative Polling® practitioner (Fishkin 2009) might, for example, find that audiences are skeptical about the robustness of a polling result. How much can we rely on the poll to tell us what would happen if another group of pollers, using different materials and perhaps a different deliberation method and at a different time, had conducted the poll instead? This can also be noted as a theoretical objection by someone who has looked at the method and results of deliberative polls. Identifying the problem is a contribution to the field, albeit one that may leave us without a solution.

What techniques can be applied to solve a problem? When a problem is the starting point, one can try to develop a solution. If we take the robustness problem in Deliberative Polling, for example, a solution might involve a new technique that would appear, *a priori*, to reduce the sensitivity of poll

⁸ The discussion below refers to Deliberative Polling in order to illustrate the progression of organizing questions. This is not meant to imply that Deliberative Polling is definitive of the field or to exclude other approaches to online deliberation.

results to the details of a deliberation exercise. A designer might put together a procedure for selecting reading materials and argue that the new procedure is more neutral than the one used previously. Since face-to-face Deliberative Polls are expensive and difficult to replicate, online deliberation appears more suited to experimental tests of robustness. A researcher might design an experiment to test reliability across different populations of poll facilitators and poll takers, choosing different sets of informative materials, presented in different ways, and so on, while of course being careful to distinguish their own innovations from the techniques that are approved under the trademark name of Deliberative Polling.

What measures should be applied to evaluating a technique? Designing a technique can itself be a contribution to the field, but for the OD community to judge whether the technique is valuable, we may need to agree on a set of measures. A common problem in evaluating deliberation, for example, is how we should measure its quality. If we think about techniques for enhancing the robustness of a Deliberative Poll, there are various ways that robustness can be measured. The developer of a technique might survey participants and ask them to express their confidence that the poll was fairly conducted. A full-blown test of reliability across conditions might require more data than is available (for example if each participant reports only their opinion at the beginning and end of a poll), so an experimenter might test for significant differences between group averages and argue that the statistical power of the test is sufficiently high. The questions here can become narrowly technical, but can also be highly philosophical.

What effects does a given technique have on an agreed measure? The development of techniques and measures can be just the starting point for future work. Once a measure is established as valid for some type of question, many people can apply it. Designers can evaluate their designs against others using the measure. Practitioners can adopt techniques and measures and do applied research. And, of course, learning about effects can influence future designs, research studies, and practice. If a technique for enhancing robustness were to be incorporated into online Deliberative Polling, for example, a researcher could compare it to some other technique of online deliberation on a standard measure, and report the effect of the variation. The field advances as it builds on previous work.

What principles emerge from testing for an effect in multiple studies? The highly multivariate nature of the online deliberation space means that any finding is likely to require testing in other environments, for replication, validation, or refinement. A pattern of finding similar effects (or a lack of effects) for a given type of comparison (e.g. offline versus online) can at some point imply a discovered principle, which is usually the product of many members of the community. For a principle to achieve wide accep-

tance, it will require validation in practice as well as in prototypes and laboratories. At the same time, principles that guide practice should be studied carefully by researchers. Clinical psychotherapy provides examples of how techniques and principles evolved toward wide acceptance among practitioners but found weak or no support when subjected to careful empirical tests (Dawes, Faust, and Meehl 1989).

The above approach to defining some organizing questions for the field of online deliberation might appear to be overly quantitative and analytical. It advocates carving up the space of possibilities into dimensions and asking questions that have quantifiable, generalizable answers. A more holistic or qualitative approach might sometimes be called for, however. I do not mean to suggest that case studies, impressionistic sharing of experience, intuitive arguments, and the like should not have a place in the field. Indeed, the vast space of possible tool and deliberation process designs seems to justify such approaches in the early stages of the field, and many of the chapters in this book (and published elsewhere) reflect that. In suggesting the types of questions discussed above as appropriate for the field, I am merely trying to say how online deliberation as a community of practice is most likely to make progress as it evolves. If the experience of other interdisciplinary enterprises is any guide, we are, I think, likely to get more systematic and rigorous in our approach, and in the standards that are applied to new work. I hope that, as this happens, we reserve space for the creative, the anecdotal, and the holistic, and that we will remain open to new vistas in our blossoming field.

4 An Overview of the Book

The book is organized into six parts, each of which is an attempt to group contributions under a unifying question. This is obviously an oversimplification, as the authors are all addressing multiple questions that may only sometimes overlap. As a record of the early work in online deliberation, however, these groupings appear to reflect distinct communities within the field.

The previous section of this Introduction was an attempt to define the field of online deliberation more comprehensively and long-term. The actual contributions in this book represent a snapshot of how this space has been explored in the coalescing of the field. What follows is a brief overview, designed as a guide to the rest of the book rather than a summary of each chapter.

Part I: Prospects for Online Civic Engagement

The unifying question for the first part of the book is: *Do online dialogue and online information about political issues have significant potential to improve the quality of citizens' political participation and judgments?*

All of the chapters in this part of the book focus on structured online deliberation exercises and what they can teach us about the future of democracy. The term 'online deliberation' really originated with this type of work among political communication researchers and political scientists, growing out of the 'deliberative democracy' movement in political theory and the face-to-face Deliberative Polls pioneered by James Fishkin.

James S. Fishkin opens the book with a chapter titled 'Virtual Public Consultation: Prospects for Internet Deliberative Democracy'. He reviews the theoretical and historical rationale for Deliberative Polling, and describes the results of recent online Deliberative Polls conducted using a voice interface. The online version produces results 'broadly similar' to the face-to-face 'deliberative weekend', but the effects appear more modest for an equivalent period of time. Still, the greater convenience and flexibility, and lower cost, of online deliberation are cited as reasons for optimism that this technique can be extended to longer periods and more issues with beneficial results for the quality of political judgment. **Vincent Price's** chapter, 'Citizens Deliberating Online: Theory and Some Evidence' reports on the results of two extended studies of participants invited to attend online text deliberations about a Presidential election and health care policy, respectively. In addition to finding a positive relationship between participation in these sessions and political engagement, Price's results suggest that text-based chatrooms may produce more equal participation levels across individuals than does face-to-face discussion, and, also interestingly, that those holding minority views in a text chat session are if anything more likely than average to contribute to the discussion. These results are intriguing and may be related to the modality of communication (text). The contrasting modalities in Fishkin's and Price's studies invite further investigation.

Arthur Lupia emerges as both a supporter and skeptic of online deliberation's potential to extend citizen engagement in 'Can Online Deliberation Improve Politics? Scientific Foundations for Success'. Lupia argues that online deliberation is promising as a way to enhance civic education, but that its researchers and practitioners should pay more attention to psychological research elucidating people's cognitive limitations. He also argues that deliberation's effectiveness can only be measured when it is compared with the effects of information in the absence of deliberation. **Robert Cavalier with Miso Kim and Zachary Sam Zaiss** report on a series of structured online deliberation exercises in 'Deliberative Democracy, Online

Discussion and Project PICOLA (Public Informed Citizen Online Assembly)'. They used a multimedia environment in which participants conversed in audio with video-based moderators, and they found no significant differences on measured dependent variables between this approach and face-to-face deliberations similarly structured.

Part II: Online Dialogue in the Wild

Unifying question: *What patterns characterize political discourse online that has emerged outside of structured deliberation exercises?*

The four chapters in this part all focus on online discussion as it occurs naturally online, *viz* not as a result of invited participation in an online deliberation experiment. The authors draw lessons for how people interact politically online, and what factors are likely to affect deliberative behavior. One of the core issues in studying Internet dialogue is whether the Internet promotes discussion and information seeking primarily within like-minded communities, so that Internet users are less likely to be exposed to information and opinions at odds with their own views. This hypothesis was put forward by Cass Sunstein (2001)⁹, and is addressed by three of the chapters in this part of the book.

In 'Friends, Foes, and Fringe: Norms and Structure in Political Discussion Networks', **John Kelly, Danyel Fisher, and Marc Smith** report on patterns of authorship in politically-oriented Usenet newsgroups. They find that, contrary to Sunstein's hypothesis, political newsgroups tend to be ideologically diverse, and that most post authors are more likely to engage with those who oppose than with those who agree with them. They find, however, that authors fall into different categories, with some engaging only the like-minded and others representing fringe viewpoints that isolate them within the group. **Warren Sack, John Kelly, and Michael Dale** develop a metric for the deliberativeness of Usenet discussion threads in 'Searching the Net for Differences of Opinion'. Referring again to Sunstein, who worried that 'The Daily Me' predicted by Negroponte (1995) would filter out viewpoints opposed to that of a given Internet user, Sack et al. write that they aim to create a 'Daily Not Me'—automatically finding diverse opinions through techniques like those they describe in their chapter.

Whereas both of the preceding chapters focus on Usenet, a pre-Web forum technology in which users gather more by topic than by ideological affiliation, **Azi Lev-On and Bernard Manin** examine the Sunsteinian debate over whether the Internet promotes homophily (like-minded clustering) in the context of the modern Web. They find a mixed picture, with the Web

⁹ See Sunstein (2006) for a later, more nuanced perspective by the same author.

having some features that lead to homogeneity and others that lead to (unintended) exposure to opposing views. People do tend to filter out opposing content when they are easily able to do so, suggesting that as tools such as custom RSS readers become more commonplace, fewer users will encounter opposing views. **Sameer Ahuja, Manuel Pérez-Quñones, and Andrea Kavanaugh** explore how a website might make it easier for users to find and discuss locally relevant content in ‘Rethinking Local Conversations on the Web’. They describe a system they are designing called ‘Colloki’ that replicates many of the features of Web 2.0 in a community-based website.

Part III: Online Public Consultation

Unifying question: *How are online tools being used for official public input into government policies, and how could such processes be made more effective?*

The five chapters in this part of the book explore the record and potential of online tools used by governments to obtain input from citizens on matters of policy. Governments around the world have been creating ways to consult their citizenry online, and research that has looked at this has generally asked how effective such systems are (or could be) in improving citizen involvement in government decisions.

In ‘Deliberation in E-Rulemaking? The Problem of Mass Participation’, **David Schlosberg, Steve Zavestoski, and Stuart Shulman** report failing to find significant differences in the deliberativeness of electronic versus paper form commenters providing input on environmental regulations. They detect a potential in current U.S. Government commenting sites that they argue is underappreciated by environmental advocacy groups: that they facilitate individual comments that are more likely to affect policy than are form letter comments of the kind often promoted by organizations mobilizing their constituencies. **Peter M. Shane** takes a critical look at the U.S.’s e-rulemaking process in ‘Turning GOLD into EPG: Lessons from Low-Tech Democratic Experimentalism for Electronic Rulemaking and Other Ventures in Cyberdemocracy’. Shane considers the potential for online public consultation to transform the way government works now into ‘empowered participatory governance’ or ‘EPG’ (Fung and Wright 2003). Dismissing technology barriers as a limiting factor for online participation in government decisions, Shane analyzes the barriers of inertia to both EPG and a more meaningful form of online public consultation than that currently practiced by the U.S. Federal Government, and concludes that locally based efforts will be needed to push the Federal Government into a more participatory model.

Hélène Michel and Dominique Kreziak's chapter, 'Baudrillard and the Virtual Cow: Simulation Games and Citizen Participation', describes an online simulation game called 'Vacheland' that was developed by a regional government in France to facilitate learning and communication about agriculture. Based on the game's lack of effect on users' attitudes, Michel and Kreziak express skepticism over the potential of simulation games to engage citizens more productively in policy areas outside their immediate experience. Along the way, they distinguish 'e-administration', 'e-government', and 'e-governance' as being about government for, of, and by the people, respectively. In another chapter, **Hossana Twinomurinzi and Jackie Phahlamohlaka** report on a preliminary study in 'Using Web Based Group Support Systems to Enhance Procedural Fairness in Administrative Decision Making in South Africa', with both positive and negative early findings. Their chapter illustrates the movement toward Web-based tools for citizen input in governments all over the world. Finally, one of the early advocates of online democracy going back to the early 1970s—**Tomas Ohlin**—describes a combined face-to-face and online public consultation in 'Citizen Participation Is Critical: An Example from Sweden'. Elderly citizens of a Stockholm suburb took part in large numbers and enthusiastically in a prioritizing exercise for city planning.

Part IV: Online Deliberation in Organizations

Unifying question: *What online tools and processes of deliberative decision making are being, or could be, used within organizations?*

The five chapters in this part describe different types of organizations' use of online tools for internal deliberation. This institutional setting contrasts with consultation between governments and citizens, and also with citizen-citizen dialogue. Themes of this work include how both governmental and nongovernmental organizations can function most effectively online, and how online tools change the nature of the organization itself.

Elisabeth Richard's chapter is titled 'Online Deliberation in the Government of Canada: Organizing the Back Office'. Canada has been an early adopter of online public consultation. Richard describes the set of government employee roles that have evolved to handle online interactions with the public, with the implication that these new ways of serving the public are significantly altering the structure of government in Canada, raising the profile of some tasks (e.g. facilitation) while lessening others (e.g. expertise). In 'Political Action and Organization Building: An Internet-Based Engagement Model', **Mark Cooper** explores the consequences of online engagement with members in politically-oriented, membership NGOs. He characterizes effective Internet-based organizing as a very challenging

process that requires continual reporting of results and updating of the organization's goals, in ways that respond to members' goals and political circumstances.

In 'Wiki Collaboration Within Political Parties: Benefits and Challenges', **Kate Raynes-Goldie and David Fono** study the Green Party of Canada's use of a wiki for its Living Platform. Their interviews provide an early look at how wikis affect deliberation. The wiki presented a technical barrier for users early on, it sometimes failed to facilitate dialogue, and its flexibility allowed content to be created that might reflect negatively on the party. On the other hand, it promoted the refinement of the platform rather than mere dialogue about the platform, and provided an outlet for members to express themselves, which members seemed able to do once they learned how. **Gunnar Ristroph** provides another case study in 'Debian's Democracy'. While the citizens of this democracy (open source software developers) are among the most technically literate people in the world, the long-term stability of Debian's online governance model provides an existence proof that asynchronous discussion via email lists can suffice for maintaining a fairly complicated set of internal rules in a constitutional document. Finally, **Dana Dahlstrom and Bayle Shanks** discuss 'Software Support for Face-to-Face Parliamentary Procedure'. They describe a system that allows an organization to keep track of a meeting under *Robert's Rules of Order*, and report the results of preliminary trials with a student government.

Part V: Online Facilitation

Unifying question: *How do the different ways of structuring and facilitating online deliberation affect its quality and quantity?*

This part features six chapters, focusing on the facilitation of deliberation forums and asking what effects different structures have on the amount and quality of participation, and on the longer-term consequences of a deliberation. Issues that arise in this area include whether and how moderators affect discussion, and the effects of variables such as anonymity, reward systems, and the composition of the deliberating group.

The chapter by **June Woong Rhee and Eun-mee Kim**, 'Deliberation on the Net: Lessons from a Field Experiment', explores many of the empirical issues related to structural and regulative variables. In an online experiment with voters during the 2004 Korean General Election, Rhee and Kim found several effects when they varied social identity cues (present versus anonymous), the presence or absence of a moderator, and reinforcement (a points system versus no system). Among their findings: moderation decreased message postings, anonymity produced more engagement, and the points system seemed to have positive effects. **Scott Wright** then discusses

'The Role of the Moderator: Problems and Possibilities for Government-Run Online Discussion Forums'. He points out that moderation can take many different forms. Building on earlier work, Wright analyzes the models of moderation employed in two online forums in Great Britain, and argues that censorship (message filtering) and facilitation should be separated into different roles, with message deletion, where necessary, done by an independent body following openly available rules. **Gilly Leshed's** chapter, 'Silencing the Clatter: Removing Anonymity from a Corporate Online Community', describes a natural experiment in which the management of a company eliminated anonymous participation by workers in the firm's internal online community, following a series of postings that were deemed inappropriate. Mirroring Rhee and Kim's results, Leshed reports that removing anonymity in this setting significantly decreased both the number of postings and the amount of dialogue that occurred.

In 'Facilitation and Inclusive Deliberation', **Matthias Trénel** analyzes a field experiment conducted in an online forum for discussing the future of New York's World Trade Center site. Groups were given either 'advanced' or 'basic' facilitation, with the former type involving professional facilitators who took a more active role in steering and summarizing discussions. Nonwhite (especially) and women residents were less likely to register for the discussions, but advanced facilitation appeared to boost participation for both groups relative to the basic condition, indicating that a more active approach might draw out underrepresented participants once they are part of the process. In 'Rethinking the Informed Participant: Precautions and Recommendations for the Design of Online Deliberation', **Kevin S. Ramsey and Matthew W. Wilson** offer a critique of online consultation practices, using the example of maps as forms of data that are inherently political. They recommend interventions to enhance participants' ability to think critically about the information presented during a deliberation. Finally, **Mark E. Phair and Adam Bliss's** 'Perlnomic: Rule Making and Enforcement in Digital Shared Spaces' describes the online game that they implemented. Players in Perlnomic vote on rule changes that are embodied in software code. The code awards points to those who make successful proposals, and this too is subject to debate. Perlnomic embodies a vision of online governance in which facilitation is done automatically, and Lawrence Lessig's famous phrase 'Code is law' becomes more true than ever (Lessig 1999).

Part VI: Design of Deliberation Tools

Unifying question: *What are online deliberation tools, and what principles should guide their design?*

The last part of the book focuses on software tools designed to support online deliberation and decision making. Six chapters describe tools designed for various uses and settings. Design is exciting because it offers a chance to implement and test our assumptions about what will lead to good deliberation. At the same time, it carries both responsibilities for the designer and risks for users. A lurking danger as we move toward e-democracy is the potential for *technocracy*—rule by those with technical skills, and by technology itself. Online deliberation system designers should be humble, open, and willing to work with people who are not programmers or designers. At the same time, their designs should reflect knowledge about end users' needs and likely behaviors. Work in this area typically draws on theory, research data, and practical experience, ideally from many sources, and explores how multiple goals and constraints can be satisfied in a unified design. A common feature of design papers in this area is the 'lessons learned' section. This reflects the trial-and-error character of designing for a complex task set, and is likely to be with us for some time.

The chapter entitled 'An Online Environment for Democratic Deliberation: Motivations, Principles, and Design' by **Todd Davies, Brendan O'Connor, Alex Cochran, Jonathan J. Effrat, Benjamin Newman, and Aaron Tam** recounts work by students and myself on the early versions of our tool: Deme (which rhymes with 'team'). We try to ground the design of this Web-based groupware in the needs of geographical communities such as East Palo Alto, California, where we did consulting research for the city's private nonprofit Community Network. Our design aims to satisfy four criteria: supporting the group, comprehensive support for deliberation-related tasks, maximizing desired participation, and maintaining high quality deliberation. Early experience with Deme led, among other conclusions, to the view that Web-based forums are generally more engaging for group members if they are integrated with email for both posting and notifying. **Douglas Schuler** describes another tool in 'Online Civic Deliberation with E-Liberate'. His system, also developed with students, was an early online implementation of *Robert's Rules of Order*. Parliamentary procedure is central to formal deliberation in the United States, so an online implementation seems like a natural place to start in developing a deliberation tool. Schuler argues that groupware designers should respect the accumulated wisdom embodied in *Robert's Rules* and should modify the rules only when they prove deficient. He reports that this perspective is at odds with that of many developers who prefer to start from scratch, but does note several features of the online environment that might justify deviations from parliamentary procedure. In 'Parliament: A Module for Parliamentary Procedure Software', **Bayle Shanks and Dana Dahlstrom** follow up on their contribution to Part IV with a detailed description of their software module implement-

ing *Robert's Rules*. The module can be used in a variety of settings, including face-to-face deliberation and online meetings. A key feature of the module is its rule specification language, which allows the rules to be individually modified to match a given group's process needs.

In 'Decision Structure: A New Approach to Three Problems in Deliberation', **Raymond J. Pingree** describes a design for an Issue Congress, based on his Decision-Structured Deliberation (DSD) model (Pingree 2006). Pingree's design rethinks several assumptions about online deliberation software in order to address problems of scale, cognitive capacity, and imposed organization. He proposes more flexible and modular structures for organizing and labeling messages, and argues that an online environment has the potential to solve age-old problems of democracy. **Matthew W. Easterday, Jordan S. Kanarek, and Maralee Harrell's** chapter, 'Design Requirements of Argument Mapping Software for Teaching Deliberation', focuses on tools for teaching argumentation skills. They analyze several existing tools according to six criteria: correct representation of argument structures, flexible construction, visual control, automation of extraneous tasks, multiple covisible diagrams, and cross platform compatibility. Finding other tools lacking on one or more of the criteria, they describe their own system, iLogos, and show how it meets all six criteria. Finally, **Marilyn Davis** describes 'Email-Embedded Voting with eVote/Clerk'. This system allows an email list to be used for voting. A way to make decisions seems crucial to online deliberation, and this system essentially converts an email list into a tool for decision making. The system makes it possible to trace how someone voted, which is at odds with the secret ballot. Davis argues that this is necessary, however, to ensure election integrity.

Epilogue, Appendix, and the Book Website

The book concludes with an epilogue, 'Understanding Diversity in the Field of Online Deliberation', by my coeditor **Seeta Peña Gangadharan**, drawing some lessons from the early years of research in this field and pointing toward the future. The Appendix lists online deliberation projects and applications. Any such list is obviously incomplete, but the book's website at Online-Deliberation.net will feature reader-driven updates of the list, with live links, together with the full text of the book.

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