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Designing Deliberative Democracy in Cyberspace: The Role of the Cyber-lawyer

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ARTICLE

DESIGNING DELIBERATIVE DEMOCRACY IN CYBERSPACE: THE ROLE OF THE CYBER-LAWYER

BETH SIMONE NOVECK*

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Architecture can shape a lived and sensed intertwining of space and time; it can change the way we live By weaving form, space, and light, architecture can elevate the experience of daily life through the various phenomena that emerge from specific sites, programs, and architectures Architecture, with its silent spatiality and tactile materiality, can reintroduce essential, intrinsic meanings and values to human experience.

--Steven Holl¹

Majority rule, just as majority rule, is as foolish as its critics charge it with being. But it is never *merely* majority rule. As a practical politician, Samuel J. Tilden, said a long time ago: "The means by which a majority comes to be a majority is the important thing": antecedent debates, modification of views to meet the opinions of minorities The essential need, in other words, is the improvement of the methods and conditions of debate, discussion and persuasion.

--John Dewey²

I. INTRODUCTION

A. *Structuring Technology to Enhance Democracy*

The planning department of Tampere, Finland offers a game on its Web site. The object is to settle two thousand immigrants in the town. Citizen-players select an area of the city from a map and click on the number of people they wish to move there. Using simple tools, like Adobe Photoshop™, the game simulates how the landscape would change with the increase in inhabitants. Click "50" and see houses dot the scene; click "150" and see a high-rise appear among the trees. The Web site explains that successful integration of these new neighbors requires reasonable distribution and an adequate increase in tax revenue. The game does not end until all two thousand immigrants are settled. With this real world SimCity™, the local government provides a multimedia platform for citizen feedback, engaging people in running their own

¹ Steven Holl, *INTERTWINING* 11 (1996).

² John Dewey, *THE PUBLIC AND ITS PROBLEMS* 207 (1927).

community. At the same time, it communicates to constituents the difficult choices involved in serving competing interests.³

Other groups have also begun to use the Internet to foster democratic participation. In July 2001, the Environmental Protection Agency ran a first-of-its-kind electronic bulletin board where citizens could give direct input on a proposed regulation without the expense of hiring lawyers or lobbyists.⁴ The community of Uppsala, Sweden does not use citizens in policy-making directly, but it does use the technology of “talking web pages” to provide public information to the disabled and visually impaired.⁵ In Hartford, Connecticut, high school students use Internet-enabled handheld devices to track the progress of urban renewal projects in local neighborhoods and improve accountability by the municipality.⁶ These are tantalizing illustrations of the role technology and, in particular, Internet-based technology might someday play in enhancing democratic and public life. Unfortunately, they are among the *only* examples in the world of interactive technologies to engage citizens, and even these are only moderately participatory.

Despite the advent of communication networks linking us within the smallest towns and to the farthest corners of the globe, the Internet is hardly used for democratic participation or its requisite deliberation. Network technology could potentially make large-scale, informed participation possible because it makes communication so cheap. Yet in spite of the panegyrics of cyber-utopians,⁷ electronic democracy – both public participation online and

³ For a description of the project, see Jari Seppällä, *City of Tampere: Turning Civic Participation into Reality via the Internet*, at http://www.ici.ro/ici/revista/sic2000_4/art05.htm (last visited Nov. 19, 2002). For another example of a real-world SimCity™, see Environmental Simulation Center, *Visualizing the Future™*, at http://www.simcenter.org/About_Us/body_about_us.html (last visited Nov. 19, 2002).

⁴ Thomas Beierle, *Democracy On-line: An Evaluation of the National Dialogue on Public Involvement in EPA Decisions*, Resources for the Future Report, available at http://www.rff.org/reports/PDF_files/democracyonline.pdf (Jan. 2002) (analyzing the EPA online consultation experiment).

⁵ For more information about the Uppsala project, see Information Society, *Talking Webpages in the City of Uppsala/Internet Sound Interface*, at http://europa.eu.int/information_society/eeurope/egovconf/projects_selected/sweden/index_en.htm#TalkingWebpages (last visited Nov. 19, 2002) (municipal Web site for the disabled).

⁶ See City Scan, *City Scan Overview*, at <http://www.city-scan.com> (last visited Nov. 19, 2002) (“CPEC (Connecticut Policy and Economic Council) is an independent, nonpartisan and not-for-profit organization providing information and communication resources to citizens, community leaders, civic organizations and local government to set priorities and improve government performance.”).

⁷ Among early cyber-frontier pioneers extolling the virtues of the Internet for community participation is Howard Rheingold, who vividly described the Internet’s potential for building community and strengthening human ties. See HOWARD RHEINGOLD, *THE VIRTUAL COMMUNITY: HOMESTEADING on the Electronic Frontier* (MIT Press 2000) (1993). John Perry Barlow’s *A Declaration of the Independence of Cyberspace* has become a seminal statement of the potential of cyberspace to enhance freedom and autonomy. See John Perry

the use of the Internet to prepare for public participation off-line – is an unfulfilled dream. There is currently no prospect of bridging the gap between commercial and democratic uses of the Net.⁸ This remains true even though we spend more and more time online.⁹ The Web revolutionizes every aspect of our private lives but, in its current form, has hardly affected us as public citizens. Despite ten years of living with the ubiquitous World Wide Web, the explosion of outlets for communication has not improved the democratic character of public life.¹⁰

In this article, I argue that we can and should make more use of technology for participatory democracy. The failure to do so is not only the result of a lack of will, but also of a misunderstanding of the role that communication plays. It is not free speech but deliberative speech that makes true democracy possible. To this end, I proffer a three-pronged analysis. First, public deliberation is fundamental to participatory democratic life. Second, deliberation is a function of a particular kind of structured speech. Third, the absence of appropriate technology to transform private conversation into public deliberation is at the root of electronic democracy's stunted growth. In the same way that the design of a ballot can change the result of the election, more sophisticated communications technology can transform democratic political institutions, making them more participatory and deliberative. Traditionally, lawyers have had to be concerned with enacting the right laws to safeguard and facilitate democracy. The "cyber-lawyer," the legal thinker practicing in the digital age, has to know how to use technology as well as rules to bring about these desired outcomes.¹¹

Barlow, *A Declaration of the Independence of Cyberspace*, at http://www.eff.org/Publications/John_Perry_Barlow/barlow_0296.declaration (Feb. 1996).

⁸ See Pew Internet & American Life Project, *Online Communities: Networks that Nurture Long-distance Relationships and Local Ties*, at http://www.pewinternet.org/reports/pdfs/PIP_Communities_Report.pdf (Oct. 31, 2001); see also Edward M. Fouthy, *The Public Perspective*, The Pew Center for Civic Journalism, at http://www.pewcenter.org/doingcj/speeches/a_perspective.html (Mar. 1996); Benjamin Barber, *The Civic Mission of the University*, Civic Practices Network, at http://www.cpn.org/cpn/sections/topics/youth/civic_perspectives/civic_mission_university.html (1991).

⁹ See Press Release, Pew Internet and American Life Project, *Do People Spend More or Less Time Online Nowadays?* (Feb. 16, 2001), at <http://www.pewinternet.org/releases/release.asp?id=25> (last visited Nov. 19, 2002) ("The Web is an increasingly important tool for work and school. Email and instant messaging are ever-more-valuable ways to stay in touch with family and friends.").

¹⁰ See The Council for Excellence in Government, *E-Government to Connect, Protect, and Serve Us*, at <http://www.excelgov.org/> (Feb. 26, 2002) (noting that "Americans are more positive about the idea of e-government, they have higher expectations for what e-government can accomplish, and they are increasingly willing to invest their tax dollars in e-government," but that "[a] large majority (63%) of the public rejects the idea of allowing people to vote online for federal offices such as the presidency or Congress").

¹¹ Though the law as a discipline has been slow to recognize the need for interdisciplinary inquiry in the information age, other fields have long explored the intersection between the

To be legitimately democratic, political decisions must be based upon consent.¹² Theorists from Rousseau to Dewey emphasize that consent is not merely the aggregate of personal preferences, but the result of “reasoned public discussion of political questions.”¹³ Deliberation is more than just talk; it requires weighing together various approaches to solving problems.¹⁴ It is public articulation structured according to specific rules, designed to transform individual prejudice into public reason and form the general will.¹⁵ In order to achieve a democratic outcome, it requires “weighing the costs and consequences of various approaches to a problem.”¹⁶ Deliberation may also be a means of exercising democratic virtues,¹⁷ articulating policy options,¹⁸ understanding how others view a problem and its potential solutions,¹⁹ and talking through the options to find common ground, even where disagreement is rife.²⁰ “Unregulated talkativeness,”²¹ as is characteristic of chat on the Web

social sciences and computer science. See Charles Ess, *Cultures in Collision: Philosophical Lessons from Computer-Mediated Communication*, 33 METAPHILOSOPHY 229, 229-53 (Jan. 2002).

¹² See *De Jonge v. Oregon*, 299 U.S. 353, 364-65 (1937) (“[T]o maintain the opportunity for free political discussion, to the end that government may be responsive to the will of the people and that changes, if desired, may be obtained by peaceful means. Therein lies the security of the Republic, the very foundation of constitutional government.”).

¹³ JOHN RAWLS, *POLITICAL LIBERALISM* 224 (1993).

¹⁴ DAVID MATHEWS, *POLITICS FOR PEOPLE: FINDING A RESPONSIBLE PUBLIC VOICE* 111 (1999).

¹⁵ Joshua Cohen, *Deliberation and Democratic Legitimacy*, in *CONTEMPORARY POLITICAL PHILOSOPHY: AN ANTHOLOGY* 143-55 (Robert E. Goodin & Philip Pettit eds., 1997). Jean Jacques Rousseau posited that individuals must govern themselves collectively according to the “General Will” which reflects the common, public interest, rather than the particularistic interests of individuals. See Jean-Jacques Rousseau, *The Social Contract*, in *THE SOCIAL CONTRACT, AND DISCOURSES* 27 (G.D.H. Cole trans., 1950) (“If, when the people, being furnished with adequate information, held its deliberations, the citizens had no communication one with another, the grand total of the small differences would always give the general will, and the decision would always be good.”).

¹⁶ David Mathews & Noelle McAfee, *Making Choices Together: The Power of Public Deliberation*, The Kettering Foundation, available at http://www.kettering.org/Foundation_Publications/Publication_List/publication_list.html#Community%20Politics (2001); See also Sarah Rickman, *Community Leadership: Community Change through Public Action*, The Kettering Foundation, available at http://www.kettering.org/Foundation_Publications/Publication_List/publication_list.html#Community%20Politics (last visited Aug. 6, 2002).

¹⁷ Michael Schudson, *Was There Ever a Public Sphere? If so, When? Reflections on the American Case*, in *HABERMAS AND THE PUBLIC SPHERE* 143 (Craig Calhoun, ed.) (1992).

¹⁸ Mathews & McAfee, *supra* note 16.

¹⁹ *Id.*

²⁰ MATHEWS, *supra* note 14, at 232-38 (outlining the outcomes of deliberation).

²¹ ALEXANDER MEIKLEJOHN, *FREE SPEECH AND ITS RELATION TO SELF-GOVERNMENT* 25 (1948) (observing that unregulated talkativeness is beyond the protective scope of the First

today, does not foster democratic participation and the deliberative public processes on which it depends.²²

Aristotle believed that democracy is the distance man can traverse in a day.²³ This belief is insightful because it underscores the reality that to deliberate effectively a citizen must be able to participate vocally in questions of public importance.²⁴ In our vast and complex society, we must elect representatives as a proxy for self-governance. Enter technology: advances in communications, information sharing and record keeping mean that participation once thought impracticable on a large scale is now possible. Ordinary citizens in Finland are making informed decisions about urban planning, and Americans are contributing to environmental policy across great distances. The potential for democratic participation, however, is even greater.

If technology is to help us overcome the problems of distance and difference that have hindered us from augmenting participation in our dispersed and pluralistic society, deliberative processes must be *designed* for cyberspace. So long as shopping malls instead of town halls proliferate in the virtual landscape, electronic democracy cannot take root.

Specific forces structure deliberation. These include explicit formal procedures enforced by law, informal norms of culture, and rules of interpersonal coordination dictated by the architecture of space in which deliberation occurs. Law, culture, and architecture have always worked in tandem to regulate speech. Cyberspace architecture - defined by the code of the technology itself - has an even greater role to play in speech regulation. Code directly shapes and structures conversation in cyberspace. Rules can be integrated into the design and enforced internally by the technology rather than being enforced externally. Because deliberation is speech-structured to achieve certain outcomes, and the technology itself most directly affects speech in cyberspace, code is the most efficient way to promote deliberation. It is speedier and much less costly. We need not enact a deliberation law and

Amendment).

²² Kant said that it is the *public* use of man's reason alone that "can bring about enlightenment among men." IMMANUEL KANT, *An Answer to the Question: 'What is Enlightenment?'* in KANT'S POLITICAL WRITINGS 55 (H.B. Nisbet, trans., 1970).

²³ Aristotle also believed that a community had to be small enough so that its citizens could participate in acts of governance. See ARISTOTLE, *POLITICS* 244 (Benjamin Jowett, trans., 2000).

²⁴ Robert Dahl sets forth assumptions and criteria for evaluating whether a governing structure is procedurally democratic. One of the criteria is effective participation: "Thus citizens must have adequate and equal opportunities for placing questions on the agenda, and for expressing reasons for endorsing one outcome rather than another. For to deny any citizen adequate opportunities for effective participation means that their preferences cannot be known, or cannot be correctly known, and hence cannot be taken into account." Robert Dahl, *Procedural Democracy*, in CONTEMPORARY POLITICAL PHILOSOPHY: AN ANTHOLOGY 109, 109-28 (Robert E. Goodin & Philip Pettit eds., 1997); see also JAMES BOHMAN, *PUBLIC DELIBERATION: PLURALISM, COMPLEXITY AND DEMOCRACY* 23 (1996).

wait fifty years to study the impact. Instead, we can construct virtual spaces for deliberation in cyberspace and experiment with them in controlled yet complex environments, thereby quickly and efficiently deepening our understanding of the deliberative process.

Since code plays a crucial role in structuring conversation in cyberspace, the cyber-lawyer has to be able to “speak to geeks.” The cyber-lawyer does not have to be able to program, but she must be able to translate ideas about desired policy outcomes into the language of code so that the computer scientists can construct the right kind of spaces. She must be able to conceive a regulatory question, not only in traditional legal terms but also in the vocabulary of technical functionality and design. She ties the conceptual frameworks of law and its underlying theories to technological advancements. Putting it another way, a cyber-lawyer is a midwife who brings the values of democracy into the world of code.

Though technology has always played an important role in organizing social relations, the impact of legal rules has been more important because of their power of enforcement. That is why “Meatspace”²⁵ lawyers needed to know little about technology (though that too is arguable). But where code has such a central role to play²⁶ and, as we shall see, law is limited in its ability to structure deliberation in cyberspace, lawyers now need to be “bilingual.”

Design matters. Just as in real space, democracy depends on the existence of free and public spaces for participation. The success of electronic democracy, too, requires the construction of technical architectures, including the graphical interface and technological functionality conducive to the goals of deliberative democracy.²⁷ Once we have constructed the right technology or code, we must then identify and codify the processes by which citizen stakeholders can make use of the technology. The best tools for deliberation are worthless without a method for implementing them. Citizens of the twenty-first century need tools to democratize participation, make deliberation

²⁵ John Perry Barlow, *Is There a There in Cyberspace?*, 68 UTNE READER 52 (Mar. 1995), available at http://www.eff.org/Publications/John_Perry_Barlow/HTML/utne_community.html.

²⁶ See, e.g., Joel Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 554 (1998) (noting that in the information age, design choices impose rules on participants); Ethan Katsh, *Software Worlds and the First Amendment: Virtual Doorkeepers in Cyberspace*, 1996 U. CHI. LEGAL F. 335 (discussing the relationship between software and speech); LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1998) (arguing that value forces regulate in cyberspace, including the technology itself).

²⁷ As technology theorist Steven Johnson explains, there is an absence of “interfaces designed to represent communities of people rather than workspaces.” We need to build those spaces. STEVEN JOHNSON, *INTERFACE CULTURE: HOW NEW TECHNOLOGY TRANSFORMS THE WAY WE CREATE AND COMMUNICATE* 65 (1997); cf. Barlow, *supra* note 7 (“Do not think that you can build it, as though it were a public construction project? You cannot. It is an act of nature and it grows itself through our collective actions.”).

relevant to governance, impact decision-making, and “scale” the conversation to overcome parochialism. One can build a magnificent town hall, but a hall alone does little to enrich democracy without parallel procedures for listening to the public.²⁸ Because process must be married to technology, the cyber-lawyer, rather than the scientist alone, has to get involved. Finally, to retain democratic legitimacy and reduce costs, political actors at all levels must consult citizens.²⁹ Critics charge that public participation can overwhelm political servants and clutter public discourse.³⁰ But new technology, if used appropriately, can help manage citizen input and help citizens share in the responsibilities of governance by allowing them to articulate and communicate demands.³¹ Professional politicians and civil servants can then do their jobs more efficiently and more responsively to the public will.³²

²⁸ Numerous civic organizations have developed methodologies for citizen dialogue or consultation. These include the Kettering Foundation, <http://www.kettering.org>; National Issues Forums, <http://www.nifi.org>; the Topsfield Foundation's Study Circles, <http://www.studyircles.org>; the Jefferson Center's Citizen Jury model, http://www.jefferson-center.org/citizens_jury.htm; and the Consensus Conference, developed in Denmark, <http://www.tekno.dk/subpage.php3?survey=16&language=uk>. The Consensus Conference technique has also been used in the United States. See North Carolina State University News Services, *Citizen Conferences Offer Public a Voice in Biotechnology Issues*, available at http://www2.ncsu.edu/ncsu/univ_relations/news_services/press_releases/02_02/44.htm (Feb. 13, 2002). Additional resources on citizen consultation include: Jo Lenaghan, *Involving the Public in Rationing Decisions: The Experience of Citizens Juries*, 49 HEALTH POLICY 45, 45-61 (1999); Simon Joss, *Danish Consensus Conferences as a Model of Participatory Technology Assessment: An Impact Study of Consensus Conferences on Danish Parliament and Danish Public Debate*, SCI. & PUB. POL'Y 2 (Feb. 1998); See also A. COOTE AND J. LENAGHAN, *CITIZENS' JURIES: THEORY INTO PRACTICE* (1997); STEPHEN H. HAEBERLE, *PLANTING THE GRASSROOTS: STRUCTURING CITIZEN PARTICIPATION* (1989); *PUBLIC PARTICIPATION IN SCIENCE* (Simon Joss & John Durant eds., 1995); J. Musso & M. Hale, *Designing Web Technologies for Local Governance Reform: Good Management or Good Democracy*, Paper presented at the Reconnecting Public Managers with Public Panel at the 1999 Annual Meeting of the Western Political Science Association, in Seattle, Wash. (Mar. 25-27, 1999).

²⁹ Consulting and informing citizens is incumbent upon all federal agencies. See Administrative Procedure Act, Pub. L. No. 79-904, 60 Stat. 237 (1946) (codified as amended in scattered sections of 5 U.S.C.).

³⁰ Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277, 329 (1998).

³¹ See Joss, *supra* note 28, at 2. Participation in institutionalized technology assessment is discussed in relation to Danish consensus conferences. Participation should be understood as a facilitating mechanism of, rather than a substitute for, technology assessment by decision-making institutions. It is more likely to be effective if it relates to a strong and articulate civil society.

³² See Nancy Perkins Spyke, *Public Participation in Environmental Decisionmaking at the New Millennium: Structuring New Spheres of Public Influence*, 26 B.C. ENVTL. AFF. L. REV. 263, 301 (1999) (“Today, public participation increasingly is viewed not merely as a

Part Two of this article explores forces that structure deliberation off-line in order to understand better how deliberation can and cannot be constructed online. Part Three addresses why code is more immediately relevant for regulating deliberation in cyberspace than either law or culture, and it then enumerates the tools currently available for engaging in deliberation online. Part Four examines seven recent experiments using Web-based technologies to improve forms of public consultation. It describes what these experiments have attempted and analyzes their shortcomings. Part Five discusses a deliberative software design experiment in which I have participated together with a team of participating researchers and entrepreneurs, and it addresses the successes and failures of the experiment with reference to the criteria outlined in Part Two. This software design is not ancillary; it is the direct outgrowth and representation of the theoretical arguments of this article. Part Six argues for specific legal and policy measures to mandate technologically enhanced public consultation at all levels of government and civil society, in addition to the financial incentives to enable these measures.

Failing to adapt technology for democratic purposes is more than just a missed opportunity. It endangers our society in four ways. First, we will spend increasing amounts of time online in a privatized media environment that reinforces passivity and the disconnection between citizenship and power. Second, we will lose an opportunity to experiment with new forms of democratic interaction in a controlled environment before implementing them in the "real world." Institutions can be built and razed in the virtual world prior to investing in them in the real world. Third, the legitimacy of our democratic institutions suffers if they do not incorporate the participatory potential of technology. Finally, less accountable institutions may be prone to abuse. As Heidegger pointed out, technology is not neutral but is the reflection of our social values.³³ It is up to all of us, the cyber-lawyer in particular, to decide whether it will reflect a commitment to democracy.

II. OF YURTS, YAKS & TELEPHONE BOOTHS: THINGS THAT STRUCTURE DELIBERATION

When Mongolia wanted to build out its telecommunications infrastructure, one of the first impediments it encountered was how to construct a telephone

method by which well-informed decisions can be reached, but also as a way to empower communities and create community leaders. The sense of efficacy that accompanies this empowerment, that arises when involved citizens see their participation activities as part of a "larger whole," is a secondary end-product that is taking on greater significance.") (internal citations omitted).

³³ Martin Heidegger, *La Question de la Technique*, in *ESSAIS ET CONFÉRENCES* (Andre Preau trans., 1954). For an English translation, see <http://www.centenary.edu/~balexand/cyberculture/question1.html> (last visited Dec. 3, 2002) (technology is not neutral and is not merely instrumental but is itself a form of social activity).

booth big enough to fit two Mongols in full sheepskin winter-wear but small enough to prevent them from corralling yaks.³⁴ In the same way that we create legal and architectural frameworks to support deliberation in the real world, it is also essential to design for deliberation in cyberspace. The success of the conversation depends upon the design of the space in which it occurs. Cyberdemocracy has failed largely because there is an absence of both policy and technology aimed at promoting thoughtful deliberation. The spaces we inhabit in cyberspace currently are constructed around the goals of commerce. Value choices translate into design choices. The objectives of business inform the choice of graphic design, user interface, and functionality. Web sites are constructed to make transacting straightforward; the “shopping cart” must never be more than one mouse click away. Yet in the same way that we construct e-commerce technologies honed to shopping atmospherics, we can, but do not, build sites tailor-made for political, social and cultural uses. Such technology would enable the group collaboration processes that underlie deliberation. This means that if we are to structure the space and procedure for deliberation in cyberspace, we need to be explicit about the meaning of deliberation and its building blocks. Public deliberation is an essential social activity in the life of a democracy³⁵ – not only in a traditional political context, but in all forms of organizational interaction, including in enterprise, where deliberative and consensual and public decision-making are desired.

A deliberative conversation does not need to be political. Rather, a deliberative discussion is characterized by certain democratic procedural prerequisites that transform the dialogue from a private chat into a specifically public and legitimately democratic convocation. This is not to suggest that democratic actors cannot be informed by personal tastes. “As long as the connection subsists between [man’s] reason and his self-love, his opinions and his passions will have a reciprocal influence on each other; and the former will be objects to which the latter will attach themselves.”³⁶ The public expression of personal beliefs has a transformative power, turning private actors into democratic decision-makers.

Deliberation is an essential activity of American democratic political culture. De Tocqueville commented on Americans’ unparalleled facility for deliberative self-determination:

No sooner do you set foot on American soil than you find yourself in a sort of tumult; a confused clamor rises on every side, and a thousand

³⁴ Interview with Veronica Taylor, Professor, University of Washington School of Law (Dec. 4, 2001).

³⁵ BOHMAN, *supra* note 24, at 12 (discussing features of deliberative democracy). See also, Peter Levine, *Getting Practical about Deliberative Democracy*, Institute for Philosophy and Public Policy, at http://www.puaf.umd.edu/IPPP/fall1999/deliberative_democracy.htm (“Democracy requires deliberation for at least three reasons.”).

³⁶ JAMES MADISON, *Federalist No. 10*, in *THE FEDERALIST PAPERS* 124 (Isaac Kramnick ed., Penguin Books 1989).

voices are heard at once, each expressing some social requirements. All around you everything is on the move: here the people of a district are assembled to discuss the possibility of building a church; there they are busy choosing a representative; further on, the delegates of a district are hurrying to town to consult about some local improvements One group of citizens assembled for the sole object of announcing that they disapprove of the government's course³⁷

Public discussion is at the root of American democracy.

Deliberation, regardless of where it takes place, has certain characteristics that distinguish it from other forms of private conversation. Though many theorists extol its virtues, rarely do commentators define what it actually is and what features comprise a deliberative process. If we are to think about how to structure deliberation in cyberspace or to build technologies for furthering deliberative processes off-line, it is important to begin with an understanding of what makes a process deliberative. Knowing the building blocks of deliberation will allow us to construct participatory processes. Hence, I propose eleven (ten would be too convenient!) non-exclusive features of democratic deliberation that transform conversation into active participation.

A. Accessible

As a preliminary issue, the deliberation must be accessible to all relevant stakeholders. Therefore, the space in which it occurs – whether physical or virtual – has to be available to as wide a range of participants as possible. Since it is impossible to accommodate everyone for those who cannot participate, the proceedings must be made public. In order to be democratic, the design of the space should take access into account. Reasonable barriers to participation need to be overcome through either process or design. A baseball stadium or town hall may be an important locus of public congregation, but unless accessible by public transportation as well as by car, large segments of the public will be excluded.

Space has to be aesthetically as well as technically useable. If the acoustics in the church basement are bad and the chairs are uncomfortable, the free entrance price of the space itself is not enough to ensure participation. Similarly, electronic spaces for deliberation have to be “technology neutral” so that access is not limited only to those running one particular operating system configuration or to those driving a car rather than riding a bike. Because deliberation is an ongoing process in a community that enables members to work through problems over time, accessibility is not a one-time prerequisite. Conditions must be right for citizens to continue dialogues through multiple iterations.

³⁷ ALEXIS DE TOCQUEVILLE, *DEMOCRACY IN AMERICA* 242 (J.P. Mayer, ed.; George Lawrence, trans., Doubleday 1969).

B. No Censorship

To be deliberative, the conversation must be free from censorship. Therefore, the space needs to safeguard freedom of thought and expression. Such censorship could include physical observation and eavesdropping as well as any form of electronic surveillance, sniffing, snooping, or pen-trapping. But censorship goes beyond physical threat. It includes any distortion or restraint of speech that would hinder the independence of the discussion. Such incursions are just as likely to come from the market as from the government.

Whereas a product placement for Starbucks or Apple Computers might be perfectly acceptable in an Austin Powers movie, we might question such undemarcated advertising included in school textbooks or surreptitiously interspersed in news broadcasts. It would be problematic if the wealthy could buy well-miked "skyboxes" for the school board meeting while other citizens sat on folding chairs in the back, straining to hear. We would consider this a form of censorship. It would be equally problematic if a company provided a computing platform for the delivery of governmental services, but refused to incorporate functionality for deliberation. Participants in a deliberative dialogue need to converse freely with one another without fear of repercussions. At the same time, a deliberative forum needs not only to allow free expression, but also to encourage critical and controversial viewpoints. Democracy is compromised if, by virtue of corporate ownership, control or manipulation participants begin to self-censor.

C. Autonomous

Participants in a deliberative dialogue are not consumers, but autonomous citizens. The process must not treat them as passive recipients of information, but as active participants in a public process. Autonomy includes respect for the civil liberties and integrity of participants. Therefore, participants cannot be used for marketing or commercial purposes, such as data profiling, in the course of deliberating. To do so would not only chill free expression, but also transform citizens from autonomous decision makers into statistical probabilities whose choices are to be predicted. The risk of open and public participation is that one's views are subject to observation. Preferences and desires must be recorded publicly to further the goals of the deliberation rather than commerce. Autonomy also demands that participants have a controlling role in the deliberative process. Deliberation depends upon the participation of all. In colonial New England, citizens ran their own town meetings and, by virtue of running the conversation, became better and more active participants in it.³⁸

³⁸ BENJAMIN R. BARBER, *STRONG DEMOCRACY: PARTICIPATORY POLITICS FOR A NEW AGE* 272 (1984) ("The historical evidence of New England towns, community school boards, neighborhood associations, and other local bodies is that participation fosters more participation."); Benjamin R. Barber, *Three Scenarios for the Future of Technology and Strong Democracy*, 113 *POL. SCI. Q.* 573, 584 (1998-99) (noting Jefferson's opinion that

D. Accountable and Relevant

A deliberative dialogue can only take place where members of a community engage with one another in accountable and reasoned public discourse. They cannot be anonymous to one another. This is a controversial value-choice and one that is surely not appropriate for all purposes. The right to anonymous speech must be protected online and off.³⁹ But productive group collaboration and decision-making in political, cultural, educational and business life also require accountable, interpersonal engagement. Participants must express themselves publicly as members of the community of dialogue. Only through the articulation of public reason is personal prejudice transformed into the public will. Though they deliberate in secret, members of a jury do not vote privately. They must express their reasons to one another. In this way, an individual cannot decide the defendant's fate merely on the basis of personal preference but must articulate sound reasons to the group. Accountability includes not only responsiveness of members of a dialogue one to the other, but also accountability on the part of those in power. They must be responsive and react to public deliberation and participation. Without their accountability to the process, it quickly loses its relevance and minimizes the potential for on-going dialogue that is the basis of deliberation.

E. Transparent

Related to autonomy and freedom is the value of transparency. Participants in the debate must be "visible" to each other and to those setting the agenda (to the extent they are not the participants themselves). Transparency means that the structure and rules of the space must be public so that citizens know who owns and controls the space, whether monitoring is taking place, and the origin of any information contributed to the discussion. It is relevant that General Electric and Disney, for example, control the newsrooms that provide much of the content that informs our public life. Likewise, it is relevant that AOL moderates its chat rooms, deleting messages that are critical of corporate policy.⁴⁰ In designing for democracy, something as simple as requiring that participants identify themselves and the source of information is essential. Knowing who sets the agenda and why is part of what transforms a private conversation into a public dialogue. Participants cannot be expected to put aside their own prejudices and act publicly if organizers do not make their own prejudices known.

what improves democracy is more democracy).

³⁹ "Anonymity is a shield from the tyranny of the majority," said the Supreme Court with reference to John Stuart Mill. The Constitution protects the right to anonymous political speech. *McIntyre v. Ohio Elections Comm'n.*, 514 U.S. 334, 357 (1995) (holding Ohio prohibition against distribution of anonymous campaign literature unconstitutional).

⁴⁰ Amy Harmon, *Worries About Big Brother at America Online*, N.Y. TIMES, July 31, 1999, at A1.

F. *Equal & Responsive*

What makes participants transparent is that they are accountable members of a community of dialogue where power is shared. But deliberative democracy also requires equality among members. To be equal, participants need not be stripped of their uniqueness; but individual attributes should not translate into more opportunity or less opportunity to be heard. Creating a public sphere is not about rending boundaries but rendering social and power relationships visible. In the constructed space, all participants must be equal players with like opportunities for access and voice. The architecture cannot privilege one group over another. We must allow everyone to have an opportunity to speak and to be heard. It is crucial that any process for deliberation encourages not merely an airing of viewpoints, but a reciprocal exchange of ideas among equals, where people can respond to one another and discuss the relative merits of a proposal.⁴¹

G. *Pluralistic*

In order to allow everything worth saying to be heard, it is necessary to ensure not only the right to unfettered speech, but also that viewpoints representing a broad spectrum are clearly expressed. As Owen Fiss eloquently argued: “[The state] may have to allocate public resources – hand out megaphones – to those whose voices would not otherwise be heard in the public square. It may even have to silence the voices of some in order to hear the voices of the others. Sometimes there is simply no other way.”⁴² The state may not be the only source for leveling differences. Rules or technology can be enlisted to regulate the space for deliberation. For instance, the school board meeting might have a rule giving each person present the opportunity to make no fewer than X and no more than Y comments. The technology of the speakerphone might be employed to reach out to and hear from those who are not physically able to be present and whose views risk going unrepresented.

Pluralism is a problem of recruitment – *i.e.*, who is invited to the table – but also of ensuring that, once at the table, all viewpoints can be heard. This is a function of the structure of the deliberation.

H. *Inclusive*

Countless philosophers have envisioned the small group or community as the ideal democratic vision.⁴³ In a deliberative and public forum, participants

⁴¹ See also AMY GUTMANN AND DENNIS THOMSON, *DEMOCRACY AND DISAGREEMENT* 349 (1996) (“No matter how earnestly citizens carry on deliberation in the spirit of reciprocity, publicity, and accountability, they can realize these ideals only to the extent that each citizen has sufficient social and economic standing to meet his or her fellows on terms of equal respect.”).

⁴² OWEN M. FISS, *THE IRONY OF FREE SPEECH* 4 (1996).

⁴³ See, *e.g.*, JOHN GASTIL, *DEMOCRACY IN SMALL GROUPS: PARTICIPATION, DECISION MAKING AND COMMUNICATION* (1983) (discussing the concept of small group democracy

must be able to “see” each other – their identities and interests laid bare. The deliberative community must be small enough that participants can be accountable, transparent, and able to participate meaningfully without being parochial. Each participant must at least have the chance to be heard. Yet at the same time, a deliberative forum must be inclusive and open to all members of the relevant community; it cannot be exclusionary and democratic. That is a fundamental tension in the running of any deliberative process. Without capturing a wide array of voices and viewpoints, it is impossible to obtain a genuine sense of public opinion and to achieve widespread consensus on a proposal. Therefore, deliberation must be both small and inclusive.

I. Informed

Successful deliberation demands discipline. It requires the articulation of reasoned opinion and the slowness upon which that depends.⁴⁴ Participants need to take the time to inform themselves in order to base their judgments upon reasonable information. This is a central requirement. A deliberative dialogue cannot be divorced from information, and participants must have access to a wide variety of viewpoints in order to make effective and educated decisions.⁴⁵ This does not mean that the discussion has to include every possible piece of information. The discussion, however, should include a range of opinions, clearly labeled and with biases disclosed.

Poorly organized information creates an incentive to read nothing at all. The first phase of e-government, in which public authorities posted all their information on the Web, did not improve access to government. Governments have since begun to move away from this approach to a more citizen-centric or

and its proponents).

⁴⁴ James Gleick argues that the pace at which our modern, technocratic age moves thwarts many of the processes we are trying to expedite. For example, instant opinion polling often measures opinions that people have not thoroughly formed, and in turn, such polls can yield misleading information. “But moods are smoke in the breeze, and most often these barometers measure something not yet fully formed: an opinion – a *public* opinion – that takes shape over hours or weeks of reflection and discussion.” JAMES GLEICK, *FASTER: THE ACCELERATION OF JUST ABOUT EVERYTHING* 97 (1999).

⁴⁵ “Deliberative Polling,” a technique pioneered by James Fishkin, a University of Texas political scientist, takes a representative sample of the population and provides the selected group with a range of carefully-balanced informational inputs, both neutral and partisan, prior to the deliberative process. Participants are polled before and after this informed deliberation. The idea is to allow the group an opportunity to learn from differing ideas and come to a considered and informed judgment on the issue. As a result of both information and deliberation, the group’s opinions usually change during the process. See JAMES S. FISHKIN, *DEMOCRACY AND DELIBERATION: NEW DIRECTIONS FOR DEMOCRATIC REFORM* (1991); JAMES S. FISHKIN, *THE DIALOGUE OF JUSTICE: TOWARD A SELF-REFLECTIVE SOCIETY* (1992); JAMES S. FISHKIN, *THE VOICE OF THE PEOPLE: PUBLIC OPINION AND DEMOCRACY* (1995). See also The Center for Deliberative Polling™, at <http://www.la.utexas.edu/research/delpol/index.html> (last updated Feb. 15, 2000).

“life event” organization of information. It is easier to look under “marriage” than to guess the relevant city agency that handles wedding licenses.⁴⁶

Too much information can be as much an impediment to successful deliberation as too little, drowning participants in a flood of irrelevant data beyond what they can read and process effectively.

J. Public

The dialogue must be public to serve the purposes of deliberative democracy. Hence, it must be open, accessible, and explicitly dedicated to the interests of the group, rather than any individual or particular interest group. By thinking explicitly as citizens and members of a community, participants articulate rationales to serve, not only themselves, but also what they perceive to be the interests of a wider community. It is very different to think in terms of “what do I think would be best for my community” than in the language of “me and what I want.”

K. Facilitated

One final prerequisite to deliberation is structural – namely, effective facilitation. The only way to manage the competing voices of a large number of participants is to facilitate the dialogue, highlighting what is productive and suppressing what is destructive.⁴⁷ Facilitation may be as simple as having someone call on people as they raise their hands, or as complex as the elaborate procedures used in a courtroom proceeding to ensure both sides a fair hearing. The moderator is an umpire who enforces the rules of deliberation’s play. Successful town meetings, for example, are run by a moderator who bridges the differences among participants and affords an equal airing of views. Moderation is essential to managing the work of groups or teams online and off.

III. STRUCTURING DELIBERATION OFF-LINE

Now that we have identified what deliberation looks like, we still have to understand how deliberation actually works in “Meatspace” before we can structure it in cyberspace.⁴⁸ Max Weber, as re-told by Robert Ellickson and

⁴⁶ See, for example, the County of Santa Clara, California’s new “life events” portal at <http://www.sccgov.org> (last visited Dec. 3, 2002).

⁴⁷ MEIKLEJOHN, *supra* note 21, at 22 (“In the town meeting the people of a community assemble to discuss and to act upon matters of public interest – roads, schools, poorhouses, health, external defense, and the like. Every man is free to come. They meet as political equals. Each has a right and a duty to think his own thoughts, to express them, and to listen to the arguments of others. The basic principle is that the freedom of speech shall be unabridged. And yet the meeting cannot even be opened unless, by common consent, speech is abridged. A chairman or moderator is, or has been, chosen.”).

⁴⁸ Barlow, *supra* note 25.

Lawrence Lessig, demonstrated that a diverse concatenation of factors, including but not limited to formal law, bring about behavioral regulation.⁴⁹ Informal norms, market rules and architecture structure human interaction.

As we will later discuss, manipulating architecture is the most efficient and effective means to control behavior in cyberspace.⁵⁰ First, we have to understand and assess the potential and shortcomings of other forces that can encourage deliberation.

A. Law

Formal law structures deliberation. Although there is no single body of law called “deliberation regulation,” the aim of structuring how people communicate, travel and associate is the goal of myriad legal rules. From postal regulations that offer bulk rates to non-profits to zoning laws that create set-asides for public gatherings, there are a plethora of local, state and federal measures designed to facilitate the conditions for public deliberation. In addition, copyright and patent law are intended to “to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings.”⁵¹ By limiting the term of the property right in information, the Constitution both creates an incentive to the creation of new works and safeguards the public right of access to an “information commons” that is free to all.⁵² This ensures that works enter the public domain⁵³ and feed the informational diet necessary for the flourishing of a healthy democracy.⁵⁴ These rules delimit public spaces and hone the use of such space for the formation of the public good.

⁴⁹ ROBERT ELLICKSON, *ORDER WITHOUT LAW* 4 (1994) (“large segments of social life are located and shaped beyond the reach of law”); LESSIG, *supra* note 26, at 88 (describing how law, market, norms and architecture together effect regulation of behavior).

⁵⁰ *Cf.* Dan Burk & Julie Cohen, *Fair Use Infrastructure for Copyright Management Systems* 15 HARV. J.L. & TECH. 41, 48 (2001) (arguing that technology can enforce rules that go well beyond law’s purview).

⁵¹ U.S. CONST., art. I, § 8, cl. 8.

⁵² *SunTrust Bank v. Houghton Mifflin Co.*, 268 F.3d 1257, 1261 (11th Cir. 2001) (“The Copyright Act promotes public access to knowledge because it provides an economic incentive for authors to publish books and disseminate ideas to the public.”) (citing *Harper & Row, Publishers, Inc. v. Nation Enter.*, 471 U.S. 539, 558 (1985)).

⁵³ *Id.* at 1262 (“The second goal of the Copyright Clause is to ensure that works enter the public domain after an author’s rights, exclusive, but limited, have expired. Parallel to the patent regime, the limited time period of the copyright serves the dual purpose of ensuring that the work will enter the public domain and ensuring that the author has received a ‘fair return for [her] labors.’” (citing *Harper & Row*, 471 U.S. at 546)).

⁵⁴ *See* Niva Elkin-Koren, *Cyberlaw and Social Change: A Democratic Approach to Copyright Law in Cyberspace*, 14 CARDOZO ARTS & ENT. L.J. 215 (1996) (arguing that the future of copyright law in cyberspace is crucial for democracy); C. Edwin Baker, *The Media that Citizens Need*, 147 U. PA. L. REV. 317 (1998) (discussing the relationship between democratic theory and corresponding conceptions of the role of media in securing

There is one area in which law and deliberation are most explicitly connected: the jurisprudence of free speech. Fresh from the experience of tyranny, the drafters of the Bill of Rights needed to guarantee that Americans could freely and publicly assemble to decide their fate, enact laws and govern themselves through consensual action in the name of liberty and against oppression. The First Amendment according to Alexander Meiklejohn and the decisions of the mid-twentieth century court he influenced, creates the preconditions for public discourse and democratic self-governance.⁵⁵ More than just a statement of negative liberty, the Meiklejohnian conception of the First Amendment implies an obligation upon government to secure and structure the conditions for robust democratic discourse.⁵⁶ According to this social interpretation, the Constitution does not protect all speech equally, but primarily safeguards the unabridged freedom of public speech.⁵⁷ The legislature “is not forbidden to engage in that positive enterprise of cultivating the general intelligence upon which the success of self-government so obviously depends.”⁵⁸ The Founders did not intend to promote unfettered speech; rather, according to Meiklejohn, they intended to secure the conditions for the expression of “everything worth saying” in a democracy.⁵⁹ “[C]onflicting views may be expressed, must be expressed, not because they are valid, but because they are relevant.”⁶⁰ Public speech is “more than self-expression; it is the essence of self-government.”⁶¹

It is not coincidental that Meiklejohn was writing about democratic self-governance at the end of the Second World War, when government was seeking to rebuild civil society out of the ashes of Fascism. Roughly contemporaneous to the publication of Meiklejohn’s *Free Speech and Its*

democracy).

⁵⁵ See Alexander Meiklejohn, *The First Amendment is an Absolute*, 1961 SUP. CT. REV. 245 (1964); William Brennan, *The Supreme Court and the Meiklejohn Interpretation of the First Amendment*, 79 HARV. L. REV. 1 (1965).

⁵⁶ Owen M. Fiss, *Free Speech and Social Structure*, 71 IOWA L. REV. 1405, 1409-10 (“The purpose of free speech is not individual self-actualization, but rather the preservation of democracy, and the right of a people, as a people, to decide what kind of life it wishes to live. Autonomy is protected not because of its intrinsic value, as a Kantian might insist, but rather as a means or instrument of collective self-determination. We allow people to speak so others can vote. Speech allows people to vote intelligently and freely, aware of all the options and in possession of all the relevant information.”).

⁵⁷ MEIKLEJOHN, *supra* note 21, at 91.

⁵⁸ *Id.* at 17.

⁵⁹ *Id.* at 25.

⁶⁰ ALEXANDER MEIKLEJOHN, *POLITICAL FREEDOM: THE CONSTITUTIONAL POWERS OF THE PEOPLE* 96 (1960).

⁶¹ *Red Lion Broad. Co. v. FCC*, 395 U.S. 367, 390 (1969) (quoting *Garrison v. Louisiana*, 379 U.S. 64, 74-75 (1964)). This echoes Meiklejohn’s statement “the freedom the First Amendment protects is not, then, an absence of regulation. It is the presence of self-government.” Brennan, *supra* note 55, at 18 (citing Meiklejohn, *supra* note 55, at 252).

Relation to Self-Government, the Council of Europe enacted the Convention for the Protection of Human Rights.⁶² Article 10 of the Convention articulated a similar vision of the relationship among state-promoted structure, speech and democracy: "Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers."⁶³ But that freedom could be limited by laws necessary in a democratic society.⁶⁴ According to the social conception of the First Amendment articulated in *Red Lion* and its doctrinal kin,⁶⁵ the First Amendment permits the enactment of restrictive regulations in some contexts to structure communication that protects freedom of speech.⁶⁶ In order to enable a multiplicity of voices to be heard in the public debate, the Constitution permits the use of law to hush the voices of others under limited conditions. Law promotes conditions favorable to certain kinds of speech, as seen in the aforementioned zoning and postal regulations. There is constitutional precedent for structuring speech directly through the enactment of content guidelines and, where necessary, for restricting certain kinds of speech altogether.⁶⁷

⁶² Convention for the Protection of Human Rights and Fundamental Freedoms, Nov. 4, 1950, 213 UNTS 221, *amended by* Protocol No. 11 (Nov. 1, 1998), *available at* <http://conventions.coe.int/Treaty/EN/CadreListeTraites.htm> (last visited Nov. 19, 2002).

⁶³ *Id.*

⁶⁴ *Id.* ("Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. This article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises. The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.")

⁶⁵ *See, e.g.*, *Turner Broad. v. FCC*, 512 U.S. 622 (1994) ("Turner I"); *Turner Broad. v. FCC*, 520 U.S. 180 (1997) ("Turner II"). *See also* *NBC v. United States*, 319 U.S. 190 (1943) (holding that the FCC can adopt regulations that go beyond the technical elements of broadcasting); Anna M. Taruschio, *The First Amendment, the Right Not to Speak and the Problem of Government Access Statutes*, 27 *FORDHAM URB. L.J.* 1001 (2000) (arguing that the First Amendment is more than a positive grant of freedom).

⁶⁶ *See* David P. Currie, *Positive and Negative Constitutional Rights*, 53 *U. CHI. L. REV.* 864 (1986) (comparing international approaches to affirmative speech regulations).

⁶⁷ *See, e.g.*, *Beauharnais v. Illinois*, 343 U.S. 250 (1952) (upholding group libel statute); *Feiner v. New York*, 340 U.S. 315 (1951) (upholding conviction of speaker for disorderly conduct); *Chaplinsky v. New Hampshire*, 315 U.S. 568 (1942) (upholding statute prohibiting fighting words).

1. Media Law

Facilitating free speech by way of legal restrictions is most evident in media law, where regulations restricting broadcasters have repeatedly withstood First Amendment challenge.⁶⁸ Media law ensures that citizens are socialized into a democratic political culture by creating the informational basis for national deliberation. In a modern, mass society, the media are primarily responsible for interest articulation and political communication. They have not only enjoyed the guarantee of freedom of press but are also subject to requirements imposing truthfulness, accuracy,⁶⁹ decency⁷⁰ and pluralism.⁷¹ Until its demise in the early 1980s, the Fairness Doctrine required U.S. broadcasters to grant a right of reply to those representing offended individuals or groups.⁷² In Europe, broadcast law also includes prescriptions regarding the origin of content and mandates airing a certain percentage of European-produced programming.⁷³ Europe broadcast law also permits regulating whether and when commercials can be broadcast during a soccer game.⁷⁴

⁶⁸ See, e.g., *National Broad. Co. v. United States*, 319 U.S. 190 (1943) (upholding FCC broadcast regulation); *Red Lion Broad., Inc. v. FCC*, 395 U.S. 367 (1969) (upholding fairness doctrine); *FCC v. Pacifica Foundation*, 438 U.S. 726 (1978) (upholding FCC's regulation of indecent material in broadcast); *Turner I*, *supra* note 65; *Turner II*, *supra* note 65 (upholding must carry).

⁶⁹ Since news distortion "goes to the essence of the trust placed in a broadcaster to provide quality service oriented to the needs of its community," news staging and news distortion "should continue to be treated as 'adverse reflections on an applicant's qualifications to serve the public interest.'" *In re Policy Regarding Character Qualifications in Broadcast Licensing*, 102 F.C.C.2d 1179, 1211-12 (1986) (restating the FCC's commitment to the character policy). See also *Serafyn v. FCC*, 149 F.3d 1213 (1998) (reviewing an order denying petition to revoke broadcaster license for news distortion); Chad Rafael, *The FCC's Broadcast News Distortion Rules: Regulation By Drooping Eyelid*, 6 COMM. L. & POL'Y. 485 (2001) (reviewing the origins and codification of the distortion policy and presenting a quantitative analysis of the FCC's decisions in this area).

⁷⁰ See 18 U.S.C. § 1464 (2001) ("Whoever utters any obscene, indecent, or profane language by means of radio communication shall be fined under this title or imprisoned not more than two years, or both.").

⁷¹ See Policy Statement on Comparative Broadcast Hearings, 1 F.C.C.2d 393, 394 (1966) (stating diversification of control is a factor of "primary significance" in the grant of a broadcast license).

⁷² See *In re Complaint of Syracuse Peace Council*, 2 F.C.C.R. 5043, 5058 n.2 (1987), *aff'd*, *Syracuse Peace Council v. FCC*, 867 F.2d 654 (D.C. Cir. 1989) (noting that the fairness doctrine requires stations to afford "reasonable opportunity for the presentation of contrasting viewpoints on those controversial issues of public importance"). The FCC repealed the doctrine in 1987. *Id.* at 5043. See also *Radio-Television News Dirs. Ass'n v. FCC*, 229 F.3d 269, 272 (2000) (ordering the FCC to repeal the personal attack rule).

⁷³ Council Directive 97/36, art. 3a, 1997 O.J. (L 202) 40.

⁷⁴ *Id.*, art. 18, 1997 O.J. (L 202) 40.

In the United States, broadcast spectrum is licensed, not sold in fee simple, and regulations of content can be tied to the grant and renewal of a license.⁷⁵ The enactors regarded these restrictions as a necessity to ensure that broadcasting will have a positive influence on public opinion formation. In Europe, incidentally, broadcasting law recognizes that government *must* create a regulatory framework to tie broadcasting to the formation of the general will.⁷⁶ The German Constitutional Court held that the German Basic Law imposed upon its government the affirmative obligation to ensure the necessary broadcasting conditions for public speech to flourish independently of the state and the market.⁷⁷

Despite the First Amendment's clear proscription against state incursions on the freedom of speech, there is no absence of rule-making relating to speech in the broadcast arena. To the contrary, law has played a pivotal role in attempting to secure media in the public interest. Whether it has been successful in promoting public deliberation or even creating the informational prerequisites for it is not clear. As Bertrand Russell pointed out, television is the medium that "allows thousands of people to laugh at the same joke and still remain alone."⁷⁸

2. Public Forum Doctrine

In addition to broadcasting law, the Public Forum Doctrine is an avenue by which the state restricts speech in the name of promoting public speech. Like media law, it is more than a negative prohibition against governmental censorship. Public forum law implies a positive right for venting unpopular views and conducting public debate in designated protected spaces.

⁷⁵ See *The Public and Broadcasting*, at http://www.fcc.gov/mb/audio/decdoc/public_and_broadcasting.html (for example, the Federal Communications Commission manual outlines requirements for children's programming that include time restrictions and requirements for identifying a children's program, requirements for the full and accurate disclosure of the material terms of contests, requirements regarding advertising, including prohibiting non-state lottery advertisements).

⁷⁶ Communication from the Commission on the application of State aid rules to public service broadcasting, 2001 O.J. (C 320) 4.

⁷⁷ "Broadcasting is more than just a 'medium' for the formation of public opinion; it is an imposing 'factor' in the formation of public opinion. This participation . . . is by no means limited to news programs, political commentary, or series on political problems of the present, past or future: the formation of opinion takes place to the same extent in dramas, musical presentations, and broadcasts of comedy programs It becomes clear from such a perspective that institutional freedom for broadcasting is no less important than for the press. . . ." BVerfGE 12, 205 (260-61) - 1. Rundfunkentscheidung (Deutschland-Fernsehen) [German Constitutional Court].

⁷⁸ See John Perry Barlow, *The Pursuit of Emptiness*, Forbes.com (Dec. 3, 2001), at http://www.forbes.com/asap/2001/1203/096_print.html (quoting Russell).

The idea of structuring a public forum⁷⁹ is rooted in the belief that, in particular, those with unpopular and minority views who may not have access to private expressive space should have a public outlet for free expression. This is not for the benefit of the individual but for the sake of public debate and the airing of all relevant views. As it has evolved in the Court's jurisprudence since the 1930s, the Public Forum Doctrine has two basic rules designed to structure public deliberation. First, when the government makes government-owned land available to the public (e.g., a street or park), it must do so on a fair and non-discriminatory basis.⁸⁰ Second, the government may subject the time, place and manner of speech, but not the speaker's viewpoint, to rational regulation.⁸¹ The following statement by a Supreme Court justice further summarizes the Public Forum Doctrine:

Wherever the title of streets and parks may rest, they have immemorially been held in trust for the use of the public and, time out of mind, have been used for purposes of assembly, communicating thoughts between citizens, and discussing public questions. Such use of the streets and public places has, from ancient times, been a part of the privileges, immunities, rights, and liberties of citizens. The privilege of a citizen of the United States to use the streets and parks for communication of views on national questions may be regulated in the interest of all; it is not absolute, but relative, and must be exercised in subordination to the general comfort and convenience, and in consonance with peace and good order; but it must not, in the guise of regulation, be abridged or denied.⁸²

⁷⁹ Early public forum cases are primarily labor-related cases regarding the right to picket or protest. In these cases, a balancing approach evolved to weigh the interests of business owners and merchants against the free speech rights of employees and labor activists. *See, e.g., Int'l Bhd. of Teamsters Local 695 v. Vogt, Inc.*, 354 U.S. 284 (1957); *Giboney v. Empire Storage & Ice Co.*, 336 U.S. 490 (1949); *Thornhill v. Alabama*, 310 U.S. 88 (1940). In a more recent strand of public forum cases that emerged during the heyday of civil rights protests, the Court more zealously protected the public forum and insisted that only narrowly drawn laws would be permissible restrictions on public speech. It was during this period that the time, place and manner restrictions and requirements of non-discretionary, content-neutral rulemaking emerged. *See, e.g., Heffron v. Int'l Soc'y for Krishna Consciousness, Inc.*, 452 U.S. 640 (1981); *Cox v. Louisiana*, 379 U.S. at 536, 558 (1965); *Edwards v. South Carolina*, 372 U.S. 229 (1963); *See also Perry Educ. Ass'n v. Perry Local Educators Ass'n*, 460 U.S. 37 (1983); *United States v. Grace*, 461 U.S. 171 (1983); *Southeastern Promotions, Ltd. v. Conrad*, 420 U.S. 546 (1975); DAVID S. BOGEN, *BULWARK OF LIBERTY: THE COURT AND THE FIRST AMENDMENT* (1984).

⁸⁰ *See, e.g., Southeastern Promotions, Ltd. v. Conrad*, 420 U.S. 546 (1975) (municipal theater); *Madison School District v. WERC*, 429 U.S. 167 (1976) (school board meeting); *Heffron v. ISKCON*, 452 U.S. 640 (1981) (state fair grounds); *Widmar v. Vincent*, 454 U.S. 263 (1981) (university meeting facilities).

⁸¹ *See cases cited supra* note 80.

⁸² *Hague v. Comm. for Indus. Org.*, 307 U.S. 496, 515-16 (1939).

3. Law's Limits: Mediocre Media Law and No Central Park in Cyberspace

Law is limited in its ability to structure deliberation in cyberspace the way it currently functions in the real world. The speech-restrictive regulations of media law have no applicability in cyberspace. Content-based rules are tied to the grant of a license for broadcast. The rationale for licensing, in turn, is based on the notion that broadcast spectrum is scarce and that the government must use a licensing scheme to allocate this public good. With the acknowledged end of scarcity and the evolution of compression technologies and new mechanisms for the transmission of broadcast content over Internet and satellite, the rationale for licensing diminishes. Furthermore, the advent of digital broadcasting and broadband Internet video signifies that broadcasters are no longer limited to a concentrated handful of television content aggregators. In cyberspace, there is theoretically no limit to the number of broadcasters. Anyone can create content and distribute it via the Web to one or to millions with no marginal cost. This is not to say that an individual has as much power to influence opinion as Disney.com or one who controls multiple media outlets. But the communications topology of cyberspace is different from the broadcast market, and the justifications for content regulation have become outmoded.

Suddenly, new kinds of companies are in the broadcasting business. Traditional media companies are now also software and e-commerce merchants and, in turn, companies are now also purveyors of news.⁸³ With the convergence of Internet, cable, satellite and broadcast technologies, and new platforms being used to transmit content that was once only available over television, traditional media law is quickly becoming inconsistent and out-of-date. Traditional media law does not apply to the Internet,⁸⁴ and rules to promote public speech online have not been created to fill the void.⁸⁵

Two of the fundamental problems with extending the reach of broadcast law or its principles to cyberspace are the absence of the scarcity rationale and the

⁸³ The paradigmatic example of this is, of course, AOL-TimeWarner, which controls both cable television and Internet broadcasting outlets in addition to a vast array of print media. See Amy Harmon, *Worries About Big Brother at America Online*, N.Y.TIMES, Jan. 31, 1999, at A1.

⁸⁴ The Federal Communications Commission considers the Internet an "enhanced . . . service provider" and therefore not subject to the non-discrimination common carrier requirements. *In re Federal-State Joint Board on Universal Service*, 13 F.C.C.R. 11501 (1998). See Robert Cannon, *What is the "Enhanced Service Provider" Status of Internet Service Providers?* FCBA NEWS, Feb. 1997, at 11, available at <http://www.vii.org/papers/espart.htm> ("ESP Status of ISPs"). See also *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 F.C.C.R. 15499, 15795 n.1416 (1996) (defining "enhanced services"); *In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 16 F.C.C.R. 9151, 9158-9159 (2001) (stating that internet service providers are enhanced service providers).

⁸⁵ Thomas G. Krattenmaker & L. A. Powe, Jr., *Converging First Amendment Principles for Converging Communications Media*, 104 YALE L.J. 1719 (1995).

fact that regulating cyberspace is a direct regulation of speech. In the virtual world, word and deed are equivalent. All activity is expressive; there is no distinction between action and expression. For example, "fighting words" that could be regulated in real space because the physical proximity of the speaker transforms speech into the threat of violence would not be subject to control in cyberspace where there is no physical proximity.⁸⁶ Or, for example, transparency rules that promote accountability by broadcasters (e.g. station identification) cannot apply in cyberspace. Mandating transparency in cyberspace would curtail the right of individuals to anonymous speech merely because they are "broadcasting" on the Internet. Hence, there is an extremely high threshold to clear in order to enact restrictive regulations. For it to enact such a regulation of content, the government would first have to have a clear and compelling rationale for doing so and no more narrowly tailored means to achieve its ends.⁸⁷ As Lawrence Lessig has demonstrated, law misapplied in cyberspace can shut down free speech and runs a great risk of stifling robust expression.⁸⁸ More to the point, it is not clear that there is any constitutional and feasible method for directly regulating speech to promote democracy in cyberspace without straying into the territory of impermissible and censorious content regulation.

Additionally, the Public Forum Doctrine cannot be applied in cyberspace because there is no public space.⁸⁹ It is a private domain. There are no government lands and no public structures. Even the telecommunications infrastructure on which the World Wide Web rests is largely in private hands.⁹⁰

⁸⁶ *Chaplinsky v. New Hampshire*, 315 U.S. 568, 537 (1942) (upholding statute that prohibits face-to-face fighting words).

⁸⁷ See, e.g., *ACLU v. Reno*, 929 F. Supp. 824 (E.D. Pa. 1996) ("Reno I") (striking down Communications Decency Act as unconstitutional); *ACLU v. Reno*, 521 U.S. 844 (1997) ("Reno II") (striking down Communications Decency Act as unconstitutional); *ACLU v. Reno*, 217 F.3d 162 (3d Cir. 2000) ("Reno III") (striking down constitutionality of COPA) (articulating strict scrutiny standard for regulations of speech content).

⁸⁸ See generally, LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* (1999).

⁸⁹ David J. Goldstone, *The Public Forum Doctrine in the Age of the Information Superhighway (Where Are the Public Forums on the Information Superhighway?)*, 46 HASTINGS L.J. 335 (1995) (arguing that to apply the public forum doctrine to the National Information Infrastructure, the NII should be thought of as an entity composed of public and private places); Allen S. Hammond, *Private Networks, Public Speech: Constitutional Speech Dimensions of Access to Private Networks*, 55 U. PITT. L. REV. 1085, 1109 (1994) ("Where the network is the product or service offered by the corporation or closed user group, subscribers and viewers have been accorded greater access and speech rights based on constitutional, economic and other public policy principles."); Edward Naughton, Note, *Is Cyberspace a Public Forum? Computer Bulletin Boards, Free Speech, and State Action*, 81 GEO. L.J. 409 (1992); Noah D. Zatz, Note, *Sidewalks in Cyberspace: Making Space for Public Forums in the Electronic Environment*, 12 HARV. J.L. & TECH. 149 (1998) (arguing for creation of expressly public spaces in cyberspace).

⁹⁰ See Robert Kahn, *The Role of the Government in the Evolution of the Internet, in REVOLUTION IN THE U.S. INFORMATION INFRASTRUCTURE* 13, 13-24 (1995) ("Very little of

If government were to close the town hall and open offices in a strip mall, it would be faced with a similar problem. Recall that the purpose of the public forum is to offer a platform to those who could not otherwise be heard. In cyberspace this justification is irrelevant. There is no need to create a segregated Speaker's Corner when the entire Internet is a Speaker's Corner where speech is cheap and easily accessible.

There is a further difference between the real and the virtual world that renders Public Forum Doctrine inapplicable to structuring deliberation. The Public Forum Doctrine assumes a geographic and spatial reality that does not apply in cyberspace. Unlike the traditional public forum, where speech takes place in a central gathering point, all expressive activity is at the margin in the topography of cyberspace; there is no center.⁹¹ The rationale of the public forum is predicated on the idea that communities have central gathering places where people congregate and where, if someone stands on a soapbox to express an unpopular idea, someone might "happen by" to hear it. In cyberspace, it is less like crying oyez from the central marketplace and more like whispering in a labyrinth. This is why imposing a legal requirement that certain parts of cyberspace be delimited as public spaces, demarcated, for example, by a ".civ" domain name,⁹² would only serve to segregate public speech on the Internet and not to make it more accessible.⁹³ There is no such thing happening upon the public square. Those who know who you are and where to find you will come, but gathering points akin to New York's Central Park do not exist. In a world of information overload, where information space is decentralized and dispersed, people tend to congregate at sites that can afford to advertise their presence in other media. Despite each person's ability

the current Internet is owned, operated, or even controlled by governmental bodies.").

⁹¹ Mark Nadel, *Customized News Services and Extremist Enclaves In Republic.Com*, 54 STAN. L. REV. 831 (2002) (reviewing CASS SUNSTEIN, *REPUBLIC.COM* (2001)).

⁹² The Public Telecommunications Service (PTS), a project of the University of Maryland, proposed the creation of a .civ top-level domain name (TLD) where "[a]nyone will be able to create Web pages and other content for the .civ domain, but their products will have to serve public purposes and obey rules that are determined by the PTS. Thus, anyone accessing a Web site or participating in a discussion in this domain will be assured of its civic and public value." Peter Levine & Robert Wachbroit, *The Public Telecommunications Service 10* (Mar. 2001) (work in progress), <http://www.peterlevine.ws/pts.pdf>.

⁹³ At an initial PTS meeting, entitled "Building the E-Commons," sponsored by the Institute for Philosophy and Public Policy at the University of Maryland, the Center for Democracy and Citizenship at the University of Minnesota, the Center for Communication and Democracy at the University of Wisconsin-Madison and the Ford Foundation on June 1-2, 2001 in Washington, D.C., the proposal was roundly criticized and rejected by the group assembled. See Democracy Collaborative, <http://www.democracycollaborative.org/programs/public/index.html> (last visited Dec. 2, 2002). Cf. David McGuire, *President Signs 'Dot-Kids' Legislation*, in WASHINGTONPOST.COM (Dec. 4, 2002) (announcing passage of the Dot-Kids Implementation and Efficiency Act mandating the creation of a .kids domain).

to be his own broadcaster, a joeqpblogger.org will never attract the eyeballs of a cnn.com even if he can reach many more than with a broadside.

In real space, the jurisprudence of the public forum makes sense, not only because it is legally and logically justifiable, but because these reserved places for public speaking are physically in the center of town. There are municipal buildings, parks and other central institutions of local life. In suburban life and cyberspace, where sprawl is the norm, people do not frequent parks or sidewalks.

The Public Forum Doctrine attempts to establish a legitimate and consistent standard governing the right of access to traditional public forums. Though there are barriers to entry in cyberspace, the barriers are no longer physical. As with access, the regulation of time, place and manner is also irrelevant in an information space where there is no such thing as nuisance. Speech in one part of cyberspace need not interfere with schools, residences, military installations or anything else. Each site on the World Wide Web coexists with every other site by means of a unique addressing system, and the code is programmed to link sites without blurring the borders between them.⁹⁴ Time, place and manner can be perfectly actualized in the virtual realm, rendering their legal regulation obsolete. The problem is not bothering others, but ensuring that the speaker can be heard amidst the cacophony of numerous chattering voices on the Internet.

In addition, the intense pressure to change content, imagery and conversation created by the speed of the new media and the economics of the new media industry reinforces the fact that little is said on the Internet worth listening to. Furthermore, there are hurdles to structuring deliberation that precede and confound the power of law.

4. No Policy for Democracy

Beyond the absence of law to support structuring deliberation in cyberspace, there also is no political will to enact any. Government does have a presence in cyberspace. It conducts itself as a purveyor of services rather than an interactive partner in governance. There is a huge and ongoing investment in

⁹⁴ The Web addresses are known as domain names, which are alphabetical representations of numerical Internet protocol (IP) addresses. Each alphabetical address actually stands in for an IP address. In other words, every time you use a domain name, a Domain Name System service must translate the name into the corresponding IP address. For example, the domain name www.example.com might translate to 198.105.232.4. The Internet Corporation for Assigned Names and Numbers (ICANN) oversees the domain name system and Net addressing functions. The U.S. Department of Commerce, along with members of the Internet's business, technical, academic and user communities created ICANN in October 1998. ICANN manages a set of technical functions previously performed under U.S. government contract by the Internet Assigned Numbers Authority (IANA) and other groups. For more about ICANN and Internet addressing, see www.icann.org (updated Oct. 26, 2002).

electronic government.⁹⁵ The focus of this spending (and related legislation) is government-to-consumer ("G2C") uses of technology to accelerate the delivery of governmental services or "brochure-ware" information.⁹⁶

At the Ministerial Conference on Electronic Government, European foreign ministers issued a joint declaration, recognizing "the importance of increasing participation in local, regional, national and European democratic processes."⁹⁷ The Council of Europe's Congress on Local and Regional Authorities called for the elaboration of national strategies to enhance citizen participation on all important regulatory issues.⁹⁸ In addition, it proposed the use of "new information and communication technologies to strengthen democratic governance and its legitimacy, to promote values like openness, transparency and accountability of administration," as well as to foster "public debate and communication."⁹⁹ Despite the rhetoric, current governmental efforts focus the use of technology on service delivery strategies and transactional technologies.¹⁰⁰ This reinforces a "thin" client-patron model of governance,

⁹⁵ Federal information technology spending in the United States alone will exceed \$48 billion in 2002 and \$52 billion in 2003. See Genie N.L. Stowers, *The State of Federal Websites: The Pursuit of Excellence*, (Aug. 2002), available at <http://endowment.pwcglobal.com/pdfs/StowersReport0802.pdf>. See also Jerry Grossman, *Market Watch: Sizing up who will succeed in government IT market*, in Washington Technology (Sept. 23, 2002), http://www.washingtontechnology.com/news/17_13/marketwatch/19079-1.html.

⁹⁶ Pamela Sherrid, *A Killer App for Bureaucrats*, U.S. NEWS & WORLD REP., Feb. 26, 2001, at 42.

⁹⁷ E-Government Ministerial Conference, *Ministerial Declaration*, at 3, at http://europa.eu.int/information_society/europe/egovconf/documents/Ministerial%20declaration%20English%2029-11-01.pdf (Nov. 29, 2001).

⁹⁸ See Council of Europe, *Recommendation 54 on Local and Regional Information Society*, available at [http://www.coe.fr/cplre/textad/rec/1999/rec54\(99\)e.htm](http://www.coe.fr/cplre/textad/rec/1999/rec54(99)e.htm) (June 16, 1999).

⁹⁹ *Id.* ("New technologies can play a role in the following areas: provision by parliaments, governments and public agencies of information for citizens, public and private institutions; enhanced interaction between politicians and citizens; closer guidance of elected representatives and governments by public involvement, especially in the legislative periods between elections; initiatives which aim to promote public debate and communication on matters of general concern, including information and communication technology applications to citizen participation in governance and direct democracy; electronic voting (a) to select candidates in elections (b) on laws and public issues; direct decision-making by citizens on at least some issues; gradual transformation of representative "delegatory" democracy into a process with more deliberation and more involvement of citizens.").

¹⁰⁰ The U.S. Federal Government has articulated an E-Government strategy comprising 23 initiatives. "These measures will use Internet-related technologies to accelerate and streamline service delivery to citizens The [23 E-Government] initiatives are designed to maximize federal government productivity gains from technology, eliminate redundant systems, and significantly improve government's quality of service for citizens . . ." Office of Management and Budget, News Release, *OMB Outlines New Federal E-Government*

whereby the private citizen-consumer transacts with the government in its capacity as market player.¹⁰¹ These transactional technology projects do not promote a “strong” democratic way of life where citizens, instead of paying parking tickets, also have the option to participate in the setting of parking rules and policy. These technologies do little to foster inclusive public deliberation, civic participation and a political culture where citizens shape rather than simply react to politics.

Lessig is right in that law has an important role to play in safeguarding cyberspace’s openness and maintaining a fair and level playing field.¹⁰² But it is less obvious that law can or should create deliberation and public participation. Deliberation is not a coerced dialogue among equals articulating public reason. As such, it is not something that can be called to life by legal mandate alone.

B. Rules and Norms

In thinking about setting the right rules for the creation of democratic dialogue online, it is clear that legal rules are not the only powerful constraints on behavior in the virtual world.¹⁰³ As Robert Ellickson revealed in *Order Without Law*, social conventions, including informal procedures and norms of etiquette, as much as formal legal rules, condition social interaction.¹⁰⁴

Deliberation depends heavily on observing the etiquette of interaction. By observing the etiquette of interaction, it is possible to create an environment in which everyone can speak and be heard, conflicting viewpoints can be aired with civility, the agenda can be set and propositions can be debated. Formal rules like Ellickson’s Rules of Order, parliamentary procedure or other rules of play enacted by a group are designed to create a level playing field during debate, and thereby produce a fair outcome. Ensuring the perception that the rules are equally applied to all participants is as important to creating a

Strategy, (Oct. 25, 2001), available at <http://www.whitehouse.gov/omb/pubpress/2001-54.html>.

¹⁰¹ According to a survey of 270 municipal Web sites in California, “most of these web sites lack a clear mission and provide few features that might effect meaningful change for local governance. The few sites that do represent change seem to favor reforms that are more entrepreneurial than participatory.” John W. Cavanaugh, *E-Democracy: Thinking about the Impact of Technology on Civic Life*, 89 NAT’L CIVIC REV. 229, 234 (2000) (citing Juliet A. Musso et al., *Designing Web Technologies for Local Governance Reform: Good management or Good Democracy?*, Paper Presented at the Reconnecting Public Managers with the Public panel in the Public Administration Section of the 1999 Annual Meeting of the Western Political Science Association, Seattle, Wash. (Mar. 25-27, 1999)).

¹⁰² LESSIG, *supra* note 26, at 265.

¹⁰³ There are those who would have government intervene to promote civic consciousness and moral virtue. See, e.g., CASS SUNSTEIN, *DEMOCRACY AND THE PROBLEM OF FREE SPEECH* (1993); Jack M. Balkin, *Populism and Progressivism as Constitutional Categories*, 104 YALE L.J. 1935 (1995) (reviewing SUNSTEIN, *supra*).

¹⁰⁴ See ELLICKSON, *supra* note 49.

democratic dialogue as guaranteeing that, in reality, the structure is fair. The integration of the rules themselves signals that it is a public dialogue with a commitment to certain values. Participants, in turn, regulate themselves and their own behavior to achieve the goals of deliberation.

Norms, however, may be more informal. Something as simple as raising one's hand and waiting to be called on by the moderator prevents people from talking out of turn. In another setting, where the participants are long acquainted and largely self-regulating, hand-raising may not be necessary. Public hearings and town hall meetings are governed, in part, by rules of experience among "players." These rules allow more excitement and interruptions than would be tolerated in either a courtroom proceeding or a personal conversation. This is, in part, because the subjects of these discussions are usually contentious and difficult and because those who go out of their way to attend such hearings are usually invested in an issue. Custom and experience dictate acceptable and productive behavior. Whereas neither yelling nor screaming might be tolerated in one community, in another community, with a different culture and personalities, loudness might be regarded as an acceptable expression of passion for an issue. Modes of discourse are often conditioned by culture and by gender.¹⁰⁵ Literature suggests, for instance, that Americans tend to be louder, while Asians adopt a quieter more behind-the-scenes style of negotiation.¹⁰⁶

¹⁰⁵ For more resources on gender and communications styles, see Terrence A. Doyle, *Gender and Communications Style*, at <http://novaonline.nv.cc.va.us/eli/spd110td/interper/culture/linksgender.html> (last modified Oct. 8, 2002) (listing various sites and sources that discuss gender and communications style).

¹⁰⁶ Shefali Rekhi, *Differences in Negotiating Styles Could Hurt Changes of a Resolution*, THE STRAITS TIMES (Singapore), June 18, 2001, at 10 ("Harvard University lecturer Brian Mandell said lack of cultural sensitivity caused much misunderstanding in a process where styles of communication and words could make or break the chances for conflict resolution. . . . Speaking to The Straits Times, Mr. Mandell said: 'Americans tend to be more proactive and assertive, whereas individuals here are more reflective, patient and do not rush to give an immediate response.' He felt that Asians found it difficult to show displeasure, especially over the Western way of thinking, while Americans were more self-confident, though it may not always be warranted. Dr. Lu Hanchao, visiting research fellow at the East Asian Institute of the NUS, felt that though generalisations could go wrong, the broad picture seemed to suggest that Americans were more direct and confrontational. Asians, he said, tended to be more tactical and roundabout."). See also Brian Bloch, *Negotiate the Global Maze: Do Your Homework Before International Forays*, THE DAILY TELEGRAPH (London), May 10, 2001, at 65 ("The most striking contrasts in negotiating styles are probably between Japanese (or Chinese) and North Americans. The former start with a substantial socialisation process, whereas Americans like to get straight down to business. The Japanese are not great talkers, concealing emotions and stressing modesty. Americans, on the other hand, value articulate negotiators who come on strong. Price is always important, but the format of talks or, as in Japan, the status, age and size of the negotiating team may be just as critical. Sending too few people, or those who are too young, can seriously jeopardise the proceedings.").

In cyberspace, conversational communities of varying flavors can co-exist side-by-side. There is no need to conform to a single style. In real space, there can only be one town meeting in a given place. It will invariably exclude those who feel alienated by the tone and style of the debate. In cyberspace, however, loud and quiet conversations can go on at the same time. The house-bound and able-bodied can participate on equal footing.

1. Shasta County in Cyberspace

The problem with relying on informal rules and norms to structure deliberation in cyberspace is that social conventions are learned rather than imposed, and there has been little experience to date with deliberation online. Beginning in the fifth century BC, citizens of Athens would gather every ten days on the Pnyx, a hill near the Acropolis, to debate and deliberate the rules that governed their lives.¹⁰⁷ Yet we have been conditioned to seek speed on the Internet rather than to exploit the technology's flexibility to impose slowness and the deliberation that depends on it. Cultural value transmission takes time and must develop. Norms from real space cannot simply be imported into the new environment because cultural conventions are particular to the space in which they develop. It is therefore necessary to design processes for deliberating online and to implement these processes in order to gain experience "doing" deliberation.

Conventions for public discourse are often codified for consistency and legitimacy. In most parliamentary bodies, explicit rules govern how long a speaker may speak, how interruptions are made, whether time may be reserved for later comment and how speaking time may be ceded to someone else. These regulations are codified, as rules of procedure, so that they can be better enforced and equitably applied. When someone derogates from the norms, they are subject to the group's sanction, perhaps as severe as temporary or permanent expulsion. A group may also publicly shame one who contravenes its rules. Such conventions are, at once, both norms and rules.

The need for imposing norms is no less important in cyberspace. However, it is more difficult in cyberspace to back up behavioral norms with the threat of sanction. There is no room from which to be ejected and, therefore, no real threat to deter misbehavior. In real space, law backs up norms. In cyberspace, the policeman can and should be the architecture.

C. Architecture

Architecture is a public experience at the heart of civic life.¹⁰⁸ It is art that is permanently on display and intended for general consumption.¹⁰⁹ But its

¹⁰⁷ P.G. Calligas, *Archeological Research on the Athenian Pnyx*, in *THE PNYX IN THE HISTORY OF ATHENS I* (Björn Forsén & Greg Stanton eds., 1996).

¹⁰⁸ See generally *THE PUBLIC FACE OF ARCHITECTURE: CIVIC CULTURE AND PUBLIC SPACES IX-X* (Nathan Glazer & Mark Lilla eds., 1987) (arguing that architecture is "consumed" less by its owners than by the public).

public quality is not only a function of its external visibility. When we interact socially and civically, it is invariably in a space defined by architecture. The space itself filters, shapes and molds the interaction and communication within it.

Baron Haussmann designed his Paris to prevent the erection of barricades and the breeding of civil unrest.¹¹⁰ He widened the streets to atomize the passer-by and erected new streets to enable soldiers to reach the workers' district faster and thereby quell unrest.¹¹¹ Stephen Holl, in his luminous buildings, such as the new Museum of Modern Art (Kiasma) in Helsinki, designs spaces organically integrated into the city's landscape that – aside from serving their primary purpose – could also be home to public gatherings, cultural happenings and performances.¹¹² The design of the town hall has as much impact on public participation there as other, expressly political factors. Participation will be enhanced if the town hall is spacious, inviting and easily accessible, and if it has ample parking, warm light, good acoustics, comfortable chairs and free snacks. Successful public spaces are free and accessible. Successful democratic public spaces go beyond mere openness to impose internal constraints that foster and encourage vibrant public congregation, participation and deliberation. In the same way that self-governance requires liberty plus self-imposed constraints, it is not the openness of a space but the constraints it imposes that transform an agglomeration of individuals into a public gathering. It is the right architecture (as much as the right legal rules and social conventions) that shapes civic congregation, protest and participation.

To secure more robust democratic life, based on ideals of citizen engagement and participation, we need to build architecture in cyberspace that not only is free from censorship, but that fosters public discussion of what Hannah Arendt called the “innumerable perspectives and aspects in which the common world presents itself.”¹¹³ Just as the erection of Paris' opulent arcades in the late 19th century gave rise to the occupation of “flaneur,” the man uprooted,¹¹⁴ we can build spaces that nurture the rooted and active public citizen in cyberspace.

Software is the architecture of the virtual world. Even more than architecture in real space, architecture in virtual space plays a direct role in

¹⁰⁹ *Id.* at ix.

¹¹⁰ WALTER BENJAMIN, *ARCADES PROJECT 12* (Howard Eiland & Kevin McLaughlin trans., 1999) (“the true goal of Haussmann's projects was to secure the city against civil war.”); HOWARD SAALMAN, *HAUSSMANN: PARIS TRANSFORMED* 16-26 (1971).

¹¹¹ BENJAMIN, *supra* note 110, at 12.

¹¹² STEVEN HOLL, *KIASMA: MUSEUM OF CONTEMPORARY ART, HELSINKI* (1997); Nancy Marmer, *Holl's Kiasma Debuts in Helsinki*, *ART IN AMERICA*, Oct. 1998, at 35.

¹¹³ Hannah Arendt, *The Public Realm: The Common*, in *THE PUBLIC FACE OF ARCHITECTURE: CIVIC CULTURE AND PUBLIC SPACES* 5, 11-12 (Nathan Glazer & Mark Lilla eds., 1987).

¹¹⁴ BENJAMIN, *supra* note 110, at 448.

shaping the expression and communication that are the essence of democracy. We do not physically inhabit cyberspace. Our ideas and thoughts do. Both the front-end graphical interfaces and the back-end functionality that determines what we can and cannot do with a given technology affect how these ideas and thoughts form and find expression in cyberspace. A Web site that requires one click to access a Congress member's e-mail address may make it more likely that a constituent will write to her than one that requires ten clicks to interact. At the same time, a site that requires ten clicks through useful and balanced political information on the way to the e-mail address may improve the chances that the eventual communication will be thoughtful and informed. In this "anti-space," where legal rules play no role in carving out a realm for public expression, the technical architecture has even a greater impact on freedom of expression and opinion formation. The design of the software itself is essential to transforming mere "unregulated talkativeness" into effective and informed dialogue for self-governance.

1. Building Blocks of the Architecture

Creating deliberative architecture out of software is not a self-evident exercise. In order to understand where to begin, we have to be more precise about the attributes of the technology that could potentially improve or degrade deliberativeness. Technology is not a monolith. We have seen how the Internet has been successfully used to promote information exchange (*e.g.*, after Tianamen Square) and organize protests (*e.g.*, during WTO meetings), as well as how it might be used to make voting more secure and convenient (*e.g.*, elections in Arizona through election.com). The development of a forum and a process wherein the structure actually improves the quality of justifications for political decisions,¹¹⁵ however, must capitalize on very different functionality than these other activities. The very same technological features that are a boon to information exchange or electronic voting might be disadvantageous to deliberation.

2. Hyper-Connectivity & Hyper-Speed

The eerie thrill of instant messaging with an unknown pen-pal simulates the sensation of human interaction, closeness and warmth for a brief time. We have the impression that we are linked to remote people and places, yet we don't know our own neighbors. When we connect merely for the sake of connecting then the ends of the technology – *i.e.*, more, faster and more connected – rather than the goal of community are served.

The speed of communications networks makes immediate, push-button voting and polling easier. It is easier to get more information faster. But it is not clear that it does anything to transform that information into knowledge or to promote thoughtfulness and the slowness required for deliberation.

¹¹⁵ BOHMAN, *supra* note 24, at 27.

The accelerated immediacy of information processing, enhanced by the leap forward from analogue modems to Internet via cable, ISDN, DSL, satellite and wireless broadband, incites the demand for speed. How gratifying is the instantaneous click-and-load of a Web site with graphics that explode onto the screen. The Internet is a faster post office, telephone, television, fax machine, car and Sherpa. It can bring information to users and takes users to the source of information. Distance and time are not barriers. Everything about life in the new millennium is faster.¹¹⁶ For deliberative democracy, where machine intelligence cannot substitute for slow reason, faster is not necessarily better.¹¹⁷

The impatience bred by point-and-click has conspired to discourage commitment and active participation.¹¹⁸ Instead of accelerated conversation, the result is a hyper-speed cacophony of dissonant shouting voices. Instead of widespread virtual deliberation, founded on technologies of interpersonal electronic interaction, the norm has become intrusive personal messaging and cantankerous e-mails, cross-posted to dozens of listservs and inundating million of in-boxes. This is perhaps most evident in chat rooms, the aptly-named locations in which those who do not merely lurk exchange lengthy diatribes or random utterances with no incentive to engage others or even commit to participation. “[I]t reminds me of graffiti,” writes Steven Johnson, “graffiti of the worst kind: isolated declarations of selfhood, failed conversations, slogans, tag lines. You don’t really see a community in these exchanges; you see a group of individuals all talking past one another, and talking in an abbreviated almost unintelligible code.”¹¹⁹

Quick speech has its uses. Even in the deliberative conversation, there is occasionally the need to get mad, shout and burst out. But the fact that speed

¹¹⁶ GLEICK, *supra* note 44, at 6.

¹¹⁷ Numerous writers have decried the loss of “slowness” in the electronic form. The most vocal among them is Sven Birkerts. See SVEN BIRKERTS, *THE GUTENBERG ELEGIES: THE FATE OF READING IN AN ELECTRONIC AGE* (1995) (examining the effect of an ever faster and more pervasive electronic form on the acts of reading and writing). See also Amy Harmon, *Internet Changes Language For :-)* & :-), N.Y. TIMES, Feb. 20, 1999, at B7.

¹¹⁸ Proponents of direct democratic uses of new technologies include Theodore Becker and Christa Slaton, who pioneered televoting (e.g., Project Hawaii) at Auburn University. Televoting can increase the franchise by using inexpensive communications technologies to reach those who otherwise could not vote. But it does nothing to improve the quality of political discourse. Though different styles of democratic participation can co-exist, the reliance on push-button techniques reinforces political passivity by reducing political life to the mere operation of the television remote. Push-button democracy encourages political leaders to respond to the direct, uninformed and non-deliberative will of the people as measured by instantaneous electronic polls. The tremendous speech of polling via the Internet encourages rapid decisions not tempered by reflection, a boon to markets inquiring about favorite movies, but a potential detriment to political discourse. See generally TED BECKER & CHRISTA DARYL SLATON, *THE FUTURE OF TELEDEMOCRACY* (2000); CHRISTA DARYL SLATON, *TELEVOTE: EXPANDING CITIZEN PARTICIPATION IN THE QUANTUM AGE* (1992).

¹¹⁹ JOHNSON, *supra* note 27, at 69.

is easy in cyberspace all the time does not mean it is necessarily desirable all the time.

3. Information Storage and Retrieval: Too Much Information

Information is a cornerstone of political education and socialization. Access to the opinions of governmental sources, the media, history books, educational institutions and neighbors is essential to being an informed citizen. Yet it is not information per se that is useful to the democrat, but knowledge – *i.e.*, information that has been distilled, evaluated and contextualized so that it can impart meaning.

The danger of the Internet is that it paralyzes us with so much information so as to give the appearance of enriching our political lives while actually drowning us in irrelevancies. Neil Postman summarizes the problem brilliantly in his classic work, *Amusing Ourselves to Death*: “[George] Orwell feared those who would deprive us of information. [Aldous] Huxley feared those who would give us so much that we would be reduced to passivity and egoism. Orwell feared that the truth would be concealed from us. Huxley feared that the truth would be drowned in a sea of irrelevance.”¹²⁰

The sheer quantity of information available creates an inverse relationship between speaking and listening, between information and understanding, between broadcasting and reception. The more people speak, the fewer people will actually be heard. Even political speech, if excessive and unfiltered, is transformed into mere chatter.

i. Personalization: The Me-Channel

The amazing flexibility of a technology that allows individuals to sit in their living rooms and click their way around the globe at warp speed, accessing diverse content-on-demand, also has the potential to emasculate the deliberative potential of the Internet. A user can download exactly what she wants, when she wants it. This can be empowering. But hyper-segmentation and individualization can also destroy the public in online life. For example, if I design my own media consumption experience, there is neither an integrator of common views nor a guarantee of access to a diversity of viewpoints. “The romantic experience of a nation united by a live comedy, a political convention or a Presidential funeral has been shattered by electronic inventions,” writes Max Frankel, New York Times media commentator. “First, tape, then the remote control, followed by cable TV, the launching of satellites, the creation of new networks and, increasingly, one-subject channels. The more we have been wired together, the faster we have been spun apart.”¹²¹ This is particularly true in light of the Web, that “ultimate slicing machine, to divide

¹²⁰ NEIL POSTMAN, *AMUSING OURSELVES TO DEATH: PUBLIC DISCOURSE IN THE AGE OF SHOW BUSINESS* vii (1985).

¹²¹ Max Frankel, *One TV Nation, Divisible: The Union of Media Giants Carves the Audience into Ever Smaller Units*, N.Y. TIMES MAGAZINE, Oct. 3, 1999, § 6, at 30.

and deliver us to market, by group for sure, and even one by one where possible. Some hail the Web as liberation, rendering all voices equal. I suspect we will be equal only in our digital loneliness.”¹²²

The simulation of community masks an isolation and atomization felt “in a society of lonely ex-couch potatoes glued to computer screens.”¹²³ The dominance of “chat” and media-on-demand jeopardizes opportunities for deliberative conversation and debate.

ii. Anonymous and Disembodied

For every benefit it confers to social interaction, anonymity also implies a detriment to accountability. The lack of body language and visual clues and cues affects the quality of conversation among people accustomed to dialogue in the real world. Participants in a face-to-face conversation become oriented and directed by visual signals such as eye-rolling, hand waving, shoulder shrugs of disaffection, slack-jawed yawns and nods of assent. The orientation and direction that these signals give rise to make the conversation more productive. This is especially true in those cultures where much communication is non-verbal and expressed by body language.

When viewed from the democratic standpoint, the speed, abundance of information, individuality and anonymity the Internet offers – while of tremendous benefit in many contexts – might contribute to fragile community, disorienting acceleration, information overload and excessive segmentation. Conversation without the signals of body language may encourage chatter. The prevalence of irrelevant chat in cyberspace, in turn, impedes real world policymakers from taking seriously the conversation in the virtual world.

4. The Internet is an Interactive Technology without Interactive Applications: Technological Paradigms for Deliberation

The Internet offers the potential to construct colorblind cyber-juries where litigants can adjudicate a case cheaply and without regard to race or ethnicity.¹²⁴ Similarly, network technology could be exploited to connect administrative decision-making processes to citizens so that the public has a voice in the development of regulations. For instance, multimedia technologies could be utilized to display two versions of a public works project so that citizens could exercise an informed choice and participate in deciding the future of their own community. Rather than simply simulating communities by aggregating individual preferences and prejudices, these

¹²² *Id.* at 32.

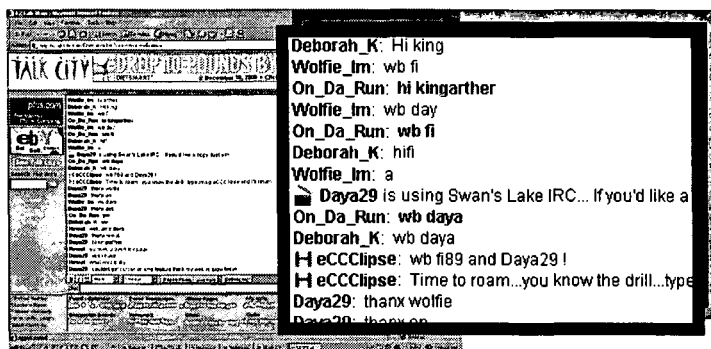
¹²³ Norman H. Nie & Lutz Erbring, *Internet and Society: A Preliminary Report*, Stanford Institute for the Quantitative Study of Society, available at http://www.stanford.edu/group/siqss/Press_Release/internetStudy.html (Feb. 16, 2000).

¹²⁴ See generally Nancy S. Marder, *Juries and Technology: Equipping Jurors for the Twenty-first Century*, 66 BROOK. L. REV. 1257 (2001); Nancy S. Marder, *Cyber-Juries: The Next New Thing?*, (unpublished manuscript, on file with author).

network communication technologies could be used to help existing communities develop a sense of public purpose more cheaply, efficiently and inclusively. The technologies could accomplish this task if they offered such capabilities as connecting pluralistic members with different viewpoints, drawing in isolated or handicapped individuals and fostering participation within the group. To date, the tools have not existed to do any of these deliberative activities. Despite thousands of years of experience with productive face-to-face dialogue, current Web-based technologies eschew the structures that make conversation effective and deliberative. Instead of applying our understanding of how groups are formed and sustained to the design of the technological architecture, we have been forced to adapt our style of working, talking and interacting with the technology. Although there have been communications applications, none have offered structured discourse for group dialogue that captures the mechanisms of off-line deliberation. There has been no reason to expect such tools to exist; no one has articulated a demand for them.

5. Chat

Four other archetypes of computer-mediated communication (CMC) tools for groups have predominated: chat; bulletin boards; video-, audio- and data-conferencing applications; and moderated chat. Each one presents a unique problem as a potential tool for collective collaboration and action. Chat rooms are probably the best-known paradigm for conversation online.¹²⁵ Anyone who has used a chat room, however, knows that utter chaos reigns there. It is anarchic and unstructured. Participants, known only by anonymous handles, exchange unconnected, unintelligibly abbreviated shorthand postings (e.g., LoL = laugh out loud, IRL = in real life).¹²⁶



¹²⁵ See, e.g., Michael Marriott, *The Blossoming of Internet Chat*, N.Y. TIMES, July 2, 1998, at G1 (noting the common use of the chat application in business, education, and consumer service).

¹²⁶ A list of common chat acronyms can be found at http://searchsystemsmanagement.techtarget.com/sDefinition/0,,sid27_gci211776,00.html (last visited Nov. 19, 2002).

It is not atypical to have a “conversation” in which a dozen people say “hi” to a newcomer who, just as rapidly, leaves to a chorus of “byes.” Screen after screen fills with salutations and gibberish. Because there is no facilitator and no ostensible organizing purpose or goal to the discussion, it is very difficult to sustain a conversation on a topic for any length of time.

The lack of rules breeds an environment that is conducive to hate and other disrespectful and illogical speech. Chat rooms are places where lies, distortions, gossip and falsehoods proliferate.¹²⁷ The proliferation of this kind of speech drives away those who would otherwise have been interested in productive dialogue, leading to a downward spiral in the level of discourse. The perception of chat as a place for “talk radio” style screaming, reinforced by stories of pedophiles lurking in chat rooms in the hope of luring children into off-line encounters, has turned many people off to the interactive potential of the Internet.¹²⁸

i. *The Origins of Chat: Internet Relay Chat*¹²⁹

Commercial chat applications, such as iChat, TalkCity or ParaChat, are based on Internet Relay Chat (“IRC”), the original chat technology, created in 1988 by Jarkko Oikarinen, a Finnish network administrator.¹³⁰ IRC is a global, multi-user chat system that gives users connected to an IRC network the ability to “talk” to one another in real time by typing.¹³¹

To communicate on IRC, a user must connect to an IRC Server in an IRC Network.¹³² This is accomplished by connecting to the Internet through an Internet Service Provider and then connecting to an IRC server.¹³³ Since all

¹²⁷ See, e.g., Kurt Andersen, *The Age of Unreason*, NEW YORKER, Feb. 3, 1997, at 41 (noting that on the Internet “[n]ot only is every citizen entitled to his or her opinion but he or she is entitled to deliver it instantaneously, studded with chunks of fake information, to the whole world.”).

¹²⁸ The dangers of chat are explored at <http://www.chatdanger.com/>, a safe chatting guide for parents and children.

¹²⁹ For greater exposition of the communication capabilities offered by Internet Relay Chat (“IRC”), see Elizabeth M. Reid, *Electropolis: Communication and Community on Internet Relay Chat* (unpublished honors thesis, University of Melbourne), available at <http://eserver.org/cyber/reid.txt> (1991). (“IRC is a multi-user synchronous communication facility that is available all over the world to people with access to the ‘Internet’ network of computer systems. IRC was not specifically designed for a business environment – the use to which it is put is entirely decided by those who use it. Work is certainly done on IRC. It is an excellent forum for consultations between workers on different points of the globe – everything from programming to translation to authorial collaboration goes on IRC. However, a large part of what goes on IRC is not work but play....”).

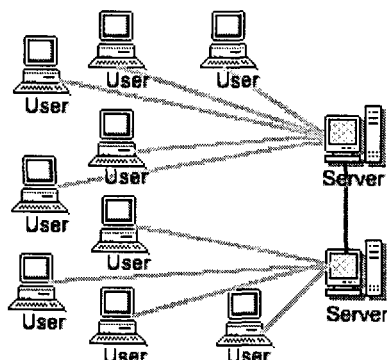
¹³⁰ *Id.*

¹³¹ See *An Introduction to Internet Relay Chat (IRC)*, NewIRCUsers.com, at <http://www.newircusers.com/java/ircchat.html> (last visited Nov. 19, 2002).

¹³² *Id.*

¹³³ *Id.*

IRC servers are inter-connected, when a user connects to one, she connects automatically to all the other IRC users even though they may not be connected to the same server.¹³⁴



Client-Server Architecture of Internet Relay Chat¹³⁵

Participation in IRC is governed by rules of discourse, known as protocols, which are encapsulated in technical commands.¹³⁶ These IRC rules have a definite structure but it is not so clear that this structure promotes deliberative democracy as outlined above. IRC programs (also known as “clients”) use standard or variant UNIX commands.¹³⁷ Commands begin with a forward slash (/) to distinguish them from ordinary text.¹³⁸ The special language of IRC makes it very popular among technical users¹³⁹ and virtually inaccessible to non-technical users. Despite wild popularity and simplicity, the built-in bias against non-technical participants makes IRC useless as a tool for inclusive democratic dialogue.

¹³⁴ *Id.*

¹³⁵ *Id.*

¹³⁶ For more information on IRC protocols, see <http://www.irchelp.org/> (last visited Dec. 5, 2002); or the guide for IRC Channel Operators at <http://www.irchelp.org/irchelp/ircd/ircopguide.html> (last revised Sept. 1997).

¹³⁷ For a basic tutorial on UNIX, see Jonathan Byrd, *What is Unix?*, Idaho State University, at <http://www.isu.edu/departments/comcom/workshops/unix/whatis.html> (last modified Feb. 5, 1997) (describing UNIX as an operating system designed to provide “simple, yet powerful utilities that could be pieced together in a flexible manner to perform a wide variety of tasks”).

¹³⁸ See NewIRCusers.com, *Basic IRC Commands*, at <http://www.newircusers.com/java/ircmds.html> (last visited Nov. 19, 2002).

¹³⁹ See *id.* (reporting that each of the major IRC networks carries more than 50,000 registered users).

There are many new clients that use the IRC architecture but provide a more user-friendly and non-technical “front end” experience for the participant.¹⁴⁰ Nonetheless these programs are no more structured than regular chat.¹⁴¹

In a popular IRC network there can be several thousand “channels,” or topic of discussion, running simultaneously. The disorganized proliferation of channels means that the audience for IRC is segmented into like-minded, rather than pluralistic, user-communities. A Channel Operator (“Op”) creates, operates and moderates each channel.¹⁴² If a user creates a new channel, he or she automatically becomes the Op. Otherwise the only way to become an Op is to be given control by the existing Op. The Op manages user access to the chat. The Op can silence discussion so that only other Ops can type to the channel. He can also limit the number of users who can join the channel and make the channel private, so that it cannot be joined without an invitation. Another command lets the Op give specific users permission to speak. There is no power sharing over the rules of a given channel. If a user dislikes the rules, his options are to petition the Op or to vote with his feet by exiting the channel and creating a new one. There is no incentive in the architecture to facilitate consensus building. The structure of IRC chat is hierarchical, with one individual wielding complete control. The inability for other users to exert control without setting up a new channel results in a proliferation of these cyber-fiefdoms and a resulting segmentation of users.

ii. Bulletin Boards

In the evolution of computer-mediated interactivity, the bulletin board precedes chat as the original paradigm. It is still a ubiquitous tool. Bulletin boards (also known as “BBS” or “Forums”) offer an advantage over chat’s anarchy in that they are not real-time. Users post messages to the virtual bulletin board for other users to see and respond to. Trains of thought on a bulletin board are known as “threads.” Users continue a thread by responding to a specific message in that thread or start a new thread to launch an idea into the conversation.

Because posts are not real-time, users have the opportunity to reflect on messages before posting a response. A moderator can easily organize, edit or remove postings or entire threads, if desired. Collaborative participation can evolve on a BBS in the same way that asynchronous communication, like letter writing, permits the gradual evolution of an idea, often over weeks and months.

¹⁴⁰ Such tools include Palace Elysium and Relay-JFC.

¹⁴¹ See generally Marc A. Smith, Shelly D. Farnham and Steven M. Drucker, *The Social Life of Small Graphical Chat Spaces*, at <http://research.microsoft.com/scg/papers/vchatchi2000.pdf> (graphical and virtual interface technology) (this comparison of text-based and graphical chat does not even question users about productivity or non-entertaining uses of the technology).

¹⁴² See Tjerk Vonck, *An Introduction to IRC*, NewIRCusers.com, at <http://www.newircusers.com/java/ircintro.html> (Apr. 1997) (last visited Nov. 19, 2002).

The time commitment required, however, often excludes participation by all except the zealously committed or the occasional interloper.

Early bulletin board systems were microcomputers into which users could dial by modem to trade messages and files.¹⁴³ Today, “bulletin board” also refers to any form of asynchronous message and file sharing service accessible via the World Wide Web. The first BBS dates from 1978, but they did not enjoy widespread popularity until the 1980s and 1990s.¹⁴⁴ Computer hobbyists used the original BBS to exchange information and tips about computer use. The owner of the bulletin board was known as the system operator or “sysop.” Like ham radio operators, early BBS sysops operated boards at their own expense. Users who dialed in quickly formed communities of interest organized around the topic of the BBS.¹⁴⁵ Often these communities were local or regional because users sought to avoid incurring long-distance charges.¹⁴⁶

One of the most popular contemporary Web-based bulletin board services is “Slashdot: News for Nerds, Stuff that Matters.”¹⁴⁷ Slashdot is an interactive technology news site for technologists by technologists. Thousands of regular Slashdot readers post comments to the site’s news stories. This popularity is the direct result of the participatory nature of the site, which lets readers help create the site’s content through their comments. The evolution of Slashdot, and the technology that runs the site, are useful examples of the role that structure plays in organizing dialogue and making it more productive. As Slashdot grew, the number of comments posted exploded and it became increasingly difficult to find relevant comments. The inability to filter out the good from the bad created an inverse relationship between the growth of the site and the ability to sustain its membership. Hence, members were driven away by the quantity of content, in which most of it was bad quality. Even the use of volunteer editors from the Slashdot community was not enough to manage the tidal wave of information.

What was needed was a way not to censor low quality postings and thereby offend users, but to label postings so that readers could more easily find

¹⁴³ For more information about the early history of BBS, see Larry Andersen, *A Little Microcomputer BBS History*, at <http://www.portcommodore.com/commodore/bbs/bbshist.html> (last modified Oct. 13, 2002).

¹⁴⁴ See *id.*

¹⁴⁵ Early bulletin board communities like “The Well,” <http://www.well.com>, exemplified this trend, described in detail in HOWARD RHEINGOLD, *VIRTUAL COMMUNITY: HOMESTEADING ON THE VIRTUAL FRONTIER* 1-24 (rev. ed., MIT Press 2000). These text-based bulletin boards were immensely successful because they focused on the building blocks of good conversation, not fancy graphics.

¹⁴⁶ See *BBS – A Whatis Definition*, at http://whatis.techtarget.com/definition/0,,sid9_gci213807,00.html (last modified July 27, 2001) (“Since calling a bulletin board system can involve long-distance charges, you may want to try starting with some in your area.”).

¹⁴⁷ Slashdot: News for Nerds, Stuff that Matters, at <http://www.slashdot.org> (last visited Nov. 1, 2002).

“good” content and filter out the chaff. Slashdot developed a moderator system to sort and label user comments.¹⁴⁸ After a thousand messages are posted, the Slashdot software selects a group of moderators from the pool of eligible moderators – *i.e.*, those who have posted comments.¹⁴⁹ These moderators see a different screen than that of ordinary users when they log on.¹⁵⁰ Moderators receive five “tokens,” or points each one allowing the holder to rate one posting.¹⁵¹ After the moderator rates five postings, or three days have passed, his or her shift as moderator is over.¹⁵² Ratings are accumulated by a database that is part of the back-end of the Slashdot system. Slashdot members then have the ability to set “preferences,” which allow a viewer to choose to view either only postings above a certain rating or all messages.¹⁵³

The Slashdot architecture grew out of the realization that the ability to filter raw content is essential to make reading pleasurable and transform information into knowledge. In real life, we rely on publishers, newspaper editors, television anchors and teachers to be mediators of information, both making and helping us to make value judgments about the worthiness and relevance of content. In cyberspace, where there is even more information to deal with and far fewer clues to evaluate that information, the ability to filter is paramount. Technology can do some of the work of filtering. Slashdot offers an engine that empowers participants by giving them a role in selecting content. The filtering rules are built into the software itself so that the participants in the site can themselves control the flow of information. This makes Slashdot a more effective and popular site. However, the values its technology promotes are, in large part, not particularly democratic.

The structure of Slashdot, like bulletin boards generally, facilitates participation because it is designed for users to add to the conversation themselves. Going beyond ordinary bulletin boards, Slashdot further empowers participants by giving them the authority to rank postings and thereby have a hand, effectively, in the censorship of other user’s comments. This creates an incentive for participants to improve the quality and relevance of their remarks in order to pass muster with the ad hoc moderators. At the same time, however, individual moderators rank postings based only on personal preference and judgment. So long as they are not vicious troublemakers, they are not held accountable for their choices. Furthermore,

¹⁴⁸ See Slashdot: News for Nerds, Stuff that Matters, *Slashdot Moderation*, at <http://www.slashdot.org/moderation.shtml> (last modified Sept. 9, 1999).

¹⁴⁹ AMY JO KIM, COMMUNITY BUILDING ON THE WEB: SECRET STRATEGIES FOR SUCCESSFUL ONLINE COMMUNITIES 178 (Peachpit Press 2000).

¹⁵⁰ *Id.*

¹⁵¹ *Id.*

¹⁵² See Rob “CmdrTaco” Malda, *How Does Moderation Work*, Slashdot FAQ, at <http://slashdot.org/faq/com-mod.shtml#cm600> (last modified June 19, 2000).

¹⁵³ KIM, *supra* note 149, at 179.

though the filtering of information may be effective, it is not tied to real-time interaction.

iii. Audio, Video and Data Collaboration Solutions

The market for real-time collaboration tools that manage and exchange information and enable communication among scattered groups is expected to grow to \$6 billion by 2005.¹⁵⁴ These tools include older and more familiar technologies, such as telephone conferencing, as well as Web-based variations on this theme such as WebEx, where participants view a common document via the Web while talking on the phone. In the business world, video conferencing facilities have been prevalent despite their cost.¹⁵⁵ With the development of improved streaming video-over-Internet technologies, the cost of video conferencing is coming down, though video conferencing is far from widespread.¹⁵⁶ Participants often pay more attention to how they look on camera than the substance of what is being said. Text-based data conferencing is the poorer cousin of telephone and video collaboration, and it does not require the investment in additional equipment or telecommunications charges beyond the software itself.

As anyone who has ever been on a conference call knows, it is impossible to have a productive conversation with more than a handful of people on the phone. Absent the visual cues and conventions, the conversation is often an anonymous jumble of voices, the loudest of which dominates. Ideally suited for point-to-point communication, a conference call substitutes poorly for a face-to-face meeting. The usefulness of this kind of conferencing is limited by the lack of physical structure and the inability to impose rules through the technology. Even when video conferencing is available and of adequate

¹⁵⁴ Lewis Ward, *Highlights From The Real time Communication and Collaboration Industry Report 2002*, Collaborate.com, at http://www.collaborate.com/mem/hot_tip/tip1201.php3 (registration required).

¹⁵⁵ According to Frost & Sullivan Consultants, "videoconferencing services continue to maintain a safe, albeit small, haven offering healthy growth on a gradually expanding end-user base. In the year 2001, total revenues in the U.S. videoconferencing services market reached \$1.52 billion up by 12.9 percent over the previous year." Frost & Sullivan Consultants, *Videoconferencing*, Frost.com, (Aug. 7, 2002) at <http://www.frost.com/prod/catlg.nsf/vwSegmentsByService?OpenView&svc=9725>.

¹⁵⁶ "Until recently, videoconferencing has been too expensive, too complex, and the performance too poor for the technology to gain a hold in many businesses. Companies implementing a videoconferencing system needed to set up special rooms with \$100,000 worth of proprietary equipment and a dedicated staff in order to connect video callers in real time. As a result, few outside the corporate boardroom ever got to use the technology. But videoconferencing isn't just for CEOs any longer, thanks to falling prices, easier-to-use products, technical standards, a proliferation of new technology, and a growing need among businesses to share information quickly and to collaborate." Anne Ziegler, *Videoconferencing: Not Just for CEOs Anymore*, Information Week (June 7, 1999), at <http://www.informationweek.com/737/video.htm>.

quality, it suffers from many of the same problems. In addition, its expense discourages repeated use. A number of new Web-based collaboration technologies have emerged. These improve on the telephone by visually representing the participants in the room (Palace), as well as by utilizing tools to invite participants (Placeware) and to share information (Lotus Notes). However, these assume a control-environment where one person sets up the conversation, selects the topic, chooses the informational inputs and moderates the dialogue. They are primarily focused on "workflow," or the ability to collaborate around a document; they place little emphasis on shaping the nature or quality of the conversation.

iv. Moderated Chat

Moderated chat is the other paradigm familiar to those who use the Web for interactivity. Unlike ordinary chat, which is a chaotic free-for-all, a facilitator hosts a moderated chat room. They combine the control of collaboration tools with the spontaneity of chat. However, the moderated chat structure implies and imposes a different set of costs to hinder democratic dialogue.

Moderation can be strong or weak. Weak moderators do not control the order of speaking or posting in cyberspace; nor do they control the ability of participants to be heard. They have the power to steer the dialogue through intervention (*e.g.*, by suggesting ideas or points for discussion), and they may have the ability to remove obscene, unproductive messages or even ban a user from speaking. Weak moderation is akin to a conversation in which one participant is acknowledged as the host and can, as a result, occasionally interject in the conversation.

A strong moderator exercises more control over what can and cannot be said. In cyberspace, participant postings go through a moderator before they become visible to the larger group. The moderator can decide whether to post, edit or delete the message. The strong moderator is like the teacher who calls on students to speak after they have raised their hands. The moderated chat model incorporates the idea of a facilitator into the structure of the dialogue. This creates conversations that stay more relevant and organized for longer periods by empowering one user to control the discussion. As in real life, having a strong facilitator prevents speaking out of turn. However, having a single moderator monopolize the discussion is impracticable for achieving outcomes that are shared and owned by the entire group. To enjoy a moderated dialogue on AOL, for example, participants must use an AOL facilitator and be subject not only to their fee structure and technology requirements, but to the contractual terms of use imposed by AOL that limit what may be said.¹⁵⁷ Having a single, external moderator prevents participants

¹⁵⁷ AOL reserves the right to itself in its "Rules of User Conduct" to remove any content that is objectionable. See America Online, <http://www.aol.com/copyright/rules.html>. In its "AOL Instant Messenger Web Chat Rules & Etiquette" AOL discourages activity that it deems to be inappropriate. See *id.*

from learning to run their own conversations and take control of the agenda for dialogue. There is little incentive to become a better participant so long as one has no responsibility for running the dialogue.

Moderated chat imposes another cost beyond the problems highlighted above. If the moderator is external to the group and represents, not its participants, but the owner of the chat room, this can have a chilling effect on conversation in the space. Chat rooms operated by AOL and TalkCity are of this variety. Politically controversial speech is banned in these areas. Speech critical of the host is forbidden.

There is also a potential increase in liability for the owner of the chat room. Whereas the Communications Decency Act of 1996¹⁵⁸ exempts Internet service providers from liability for the speech of third parties, it is not clear that the exemption would always apply if the service provider were performing an active editorial function.¹⁵⁹ In any event, the liability exemption does not extend to content creators for the creation and posting of illegal content, such as defamatory material or violations of copyright.¹⁶⁰ Though there has not been case law to test this directly, current precedent suggests that where the host performs an active editorial function, such as in a strongly moderated chat room, liability for what is said and done in the room increases. Concerned about this, the Environmental Protection Agency decided not to moderate its online citizen consultation.¹⁶¹ This creates an incentive for providers to offer non-moderated chat, highly controlled chat, or no interactivity at all.¹⁶²

6. E-Government without E-Democracy

Given the absence of tools for structuring deliberation, it is not surprising that current e-government or even so-called e-democracy Web sites do not foster participation. Of the eighty exemplary technology projects chosen by the European Commission to exhibit at its E-Government Conference,¹⁶³ all

¹⁵⁸ 47 U.S.C. § 230 (2001).

¹⁵⁹ Internet service providers are exempt from liability for defamation under 47 U.S.C. 230 (2001). See *Zeran v. America Online, Inc.*, 129 F.3d 327, 330-31 (4th Cir. 1997); *Blumenthal v. Drudge*, 992 F. Supp. 44 (D.D.C. 1998) (holding the Internet service provider exempt from liability by statute but noted, in dicta, that where the provider has editorial control, it should also bear responsibility consistent with the rules for print media).

¹⁶⁰ *Universal City Studios, Inc. v. Corley*, 273 F.3d 429 (2d Cir. 2001) (upholding injunction against posting of and linking to copyright decryption software code); *Blumenthal*, *supra* note 159 (dismissing action against Internet Service Provider but not against author of allegedly defamatory content).

¹⁶¹ See Beierle, *supra* note 4.

¹⁶² For example, the Anti-Defamation League, the world's largest provider of information about hate speech, offers no interactivity on its Web site in order to avoid "flaming" and creating a forum for precisely that kind of speech it seeks to combat.

¹⁶³ See *From Policy to Practice*, Conference organized by the European Commission, (Nov. 29-30, 2001), at http://europa.eu.int/information_society/eeurope/egovconf/text_en.htm (last visited Nov. 1, 2002).

but a handful demonstrated the use of technology for anything other than the delivery of services. There were examples of electronic cash payment systems (Torino, Italy), local portals for obtaining forms online (The Hague, Netherlands) and electronic court docketing systems (Vienna, Austria).¹⁶⁴

There are six generally-accepted phases of e-government: (1) providing information; (2) providing online forms; (3) accepting completed online forms; (4) handling single transactions; (5) handling multiple, integrated transactions; and (6) developing intergovernmental projects that require the restructuring of the government to allow the delivery of new integrated services.¹⁶⁵ Not one of these aspires to participation by citizens in the democratic process or the use of technology to further democracy (as opposed to service delivery). The reorganization of government demanded by the creation of integrated, online services in this schema does not involve any change in political decision making or contemplate an improvement in democratic processes. E-Government is an entirely business-oriented strategy to reduce costs and generate revenue by streamlining the delivery of citizen services.¹⁶⁶ It operates parallel to and independent of the evolution of e-democracy, which receives little to no official support or funding.

At the same time, most so-called e-democracy endeavors are not technologies at all. They are Web sites that take television as their model, offering a passive portal to which media consumers are expected to flock, buy content and build "community." By personalizing and targeting their offerings (the Me Channel), they aim to capture viewers based on their personal preferences and interests. Instead of exploiting technology to empower actual communities and make them productive, deliberative and inclusive, these sites deracinate existing loyalties, attempting to build "brand loyalty" to the site.

Millions of participants are expected to converge on a single station or Web site. But real democracy does not work like this. Democratic movements and institutions require the networking of many smaller units of participation.¹⁶⁷ Democracy is, in its essence, a local phenomenon. Like failed dot coms that did not follow basic business principles of profit and loss, these dot com-style

¹⁶⁴ For examples of the e-government technologies showcased at the Brussels Conference on e-Government, see http://europa.eu.int/information_society/eeurope/egovconf/programme/index_en.htm (last visited Nov. 1, 2002).

¹⁶⁵ Francis McDonough, *An Inventory of Federal E-Government Initiatives: A Baseline Documenting the Status of E-Government Implementation*, available at http://www.gsa.gov/Portal/ll&contentType=1005&contentOID=115009&more=1&more_contentType=Publication&more_contentTypeID=1008 (2001) (last modified July 2, 2002); Francis McDonough, *Report on International Council for Information Technology in Government Administration Meeting, Berlin, Germany*, available at <http://www.gsa.gov/Po=1003&PMGZ=1> 2001 (last modified July 25, 2002).

¹⁶⁶ These projects are deployed primarily for the Web and have not yet been developed to work on other digital platforms, such as mobile phones and digital television.

¹⁶⁷ For more on the role of dialogue in organizing social movements, see BILL MOYER, *DOING DEMOCRACY: THE MAP MODEL FOR ORGANIZING SOCIAL MOVEMENTS* (2001).

democracy sites, with a few notable exceptions, misunderstand that democracy, by its very nature, requires collaboration among small pluralistic groups. These groups, through the conversation process, define and redefine the political agenda, identify policy choices and their impact and reach consensus through dialogue. As a result, sites like *democracy.com* and *onedemocracy.com*¹⁶⁸ have gone out of business or fail to attract anything more than marginal attention.

Existing electronic democracy endeavors are also hampered by other factors, especially a lack of funding and a disconnection from sources of power and attention. Other than the community-building endeavors of large corporate Web sites, electronic democracy projects are run by grassroots organizations that lack the money to realize their visions fully. But even the grandest visions have failed because they rely on technologies designed for commerce rather than for community. There are no software applications to “do democracy” because there are no applications that code the rules and structures of conversation into the virtual environment.

IV. WHICH DEMOCRACY FOR WHICH TECHNOLOGY: SEVEN EXPERIMENTS

Despite the absence of expressly deliberative technologies, currently available tools have been enlisted to engage citizens in the political decision-making process. Generally, these have been extra-governmental endeavors or on-off, ad hoc projects rather than on-going institutions for public participation. This absence of electronic participation processes is, in part, a reaction to the excessive feedback enabled by new technologies.¹⁶⁹ With the universal adoption of electronic word processing and e-mail, most governmental agencies, courts, and other authorities have allowed electronic submissions of filings and comments, thereby facilitating participation by more people.¹⁷⁰ Many federal agencies have developed a Web presence and offer an e-mail point of contact, increasing the volume of communication without any new mechanisms for managing this input. One result is a reluctance to engage the public or open up additional channels of communication.¹⁷¹

¹⁶⁸ Both *democracy.com* and *onedemocracy.com* are now defunct.

¹⁶⁹ See JOHNSON, *supra* note 27, at 329; Electronic Signatures in Global and National Commerce Act, 15 U.S.C. § 7001 (West 2002) (putting electronic documents legally on par with written documents enabled an explosion in electronic submissions and filings).

¹⁷⁰ The Government Paperwork Elimination Act of 1998, 25 U.S.C. § 3504 (2001), instructed federal agencies, by October 2003, to allow electronic maintenance, submission, and disclosure of information. Many States have similar mandates, see Electronic Filing & Registration Enacted Legislation at <http://www.ncsl.org/programs/lis/legislation/e-file01.htm>.

¹⁷¹ See JOHNSON, *supra* note 27, at 329 (arguing that the Internet holds great promise if agencies affirmatively use it to solicit public input during initial policy development in either notice and comment rulemaking, or in the initial development of interpretive rules, guidelines, or policies; yet many feel that “the tools could create an information overload for

There have been no formal investigations or evaluations of mechanisms for deliberation to enable citizen participation, but there have been several novel experiments that give a sense of what might be possible. Each of these projects enabled wider participation than what otherwise would have been possible and included new voices in the debate. They also used the Web to educate citizens about policy. However, they are not equally deliberative by the standards set forth earlier, as will become clear from the following illustrations. Some enable individual rather than group participation or one-time comments rather than iterative processes. The functionality and design of each project enables different democratic practices.

A. Money and Politics: Asynchronous Public Deliberation

In March 2001, the ten-day online forum *Who Owns Democracy?* convened 230 participants from 35 states to talk about campaign finance reform.¹⁷² Information Renaissance and the Kettering Foundation National Issues Forum hosted the event and designed it to “incorporate the ideals of deliberative discourse into the online forum.”¹⁷³ The dialogue comprised a Web site with an indexed message forum, online surveys and a background briefing book entitled *Money and Politics: Who Owns Democracy?*.¹⁷⁴ Participants were given access to the Web site and briefing materials one month prior to the start of the discussion so they could familiarize themselves with the involved issues and procedures.¹⁷⁵ Statistics tracking use of the Web site and briefing materials indicate that people took “a serious and active interest in the materials provided.”¹⁷⁶ A moderator, reporter, administrator, and facilitator oversaw the ensuing discussion, which took the form of an asynchronous, threaded message board.¹⁷⁷ The professional moderator “kept the agenda moving and encouraged participants to listen to each other and explore opposing viewpoints thoughtfully.”¹⁷⁸ The reporter prepared and posted

the agency, thus delaying agency decisions," and reducing deliberation).

¹⁷² Robert D. Carlitz & Laurie Maak, *Final Report: Money and Politics — Who Owns Democracy?*, at <http://www.network-democracy.org/map/map-report.pdf> (last visited Nov. 25, 2002); see also Information Renaissance, *Site Outline*, at <http://www.info-ren.org/info-ren.html> (last visited Nov. 24, 2002).

¹⁷³ *Id.*

¹⁷⁴ See Public Agenda, *Money and Politics: Who Owns Democracy?*, at <http://www.publicagenda.org/specials/nifmoneyandpolitics/toc.htm> (2000) (stating that the Who Owns Democracy project was a collaboration between the Kettering Foundation and Public Agenda; the Public Agenda is a nonpartisan, nonprofit public opinion research and citizen education organization based in New York City that was founded in 1975 by social scientist and author Daniel Yankelovich and former Secretary of State Cyrus Vance).

¹⁷⁵ Carlitz & Maak, *supra* note 172, at 5.

¹⁷⁶ *Id.* at 7.

¹⁷⁷ *Id.* at 7-8.

¹⁷⁸ *Id.*

summaries of the day's discussions.¹⁷⁹ The administrator reviewed each message prior to posting and returned erroneously sent messages.¹⁸⁰ The facilitator solicited participants' feedback.¹⁸¹

Information Renaissance recruited participants by mailing hardcopy invitations to civic organizations, such as the American Library Association and the League of Women Voters, and by e-mailing group lists, such as Net-Happenings for K-12 educators.¹⁸² It also contacted print media organizations and distributed flyers on campaign finance reform at a San Francisco town meeting.¹⁸³ Feedback reflected that the overwhelmingly white and educated participants joined as a result of electronic solicitations or on the recommendation of a friend or colleague.¹⁸⁴ Although the organizers sent them invitations, no member of Congress or their staffers participated.¹⁸⁵

The moderator organized the substance of the conversation into five segments spanning two days.¹⁸⁶ The first segment welcomed the participants and provided an opportunity for introductions.¹⁸⁷ The following three segments discussed three distinct policy choices for pursuing campaign finance reform.¹⁸⁸ These included reforming the campaign fund-raising system, reining in lobbyists and politicians, and publicizing political donations.¹⁸⁹ The final segment concluded the forum with a discussion in which participants were asked to search for common ground.¹⁹⁰ The background materials available on the *Who Owns Democracy?* Web site reflect this topical breakdown, offering both summary materials and links to resources advocating one of the three positions.¹⁹¹

The published participant surveys make clear that this dialogue mechanism enjoyed some success, but also suffered distinct shortcomings.¹⁹² The Internet made it possible to reach a wider audience than could an off-line consultation. Though this online event achieved wide geographical diversity among participants, it failed to attract an ethnically or socio-economically pluralistic

¹⁷⁹ *Id.* at 8.

¹⁸⁰ *Id.*

¹⁸¹ *Id.*

¹⁸² *Id.* at 2-3.

¹⁸³ *Id.* at 3.

¹⁸⁴ *Id.* (stating that 38% of the participants heard about the dialogue via an e-mail announcement while 35% heard about it from a friend or colleague).

¹⁸⁵ *Id.* at 4.

¹⁸⁶ *Id.* at 8.

¹⁸⁷ *Id.* at 7-8.

¹⁸⁸ *Id.* at 9-10.

¹⁸⁹ *Id.*

¹⁹⁰ *Id.* at 10-11.

¹⁹¹ Information Renaissance, National Dialogue on Money and Politics, at <http://www.network-democracy.org/map/welcome.shtml> (last accessed Dec. 9, 2002).

¹⁹² Carlitz & Maak, *supra* note 172, at 19-30.

community of participants.¹⁹³ Organizers argue that achieving a representative sampling is difficult without a budget for recruitment.¹⁹⁴ Though participants actively contributed, posting over 600 messages in two weeks, the quantity of conversation was “enough to tax most participants’ attention span.”¹⁹⁵ There is an inversely proportional relationship between the size of the audience and the ability of its members to exchange ideas. In the surveys, many participants responded that they would have preferred smaller discussion groups.¹⁹⁶

It is evident from this experiment that without a manageable volume of information, it is impossible for all but the professional, paid members to keep up active participation.¹⁹⁷ The requisite levels of participation and educational preparation must be feasible. Yet, simply reducing the number of participants could be done only at the risk of a decline in the debate’s quality, scope and relevance to actual policymaking. This particular dialogue experiment was designed to help participants frame the agenda for debate and better understand the issues.¹⁹⁸ Yet the forum did not tie into actual decision-making, nor was there evidence of how the discussion or surrounding publicity may or may not have made a difference in the public debate.

*B. Environmental Protection Agency - Asynchronous Public Participation*¹⁹⁹

Information Renaissance administered another online participation experiment, called the *National Dialogue on Public Involvement in EPA Decisions* (“EPA Dialogue”). The EPA Dialogue differed from *Who Owns Democracy?* in that it aimed to create public consultation for a governmental agency’s decision-making process.²⁰⁰ It also had the support and sponsorship of a political authority, the Environmental Protection Agency (“EPA”).²⁰¹ This two-week, asynchronous conversation among 1,166 participants directly tied into policymaking and provided a mechanism for experts and ordinary citizens to volunteer suggestions beyond the traditional agency notice-and-comment process.²⁰²

The idea for the EPA Dialogue began in 1999 when the EPA began to review its policies for public participation in federal environmental decision making.²⁰³ It solicited public comments for the preparation of a Public

¹⁹³ *Id.* at 3-4.

¹⁹⁴ *Id.* at 12.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.* at 18.

¹⁹⁷ *See id.* at 15-30.

¹⁹⁸ *Id.* at 2.

¹⁹⁹ *See* Beierle, *supra* note 4.

²⁰⁰ *See id.* at 8.

²⁰¹ *See id.*

²⁰² *Id.*

²⁰³ *Id.* at 15.

Involvement Policy (“PIP”).²⁰⁴ When face-to-face regional meetings to solicit public input appeared too expensive, plans took shape for a cheaper online consultation.²⁰⁵ Information Renaissance collaborated with EPA staff to formulate an electronic briefing book, an agenda of daily topics and a participation methodology for a two-week dialogue.²⁰⁶ Solicitations for participants, including EPA staff and expert hosts, were made using EPA mailing lists and listservs.²⁰⁷

Due to legal concerns about violating participants’ First Amendment rights, the EPA’s General Counsel’s office demanded that moderators be allowed only to set the tone of the discussion, offer technical support and monitor messages for obscene language. They would not be permitted to edit or remove postings regardless of relevance.²⁰⁸ Similar concerns about privacy precluded publishing biographical material of participants.²⁰⁹ In this case, the law constrained the design.

Among those who registered for the discussion, 320 people posted a total of 1,261 messages.²¹⁰ Despite a relatively small number of people posting a large percentage of the total messages, the most vocal contributors fairly represented the viewpoints and affiliations of the larger group.²¹¹ In a follow-up survey, 76% of participants rated the experience as “very” or “somewhat positive” and only 9% rated it as “very” or “somewhat negative.”²¹²

The online consultation reached a significantly higher number of people using the Internet, as opposed to a face-to-face or paper-based mechanism.²¹³ An overwhelming majority of contributors had never before participated in the EPA’s public consultation procedures.²¹⁴ They were new voices in the debate. Yet it remains an open question whether the EPA reached significantly different viewers and viewpoints than it had in the past. As in the *Who Owns Democracy?* dialogue, this group was larger and more geographically diverse without necessarily being any more representative of the population at large.²¹⁵ Again, the participants were primarily white and educated (through the graduate university level).²¹⁶ In contrast, the EPA dialogue included representatives of environmental justice organizations, tribal and community

²⁰⁴ *Id.*

²⁰⁵ *Id.*

²⁰⁶ *Id.* at 17.

²⁰⁷ *Id.* at 16-17.

²⁰⁸ *Id.* at 17.

²⁰⁹ *Id.*

²¹⁰ *Id.* at 9.

²¹¹ *Id.*

²¹² *Id.*

²¹³ *Id.* at 10.

²¹⁴ *Id.* at 33.

²¹⁵ *Id.* at 23.

²¹⁶ *Id.*

groups.²¹⁷ Most participants worked for governmental agencies or environmental organizations.²¹⁸ An 18% minority listed their affiliation as “citizen/no affiliation” or “other.”²¹⁹ Academics accounted for 12% of participants.²²⁰

As in the *Who Owns Democracy?* dialogue, participants cited a lack of time to follow all the postings as an impediment to effective participation.²²¹ Nonetheless, this experiment demonstrated that technology can create interactive public participation when the forum design creates a “more dynamic mode of communication.”²²² People not only contributed comments, but listened and responded to one another’s points of view, thereby engaging in a deliberative and reflective process of dialogue.

C. Eriik, Estonia²²³—Direct Democracy Online

In the Baltic Republic of Estonia, the Prime Minister’s Office has sponsored the development of a Web-based system for public participation in proposing legislative measures.²²⁴ This is part of a wider initiative in Estonia to use technology to enhance and democratize decision-making.²²⁵ Currently, the nation’s cabinet does all its business online.²²⁶ Though its population of 1.4 million is very small, 25% of Estonians actively use computers and 36% have used the Internet in the past six months.²²⁷ The Web site currently allows anyone to read information and proposals.²²⁸ Registration is required to submit, comment, vote on or sign a piece of proposed legislation.²²⁹ Though registration is required, the Web site neither limits registration to Estonian citizens nor imposes any other accountability requirements.²³⁰

²¹⁷ *Id.* at 22.

²¹⁸ *Id.*

²¹⁹ *Id.*

²²⁰ *Id.*

²²¹ *Id.* at 32.

²²² *Id.* at 19.

²²³ See Office of Prime Minister of Estonia, *TOM-Enhance Public Participation in Public Decisionmaking*, at [http://europa.eu.int/information_society/eeurope/egovconf/documents/ppt/TOM\[1\].ppt](http://europa.eu.int/information_society/eeurope/egovconf/documents/ppt/TOM[1].ppt) (last visited Nov. 24, 2002) (describing the initiative project through an online, Powerpoint presentation) (the actual Web site for TOM is <http://tom.riik.ee>); Estonia, *Eriik*, <http://www.riik.ee/en/> (last visited Nov. 24, 2002) (*Eriik* is Estonia’s official government Web site).

²²⁴ Office of Prime Minister of Estonia, *supra* note 223.

²²⁵ See Estonia, *supra* note 223.

²²⁶ See *id.*

²²⁷ Office of Prime Minister of Estonia, *supra* note 223.

²²⁸ See *id.*

²²⁹ See *id.*

²³⁰ See *id.*

An idea for legislation can be submitted for comment by others on the Web site.²³¹ The suggestion is voted on and signed by participants before being passed electronically to the state for consideration as a legislative proposal.²³² The Web site's launch was highly publicized and while initial visits were high, active participation was very low.²³³ During a six month period in 2001, 2,629 users registered to participate and submitted 405 proposals.²³⁴ Of those proposals, 69 were removed and 83 were voted out.²³⁵ Each proposal garnered an average of 10 votes and 7 signatures.²³⁶

The organizers of this Web-based referendum project celebrated the relatively large turnout, but the design of the system resulted in short and incomplete proposals, many of which were repetitive.²³⁷ Despite the Web site's goal of soliciting public input for legislation, most submissions did not clearly take the form of a legislative proposal.²³⁸ The Web site offers a simple interface for tracking the progress of an initiative, but has proved unsuccessful in its goal without additional mechanisms.²³⁹ Participants need guidance in drafting submissions. Similar proposals need to be categorized and presented in the aggregate as a single concept. Feedback needs to be collected, edited and published. Without additional mechanisms serving these ends, the project's use will remain academic.

D. *Tampere, Finland*²⁴⁰-- *Public Participation Through Simulation*

The city planners of Tampere, Finland have created their own version of SimCity™, a simulation game that enables residents to participate in developing the town to accommodate new inhabitants.²⁴¹ Players in this urban planning game select an area of town and the number of inhabitants they wish to settle there.²⁴² The Web site shows how the addition of more people changes a city's landscape, integrating homes or apartment complexes into the scene by means of a simple photo simulation program.²⁴³ The Web site explains that 1700 prospective citizens must settle to generate adequate

²³¹ *See id.*

²³² *See id.*

²³³ *See id.*

²³⁴ Office of Prime Minister of Estonia, *supra* note 223.

²³⁵ *Id.*

²³⁶ *Id.*

²³⁷ *Id.*

²³⁸ *Id.*

²³⁹ *Id.*

²⁴⁰ *See* Seppällä, *supra* note 3 (describing the city planning program in Tampere, Finland). For the actual Web site, go to <http://www.tampere.fi/tiedotus/tohloppi/> (last visited Jan. 15, 2003).

²⁴¹ *See id.*

²⁴² *See id.*

²⁴³ *See id.*

revenue for the extension of municipal services.²⁴⁴ Once a citizen-player has made his selection of neighborhoods and housing development, he can submit his choices by completing a simple Web-based form.²⁴⁵

This simulation tool not only measures citizen input in local policy making, it also helps the municipal government educate its constituents about the difficult balancing choices involved in urban planning.²⁴⁶ For example, the game does not permit a player to make unrealistic choices, like placing all 1700 citizens in one part of town or ending the game without having settled all 1700 citizens.²⁴⁷

The experiment is fascinating because it uses visual multimedia technologies to convey otherwise complex technical information about urban planning in an easy-to-understand, and even fun, format. As such, it helps inform decision-making and makes meaningful citizen participation possible. In its current form, however, it does not allow citizens to challenge the agenda set by the town planners. For example, it does not permit a participant to alter the number of citizens. Nor does the simulation permit any dialogue with government officials or among citizens. It does not facilitate any form of networking to talk through what are inherently difficult decisions. Nonetheless, the game demonstrates the potential power of visual media in illustrating the consequences of decision-making.

E. *City Scan Project – Community Participation and Mobile Technology*²⁴⁸

In the summer of 1999, the Connecticut Policy and Economic Council (“CPEC”), a non-partisan, not-for-profit organization located in Hartford, Connecticut, outfitted six students and graduates from Hartford Public High School Technology Academy with Pocket PCs, digital cameras and software containing customized pull-down menus.²⁴⁹ CPEC assigned them the task of surveying the physical condition of Hartford’s parks, including such factors as potholes, graffiti and untended lawns, and aptly named the project City Scan.²⁵⁰ By equipping the residents of neighborhoods with the necessary tools, CPEC helped the participants take responsibility for, and play a role in, the clean-up of their own neighborhoods.²⁵¹

With documented evidence of neglect and disrepair, these young people “create[d] a visual database that can then be used as an accountability tool and

²⁴⁴ See *id.*

²⁴⁵ See *id.*

²⁴⁶ See *id.*

²⁴⁷ See *id.*

²⁴⁸ See *City Scan*, *supra* note 6.

²⁴⁹ Nicole Neroulia, *Students Note Urban Blight*, HARTFORD COURANT, Aug. 6, 2002, available at <http://www.cpec.org/article.cfm?section=news&page=courant08072002.htm>. Since 1999, the project has grown to include seventy-five participants. *Id.*

²⁵⁰ See *City Scan*, *supra* note 6.

²⁵¹ *Id.*

for advocacy purposes so that neighborhood organizations and citizens can take this information to people with resources to improve the quality of life in these neighborhoods,” according to Michelle Doucette Cunningham, project director.²⁵² Young people are given a voice in their government and are involved in the civic life of their city through the use of technology. Moreover, the interest and actions of the students in surveying their surroundings prompted greater responsiveness from park employees.²⁵³ For instance, the City Scan participants “found a large pit that needed a metal plate over it [because] they felt that a small child could easily fall in. A maintenance worker asked them what they were doing, and when they came back the next day, the hole was covered up.”²⁵⁴

The use of technology is an integral part of City Scan. Using HTML, Microsoft Frontpage, Macromedia Dreamweaver, Flash 4 and Adobe Photoshop, the students created Web-based maps of park conditions.²⁵⁵ They charted every bench, trashcan and portable toilet, noting both positive and negative conditions.²⁵⁶ Dated photographs accompanied students’ comments, creating a transparent and accessible repair history.²⁵⁷ The Web-based maps of the park conditions allowed the City Scan project director to show the Parks and Recreation Commission the conditions of the parks at a time that was convenient for them—*i.e.*, “[i]t’s a way of bringing the parks to the people.”²⁵⁸

Stemming from the parks project, City Scan has expanded to assess other Hartford neighborhoods, such as Parkville, and other Connecticut cities, such as Stamford.²⁵⁹ The participants in these later projects also include senior citizens.²⁶⁰ Since some of the senior citizens were not familiar with computers, ease of use was crucial in the selection of technology.²⁶¹ Moreover, pairing high school students with senior citizens ended up as a “nice intergenerational activity as well as useful training.”²⁶²

Like the Tampere, Finland experiment, the City Scan project uses multimedia tools to create greater transparency in decision-making and engage citizens. In this case, the work is not top-down. Rather, a civic non-governmental group has organized the program, employing technology to make municipalities more responsive and give citizens a voice in governing

²⁵² Eric Martin, *Clean-Up Crew: Pocket PC-Packing Students Take Stock of City Parks*, Mobile Government, at <http://www.cpec.org/about/mobilegov.htm> (May 2001).

²⁵³ *Id.*

²⁵⁴ *Id.* (quoting Cunningham).

²⁵⁵ *See id.*

²⁵⁶ *See id.*

²⁵⁷ *See id.*

²⁵⁸ *Id.*

²⁵⁹ *See City Scan*, *supra* note 6.

²⁶⁰ Martin, *supra* note 252.

²⁶¹ *Id.*

²⁶² *Id.*

their own communities. The projects are dependent on funding from outside grants.²⁶³

F. Votia Empowerment AB, Sweden – Commercial Deliberative Systems

Given the difficulties of sustaining citizen participation projects without government support, one Swedish company has established a commercial business designed to help governmental and organizational clients be more democratic and responsive to constituent participation.²⁶⁴ Votia Empowerment AB (“Votia”) in Stockholm builds Web-based systems for clients wanting to conduct dialogues with their members.²⁶⁵ In 2001, they ran a six week dialogue program for the Swedish Union of Insurance Employees, which included a discussion of such issues as bonus salaries, distance work, and the value of membership.²⁶⁶

In addition, Votia built a Web site for young adults from age 12 to 19 years living in Haparanda, Sweden.²⁶⁷ According to Votia, every fifth young person participated by sharing his opinion with the local government.²⁶⁸ The Web site listed 20 questions for young people to answer, thereby giving politicians and local authorities an idea of how young people viewed their lives and what they wanted to see changed.²⁶⁹

During September 2000, Votia ran a citizen discussion for the municipality of Kalix, Sweden, which was seeking citizen input on the redesign of the town center.²⁷⁰ Rather than offering a fixed proposal and soliciting votes, the town conducted an open dialogue to get a better sense of what people wanted to see from any proposal.²⁷¹ All citizens over the age of 11 could participate by answering questions on the Internet, by phone, or on a paper questionnaire.²⁷² Citizen feedback showed that people wanted more green areas in the center of town and the government responded in the proposals it developed during the spring of 2001.²⁷³ This experiment was a one-off event over a period of two weeks, rather than an ongoing deliberative procedure.²⁷⁴ While it used technology to solicit input, the experiment had no mechanism for citizens to

²⁶³ See City Scan, *supra* note 6.

²⁶⁴ For the English version Web site of Votia Empowerment, see <http://www.votia.com/english>.

²⁶⁵ Votia Empowerment, http://www.votia.com/english/about_votia.html (last visited Dec. 22, 2002).

²⁶⁶ See *id.*

²⁶⁷ *Id.*

²⁶⁸ *Id.*

²⁶⁹ *Id.*

²⁷⁰ *Id.*

²⁷¹ *Id.*

²⁷² *Id.*

²⁷³ *Id.*

²⁷⁴ *Id.*

participate in setting the agenda or talking with one another about plans for the city's future.²⁷⁵

G. *E-thepeople.org— Collaborative Filtering Tool*²⁷⁶

E The People is a different kind of experiment in electronic democracy. E The People is a Web-based technology used by the creators of E The People and syndicated for use by other groups to create a collaborative publishing space for the democratic exchange of ideas.²⁷⁷ E The People describes itself as follows:

E The People is a public forum for democratic and deliberative discussion. The principle behind E The People is to allow you to be both a participant and a moderator in these deliberative discussions. You publish "conversations" for the rest of the community to read. Conversations may alert others to an interesting news story, point to a Web site that is worth seeing, ask a question or offer a perspective on something in the news. As others read your conversation, they provide feedback by rating the article as something they would "encourage" others to read or "discourage" others from reading

These collective ratings help determine the relative prominence of articles on the E The People home page The homepage and the conversations tab contain the most popular conversations. They have been posted recently. Technically, these conversations have the highest relevance score - a figure based on numbers of encourages, discourages and the posting date. In addition, there are also "New" conversations, which are conversations that have only very recently been posted to E The People, and have not been seen by very many people yet. The presence of this section ensures that all articles have an equal chance of being rated.

In addition to the information they introduce, conversations are a starting point for people to respond. You respond to conversations with "comments", and comments show up alongside the article This allows you to weigh in on a given article, answering a question it poses, offering new information, or challenging the assumptions it makes. As more and more comments appear next to an article, they become a rich and textured record of the diverse perspectives of participants on the site. Comments, like articles, can be "encouraged" and "discouraged", so that those that resonate best appear at the top of the list, and those that don't appear at the bottom (or even on another page). This allows you, collaboratively with others, to moderate down content that violates the

²⁷⁵ *Id.*

²⁷⁶ See Scott Reents, *Democracy is a Conversation*, at <http://www.e-thepeople.org/national/about/fullstory> (last visited Nov. 24, 2002).

²⁷⁷ See *id.*

standards for discussion on the site. This also encourages people to post thoughtful and respectful comments.²⁷⁸

E The People is not an issue-specific project, but rather a tool for information exchange that is designed according to a set of democratic ideals and principles.²⁷⁹ It is not a deliberation or discussion tool, but rather a mechanism for providing input to a discussion and managing the information overload problem characterizing other experiments.²⁸⁰ E The People allows participants to rate other people's postings and sorts postings by these ratings, thereby creating a mechanism to filter a large quantity of contributions.²⁸¹

Despite the software's rating and sorting capabilities, nothing encourages people to rate postings for their deliberative value.²⁸² Readers can "encourage" or "discourage" participants to read the article, and the Web site presents the articles to viewers based on these ratings.²⁸³ This tool, however, essentially presents information based on popularity, rather than pluralism.²⁸⁴ The Web site does not ask people to evaluate whether the posting has contributed something new to the debate or presented a viewpoint that has not been heard.²⁸⁵ Instead, the Web site asks participants to encourage other viewers to read it if it was informative and stimulating.²⁸⁶ If the project's goal is to create a balanced and deliberative forum, whether this is the most effective question to ask participants is subject to debate.

V. FROM THEORY TO PRACTICE – SOFTWARE AS DELIBERATIVE STRUCTURE

The electronic democracy experiments examined above are path breaking in their effort to exploit technology to serve democracy. However, most are experiments, rather than ongoing initiatives. In one form or another, these were attempts to improve citizen participation in decision-making. Yet they exhibited a number of shortcomings from the point of view of constructing deliberation.

²⁷⁸ E The People, *How Do Conversations on E the People Work?*, at <http://www.e-thepeople.org/a-national/about/fullstory/how>.

²⁷⁹ See Reents, *supra* note 276.

²⁸⁰ E The People, *supra* note 278.

²⁸¹ *Id.*

²⁸² *Id.*

²⁸³ *Id.*

²⁸⁴ *Id.*

²⁸⁵ *Id.*

²⁸⁶ *Id.*

are neither synchronous nor deliberative.²⁹¹ Rather they use technology to foster a more efficient and wider-reaching polling.

Finally, the experiments have no defined process or means to take the project to scale. CPEC's plan to provide high school students and senior citizens with hand held mobile devices for measuring the municipal works projects is compelling and appears to be working to improve the quality of Connecticut's cities.²⁹² It is also the one project that continues.²⁹³ It uses technology to enhance face-to-face feedback and political participation. Yet CPEC is still dependent on grants to sustain its efforts and must struggle to get governmental response and recognition.²⁹⁴

The Unchat experiment is similar to these in that our team designed a technology for democratic purposes.²⁹⁵ Unchat is an implementation of deliberative theory through technology. The goal of this project was to create software for synchronous small group deliberation and to see how it could be used as a tool to create deliberative processes. We wondered whether it was possible to have a conversation structured according to the principles of deliberative democracy in cyberspace and to sustain it over time. We were curious as to whether "community" could be formed in the virtual world. So we embarked on two-year research experiment to build the tool and to test it in a number of environments. This research is only in its infancy, however. The first version of the software is built and functioning in a number of different civic and educational environments and we are able to analyze the results of the first year's use and plan for new experiments.

This section details the research experiment and its methodology and discusses its successes and failures. I also discuss the future of this research in democratic technology design. Inasmuch as this is about how technology structures deliberation, it is also a story about the cyber-lawyer as democracy's midwife who designs code as others would draft regulations.²⁹⁶

²⁹¹ See *Votia Empowerment*, *supra* note 264; see also *E The People*, *supra* note 278.

²⁹² See *City Scan*, *supra* note 6.

²⁹³ See *id.*

²⁹⁴ See *id.*

²⁹⁵ See *Bodies Electric LLC, Unchat*, at <http://www.unchat.com> (last visited Nov. 24, 2002) (providing information about Unchat as its official Web site). The Unchat software was created by an interdisciplinary design team led by the author and Benjamin R. Barber, Kekst Professor of Civil Society at the University of Maryland, with technical support from Thaumaturgix, Inc., a software development company in New York, at <http://www.tgix.com>. Benjamin Barber, founder and former director of the Walt Whitman Center for the Culture and Politics of Democracy, conducted a study in 1996 on the democratic quality of the Net, sponsored by the Markle Foundation. The author assisted with that research. The Unchat design process was a response to and a remedy for the deliberative democratic deficit identified in that early study. After searching in vain for tools that could be adapted to "do deliberation" online, the team embarked on this original design project, which is ongoing.

²⁹⁶ See Beth Simone Noveck, *Democracy Design Workshop*, <http://www.nyls.edu/>

A. *How it Works*

In 2000, no tool existed to easily and effectively allow a group of Yale Law School students to debate international issues in Internet regulation with policy experts from other countries, and to develop strategies for harmonizing legal approaches to privacy and information law.²⁹⁷ Similarly, no tool existed to easily allow a group of church leaders from around the country to exchange ideas for reinvigorating spirituality.²⁹⁸ Existing applications, especially those designed for the Internet, lack the requisite functionality for sustaining deliberation presumably because they are built to enable commerce.

Initially, our research and design team wanted to identify an application that could be adapted to do experiments about technology's impact on creating a deliberative public forum, like a town meeting. After extensive due diligence by a hired team of professional technologists and social scientists, however, we quickly realized that no tools existed to conduct a small group, structured dialogue. Therefore, the next step was to articulate a set of values that would drive the drafting of technical specifications for the design of the software architecture. These values are set out in Part One of this article. The process of translating values into technical specifications – of drafting a blueprint for the software – was a collaborative process undertaken by an interdisciplinary team of researchers and technologists. We would enumerate a requirement, like accountability, and then discuss that requirement's implications in terms of functionality, navigation, interface design, aesthetics, and information architecture. We then analyzed the costs of different technical options and assessed how best to balance competing values. Finally, even after the key features had been identified, we had to prioritize what to build and test first.

content.php?ID=931 (last visited Nov. 24, 2002) (introducing the Democracy Design Workshop, a laboratory for improving democracy both on and off-line that aims to promote the work of the cyberlawyer in designing both code and law). The Workshop seeks to incubate ideas and design practices that will exploit the use of technologies to deepen democracy. Joining the worlds of thought and action in a forum for inter-disciplinary inquiry, the Workshop studies ways to implement more efficient and equitable delivery of governmental services, or e-government, improve communication between political representatives and citizens, or e-democracy, and strengthen deliberative and participatory democratic processes and civic organizing among citizens, or e-civitas. Its goal is to advance learning in the field and apply a theoretical understanding to the design of actual technologies.

²⁹⁷ See Information Society Project, *International Cyberlaw: Civil Liberties and Media Regulation in a Borderless and Digital World Syllabus*, Yale Law School Directed Reading Group (Fall 2001), available at http://www.bethnovak.com/international_issues.html (last visited Oct. 7, 2002).

²⁹⁸ Whereas there are numerous tools for corporate collaboration, such as WebEx and Placeware, aimed at allowing corporate workgroups to share a document, such as a PowerPoint, there were no tools designed for synchronous, participatory discussion via the Web.

Before going into detail about the research process, I will provide an illustration of how we used the software in its early implementations. Understanding what the software does and how it works makes it easier and more relevant to study the methodology of the design process.

In the Yale Law School International Cyberlaw discussion group, a dozen law students met online once a week for two hours with academics, policymakers and technologists from around the world.²⁹⁹ By convening on the Internet, these American law students could converse with representatives of the European Commission and the Council of Europe to gain a deeper understanding of privacy and intellectual property regulation in the European legal tradition.³⁰⁰ They exchanged typewritten messages in real-time, which, though slower than speaking, conditioned the group to the reasoned expression of ideas.³⁰¹

Participants uploaded informational resources, such as statutes and cases, to shared electronic libraries.³⁰² The array of shared information enabled them to compare American and European privacy and media regulation and deepen their understanding of the basis for these differing approaches to lawmaking in a global information society.³⁰³ The ubiquity of the World Wide Web made it easy for one of the participants to join from London, Oslo or Luxembourg, depending on where the participant was working that week.³⁰⁴ Inclusion of Israeli lawyers and law professors provided an interesting counterbalance on a few occasions during the semester to the European perspective.³⁰⁵

In another project, twenty-five fourteen year-old teenagers convened from their respective suburban, urban and inner city schools via Unchat to discuss harmful Internet content.³⁰⁶ Having read the material beforehand, they intelligently debated what should be included in an Internet acceptable use policy. Exceeding their age in terms of sophistication and civility, they discussed balancing free speech rights and educational openness against the interests of the school community in creating a safe environment for educating young students.³⁰⁷

In these virtual forums where participants appeared with nametags, as opposed to "handles," the immediacy of convening in the same room and identifying themselves to one another was replicated without the inefficiencies

²⁹⁹ See Information Society Project, *supra* note 297.

³⁰⁰ *See id.*

³⁰¹ *See id.*

³⁰² *See id.*

³⁰³ *See id.*

³⁰⁴ *See id.*

³⁰⁵ *See id.*

³⁰⁶ For more on this Internet Ethics in Schools project, see New York Law School, *Internet Use in Schools*, at <http://www.nyls.edu/democracy.php?ID=26> (last visited Jan. 10, 2003).

³⁰⁷ *Id.*

of travel.³⁰⁸ By the same token, participants were not allowed to speak anonymously.³⁰⁹

> Technology in Education > LIBRARY

> Technology In Education

Please click on Add Category to create a new library category. From within a category you can use Add Category to create sub-categories. Clicking on Add Document, adds a document to the category you are in. Deleting a category deletes all documents in that category.

LIBRARY CATEGORY:

Resources

LIBRARY DOCUMENTS:

<input type="checkbox"/> The Deceiving Web of On-Line Advertising	Dangers of Commercial Content	<input type="button" value="EDIT"/>	<input type="button" value="DELETE"/>
<input type="checkbox"/> Kids Rules for On-Line Safety	Internet Use Guidelines	<input type="button" value="EDIT"/>	<input type="button" value="DELETE"/>
<input type="checkbox"/> The First Amendment	of the U.S. Constitution	<input type="button" value="EDIT"/>	<input type="button" value="DELETE"/>
<input type="checkbox"/> The Internet: Free Speech or Filtered Speech	Arguments For and Against Filtering	<input type="button" value="EDIT"/>	<input type="button" value="DELETE"/>
<input type="checkbox"/> Children's Internet Protection Act	CIPA and HCFPA Legislation	<input type="button" value="EDIT"/>	<input type="button" value="DELETE"/>

Unchat allowed members of these groups to select the appropriate level of facilitation for the occasion.³¹⁰ The available facilitation levels included non-moderated, moderated or self-moderated conversation. As in a town meeting where those wishing to speak raise their hand and wait to be called, the moderated or self-moderated facilitation levels required that contributions go through a facilitator.³¹¹ In the Cyberlaw class, where twenty highly vocal people were in the room at once, moderation was enabled.³¹² Postings would then go through a moderator, who would preview and organize the comments.³¹³ The moderator would reject or hold those interventions that were not on topic.³¹⁴ Conversely, participants in a three person work group used Unchat's non-moderated option to generate a transcript to share with the larger group.³¹⁵

³⁰⁸ See Unchat, *supra* note 295.

³⁰⁹ See *id.*

³¹⁰ See *id.*

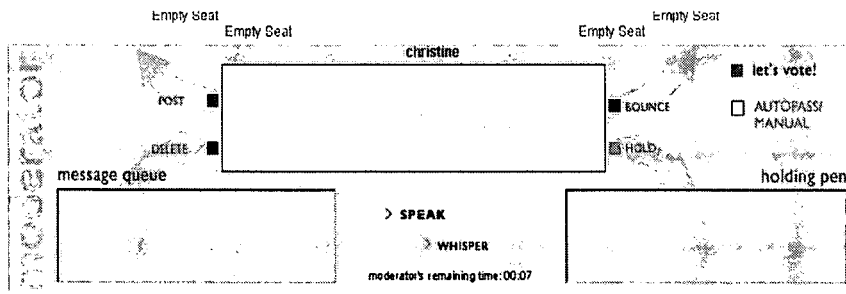
³¹¹ See *id.*

³¹² See Information Society Project, *supra* note 297.

³¹³ See *id.*

³¹⁴ See *id.*

³¹⁵ See *id.*



With so much power afforded to the moderator, there was always a risk that the moderator would monopolize the conversation and run the meeting poorly, censoring worthwhile comments and posting irrelevancies. For this reason, Unchat was designed to allow a group such as the International Cyberlaw class to self-moderate, taking turns moderating the discussion.³¹⁶ Sometimes, we rotated the moderation from one participant to another so that everyone had an opportunity to wield the electronic gavel. On other occasions, we elected our moderators by vote, selecting a new moderator at the end of the agreed upon tenure. Therefore, one person could not co-opt the conversation. In addition, members learned to become better participants by taking responsibility for running the conversation. If someone insisted on being argumentative, the moderator could bounce that person's messages back until he understood that only civil comments would be allowed in the debate.³¹⁷

In every conversation, there were always those people who got excited and impassioned about an issue. Rather than have their pleas stifled by an unsympathetic moderator or risk the conversation winding its way to a new topic without their viewpoint being aired, participants could "shout" a message, bypassing the moderator altogether.³¹⁸ The "shout" is the equivalent of interrupting or speaking out of turn without waiting to be recognized by the chair. Unlike in face-to-face meetings where participants are often at the mercy of a chronic interrupter, Unchat allowed this group to configure the number of so-called "shouts," restricting a participant's interruptions to 5 or 10 or 100, depending on the desired level of anarchy, the familiarity of the participants with one another, the subject matter of the conversation and the self-restraint of the participants.³¹⁹ The group itself could decide what level of shouts it wanted, and could change the rules for that end. Unlike other interactive technologies that imposed one structure, Unchat was designed to allow the group to select among different rule structures.³²⁰

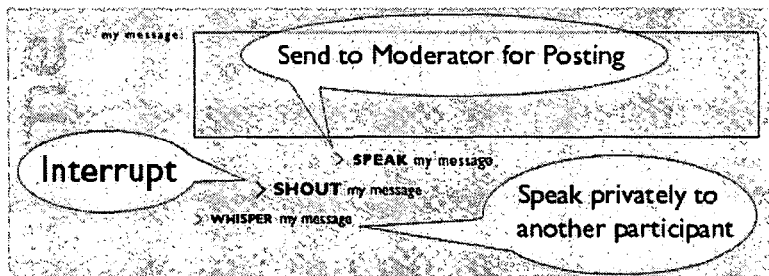
³¹⁶ See Unchat, *supra* note 295.

³¹⁷ See *id.*

³¹⁸ See *id.*

³¹⁹ See *id.*

³²⁰ See *id.*



After a participant has used up his shouts, the software shuts off the ability of that person to interrupt. The shout option not only takes advantage of the flexibility of the software to enable impassioned outcries, but it also encourages participants to reflect on the impact their disruptions have on the dynamic of the larger group. When necessary, it also performs the heavy-lifting for the facilitator. The software itself silences the chronic interrupter but with complete transparency. When the interruption button turns off, the system provides the participant with a message: "You have used up 5 out of your 5 shouts."³²¹

Like the shout, a whisper does not go to the moderator for posting to the larger group. Rather, it is a private message between two participants.³²² When a student commented erroneously on European privacy law, another participant quietly prompted one of the Europeans to proffer a correction.³²³ Moderators used it frequently to encourage a passive person to join the discussion without embarrassing him.³²⁴ If someone had something urgent to say, he could whisper to the moderator to hold the speaking queue until he had finished typing his contribution. Like shouts, whispers are configurable.³²⁵ When I set the number at 15 for the first International Cyberlaw class, the students voted unanimously to increase the number to 25.³²⁶ In an unrelated discussion on "Spiritual Friendship in the Digital Age," Episcopal priest and facilitator Reverend Steve Kelsey required participants to "huddle" with a partner by whispering one-on-one for five minutes to create a more intimate climate prior to the group discussion.³²⁷ The software was flexible enough to enable this facilitation technique and allow that group to create its own dynamic.

Unchat is a technical architecture that allows the group to set and change rules of the dialogue, including the number of shouts and whispers, the choice

³²¹ See *id.*

³²² See *id.*

³²³ See *id.*

³²⁴ See *id.*

³²⁵ See *id.*

³²⁶ See *id.*

³²⁷ See *id.*

of moderation style and timing, and the number of participants.³²⁸ In our design, we chose a series of rules based on what traditional democratic theory teaches about deliberation and effective conversations. Next, we altered the settings and monitored resulting changes in the discourse. We could have programmed the software with different rules to allow private messages only between people sitting in every third seat or the posting of anonymous messages, for example. In addition to shouts, there could also be a new category called “guffaw” to heckle a speaker or “yawn” to express boredom. The timer on the voting could be set to increments of days or weeks, rather than minutes, to encourage lengthy periods of deliberation. Instead of names alone, participants could appear in the chat room with a name and title or a party affiliation. These new rules may impact the way participants interact with one another. Changing the rules changes the kind of democratic activity technology makes possible.

Principles of deliberative democracy suffuse the concept and functionality of Unchat. The knowledge of how to structure successful participation off-line informs the design of this online deliberation tool, of which the software’s architecture is intended to capture the ideas of deliberative structure outlined earlier. They are as discussed in the subsequent section.

B. The Design Process: Translating Values into Code

1. Accessible

To be accessible, the software tool we wanted to build needed to be available to participants regardless of technological ability or choice of technology. Therefore, we wanted to build a Web-based tool that would function on Windows, MAC and Linux operating systems using both major browsers, Internet Explorer and Netscape. Designing for multiple configurations is neither simple nor cheap, but universality of access was a central criterion for design. A sophisticated discussion technology requires a back-end database and middleware technologies to make it run.³²⁹ Initially, Unchat ran on an Oracle database with a WebLogic middleware platform.³³⁰

³²⁸ See *id.*

³²⁹ See searchDatabase.com, *Back-End*, at http://searchdatabase.techtarget.com/sDefinition/0,,sid13_gci212161,00.html (last updated Nov. 25, 2002) (describing a back-end database as an application for information storage and management that the user never interacts with directly but that supports a front-end service; for example, if the user interacts with a mailing list sign-up, that “front-end” interface forwards a request to the back-end database, which can be located remotely, for processing); see Webopedia, *Middleware*, at <http://www.webopedia.com/TERM/m/middleware.html> (last modified Jan. 25, 2002) (describing middleware as any programming that acts as “glue” or a mediator between two separate programs; a common example is a middleware tool that connects two databases or that connects an application to a database).

³³⁰ See Oracle Corporation, at <http://www.oracle.com> (last visited Oct. 8, 2002) (stating that the California company Oracle Corporation develops and manufactures database

These are powerful, but expensive proprietary technologies. We realized that building our public forum on such an expensive infrastructure would necessitate charging communities and civic groups enormous fees or recurring rents to use it. Passing on such costs would be similar to passing a law that every city must construct its town hall from Carrera marble and rent it to those wishing to speak in order to recoup the expense. The technical architecture made no sense for the goals of democratic inclusion and affordability. Hence, the entire application was ported, or translated and moved, from the initial Oracle-WebLogic infrastructure to an entirely freeware back-end, using technologies that are free and interoperable with different hardware platforms.³³¹ Adopting this architecture meant that the software could be installed in communities, giving them control over the technology without adding cost. The initial choice of rudimentary building materials opened up, rather than precluded, choices. Nevertheless, we were left with many open questions about the best way to continue to develop, maintain and provide technical support for the technology, while making the cost affordable and accessible.

2. No Censorship

We needed to ensure that Unchat would be free from censorship. The aim was to build a tool that encouraged and allowed everyone to speak. The lack of an option for adding or adequately commenting on submissions stymied the Estonian online referendum project because participants could not discuss proposed legislation.³³² Despite the potential for interactivity, most Web sites, including governmental ones, deprive users of a voice in the virtual world. Even on Web sites that have an e-mail feedback mechanism, the communications tool acts as a device of censorship (and frustration) when these e-mails simply end up as a paper print-out on someone's desk. Network design choices made to protect network security or enhance ease of use sometimes have unintended consequences on free expression. For example, in

software for information management, considered by many to be the best of its kind and used in many of America's largest corporations); BEA Systems, *Introducing Web Logic Platform*, at <http://edocs.bea.com/platform/docs70/intro/intro.html#1189680> (last visited Oct. 7, 2002) (stating that WebLogic is a middleware application developed by BEA Systems that runs on the middle layer between the Internet browser and the front-end application running via the browser).

³³¹ See Sun Microsystems, TOMCAT@JAKARTA, at <http://java.sun.com/products/jsp/tomcat> (last updated Nov. 25, 2002) (stating that TomCat, a Sun Systems java-based product, is completely free for use and integration). Freeware are programs offered to the user at no cost for his personal use. Freeware applications, however, are usually subject to the author's copyright and the terms and conditions of use, which, generally, do not provide for integration into other commercial applications. See also MySQL, *The World's Most Popular Open Source Data*, at <http://www.mysql.com> (last visited Nov. 25, 2002) ("MySQL is the world's most popular Open Source Database").

³³² Office of Prime Minister of Estonia, *supra* note 223.

order to prevent security breaches, many companies and governmental employers close access to communications “ports” or gateways to the Internet, rendering interactive uses of the technology impossible.³³³ Network administrators sometimes block inbound communications traffic to prevent abuses, such as spam mailings and Internet conversations among employees.³³⁴ Even where companies do not, their Internet service provider may block access to communication ports.³³⁵ High-speed Internet service providers are arguably blocking or have the potential to block access to interactive and other services in order to prevent the use of excessive bandwidth and to promote use only of their own proprietary platforms and services.³³⁶

Without a critical mass of useful technologies for interactivity, as opposed to mere chat, network administrators have little incentive to liberalize access to communications ports. In the meantime, any technology that aims for democratic use and wide accessibility must do an end-run around this form of network-imposed censorship.³³⁷

Unchat runs on the browser, communicating with the server via an open port.³³⁸ This excludes participants behind certain firewalls or proxy servers that do not permit this kind of outbound communications traffic.³³⁹ It is not difficult to “punch a hole” in a firewall so that Unchat can be used, but this kind of one-off solution that requires the intervention of an IT professional is not an ideal solution.³⁴⁰ However, communication via the HTTP protocol does

³³³ See Sami Lais, *EarthLink Antispam Measure Trips Some Users* (Oct. 30, 2000), at <http://www.cnn.com/2000/TECH/computing/10/30/earthlink.antispam.idg> (describing EarthLink’s shutdown of its communication ports to as an “antispam measure”).

³³⁴ See *id.*

³³⁵ See *id.*

³³⁶ Center for Digital Democracy, *Neither Worldly Nor Wide: How Broadband Systems will Narrow the Net*, at <http://www.democraticmedia.org/narrownet.html>. See also *Technological Analysis of Open Access and Cable Systems*, Prepared for the American Civil Liberties Union by Columbia Telecommunications System (Dec. 2001), at http://archive.aclu.org/issues/cyber/broadband_report.pdf.

³³⁷ See Webopedia, *Tunneling*, at <http://www.webopedia.com/TERM/T/tunneling.htm> (last visited Nov. 25, 2002) (explaining a technology known as tunneling that would provide such an end-run by letting a user send data via another networks connections; for example, a user could tunnel by employing the Internet to transmit data using Microsoft’s PPTP technology, thereby avoiding a firewall).

³³⁸ See Unchat, *supra* note 295.

³³⁹ See Habtamu Abie, *An Overview of Firewall Technologies*, at <http://www.ifi.uio.no/~abie/fwt.pdf> (Jan. 2000) (Firewalls can be set up so that packets can be filtered on the basis of some or all of the following criteria: source IP address, destination IP address, source port, and destination port. A firewall of this type can block traffic to and from specific hosts, networks and ports.).

³⁴⁰ See David W. Chadwick, *Network Firewall Technologies*, at <http://sec.isi.salford.ac.uk/download/Firewalls.PDF> (last visited Dec. 23, 2002). (For example, in a firewall with a packet filtering router, it is usually possible to specify all ports or hosts, as well as specific ones. To allow access into a firewall, an administrator can configure the router to

not depend on an open port and could therefore be an option.³⁴¹ Changing the technology would impact the nature of communications. If the communications port is not constantly open as it is in the current configuration, then the server would have to check for updates on a regular but not instant basis. As a result, the conversation would be dramatically slowed. While time and money can fix this problem, it highlights the inherent tradeoff between security and free speech in cyber-democracy. The tradeoff is not unlike the risks we undertake when a large crowd gathers to protest. Free exchange is a necessary activity of democracy that must be protected despite its costs for security and safety.

3. Autonomous

To fulfill the mandate of autonomy, any technologies we developed had to allow users to control the technology, rather than be controlled by it. We wanted to build software that gave users the choice of how to structure their own communication. In real life, conversation can take place in a café, a town hall or a classroom. Formal and informal rules alike can govern ordinary conversation. These rules can change from group to group and culture to culture. Cyberspace is flexible enough that users ought to be able to convene in different sorts of spaces according to the rules they set for themselves. Yet as discussed above, currently available tools do not offer much choice. With Unchat, a group can not only set the rules of the space, but also change them as needed.³⁴² The ability to change the rules, however, depends on the user's password.³⁴³ A user must still decide whether all, several, a few, or no participants get to change the rules.³⁴⁴ Though the technology makes it possible to share power equally and enforce this autonomy, these abilities remain a question of initial process design and set-up.

4. Accountable and Transparent

Unlike private conversation, democratic deliberation occurs among citizens engaged in the business of making public choices.³⁴⁵ To be a legitimate

allow traffic on a port. However, configuring and maintaining the services becomes increasingly difficult since an error by an administrator in maintaining a consistent configuration of security services can easily lead to security vulnerability.).

³⁴¹ See James Marshall, *HTTP Made Really Easy*, at <http://www.jmarshall.com/easy/http/> (last modified Aug. 15, 1997) (The Hypertext Transfer Protocol communicates information across the World Wide Web under a client-server model. The protocol is basically stateless - not maintaining any connection information between transactions. Transactions take place by means of an establishment of a connection by the client to the server with a standard port of 80.).

³⁴² See Unchat, *supra* note 295.

³⁴³ See *id.*

³⁴⁴ See *id.*

³⁴⁵ See JEAN-JACQUES ROUSSEAU, *ON THE SOCIAL CONTRACT* 79-80 (Donald Cress ed. & trans., Hackett Publishing Co. 1987) (emphasizing the public nature of his conception of the

expression of the general will, these dialogues must be reasoned, rational and accountable. Chat rooms are anonymous. Participants choose handles by which to hide their identities and role-play in the virtual space. Yet when communication functions as a means for public decision making and not as entertainment, participants must be identifiable and accountable.³⁴⁶ Being known by name encourages responsible participation because it connects public action with personal reputation. In a chat room where participants are not accountable, there are no consequences, even for opinions that are destructive and prejudicial.³⁴⁷

Anonymity is at times a liberating feature of cyberspace.³⁴⁸ It permits users to switch gender, generations, nationality and cultures.³⁴⁹ In real space, however, social relations are iterative not itinerant. People cannot easily change the social, business or political community they inhabit. Accordingly, they must learn to participate in these communities on an ongoing basis, which carries a cost to hateful and hurtful words or actions. Accountability creates an incentive for productive and respectful participation.

Since Unchat is a tool intended to serve real communities, it had to identify participants and make them accountable in real life for what they say in cyberspace. The software must integrate seamlessly with ordinary communication, rather than operating independently of real life. Hence, identity carries over from one realm to the other.

Chat rooms may be an amazing invention of the cyber-world, but they ignore long-practiced conventions of the classroom and the boardroom, namely participant identification. In conference calls with many participants, speakers commonly identify themselves before speaking. While this may be cumbersome, it is basic etiquette for group dialogue. Name plates serve the same function at a face-to-face public meeting.

In an Unchat session, participants log in with a first name and a last name, rather than just a first name or other nickname.³⁵⁰ Logging in immediately signals to the participant the seriousness of the exercise, thereby linking real-life consequences directly to virtual conversation.³⁵¹

general will).

³⁴⁶ See AMY GUTMANN AND DENNIS THOMPSON, *DEMOCRACY AND DISAGREEMENT* 128-64 (1996) (Chapter 4 discusses the role of accountability in deliberative processes).

³⁴⁷ See Julian Dibbel, *A Rape in Cyberspace*, at http://levity.com/julian/bungle_vv.html (Dec. 23, 1993) (describing a virtual rape occurring at a virtual party).

³⁴⁸ See *id.*

³⁴⁹ See *id.*

³⁵⁰ See Unchat, *supra* note 295.

³⁵¹ Though a seemingly modest requirement, this request to have real names stymied the first programmer, who was convinced that the database would not read a space between the first name and last name and could only accept "firstnamelastname" or "firstname_lastname." It took a second consultation and more technical research to uncover that the immutable "truth" of cyberspace, where individuals exist only according to nicknames, could be changed to meet the demands of real life.

As with every other phase of the design process, however, we wanted to program the basic prerequisites of deliberation and then go beyond to offer increased choices enabled by technology. In a virtual world dominated by the chat paradigm, the first goal was to create an accountable speech alternative. Technology made it possible to combine both accountability and anonymity as well. Our next step was to allow an option for anonymous speech, creating a blended anonymity that is not possible in real space. A real-life analogy would be going into a boardroom where each participant is visibly seated around the conference table and then turning off the lights so no one can tell who is making a particular contribution.

In an early demonstration of Unchat in Singapore, local civil society builders and political organizers initially reacted negatively to accountability.³⁵² What made sense for an American audience did not fit with the political reality of a more repressive regime.³⁵³ They felt that successful and open dialogue for civil society depended on the ability to speak freely and without political repercussions.³⁵⁴ To be a globally useful tool, Unchat needed to incorporate the option to speak accountably and anonymously and to offer different options for anonymous speech.

An Unchat session could be customized to be completely anonymous, but a study of the results of a blended anonymity that allowed for a limited amount of anonymous speech would be more interesting.³⁵⁵ A participant would be able to speak anonymously, but only a set number of times, after which the functionality shuts off. Communication options never before possible may easily be the subject of experimentation in cyberspace.

5. Relevant and Responsive

Communication technologies can be broken down into real or synchronous time and non-real or asynchronous time.³⁵⁶ Real-time tools, such as the telephone, permit simultaneous dialogue. Asynchronous dialogue, such as a

³⁵² See Institute of Policy Studies, at <http://www.ips.org.sg/> (last updated Oct. 4, 2002) (providing additional information on the Institute of Policy Studies, a colloquium on civil society in Singapore that convened on Feb. 22, 2001); see also ThinkCentre, at www.thinkcentre.org (last visited Oct. 4, 2002) (providing additional information on ThinkCentre, a civil society organization in Singapore whose head, James Gomez, attended the Institute of Policy Studies' Feb. 22, 2001 convention).

³⁵³ See generally STATE AND SOCIETY IN SINGAPORE (Gillian Koh & Ooi Giok Ling eds. 2000).

³⁵⁴ Discussion at the Institute for Policy Studies in Singapore, *supra* note 352.

³⁵⁵ See Unchat, *supra* note 295.

³⁵⁶ WILLIAM MITCHELL, CITY OF BITS: SPACE, PLACE AND THE INFOBAHN 15-17 (1995) (exploring the concept of temporality and ways in which the Internet has upended our notion of time, allowing us to perform communication tasks asynchronously which, before e-mail, could only be done in real time); see also MANUEL CASTELLS, RISE OF THE NETWORK SOCIETY 491-92 (2d ed. 2000); JOHN SEELY BROWN & PAUL DUGUID, THE SOCIAL LIFE OF INFORMATION (2000).

written debate between two pundits in a magazine, letter writing, or a threaded bulletin board, makes possible a different kind of conversation. Arguably, non-real-time dialogues allow for a thoughtful airing of considered viewpoints. For example, voting by mail, rather than at the ballot box, potentially gives voters more time to understand and reflect upon the issues. The additional reflection facilitates participation in a more deliberative and informed manner.³⁵⁷ In fact, it increases voter turn-out and participation.³⁵⁸

What works best for voting, however, does not necessarily best serve deliberative processes. In the public consultation experiments described above, their asynchronicity necessitated participation over several weeks. Participants had to follow thousands of postings. In every case, participants complained about the time commitment and volume of information. As the days wore, participation dwindled. The required intensity of commitment created a disincentive for the airing of all ideas by a wide array of participants. The asynchronicity of these forums contributes to the articulation of disjointed reasons rather than a responsive dialogue.

Having the option of synchronicity is especially important when the goal is to attract deliberation among a diverse group, including working class people. People can read and inform themselves at home in their own time, but they need to be able to air ideas publicly and exchange viewpoints with one another. This requires that they come together in the same room at the same, limited time and respond to one another, as in a New England town meeting.

Deliberative democracy of the kind Tocqueville and Meiklejohn imagined requires citizens to gather together, exchange ideas, debate issues and through conversation, refine their understanding of each other and of an issue.³⁵⁹ This can only take place in real time.

Asynchronous communication in the form of bulletin boards has become the ubiquitous standard mode of Web-based communication. These threaded message boards are convenient and easy to use. Participants do not have to be in the same “place” at the same time and residents of different time zones can engage in a global dialogue by posting to a Web-based bulletin board. From the point of view of democracy, these tools are wholly inadequate to foster confrontation with new ideas and new people in the way that can only happen when individuals come together at the same time to talk and deliberate. Bulletin boards also utilize less bandwidth and are therefore preferred by Internet service providers and Web site operators.

Facilitating groups who wanted to come together to discuss and debate an issue in real time was a design prerequisite for Unchat. Like the telephone or a meeting, Unchat is a real-time communications tool. We imagined a way for

³⁵⁷ Sam Reed & Bill Bradbury, *The Voting Booth at the Kitchen Table*, N.Y. TIMES, Aug. 21, 2001, at A17.

³⁵⁸ See *id.*

³⁵⁹ See MATHEWS, *supra* note 14, at 228 (discussing the need to “talk through” problems for successful deliberation).

community board members and interested citizens to interview prospective real estate developers about plans for a new public housing project without leaving their families and without regard to race or ethnicity. At the same time, Unchat may create a sense of public dialogue by enabling citizens to respond and react to each other's comments.

Feedback to date has confirmed our premise that synchronicity is extremely convenient for participants and leads to a conversation where participants respond directly to one another's point.³⁶⁰ Our ongoing research focuses on better understanding the impact of synchronicity on the nature and quality of the deliberation.³⁶¹ To achieve this end, we will run and compare deliberative policy juries using Unchat, a bulletin board, a Web log and face-to-face dialogue.

6. Equal: Democratic Architecture and Graphic Design

In addition to the naming conventions of this space, certain other fundamental design prerequisites informed the development process for Unchat. The look and feel of the technology had to be open and inviting. The screen had to show a good amount of white, empty space and the graphic design needed to be inclusive. An overly-designed space with an excessively modernist or classical design would preclude people from imagining how to use the space. Adopting a typeface and look that was too futuristic would alienate non-technical members of a democratic community already ill-at-ease with the use of technology. On the other hand, in a Web world dominated by flashy effects and bright color schemes, Unchat's white, muted look might have bored younger Web aficionados. The initial design emphasized a feeling of lightness, openness and air.

The challenge to present an open look and feel was greatest in the design and building of the discussion application, otherwise known as the Applet.³⁶²

³⁶⁰ Conversational groups very quickly develop a "culture" whereby people start to respond to each other by name and identify comments that they are responding to by cutting and pasting from that comment or referencing it in some way.

³⁶¹ See New York Law School, *Democracy Design Workshop*, at <http://www.nyls.edu/content.php?ID=931> (last visited Nov. 24, 2002) (describing the Democracy Design Workshop as conducting a research project on how deliberation works across different media--its goal being to test and compare methods for deliberation and to elicit qualitative and quantitative feedback from both citizen-participants and regulators) (the Democracy Design Workshop seeks to better understand the relative merits of face-to-face and technologically-enabled methods of deliberation and decision making and seeks also to identify the strengths and weaknesses for each, thereafter constructing a more effective processes for citizen participation in decision making).

³⁶² See Websitefactory.co.za, *What is an Applet?*, at http://www.websitefactory.co.za/faq/designfaq/an_applet.htm (last visited Nov. 25, 2002) (defining an applet as a small program that can be quickly downloaded within the browser and is intended to be embedded inside another application rather than run on its own; the Unchat discussion interface is embedded within an applet that sits within a larger Web site).

The challenge was creating a sense of place and purpose with very little space. All our experience in real space organizing taught us that architecture matters. So many public-purpose buildings are intentionally monumental, imbuing the visitor with a sense of awe. Yet in this tiny space – minimized by the need to design for the smallest standard monitor size rather than the largest – room was needed to display a group dialogue with all its participants and also leave room to type contributions to the discussion, create ballots and share information.

The question arose of how to present the participants in the space without crowding the screen. Most chat applications list the current chatters in a text-box. This saves space on the screen but is neither visually appealing nor contributes to any sense of place or space. Other applications, such as Palace, a graphical form of Internet Relay Chat, represent participants with cartoon-like characters or so-called avatars.³⁶³ This gives each group member a unique but highly unrealistic visual identity. Other applications, such as Microsoft NetMeeting or corporate conferencing tools, use video technology to broadcast a real image of the participant. However, this requires extra equipment and expense as well as higher bandwidth, which in turn means added expense for the group. Use of Web-cam and streaming media as a default also makes anonymity impossible. While merely incorporating video adds a dimension of affect to the conversation, it does nothing to enhance the strictures necessary for fostering deliberation.

Unchat eschews the chat convention of listing participant names in favor of a visual metaphor of the table. Participants appear in text by their first and last names in a semi-circle around a table. This circumvents the need for graphically intensive video-based technologies to create a sense of the group in a space. The name of the moderator appears at the top of the screen. The name of the participant appears in the middle of the screen. These are visual aids to help situate a person in the space and convey an impression of being in a room around a table. When someone “speaks,” his or her name flashes and changes its color to blue to further highlight who is talking and communicate the impression of a conversation. The next challenge will be to experiment with different designs and with the use of different metaphors, like a classroom, to convey a sense of space and foster a unique culture within the group. The even greater task will be to know how to adapt the design and integrate audio and video communication. We will look at how a change in voice or image affects the sense of space and how it is defined.

The table metaphor is possible because there is a limit to the number of participants in a given Unchat session. This is not a technical limitation. There is a limit to the number of people in real-space or cyberspace who can

³⁶³ See thePalace.com, *Announcements*, at <http://www.thepalace.com> (last visited Nov. 25, 2002) (providing information about Palace); Palacetools.com, *sHome*, at <http://www.palacetools.com> (last visited Nov. 25, 2002) (providing information about Palace Chat Community).

effectively participate in a conversation at once.³⁶⁴ Beyond that number there cannot be a genuinely participatory dialogue.³⁶⁵ If there are too many participants, there is the risk that the conversation will devolve into noise and, more important, that not everyone who wants to will have the opportunity to be heard.³⁶⁶ Hence the graphic design of an Unchat session limits the session size. Obviously, this can be easily reconfigured, but the initial design goal dictated the need to limit size. We have discovered that ten to twenty is an optimal number of participants. With more than twenty participants who are all contributing actively, an inexperienced moderator may have difficulty keeping up with the pace of the dialogue. On the occasion that we had more than two dozen fourteen-year-olds in a discussion, the potential for anarchy terrified this moderator. The fear was unfounded in the end, but I would have preferred a smaller group.

Future alternatives to be tested include multiple interlocking rooms, an automatic generation of new rooms, and passive “observer” rooms of unlimited size linked to each participatory Unchat session where new participants rotate in and out based on duration in the discussion or frequency of contribution.

7. Facilitated

i. Selecting a Moderator

The default rule requires all participant postings to go through a moderator. The position of moderator in this environment, as much as in real life, is powerful. A good facilitator makes all the difference between a productive and a divisive meeting because he sets the tone and controls the agenda, including who speaks when. The essential problem with commercial moderated chat tools is that they do not allow participants to change the moderator and, all too frequently, impose a moderator who is external to the group. To empower participants to engage in productive deliberation, this experiment had to build

³⁶⁴ See generally ETIENNE WENGER, *COMMUNITIES OF PRACTICE: LEARNING, MEANING, AND IDENTITY* (1999); JEAN LAVE & ETIENNE WENGER, *SITUATED LEARNING: LEGITIMATE PERIPHERAL PARTICIPATION* (1994).

³⁶⁵ For data on small group dialogic practices, see Don Adams & Arlene Goldbard, *Transforming Dialogue: Web Lab’s Explorations at the Frontiers of Online Community*, at <http://www.weblab.org/sgd> (July 10, 2000) (analyzing the results of small group dialogue experiments). See also *Changing the Nature of Online Conversation: An Evaluation of RealityCheck*, at <http://www.weblab.org/sgd> (last visited Dec. 23, 2002). By limiting the size and lifespan of discussion groups, WebLab, a New York City company, has had success in fostering a sense of belonging to the group and increasing participation. All practiced mechanisms of civic dialogue, including the Study Circle model, the Kettering National Issues Forum and Deliberative Polling, see *supra* note X, require small group formation. See GASTIL, *supra* note 43, at 6. See generally KIRKPATRICK SALE, *HUMAN SCALE* (1980).

³⁶⁶ See MEIKLEJOHN, *supra* note 21 (discussing the importance of everything worth hearing being said).

in a mechanism in which participants could elect a moderator democratically and revolt against a moderator by deposing him in favor of another. Again, the idea was to take advantage of the flexibility of cyberspace and enable a choice of different rules, not to simply replace the old rule of one set moderator with a new rule of voting for that moderator. Unchat permits the participants to set a moderator, vote for a moderator or rotate the moderation functionality from person to person. The ability to change moderators means that time limits for moderator tenure also need configuration. If citizens meet to discuss an issue, an expert facilitator might moderate the first session. The next time the group meets, participants might take charge of their own dialogue and start electing moderators from among the ranks. Each moderator might serve a fifteen-minute term to allow adequate time for that moderator to get acclimated, but short enough to give several people a turn.

In the alternative, the group may decide to elect one person who is well liked and adept to moderate repeatedly. Though not currently part of the rule settings, a program may be set up to prevent participants from reelecting the same person more than once or twice or ten times, imposing term limits so that more people have to participate in running the discussion. The legitimacy of the outcome requires that every person takes a turn at moderating, or at the very least has an opportunity to moderate. To that end, session rules can be set to rotation, rather than voting. For example, the electronic "gavel" could pass every ten minutes from one person to the next and every member of the group would serve one ten-minute term. In this way, no person could complain of being disenfranchised and each member of the group would learn how to be a better and more effective participant from being a moderator. Having been responsible for the flow of the dialogue, participants would learn to make productive contributions.

ii. Moderator Macros

In constructing an interface for democratic deliberation, one of our most difficult challenges was adhering to the value of transparency and ease of access. One of the primary impediments to using technology to enhance democratic life is the hurdle that technology imposes on those who are not used to it. The problem stems, less from the inexperience of the user, than from the opacity of the technology. Technologists design software and hardware devices for technologists. The user must acclimatize to the technology, rather than the other way around. In developing a tool for democratic deliberation, the concern was to make it easy-to-use and accessible to all, regardless of technological ability or facility. Given the difficult demands of engaging in productive conversation and, in particular, of moderating a dialogue, the technology itself needed to be transparent and simple. To this end, the moderator functionality includes four macro buttons entitled "post," "bounce," "hold" and "delete." These buttons will allow the moderator to perform a series of standard tasks with one click. When a participant sends a message to the moderator by speaking, he or she has a

choice of what to do with that message. He can post or broadcast it to the group for all to see. Posting a message contributes it to the public dialogue. Bounce sends the message back to the sender. Hold retains the message for later action, and delete is reserved for messages that should never see the light of day. These four buttons allow a cyber-facilitator to imitate the actions of a real-life moderator and even go beyond what is possible in real life, where pre-screening comments for relevance or obscenity is impossible.

The danger is that a moderator could abuse the tools of censorship by deleting or bouncing messages with impunity and without justification, leading to a monopolization of the conversation, an alienation of participants, and a non-deliberative process. As a result, the moderator's role needed greater transparency and accountability without making the technology more complex or the job more difficult.

Each button has a list of tags or pre-programmed comments that explain the reasoning behind the moderator's action. For example, if a moderator wants to bounce a message, he must select a reason for doing so. This requires the moderator to justify the power that he exerts and creates a channel of communication between the moderator and the participant, thereby improving the experience of communication at a distance. If a moderator wants to cut someone off in real-life, he may interrupt by saying something to the effect of "please ask a question of our guest and refrain from making a comment" or "we are running out of time, please be brief" or "please try to stick to the subject" or "personal attacks are not appropriate." The moderator has the power to silence a participant, but etiquette and legitimate leadership demand that the moderator make his reasons transparent and justify his exertion of power within the group.

The moderator's macro tags fulfill a similar function, but accomplish what cannot be done in real space. In a meeting, if a moderator silences a participant, it usually has to be done in front of the entire group, thereby shaming the participant. Hence a good facilitator is less likely to exercise this power except when absolutely necessary, often refraining from doing so even when it would be desirable. In cyberspace, a message can be bounced privately. With one click the moderator says to the participant, "please stick to the subject" and bounces the message back. This makes the job of moderator easy. It also structures the conversation effectively without a psychological cost to the participants. They experience no public shame or embarrassment from receiving a private message from the moderator that cannot be viewed by others. Though the initial temptation for a moderator is to post everything, bouncing messages keeps the discussion on topic. Moderators quickly learn that bouncing or deleting an inappropriate message actually improves the quality of conversation for the entire group. The moderator is not precluded from commenting on messages with original remarks. The macro tag system is designed to make the moderator's job easier and more transparent by replicating the standard tropes common to managing any conversation.

The moderator macro tags can be changed at the start of every conversation. Though the software comes with pre-programmed defaults, participants can

set-up a discussion with French or Spanish tags or with responses designed to appeal to children, for example.

iii. Autopass

The final feature designed to make the moderator's job easier and the conversation more susceptible to facilitation is the "autopass" or autopilot functionality. With one click, the moderator can turn on the ability for messages to be broadcast directly to the group without awaiting moderator action. This allows the moderator to sit back and take stock of the dialogue without having to intervene and without pausing the conversation. In a self-moderated system where moderators are not necessarily professional or experienced facilitators, this functionality allows the new moderator to learn the ropes and assess the group dynamic while messages continue to post automatically at a reasonable interval. It also permits the moderator to get up and leave the room for a time without halting the discussion. Autopass is an important tool to teach and learn the skills and timing of moderation.

In one instance, a participant left the computer to answer the phone and was elected moderator by the group during that interval.³⁶⁷ Unbeknownst to him, incoming messages were piling up and the conversation came to a halt. This incident demonstrated that using Autopass could have been helpful. But the experience also taught another design improvement, namely the need for audio as well as visual cues to notify the new moderator of his changed role. Recognizing the problem, in a subsequent iteration the development team added a "CHANGE MODERATOR" button to allow the involuntarily elected moderator to step down and switch control.

8. Pluralistic and Inclusive: Devolving Power Downward: Role-Based Permissions

Moderated chat is structured better for deliberative practices than ordinary chat because it incorporates a facilitator. However, standard moderated chat generally centralizes control, allowing one person who may or may not be a member of the community of discussion to control the dialogue. Even in ordinary, non-moderated chat, though it appears free-for-all, a single administrator controls who may participate and who will be kicked out of the group. Often the responsible individual must have technical ability, thereby further limiting the potential for democratic participation. Especially if control always rests with a technical professional or with someone external to the group, such as a professional facilitation company, the group loses its cohesion. It potentially also loses the ability to set its own agenda. It is also a disincentive to those in charge because it imposes additional time and cost burdens. In the experiments we looked at earlier, most of them demanded significant time investment on the part of the hosts, who were responsible for

³⁶⁷ This took place during the International Cyberlaw Class at Yale Law School, 2001.

moderating, facilitating and administering discussions, preparing all informational inputs and analyzing the results.

Unchat clearly needed to give participants control over their own conversation to serve as an effective tool for community self-governance through deliberation. People needed to have options to set-up and run their own conversations just as in real life; they call meetings, convene groups and organize spontaneous water-cooler colloquies. In real life, any two people can have a conversation and set the agenda for it. Any individual with enough gumption can stand on a soap-box in Speakers Corner and engage the crowd in political protest. In other physical space contexts, only certain people have permission to book a conference room at the office or an assembly room at school. Cyberspace offers the promise of opening up the channels of discourse so that everyone can be his own broadcaster. The challenge in this experiment was to harness the potential for open communication to the beneficial structures of the deliberative process. We wanted to try to use technology to transform individual rants into public deliberation.

Unchat operates on a hierarchical permission scheme. It has a site-wide administrator responsible for initial installation, set-up and role assignment. At the next level, it has Topic Creators who have the power to create new discussion themes, known as topics, and designate the users who may participate in them. Topic Creators have the power to create Unchat sessions under that topic, as well as to assign the role of Chat Creator. Chat Creators can create new Unchat sessions and accompanying rules. These roles are hierarchical. The site-wide administrator has all the permissions of a topic creator and a Chat Creator. A Topic Creator, in turn, has the power and permissions of a Chat Creator. A participant with access to a topic has access to all the Unchat sessions in that topic, but a participant who only has access to an Unchat session does not have access to other sessions within the topic. Multiple people can occupy each role. A given topic need not have only one creator. Every member of the discussion could potentially be a topic creator with administrative privileges and responsibilities.

At one end of the spectrum, this schema allows for every participant to set up conversations. At the other end, it still permits the group to protect the security and integrity of a dialogue by restricting access. A member of a topic community can participate in any discussion within that community. The group can invite a special guest, such as a politician or a local expert, to participate in one conversation without necessarily giving that guest access to other private discussions. All participants may want to have the power to edit or change a library or to change the rules of the discussion. In the alternative, the group may decide that this power needs only to reside with one person, such as a teacher or administrator.

Roles	Site	Topic	Unchat
	Administrator	Administrator	Administrator
Set-up Management -create & edit -create & customize library -create & customize quiz	Set-up site		
	Set-up topics	Set-up topics	
	Set-up Unchats	Set-up Unchats	Set-up Unchats
User Management -add, edit and delete participants	Manage site users		
	Manage topics users	Manage topics users	
	Manage Unchats users	Manage Unchats users	Manage Unchats users

The same tool allows the regulator to set-up a feedback dialogue with invited stakeholders and to turn over the tool to citizens to conduct their own networking and learning dialogues. More specifically, a regulator, politician, professor or citizen could be the Site Administrator instead of an IT administrator and upload a database of participants to the site, selecting which ones belong to which group. Participants can sign up or be assigned to a given topic. For example, in an educational setting each class is set up as a topic. In turn, the professor's teaching assistants are given Topic Creator status so they can set-up and customize a class Topic Library to store the syllabus and course-wide readings. Each section of the class can have its own Unchat session to use for collaboration. Teaching assistants or a different student each week can run sessions. Students can take turns running sessions by rotating or voting for moderators throughout the session. Responsibility for moderation may correlate to other responsibilities for preparing questions or assignments in a given week. Each Unchat session has its own library to which students with administrative access can upload documents. Students can be assigned to do research on the Web and upload their findings to the Unchat session's Team Library. Sections can be assigned to meet online on a regular basis and to invite external guests who are given permission by the professor to access the Unchat session.

Clearly, the rules for access to and control of the means of communications can be altered and further experimentation needs to be done to try new permutations. This permission matrix has been designed for a combination of control and freedom to maximize the ability to devolve power downward without degenerating into unstructured chaos. An entire database of participants can be uploaded with a few clicks. From that list of registered site users, Topic Creators and topic members can be selected by viewing the list of site members or searching for given participants. To this end, one may add a sorting mechanism to create groups characterized by their diversity or their like-mindedness.

9. Deliberative Communication: Speak, Shout and Whisper

In the same way that Unchat allows different people to possess keys to the public meeting space through the assignment of access roles and permissions, it also allows participants to configure the nature of communication in the space. People have a choice in real-life of whether to hold a conversation in a café or in a boardroom, but have not previously had that choice in cyberspace. When participants engage in a structured dialogue using Unchat, they can choose to have an unmoderated, moderated or self-moderated exchange. An unmoderated discussion is structured like a chat room. Members type and post messages seriatim without any editorial control or structure. In a moderated dialogue, a participant's posted message must pass through a moderator, who decides whether or not to broadcast that message to the group. A self-moderated dialogue differs from a moderated dialogue in that participants take turns serving as the moderator.

Real-life conversation has more than the two standard tropes of unmoderated, akin to speaking directly to the group, and moderated, akin to raising one's hand and waiting to be called on before speaking. Ordinary conversation has quiet interruptions and loud interjections, private sidebars and caucusing. The ability to vary the conversational cadence is often essential to the effectiveness of the dialogue. In a controlled and well-ordered conversation, the occasional impassioned outburst signals the importance of an issue to the speaker. In most meetings, the tendency of one person to interrupt constantly and provide a running commentary to the dialogue under his breath undermines the experience.

Unchat mimics this by allowing the participant to choose among speaking, shouting and whispering his message. When a participant types a message and hits return, the software will by default send that message to the moderator, who decides whether or not to post it. However, understanding that sometimes people need to interrupt and bypass an ineffectual or disagreeable moderator or to demonstrate urgency, the participant may select the shout button to bypass the moderator and immediately broadcast the message publicly to the group. In real life, an interruption is clearly recognizable as such and blame for it rests with the speaker. In order to prevent the virtual moderator from taking any blame for the interruption, a shouted message is labeled as such. At the other end of the participation spectrum, a whisper is a private message to another participant. It is the equivalent of leaning over in your chair at a meeting and remarking quietly to the person next to you. In cyberspace, the concept of who is next to you expands to include anyone in the room. I can whisper to someone sitting in Singapore without interrupting the flow of conversation. Whispering can be essential for a few people to discuss and agree on a position before broadcasting their view to the larger group.

In real-life, if someone interrupts repeatedly, he will be asked by the moderator or by the participants to refrain or leave the room. This conversational etiquette is missing in the typical cyberspace chat room where interruption is the dominant mode of expression and participants' only option

in the face of inappropriate behavior is to leave. To address this, we made Unchat's shout and whisper features configurable. A participant can interrupt by typing a message and selecting shout, but the shout button will stop working after the participant has used up his pre-set number of interruptions. For a more anarchic, free-for-all dialogue, the number can be set very high. To control interruptions, the number of shouts can be set low. By imposing this rule explicitly, more so than in real space where etiquette is implicit, participants reflect on the rules of communication and adjust their behavior accordingly. It follows logically that a participant will be judicious in what he says by interruption if he knows that he can only do so five times. By highlighting the rules and making the structures visible, people begin to conform their behavior to the constraints.

Similarly, if a participant knows he can whisper only a few times before the button turns off, he will not engage in a running sidebar, heckling the speakers and moderator and distracting other participants. Instead, he will save his private remarks for when they are useful, or at least unusually humorous. A high number loosens the constraints against private conversations in the space. By sending the message "You have used 1 of 75 whispers," the software informs the participant that the environment is conducive to and encouraging of private caucusing. The explicit nature of the instructions imposes a process of reflection on the rules of communication and the dynamic within the group. It causes participants to think about the affect of interruption and private whispering on the outcome of the deliberative process.

10. Informed and Public: Archiving

The EPA consultation experiment illustrated that one of the most important features to the dialogue was having an archive of the discussion with summaries of the day's conversation.³⁶⁸ This helped participants to get a sense of the debate, review what they heard and catch up on what they missed.³⁶⁹ A deliberative discussion requires the structure created by facilitation, but it also requires the development of institutional memory within the group to allow one conversation to build and grow on the next. A Web conference, unlike a telephone conference call, allows for easy logging and transcription of a conversation. This ability to record the conversation not only helps to create memory within the group, but also makes the discussion more inclusive by allowing those who cannot participate to keep abreast of the dialogue.

With Unchat every conversation is logged in real time. Someone entering late can participate in the current conversation while opening a new window to see what was said at the beginning of the conversation. This is far less disruptive than entering a real-life meeting late and having to ask someone what took place in the first few minutes. The latecomer can catch up on what was said and immediately participate in the conversation, whereas in a real-life

³⁶⁸ Beierle, *supra* note 4, at 9.

³⁶⁹ *Id.*

conversation latecomers may be hesitant to jump in out of fear that they might have missed the gist of the conversation.

The archiving functionality of Unchat comprises two different archives. The first is a real-time transcript of the group's conversation. The second is a log of the conversation, including the moderator's various actions, like bounce, hold and delete. This second archive, known as the history, monitors the moderator's actions. This increases the transparency of the moderator role. The history is intended to make the moderator more accountable for his actions by creating a mechanism to prove whether the moderator has unfairly deleted or bounced messages. However, it is more than a control against moderator abuses, it is also a mechanism to study the effectiveness of different rule structures and their impact on the group. The organizer or the entire community can examine what was bounced, held and deleted to understand the effectiveness of different styles of moderation. The history is configurable to include or exclude whispers, which can be kept private or revealed later, depending on the needs of the community. For example, the history can be defined to include only moderator whispers and not whispers between participants.

The next version of the software should include text fields for summarizing transcripts and a function for automatically e-mailing transcripts to participants. Additional functions might include search tools for finding particular postings, such as threading and collaborative filtering technology to reorganize and sort comments by substance instead of chronology.

11. Informed: Whiteboard

Another essential feature of effective meetings in real space is the whiteboard (or, in some cases, the green or blackboard). Participants in a meeting often use a board to list an agenda, summarize consensus points, brainstorm, or evaluate a design together. The whiteboard is essential to effective conversation. In some meetings, only the facilitator holds the marker and can write on the board. In other meetings, such as brainstorming sessions, every participant might be expected to contribute to the board.

Whereas in real space, participants use a blank slate to write, draw, do math or pin up a poster, cyberspace uses many different kinds of whiteboards. Some whiteboards allow participants to write text and share it among the group, but it requires a different technology to draw or compute math problems with the computer's aid. Also, whether one person controls the whiteboard, control rotates from person to person, or each person can add, edit and delete from the whiteboard requires different sets of controls.³⁷⁰ To mimic the blank slate is

³⁷⁰ The core technology of PlaceWare, a business collaboration tool, is a sophisticated, shared whiteboard that allows participants to share slides, draw and doodle on a shared platform while speaking on a conference call. PlaceWare, <http://www.placeware.com> (last visited Dec. 23, 2002).

relatively easy, but taking advantage of the computer's power to aid drawing and problem solving is more expensive and difficult.

In the early designs of Unchat all participants could write on the whiteboard. Unchat had a text-only box that popped open whenever something new was written in it. However, writing something new on the whiteboard erased previous entries. Also, logic dictated having the option of vesting control over the whiteboard exclusively with the moderator and shifting control only when the moderator changed. Yet, this proved to be a contentious point among the design group, some of whose members felt that the whiteboard control should pass independently. For this reason, we refrained from incorporating whiteboard technology in the initial implementations, despite its noticeable absence and the need.

12. Informed: Integrated Libraries

By integrating content into the discussion tool, Unchat connects content to the conversation. The structure of the software promotes informed discussion by presenting participants with materials for reading and reflection prior to the conversation. Informed collaboration is a primary design requirement when constructing a system for democratic deliberation. Most Web sites offer a great deal of content. Some Web sites offer communications tools like bulletin boards or chat rooms. Few Web sites, if any, connect the two and present the content as an input for conversation rather than presenting the conversation as an adjunct or follow-up to the information. Deliberation means engaging in a conversation about issues of public import informed by useful information and a set, but amendable, agenda. The Internet makes it relatively easy to associate a library with each discussion so that the participants can connect content materials with each discussion.

Technically linking a library to a conversation cannot compare to the work required to conceive and create the content of a library. The task of devising the library must belong to someone other than the session organizer, such as an expert in that subject area or other members of the community who can share the responsibility. The ability to manipulate content in the library must be restricted to prevent accidental deletion of documents or addition of extraneous material.

The original Unchat design included three levels of libraries. First, a universal library allowed the uploading of documents on a given subject as a resource to topic creators. Each topic would have its own library with materials copied from the universal library, or separately uploaded. The topic creator could set up a library independently of the creator of the universal library, thereby spreading the work for library creation across multiple actors. Second, each participant would have a personal library entitled "my library." A participant could copy and paste documents from the upper level libraries to "my library" or upload his own content. In this way, participants can contribute information to the discussion without manipulating the general library. To make these libraries easier to use, the original design incorporated

a standard taxonomy of categories and subcategories to organize the documents.

But experience dictates that conversation often does not revolve around a library of resources, but rather around a single document or a handful of informational resources. The standard taxonomy designed to make using the library a consistent and familiar experience had the effect of burying needed resources. A series of deliberative conversations or a course on a given topic benefited from having an associated library, but there was little need for a universal library independent of the topic. The universal library presented content independently of any conversational purpose, thereby committing the same error as many Web sites.

The redesign of the library structure incorporated a powerful and flexible content management engine to make it possible to create custom libraries easily. A library can now contain one document or one hundred documents further organized into categories and subcategories. To make the job of creating libraries less onerous, the work can be spread among different people to share the burden and to maximize expertise. Every topic creator has the power to set up an associated topic library, including the power to add and delete categories, subcategories, and documents. Every chat creator has the power to set up a chat session library. Instead of having a universal library, a topic library and a personal library, the new system offers topic libraries, chat libraries and personal libraries.

A topic library can be the repository for a class syllabus and all the materials required for a semester's civic or educational discussion. For each individual weekly Unchat session, that week's organizer can set up a new library by downloading relevant materials from the topic library and any independent materials of the organizer's choice. The agenda for that particular discussion may be posted on this library. The organizer can also assign participants to perform a certain task, such as writing an essay or performing research on the Web, and then upload those results to the personal library. In this way, participants can interact with content and perform hands-on learning without corrupting the library structure. Learning by doing is one of the most effective ways to retain knowledge. With their own libraries, participants can engage in task-based learning. They can also make personal contributions to every dialogue and share content with their peers.

13. The Deliberative Speed-Bump: Navigation

Bringing information into the conversation by means of a whiteboard is one way to inform the dialogue and transform it from a conversation to a deliberation. While the whiteboard is useful for spontaneous information sharing and recording, it is less suited to preparing participants for a discussion. In real life, meetings are often preceded by the distribution of working papers or documents. Participants might also be required to attend an introductory lecture or a training session before being allowed to participate in

a more advanced working group. Unchat is designed to encourage reflection and preparation prior to discussion.

Pundits laud the speed of the Internet – how it makes everything that much faster.³⁷¹ However, we were interested in taking advantage of the Internet's flexibility to slow people down in order to permit the articulation, not only of an opinion but of "rational argument on its behalf."³⁷² The navigation of Unchat works differently from a traditional e-commerce site in that not every screen leads to a shopping cart. Instead, the navigation is expressly designed to promote the goals of deliberation. A participant wanting to jump into a conversation must first pass through the library. If so configured, he will also encounter a topical quiz, designed to frame the issues for debate and prompt reflection in an entertaining way. While no person can be forced to read, designing the system such that participants interact with the content makes deliberation easier. This navigation exploits the Web's informational resources and ties them more closely to the human interaction that takes place inside an Unchat forum.

14. The Virtual Speed-Bump: Quiz

Like the general structure of the navigation, the library system works to slow participants and promote education before the dialogue occurs. After the library, quizzes or polls can be inserted to enhance the deliberative structure. A quiz or a poll can be used to promote and stimulate thinking, as well as to test knowledge. The Unchat quizzes are intentionally not organized in test form. Instead, the quiz is a point-counterpoint interaction with the participant. When the quiz-taker answers a question, the system responds to that answer. For instance, if the quiz-taker answers with a typically left-wing point of view, the system might suggest a right-wing argument and further reading. The quiz is a tool for articulating issues in order to set the agenda and presenting questions for consideration in the debate. Quiz functionality could eventually be used in a variety of ways, including testing participant knowledge before and/or after a discussion, as a sorting mechanism for organizing discussion groups according to viewpoint (i.e. to mix or segregate people of different viewpoints based on their answers to quiz questions), to poll opinions before as well as after a discussion, to measure feedback to a discussion and organize deliberative focus groups.

Deliberative polling is an expensive endeavor in real space.³⁷³ It requires recruiting and bringing together groups of people across large distances for

³⁷¹ See GLEICK, *supra* note 44; Beth Simone Noveck, *Paradoxical Partners: Electronic Communication & Electronic Democracy*, in *THE INTERNET DEMOCRACY AND DEMOCRATIZATION*, 18-36 (Peter Ferdinand ed., Frank Cass 2000).

³⁷² Benjamin Barber, *Three Scenarios for the Future of Technology and Strong Democracy*, 113 *POL. SCI. Q.* 586 (1998-99).

³⁷³ For works outlining the deliberative polling process, see generally FISHKIN, *supra* note 45.

several days at a time.³⁷⁴ Participation in a deliberative poll is limited by the person's ability to leave behind a job, family and home.³⁷⁵ Yet, deliberative polls are important democratic experiments because they reveal how information and conversation can shape political opinion formation.³⁷⁶

With computer software, the deliberative poll can be implemented at a far lower cost and reach more people. The difference between face-to-face discussion and online discussion needs further understanding, but online polling or quizzing could be instrumental in constructing a deliberative poll in cyberspace. Combining this kind of deliberation mechanism with automated tools for recruiting participants would make it possible to run deliberative polls at far lower cost.

VI. PROCESSES FOR DELIBERATION: WHO WILL BUILD IT AND WILL THEY COME?

The first step in the Unchat experiment translated an understanding of the processes of deliberation into a virtual space for conducting deliberative dialogues. The existence of a tool for small-group, structured deliberation is a prerequisite to participatory electronic democracy. This tool alone is not enough, for it must be tied to relevant processes. There are numerous deliberation methodologies, which can and should be tested in online environments.³⁷⁷ Constructing new tools to aid in multimedia information presentation, participant recruitment, and drafting management are also possibilities. These tools would be useful additions to the toolkit of democratic technologies.

We are now continuing our empirical research to compare online and off-line deliberation. We are trying such deliberative technology in the context of dispute resolution, and as a tool for citizen consultation in both regulatory and civic environments. We need to gain much more experience with using this tool and others, separately and in combination, to know what does and does not work in democratic processes, both in the traditional political context and in other civic or business environments. We will need to combine this experience with newer technologies as they become available to develop improved tools. We need to understand better how to construct deliberation for a small group

³⁷⁴ See *id.*

³⁷⁵ See *id.*

³⁷⁶ See *id.*

³⁷⁷ See Kettering Foundation, *supra* note 16; Topsfield Foundation, *supra* note 16; AmericaSpeaks, at <http://www.americaspeaks.org>; Beierle, *supra* note 4, at 11 ("On-line dialogues need to evolve through an iterative process of experimentation and learning" writes Thomas Beierle in his conclusion to his study of the EPA online consultation process, illustrating that we are just at the beginning of our experience with on-line citizen consultation and participation).

and what is involved in taking it to scale to translate the experience of the small group deliberation into processes for large-scale institutional change.

Making deliberation work requires more than finding the right tool and the right discussion methodology, it also requires connecting the deliberative process to real world decision-making. As we, other cyber-lawyers and technologists progress with research and companies begin to build the tools, law once again has a role to play to institutionalize deliberative processes. Several measures will need implementation. First, we must mandate citizen participation and the use of technology to democratize and scale it. Second, we must finance the research, development, and implementation of democratic technologies and processes. Finally, we must develop deliberative practices in non-governmental contexts as a safeguard for self-regulatory procedures.

A. *Mandating Citizen Participation*

All levels and branches of government from local to federal should revisit how they solicit citizen participation. Potentially, as one scholar has suggested, the President should mandate citizen participation as part of the federal government's e-government initiatives.³⁷⁸ This is first a question of process and second of technology. Citizen participation processes should be reviewed in multiple contexts of political life, including rulemaking, government enforcement functions, and where authorities provide information, planning and review procedures. For example, the Nuclear Regulatory Commission might expand the scope and depth of citizen consultation in the planning of a nuclear waste disposal site and, at the same time, educate citizens about issues of safety using the Web. Through the use of technology, the Federal Communications Commission could solicit a broader range of stakeholder input when promulgating rules, bringing all relevant actors to the table, and not only those with high-priced lawyers and lobbyists, to ensure a more deliberative and democratic process.

The legal framework exists to incorporate and review such processes. The Administrative Procedure Act ("APA"), enacted in 1946, sets forth the general procedural requirements of U.S. federal government agencies.³⁷⁹ It mandates both the availability of agency information to the public and public participation in federal agency rule making.³⁸⁰ In 1941, the Attorney General's Committee on Administrative Procedure declared that "public participation 'in

³⁷⁸ See Beierle, *supra* note 4, at 12 ("Through an executive order, the president should encourage all federal agencies to conduct pilot on-line public dialogues in conjunction with traditional participation processes for rulemaking and policy formulation activities. The executive order should encourage agencies to consider electronic democracy in their electronic government planning efforts."); see also General Services Administration, *E-Gov*, at <http://www.egov.gov> (last modified Apr. 25, 2002) (providing more information about the U.S. federal government's electronic government initiatives).

³⁷⁹ See Administrative Procedure Act, 5 U.S.C. §§ 551-559 (2000).

³⁸⁰ See *id.*

the rule-making process is essential in order to permit administrative agencies to inform themselves and to afford adequate safeguards to private interests.”³⁸¹ Accordingly, section 552 provides that each agency must make available to the public information about the agency and its rules of procedure as well as information about “from whom, and the methods whereby, the public may obtain information, make submittals or requests or obtain decisions.”³⁸² The APA goes beyond a mere informational requirement to guarantee a right to petition. “After notice required by this section, the agency shall give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation.”³⁸³

With the proper tools and procedures, interaction and dialogue between citizens and government can be increased. Institutionalizing mechanisms that measure citizen input more accurately and provide politicians with more qualitative information should reduce the cost of governance. In addition to lowering costs, citizen participation should improve the quality and relevance of feedback gathered, improve coordination, and reduce confrontation.³⁸⁴ Also, it provides citizens a grassroots opportunity to have a serious public influence on policymaking through wider public representation, thereby reducing the influence of interest groups. Using technology to reach out to affected constituents provides a further opportunity for engagement on both a global and local level.

Furthermore, since technology can enable deliberative processes that allow citizens to set their own agenda and make their own decisions, the burden on politicians and bureaucrats is reduced. Imagine if, instead of 1,000 citizens registering individual complaints by e-mail, a community deliberation forum made it possible for these citizens to get together in a self-moderated deliberation, discuss their grievances, listen to and propose new solutions and vote on a course of action. This would be less burdensome because the eventual decision would be based on wider, popular consensus, reducing the costs of enforcement and increasing the democratic legitimacy of the decision reached.

³⁸¹ Arthur Earl Bonfield, *Public Participation in Federal Rulemaking Relating to Public Property, Loans, Grants, Benefits, or Contracts*, 118 U. PA. L. REV. 540, 540 (1970) (quoting *Final Report of the Attorney General's Committee on Administrative Procedure* at 103 (1941), contained in S. Doc. No. 248, 79th Cong., 2d Sess. 19-20 (1946)).

³⁸² 5 U.S.C. § 552(a)(1)(A) (2000).

³⁸³ *Id.* at § 553(c).

³⁸⁴ Mary C. Dollarhide, *Surrogate Rule Making: Problems and Possibilities Under the Administrative Procedure Act*, 61 S. CAL. L. REV. 1017, 1018 (1988) (“Agencies would not necessarily generate more rules via informal rule making procedures. Rather, the flexible guidelines increased the likelihood that agencies would first seek out useful information regarding proposed regulations, and then give meaningful consideration to the major issues at hand. This, in turn, would result in better administrative rule making.”).

B. Financing Citizen Participation

Just as the government acts as a market player by sponsoring the defense industry's research and development and purchasing the resulting products, the government could also create a market for democratic technologies. Alone, the private sector has little incentive to build tools to enhance citizen participation and foster deliberation. However, if government becomes a consumer of such products, incorporating interactivity and citizen feedback into processes of governance, the marketplace will have the incentive to develop tools for both e-commerce and democratic life.

These tools would have parallel applications for the civic, educational and cultural institutions that depend on democratic and deliberative processes of self-governance. However, the non-profit sector does not have the money to build and disseminate such technologies and processes. Incorporating more citizen engagement requires the construction of appropriate deliberative processes both on and off-line. Just as the Clinton Administration called upon federal governmental agencies to make information freely available to the public via the Internet, current political leaders may require governmental authorities to develop mechanisms for including a wider array of public voices in their decision-making process.³⁸⁵

C. Deliberation and Civil Society: Sponsoring Civic Engagement

Government is not the only entity that can foster innovation for democracy. In a legal environment where companies and individuals are increasingly called upon to self-regulate, improved deliberative processes can help produce greater accountability in civil society and business life.³⁸⁶ In addition to becoming a consumer of democratic technologies, government can enact subsidies and tax incentives to encourage the adoption of deliberative processes and technologies in other sectors, including by industry. Such democratic tools, designed for the purposes of democracy, would enable self-

³⁸⁵ At the Ministerial Conference on Electronic Government, European foreign ministers issued a joint declaration, recognizing "the importance of increasing participation in local, regional, national and European democratic processes." EGovernment Ministerial Conference, *supra* note 97, at 3. The Council of Europe, Congress on Local and Regional Authorities, called for the elaboration of national strategies to enhance citizen participation on all important regulatory issues and the use of "new information and communication technologies to strengthen democratic governance and its legitimacy, to promote values like openness, transparency and accountability of administration" as well as to promote "public debate and communication." Council of Europe, Recommendation 54, *supra* note 98, at <http://www.coe.fr/cplre/textad/rec/1999/rec54%2899%29e.htm>. For more information, see generally the Council of Europe, Congress of Local and Regional Authorities of Europe at <http://www.coe.fr/cplre/indexe.htm>.

³⁸⁶ See BROOK MANVILLE & JOSIAH OBER, *A COMPANY OF CITIZENS: WHAT THE WORLD'S FIRST DEMOCRACY TEACHES LEADERS ABOUT CREATING GREAT ORGANIZATIONS* (2002) (discussing the role of democratic practices in spurring innovation and creating successful companies).

regulatory bodies to engage in the same kind of stakeholder consultation as a government agency.

VII. CONCLUSION

Ten years into the Internet revolution, we are only at the beginning of our exploration of what technology can do to enrich, not only our economy, but also our political economy. The nature of cyberspace is such that, with adequate tools, we can experiment with new ways to improve democratic participation and to overcome the political alienation that is endemic to our society. The lawyer and the lawyer-as-policymaker have always carried a duty to use legal tools to organize social and political relations to serve social justice and democracy. For fifty years after World War II, the global community has enacted myriad measures, direct and indirect, to safeguard democracy and prevent the rise of fascism. We have understood that television and other media affected us as citizens and therefore had to be enlisted in the struggle to protect democracy. The contemporary challenges to our values may be new but the preservation of democracy continues to be the goal. Technology is changing but its public impact has not.

In response, the cyber-lawyer has to recognize and assess technology's impact on democracy. But the cyber-lawyer need not be a by-stander in the Internet age. Whereas the philosopher may articulate a vision of the good life, it is most often the lawyer who understands how to realize that vision and make it a social reality. The cyber-lawyer can enlist the technology itself along with the familiar devices of his legal arsenal to safeguard democracy and strengthen its institutions.