

2004

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Recommended Citation

Emory Law Journal, Vol. 53, Issue 2 (Spring 2004), pp. 433-522

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THE ELECTRONIC REVOLUTION IN RULEMAKING

*Beth Simone Noveck**

It is one thing to understand the principles, and another thing to understand the forms of government. The former are simple; the latter are difficult and complicated. There is the same difference between principles and forms in all other sciences. Who understood the principles of mechanics and optics better than Sir Isaac Newton? and yet Sir Isaac could not for his life have made a watch or a microscope.¹

INTRODUCTION

Informal rulemaking, “one of the greatest inventions of modern government,”² is about to be transformed by the silent revolution of e-government, the widespread incorporation of Web-based technology in the public sector. Whether the revolution is a boon or a bust for democracy will depend on whether that technology is designed to strengthen the right of citizens to participate in making administrative rules. Many federal agencies already exploit efficiency-creating automation in the administration of federal

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¹ BENJAMIN RUSH, THE SELECTED WRITINGS OF BENJAMIN RUSH 78 (Dagobert D. Runes ed., Philosophical Library 1947) (1777).

² KENNETH CULP DAVIS, DISCRETIONARY JUSTICE: A PRELIMINARY INQUIRY 65 (1969); *see also* STEPHEN BREYER, REGULATION AND ITS REFORM 348 & n.24 (1982) (quoting Davis).

rulemaking.³ Now funding and impetus provided by the E-Government Act of 2002⁴ will accelerate the inevitable digitalization of the informal (or so-called “notice and comment”) rulemaking process and the transition by federal agencies from paper-based to fully electronic crafting of regulations. This redesign of administrative rulemaking as “e-rulemaking” augurs the end of autonomous agency practices and the beginning of centralization through automation.⁵ No longer will each federal agency create regulations according to its own methods. Instead, all rulemaking activity will be housed⁶ in a single website, <http://www.regulations.gov>, under the direction of the Executive. This e-rulemaking initiative is perhaps the most far-reaching and important such governmental transformation ever effected. At the same time, this radical overhaul of the administrative process is being conducted in a closed and almost secretive manner without public consultation. This design process ignores how individuals and groups communicate and work together to solve problems.

E-rulemaking does not fundamentally change the need for rules.⁷ What makes e-rulemaking potentially revolutionary⁸ is that it necessitates mapping

³ See Florida State University College of Law, *Notable Uses of the Internet in Federal Agency Decisionmaking*, at <http://www.law.fsu.edu/library/admin/admin2.html> (last visited May 16, 2004).

⁴ Pub. L. No. 107-347, 116 Stat. 2899; OFFICE OF MGMT. & BUDGET, JOSHUA B. BOLTEN, IMPLEMENTATION GUIDANCE FOR E-GOVERNMENT ACT OF 2002, MEMORANDUM TO ALL DEPARTMENT AND AGENCY HEADS, OMB Memorandum M-03-18 (Aug. 1, 2003) [hereinafter BOLTEN MEMORANDUM], available at <http://www.whitehouse.gov/omb/memoranda/m03-18.pdf>. The legislation, passed by Congress last year, proposes to make it easier for citizens to interact with government, as well as streamline citizen-to-government transactions. Key elements of the E-Government Act of 2002 include the institutionalization of electronic government initiatives, their organization and funding structure, establishment of an Office of Electronic Government under the authority of the Office of Management and Budget (OMB), endorsement of cross agency initiatives, such as E-Rulemaking, Geospatial One-Stop, E-Records Management, E-Authentication (especially E-Signatures) and Disaster Management, and provisions for use of technology by federal courts and federal agencies. For a summary, see <http://thomas.loc.gov/cgi-bin/bdquery/z?d107:HR02458:@@L&summ2=m&TOM:/bss/d107query.html#summary> (last visited May 16, 2004). See Rebecca Fairley Raney, *Move to Open Government Electronically*, N.Y. TIMES, Dec. 23, 2002, at C4. For an analysis of the bill, see CTR. FOR DEMOCRACY & TECH., S. 803, E-GOVERNMENT ACT OF 2002, AS AMENDED, available at <http://www.cdt.org/legislation/107th/e-gov/020325s803analysis.pdf> (last visited Mar. 16, 2004).

⁵ All rulemaking activity will eventually be brought together in a single website, <http://www.regulations.gov>, under the coordination of OMB. See BOLTEN MEMORANDUM, *supra* note 4, at 7 (“The E-Government Act enhances OMB’s authorities under the Clinger-Cohen Act with greater emphasis in the development of electronic initiatives across the government.”). This continues the trend toward centralization of regulatory activity under greater presidential control. See Robin Kundis Craig, *The Bush Administration’s Use and Abuse of Rulemaking, Part I: The Rise of OIRA*, ADMIN. & REG. L. NEWS, Summer 2003, at 8. For further discussion, see *infra* Part III.

⁶ Though no decision has been made regarding the structure of electronic rulemaking, from the public point of view, rulemaking will appear to take place at a central point.

⁷ Compared to 270 statutes passed each year by Congress, federal agencies promulgate between 4000

the processes of rulemaking onto interactive software, embedding the desired practices into the design of the virtual spaces for rulemaking.⁹ By virtue of having to “translate” rulemaking into a set of software specifications, agency officials have to focus on the practices and precise how-to’s of rulemaking. Technology design opens the political imagination to better ways of organizing, not simply documents, but the interpersonal relationships of the rulemaking process. The code does not just recite desired procedures; it implements them, enabling the tasks of rulemaking while furthering underlying democratic goals. More precisely, the code maps the communications and information flows of groups, including regulators, stakeholders, and the public, who are involved in rulemaking. Software eventually will control who speaks and when and with whom. The process of designing this technology has precipitated the first confrontation with the question of how to enhance “public participation in government by electronic means”¹⁰ and demands a re-examination of the practice of administrative rulemaking. This mandate brings the existing democratic deficit of rulemaking to the fore. But it also presents the means to remedy it by using interactive technology to make citizen participation more manageable for regulators and more collaborative between government and citizens.¹¹

The necessity to design information and communication systems for rulemaking demands nothing less than a rethinking of bureaucracy itself. Designing for rulemaking creates an opportunity to shift the emphasis away from one-off commenting by individuals or interest groups on a document and

and 8000 rules every year (not including compliance orders). According to figures compiled from the National Archives and Records Administration, 4187 rules were proposed in 2002. See CLYDE WAYNE CREWS, JR., *TEN THOUSAND COMMANDMENTS: AN ANNUAL SNAPSHOT OF THE FEDERAL REGULATORY STATE* 13 (2003).

⁸ J.M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Economy*, 79 N.Y.U. L. REV. 1 (2004).

⁹ Beth Simone Noveck, *Designing Deliberative Democracy in Cyberspace: The Role of the Cyber-Lawyer*, 9 B.U. J. SCI. & TECH. L. 1 (2003); Clay Shirky, *A Group Is Its Own Worst Enemy: A Speech at ETech* (Apr. 24, 2003) (discussing “social software”), at http://www.shirky.com/writings/group_enemy.html; see also HENRY PETROSKI, *DESIGN PARADIGMS: CASE HISTORIES OF ERROR AND JUDGMENT IN ENGINEERING* (1994).

¹⁰ E-Government Act of 2002, Pub. L. No. 107-347, § 206(a)(2), 116 Stat. 2899.

¹¹ Participatory democracy emphasizes the importance of direct citizen involvement in decisionmaking. Distinct from direct democracy, participatory democracy refers to engagement that goes beyond mere polling or voting to include processes that allow citizens to participate in setting the agenda and deliberating it. For a complete discussion of participatory democracy, see BENJAMIN R. BARBER, *STRONG DEMOCRACY: PARTICIPATORY POLITICS FOR A NEW AGE* (1984). See also Benjamin Barber, *Three Scenarios for the Future of Technology and Strong Democracy*, 113 POL. SCI. Q. 573, 585 (1998); Robert A. Dahl, *Procedural Democracy*, in *CONTEMPORARY POLITICAL PHILOSOPHY: AN ANTHOLOGY* 109-27 (Robert E. Goodin & Philip Pettit eds., 1997).

toward cultivating ongoing communities of interest and expertise, passionate about solving problems through the mechanisms of regulatory policy. Rulemaking is a social process of drafting and policymaking that requires deliberation among groups. These groups include stakeholders who volunteer and those individuals and interest groups recruited to inform the process. Through repeated interaction, conversation, and deliberation—the “peer production”¹² of participation—these communities of practice¹³ can germinate the kind of dynamic knowledge base to inform policy across rulemakings and over time. If designed toward this end, technology can make it easier to form and maintain such deliberative communities and to give them a stronger voice in policymaking.

The Administrative Procedure Act (APA) grants the public¹⁴ a right to participate directly in the rulemaking process. Participation improves the quality of rules and makes regulatory rulemaking more legitimate and accountable. It is ideally suited to public involvement because rulemaking concerns relatively specific subject matter bounded by the goals set forth in authorizing legislation.¹⁵ Yet, despite the right, the reality of participation as currently practiced is largely indirect, mediated by interest groups and hopelessly time-consuming for agency officials.¹⁶ By necessity, citizen

¹² Yochai Benkler, *Freedom in the Commons: Towards a Political Economy of Information*, 52 DUKE L.J. 1245, 1256 (2003) (stating that peer production is the collaborative process by which individuals “contribute to a joint effort” to produce “information or culture”).

¹³ ETIENNE WENGER ET AL., *CULTIVATING COMMUNITIES OF PRACTICE* 4 (2002) (“Communities of practice are groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.”).

¹⁴ See Ernest Gellhorn, *Public Participation in Administrative Proceedings*, 81 YALE L.J. 359, 360 (1972) (“The ‘public interest’ . . . is not a monolith,” writes Gellhorn. “It involves a balance of many interests and the presentation of otherwise unrepresented views should be viewed as a potential aid rather than a hindrance to agency operations.”). Though much of the literature distinguishes between private interests and public interest groups, neither one is any more or less “public” than the other. Public interest groups come in many different forms. For purposes of this Article, “public participation,” unless otherwise stated, shall refer both to individual, private parties and public interest group participation. The public, as a countervailing force and source of information, comprises both individual citizens and citizens represented by nongovernmental organizations with a common purpose. I will further differentiate between procedures for soliciting individual input and for soliciting input from organized interests in Part IV when I discuss specific models for participation in different contexts. See generally MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS* (1965) (remarking that groups with high stakes in the outcome participate).

¹⁵ CORNELIUS M. KERWIN, *RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY* 32-33 (2d ed. 1999) (stating that rulemaking provides a much better delineated opportunity for public participation because “the issues are better defined, the actions the government is contemplating are more specific, and the implications for affected parties are much easier to predict”).

¹⁶ Reforms aimed at improving participation have furthered a passive conception of participation through

participation is less a *res publica* and more a top-down exercise driven by government.

This Article argues that this shortcoming is the result of a failure to invent and mandate *participative practices*.¹⁷ The notice and comment process, I argue, should offer, not merely an individual right subsequently enforceable by courts *ex post*, but a framework to enable¹⁸ methods for “doing democracy” that build the skills and capacity necessary for individuals and organizations to form communities of participation.¹⁹ Counterintuitively, the legal rule by itself cannot institutionalize the right to participate. Needed are the practices designed and structured to effectuate the rule.²⁰ Practices go beyond written procedures. They are methods that determine who sets the agenda, what subject matter the agenda covers, who participates and for how long, and what comprises the rules of dialogue. In many fields, such as environmental and land use management, participation is frequently mandated, especially on a local level (for example, to decide where an environmental hazard will be sited). But the forms it takes are haphazard and neither manageable nor replicable for rulemaking generally. Citizens and regulators alike need ways to build communities of practice and to take advantage of technology to work together in groups and “do democracy” in rulemaking. Current plans for e-rulemaking do nothing of the kind. They centralize control, adopting a one-size-fits-all solution without regard to its impact on public engagement and without an understanding of what it entails.

transparency. Statutes such as the Freedom of Information Act, Government in the Sunshine Act, and Paperwork Reduction Act facilitate the provision of information but do not encourage the use of it through active practice. Freedom of Information Act, Pub. L. No. 89-487, 80 Stat. 250 (1966) (codified as amended at 5 U.S.C. § 552 (2000)); Government in the Sunshine Act, Pub. L. No. 94-409, 90 Stat. 1241 (1976) (codified as amended at 5 U.S.C. § 552b (2000)); Paperwork Reduction Act of 1980, Pub. L. No. 96-511, 94 Stat. 2812 (codified as re-enacted at 44 U.S.C. §§ 3501-3520 (2000)); Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 17, 1981), *revoked by* Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993), *amended by* Exec. Order No. 13,258, 67 Fed. Reg. 9385 (Feb. 26, 2002).

¹⁷ BARBER, *supra* note 11, at 272 (“The historical evidence of New England towns, community school boards, neighborhood associations, and other local bodies is that participation fosters more participation.”).

¹⁸ This follows on the initial example set by the Negotiated Rulemaking Act of 1990, Pub. L. No. 101-648, 104 Stat. 4969 (codified as amended at 5 U.S.C. §§ 561-570 (2000)) (encouraging agencies to use the process when it enhances informal rulemaking procedures).

¹⁹ According to Alexander Meiklejohn, democratic self-governance is the central goal of the First Amendment, enshrined in our constitutional and historical tradition. See Alexander Meiklejohn, *The First Amendment Is an Absolute*, 1961 SUP. CT. REV. 245, 255; see also William J. Brennan, Jr., *The Supreme Court and the Meiklejohn Interpretation of the First Amendment*, 79 HARV. L. REV. 1, 12 (1965).

²⁰ Audrey G. McFarlane, *When Inclusion Leads to Exclusion: The Uncharted Terrain of Community Participation in Economic Development*, 66 BROOK. L. REV. 861 (2000) (discussing the disconnect between the legal principle and the complex practice of citizen participation in urban economic development).

Administrative rulemaking has been the subject of significant legal writing but none of those writings have discussed models of participation practices.²¹ We have to distinguish clearly practice from procedure. The public has not been deprived of an opportunity to participate. Rather, procedural safeguards have existed but without the methods to transform the right to participate into a meaningful ability to do so. This Article argues, in the wake of technological change, for a paradigm shift away from the *right* to participate and toward an examination of *participative practices*, the how-to's of participation. Without defined practices, courts cannot mandate consultation beyond the minimal requirements of the APA.

The argument is strongly normative. The aim of this Article is to explore how the use of technology in rulemaking can promote more collaborative, less hierarchical, and more sustained forms of participation—in effect, myriad policy juries—where groups deliberate together. Because we are dealing here with the making of practical policy on a national level, e-rulemaking presents a singularly important opportunity to develop information systems that reflect the way groups actually work together and thereby to enable participatory practice. E-rulemaking should foster these communities and embrace both those who are eager to be involved and those who are recruited to the task of serving on such policy juries. Only through active engagement can citizens and regulators alike learn the difficult choices involved in rulemaking and learn to become more effective participants in the process. At the same time, the mechanisms for conducting policy juries should include ways for civic groups, stakeholders, and citizens to run their own participatory consultations on policymaking and for those deliberations to be relevant to the final government decisionmaking process.

By refocusing the attention of scholarship and policy in this area we can move away from the traditional critiques, which regard the shortcomings of participation as chronic and endemic, toward practice-centered correctives that exploit the potential of new technologies in operation. This *design-centered approach* has the potential both to ground the law of rulemaking in the reality

²¹ There have been case studies of public sector organizational management, but these political science and business case studies do not adequately tie their analyses of best practices to the underlying legal theory. Information science and law, as fields of study, have much to learn from one another toward the end of mapping appropriate participation processes. See DORIS A. GRABER, *PUBLIC SECTOR COMMUNICATION: HOW ORGANIZATIONS MANAGE INFORMATION* (1992).

of its actual practice and to anchor that practice in the theory of participatory democracy and collective action.²²

Technology itself is not per se the savior of citizen participation. What is revolutionary are not the tools alone, but the way they embed into the tools methods of interpersonal communication and information exchange. I call this methods-plus-technology “speech tools.” They enable group collaboration, not because they are interactive, but because they *structure*²³ and *limit*²⁴ communication. They help to unblock the bottleneck of irrelevance and superfluity. Speech tools make communication useful by managing it and can therefore structure cooperation by groups.²⁵ Agency officials can use these tools to bring about qualitative (as distinct from merely quantitative) and manageable communication in rulemaking.

Take, for example, the difference between a website that invites the user to “click here to comment” without more and the website that asks the citizen to respond to or rate another citizen’s comment in exchange for the privilege of posting one’s own.²⁶ The latter software is designed to stimulate more deliberative²⁷ participation, ensure a higher degree of responsiveness among commenters, and connect disparate individuals, transforming them into a

²² ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990).

²³ Owen M. Fiss, *Free Speech and Social Structure*, 71 IOWA L. REV. 1405 (1986); see also OWEN M. FISS, *THE IRONY OF FREE SPEECH* 4 (1996).

²⁴ Roger C. Cramton, *The Why, Where and How of Broadened Public Participation in the Administrative Process*, 60 GEO. L.J. 525, 537 (1972) (noting that making participation effective does not mean letting everyone talk all the time, but instead allowing agencies to structure and manage participation to make it practicable).

²⁵ OLSON, *supra* note 14, at 2 (stating that unless the number of individuals is small, rational self-interested individuals will not act to achieve their group interests without coercion or other special devices).

²⁶ Yochai Benkler relates the example of a posting to slashdot.org on the effects of a controversial, new, high-tech copyright law that garnered 792 comments over two days. Because the comments on slashdot are peer-reviewed, they can be sorted for quality. Benkler, *supra* note 12, at 1258.

²⁷ Joshua Cohen, *Deliberation and Democratic Legitimacy*, in *CONTEMPORARY POLITICAL PHILOSOPHY: AN ANTHOLOGY* 143 (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 AND DISCOURSES* 23 (G.D.H. Cole, trans., E.P. Dutton 1947) (1762) (“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.”); see also DAVID MATHEWS & NOELLE MCAFEE, *MAKING CHOICES TOGETHER: THE POWER OF PUBLIC DELIBERATION* (2001), available at http://www.kettering.org/Foundation_Publications/Publication_List/publication_list.html#Community%20Politics; SARAH RICKMAN, *COMMUNITY LEADERSHIP: COMMUNITY CHANGE THROUGH PUBLIC ACTION* (n.d.).

group.²⁸ Viewing other comments might also cause the citizen to reflect on tone and format before commenting, thereby promoting more disciplined participation. Or imagine if the software offered a graphical scatterplot²⁹ of comments to display visually the range of opinions among the group. The design of the software can be employed to ensure that more ideas get a fair and equal hearing, that comments are informed, relevant, and responsive to one another, and that the general level of discourse is raised and reasoned. Speech tools help a group of private individuals and interests to cohere into a community, to develop a sense of that group's culture, and to begin to act together as a group. In short, the technology can "code" greater participation and deliberation into the process.

The argument that by structuring communications, new technology enables the practice of participation is half the solution. The mere fact that technology should be structured to democratize rulemaking does not mean it will be.³⁰ Distrust of participation coupled with resistance on the part of individual agencies³¹ to automating and centralizing administrative procedure³² (and a lack

²⁸ According to Daniel Yankelovich, an expert on the use of dialogue in management, dialogue "turns out to be a highly specialized form of discussion that imposes a rigorous discipline on the participants." DANIEL YANKELOVICH, *THE MAGIC OF DIALOGUE: TRANSFORMING CONFLICT INTO COOPERATION* 16 (1999) (distinguishing dialogue from other forms of communication as a special form of problem-solving talk) [hereinafter YANKELOVICH, *MAGIC OF DIALOGUE*]; see also DANIEL YANKELOVICH, *COMING TO PUBLIC JUDGMENT: MAKING DEMOCRACY WORK IN A COMPLEX WORLD* (1991).

²⁹ Microsoft Corp., *About Netscan*, at <http://netscan.research.microsoft.com/about/> (displaying chart and bar views of newsgroups) (2004); see also Martin Dodge, *The Netscan Project: Mapping the Social Geography of Usenet News*, MAPPA MUNDI MAG., at http://mappa.mundi.net/maps/maps_019/ (last visited Mar. 30, 2004).

³⁰ As Richard Stewart recently pointed out, administrative law tends to be conservative, evolving without shedding older forms. Richard B. Stewart, *Administrative Law in the Twenty-First Century*, 78 N.Y.U. L. REV. 437, 443 (2003); cf. Henry H. Perritt, Jr., *The Electronic Agency and the Traditional Paradigms of Administrative Law*, 44 ADMIN. L. REV. 79, 80 (1992) (recognizing the role of system design in fostering appropriate processes, but concluding that information technology will ultimately advance all of the traditional goals of administrative law, including participation).

³¹ U.S. GEN. ACCOUNTING OFFICE, *ELECTRONIC RULEMAKING: EFFORTS TO FACILITATE PUBLIC PARTICIPATION CAN BE IMPROVED* 7 (2003), available at <http://purl.access.gpo.gov/GPO/LPS43244>.

³² A rush to beat European and various Asian governments to dominance in e-government service offerings creates an added incentive. See, e.g., Ministerial Declaration, European eGovernment Conference 2003 (July 7-8, 2003) (a ministerial declaration issued by Lucio Stanca, Italian Minister for Innovation and Technology and agreed to by the thirty European Union, European Fair Trade Association, candidate, and accession countries, on behalf of the Italian Presidency, proposing concrete measures to accelerate the move to e-government), available at http://europa.eu.int/information_society/eeurope/egovconf/doc/ministerial_declaration.pdf; see also Singapore Government, E-Government Action Plan (2003) (earmarking \$1.5 billion to "delight[] customers" and "connect[] citizens" through a "networked government"), available at http://www.egov.gov.sg/egovt_action_plan.htm.

of adequate funding³³) will likely lead to a race to the bottom, an implementation of the least desirable system for electronic rulemaking. As with electronic voting, which is frequently in the news, the lack of attention to design flaws in rulemaking will not only thwart the realization of technology's benefits, but it could undermine civil liberties.³⁴ This will lock us into a procrustean bed of technological uniformity that might just as easily weaken democratic practice and reinforce undesirable values. Frankly, what ought to happen—namely, the exploitation of technology to improve the methods of the comment process—is unlikely.

Simply putting notice and comment online makes the cost of speech cheaper. This will open the floodgates³⁵ to a quantity of undifferentiated public input—"notice and spam"—that will exacerbate regulatory fatigue.³⁶ Imagine a draft rule accessible via the Internet with a blank text box and button marked "Click Here to Comment."³⁷ Putting the notice-and-comment process as is on the Internet so that anyone can post a comment to a proposed rulemaking reduces the costs³⁸ of participation.³⁹ Unifying disparate agency procedures

³³ Despite the Bush administration's request for \$45 million to support the much-touted E-Government Act, the U.S. House Appropriations Committee approved only \$1 million for the first year, saying the White House had not justified the spending request. Roy Mark, *House Panel Approves Deep E-Gov Funding Cuts*, INTERNET.COM (July 28, 2003), at <http://dc.internet.com/news/article.php/2240881>.

³⁴ See Paul M. Schwartz, *Privacy and Participation: Personal Information and Public Sector Regulation in the United States*, 80 IOWA L. REV. 553, 566 (1995); PIPPA NORRIS, E-VOTING AS THE MAGIC BALLOT? 3-4 (Kennedy Sch. of Gov't, Harvard Univ., Working Paper No. RWPO2-016, 2002).

³⁵ Stuart W. Shulman, *An Experiment in Digital Government at the United States National Organic Program*, 20 AGRIC. & HUM. VALUES 253, 255 (2003) (noting that the U.S. Department of Agriculture (USDA) received over a quarter of a million public comments in response to a rulemaking under the National Organic Program where comments could also be submitted via the World Wide Web, an unprecedented response).

³⁶ IAN AYRES & JOHN BRAITHWAITE, *RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE* 82-84 (1992); Rebecca Fairley Raney, *E-Mail Finds the Rare Ear in Congress*, N.Y. TIMES, Dec. 13, 2001, at G11 (observing that many congressional offices, ill-equipped to cope with the deluge of the correspondence Internet has brought, have stopped disclosing e-mail addresses to the public and that staff members and lobbyists say e-mail is far less successful than faxes, phone calls, or letters in reaching and influencing legislators). Other countries have reported a significant increase in the amount of feedback received from citizens since the publication of public servant e-mail addresses via the Web. ORG. FOR ECON. CO-OPERATION & DEV. (OECD), *CITIZENS AS PARTNERS: INFORMATION, CONSULTATION AND PUBLIC PARTICIPATION IN POLICY-MAKING* 68 (2001), available at <http://www1.oecd.org/publications/e-book/4201131e.pdf>.

³⁷ See Stuart W. Shulman, *Citizen Agenda-Setting, Digital Government, and the National Organic Program* at 4, available at <http://www.drake.edu/artsci/faculty/sshulman/Papers/APSA2000.pdf> (last visited Mar. 17, 2004); *supra* note 35.

³⁸ Roger Cramton points out that already in 1972, participation in a major case before the Federal Trade Commission (FTC) would have cost an intervenor \$100,000, with the cost of participation in a Food and Drug

into a centralized “portal”⁴⁰ removes the hurdle of learning differing practices, making it easier for a wider array of citizens to participate, not just those interest groups versed in the ways of specific agency cultures. Automating the comment process might make it easier for interest groups to participate by using bots—small software “robots”—to generate instantly thousands of responses from stored membership lists. Moving from longstanding agency traditions to a rationalized online system levels the playing field and lowers the bar to engagement. Suddenly, anyone (or anything) can participate from anywhere. And that is precisely the potential problem.

Increased network effects may not improve the legitimacy of public participation.⁴¹ For without the concomitant processes to *coordinate*⁴² participation, quality input will be lost; malicious, irrelevant material will rise to the surface, and information will not reach those who need it. In short, e-rulemaking will frustrate the goals of citizen participation. The revolution may, in fact, lead to a “reign of terror.” James Rossi argues that too much participation imposes costs on regulatory decisionmaking, leading to worse, not better, public policy. At a critical point, participation results in information overflow and the proliferation of disinformation.⁴³ It leads to the current

Administration (FDA) rulemaking estimated at between \$30,000 and \$40,000 at that time. Cramton, *supra* note 24, at 538.

³⁹ This is one reason why the Regulatory Flexibility Act, which aims to provide small business entities with real opportunity to participate in rulemakings that are likely to affect them, calls for soliciting and receiving public comment over computer networks. 5 U.S.C. § 609(a)(4) (2000) (amending comment procedure to include “soliciting and receiving comments over computer networks”); see Small Business Regulatory Enforcement Fairness Act of 1996, enacted by Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (codified at 5 U.S.C. §§ 601, 801-808).

⁴⁰ “Portal” is defined as a website to visit when looking for links to other sites. It is a central gateway with access to thematically connected material. DOUGLAS DOWNING ET AL., *DICTIONARY OF COMPUTER AND INTERNET TERMS* 375 (8th ed. 2003).

⁴¹ In thinking about the Internet, it has been a common misunderstanding to equate more information and more communication with better democracy. Beth S. Noveck, *Paradoxical Partners: Electronic Communication and Electronic Democracy*, in *THE INTERNET, DEMOCRACY AND DEMOCRATIZATION* 18 (Peter Ferdinand ed., 2000); see Joseph S. Nye, Jr., *Technology.gov: Information Technology and Democratic Governance*, in *DEMOCRACY.COM: GOVERNANCE IN A NETWORKED WORLD* 1, 8-14 (Elaine Ciulla Kamarck & Joseph S. Nye, Jr. eds., 1999).

⁴² See generally Yochai Benkler, *Coase's Penguin, or, Linux and The Nature of the Firm*, 112 *YALE L.J.* 369 (2002) (noting that large-scale collaboration projects, such as open source computing, demonstrate that financial incentives to create information may be less relevant in certain circumstances than the ability to coordinate production).

⁴³ To the extent that open participation is justified as necessary to achieve “customer satisfaction,” Cary Coglianese points out that satisfaction is not the sole basis by which to evaluate the success of rulemaking. Participant satisfaction, while one of the easiest variables to measure empirically, does not necessarily indicate that a given policy is better for the public. Participants in the process may or may not be representative of the public as a whole, nor are participants necessarily able to evaluate what a specific policy means for them.

situation in which the reading of public comments has to be outsourced to third-party consultants.⁴⁴

By lowering barriers to participation, e-rulemaking may increase the incentive for agencies and the public to “work around” technological mechanisms and shift away from transparent toward less democratic, but more manageable, models of back-room consultation.⁴⁵ Or, in a worst-case scenario, speech tools are used, not simply to structure and limit, but to control and manipulate discourse, resulting in even greater flaws in democratic participation than those that plague offline rulemaking.⁴⁶ In the dystopic scenario, technology ends up reinforcing the deeply antiparticipative culture of administrative rulemaking. As Dan Esty emphasizes,

giving “voice” to more people does not guarantee better policymaking. The promise of cyberdemocracy with a fully informed and engaged populace could give way to “spam,” misinformation, and dialogue among the uninformed that diminishes thoughtful deliberation. More opinions being heard may lead to chaos and breakdown rather than higher quality decisions. Even if some participants in the policy process stay engaged, a flood of information could lead to narrowly focused decisionmaking with little consideration given to the broader context of a policy choice.⁴⁷

At this critical juncture when technology is about to upend administrative practice, this Article focuses on public participation in the informal rulemaking process⁴⁸ and how information and communication technology is likely to

They may have found the process rewarding but this perception of the process says nothing about the usefulness of the outcomes. See generally CARY COGLIANESE, *IS SATISFACTION SUCCESS? EVALUATING PUBLIC PARTICIPATION IN REGULATORY POLICYMAKING* (Kennedy Sch. of Gov't, Harvard Univ., Working Paper No. RWPO2-038, 2002).

⁴⁴ See KERWIN, *supra* note 15, at 139.

⁴⁵ Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 DUKE L.J. 1385, 1393 (1992) (“Frustrated agencies are beginning to explore techniques for avoiding notice-and-comment rulemaking altogether, such as establishing rules in adjudications.”); John Markoff, *Whitehouse E-Mail System Becomes Less User Friendly*, N.Y. TIMES, July 18, 2003, at A1 (observing that increase in volume of e-mail messages sent to White House led to redesign of system to prevent direct e-mail communication).

⁴⁶ For example, Barbara Brandon and Robert Carlitz assert that new online innovations will improve transparency and foster better rulemaking processes without addressing and justifying the design choices. They call for the use of asynchronous discussion tools without any evidence that asynchronous discussions are more likely to produce the desired results than synchronous mechanisms. Barbara H. Brandon & Robert D. Carlitz, *Online Rulemaking and Other Tools for Strengthening Our Civil Infrastructure*, 54 ADMIN. L. REV. 1421, 1431-32 (2002).

⁴⁷ Daniel C. Esty, *Environmental Protection in the Information Age*, 79 N.Y.U. L. REV. 115, 172 (2004) (footnotes omitted).

⁴⁸ Much of what this Article discusses applies to the public’s right to participate in adjudication and other

change it. It argues in favor of designing the technologies of rulemaking to improve the public participation process. The Article recharacterizes participation in rulemaking, not as a court-enforced procedural right, but as a set of democratic practices that government enables through technological means,⁴⁹ and it argues for developing a variegated set of e-rulemaking speech tools structured to encourage those practices.

This e-rulemaking “toolkit” should not simply increase participation⁵⁰ per se—more comment for comment’s sake—but should include speech tools for regulators and citizens alike to manage participation that yields desired outcomes⁵¹ and cultivates communities of regulatory practice.

To squander the opportunity for democratic experimentalism⁵²—this “laboratory for democracy”⁵³—would reify administrative procedure⁵⁴ and

agency administrative procedures as well as to the public’s right to challenge a rule in court. However, I choose to focus on informal rulemaking because public intervention rights in this arena have been insufficiently studied. Cf. Gellhorn, *supra* note 14, at 403 (discussing structuring public intervention in adjudicatory proceedings); Thomas O. Sargentich, *The Reform of the American Administrative Process: The Contemporary Debate*, 1984 WIS. L. REV. 385, 392-97 (distinguishing among formalist, instrumentalist, and participatory models of agency action). Furthermore, the notice-and-comment process is designed to foster wide participation (rather than settling a dispute between a handful of parties) and therefore how this large-scale participation can be better managed via the Internet merits examination.

⁴⁹ See, e.g., Recommendation of the Administrative Conference of the United States, Representation of the Poor in Agency Rulemaking of Direct Consequence to Them (Recommendation No. 68-5), 1 C.F.R. § 305.68-5 (1968) (proposing affirmative action on the part of federal agencies to make rulemaking accessible to the poor: “Federal agencies should engage more extensively in affirmative, self-initiated efforts to ascertain directly from the poor their views with respect to rulemaking that may affect them substantially. For this purpose, agencies should make strong efforts, by use of existing as well as newly devised procedures, to obtain information and opinion from those whose circumstances may not permit conventional participation in rulemaking proceedings.”), available at <http://www.law.fsu.edu/library/admin/acus/305685.html>. The Finnish government has passed a resolution declaring that “the aim of the Government is to create possibilities for the active participation of citizens which will promote the role of the State and the municipalities as well as civic organizations in attending to common issue[s].” OECD, *supra* note 36, at 41; see INFO. SOC’Y ADVISORY BD., PUBLIC SERVICES IN THE NEW MILLENNIUM (2001) (providing English translation of Finnish government report), available at <http://www.financeministry.fi/tiedostot/pdf/en/40644.pdf>.

⁵⁰ Since participation serves different, overlapping goals, including the expression of the public’s needs, on the one hand, and informing the regulator, on the other hand, it is meaningless to prescribe one form of consultation. Improving public participation means fulfilling a variety of goals, depending on the particular rulemaking. Therefore it is crucial to consider different outcomes and develop consultation practices that promote them. See CARY COGLIANESE, THE INTERNET AND PUBLIC PARTICIPATION IN RULEMAKING 13-14 (Kennedy Sch. of Gov’t, Harvard Univ., Working Paper No. RWP03-022, 2003) (making the point that measuring the success of public participation means measuring a multiplicity of concrete changes), available at [http://ksgnotes1.harvard.edu/research/wpaper.nsf/rwp/RWP03-022/\\$File/rwp03_022_coglianesi.pdf](http://ksgnotes1.harvard.edu/research/wpaper.nsf/rwp/RWP03-022/$File/rwp03_022_coglianesi.pdf).

⁵¹ See DOUGLAS K. SMITH, MAKE SUCCESS MEASURABLE (2003) (advocating the setting of outcome-based instead of activity-based goals).

⁵² See Charles F. Sabel, *Design, Deliberation, and Democracy: On the New Pragmatism of Firms and Public Institutions*, at <http://www2.law.columbia.edu/sabel/papers/Design.html> (last visited Mar. 17, 2004)

delegitimize the electronic rulemaking process. It would also set us farther apart from the growing number of advanced nations⁵⁵ that are using technology to institutionalize citizen participation practices as a component of e-government.⁵⁶

("Because the norms of accountability it establishes are tied to disciplined practical activity, design through learning-by-monitoring provides a model for public rule making when the solution to collective problems can only be found by experiment."). Though Sabel here is referring to rulemaking generally, rather than rulemaking as a term of art, he correctly theorizes the connection between democratic ideals and organizational design as a means to realize those ideals. Sabel draws on Durkheim and Hayek and their understanding of organizational flexibility as central to the endeavor of democratic experimentalism. *See id.* For more on democratic experimentalism, see Michael C. Dorf & Charles F. Sabel, *A Constitution of Democratic Experimentalism*, 98 COLUM. L. REV. 267, 267 (1998) (identifying democratic experimentalism as a new form of government "in which power is decentralized to enable citizens and other actors to utilize their local knowledge to fit solutions to their individual circumstances, but in which regional and national coordinating bodies require actors to share their knowledge with others facing similar problems," and claiming that "[t]his information pooling, informed by the example of novel kinds of coordination within and among private firms, both increases the efficiency of public administration by encouraging mutual learning among its parts and heightens its accountability through participation of citizens in the decisions that affect them"). This is a theme discussed at great length in my earlier paper, Noveck, *supra* note 9. *See also* DEEPENING DEMOCRACY: INSTITUTIONAL INNOVATIONS IN EMPOWERED PARTICIPATORY GOVERNANCE (Archon Fung et al. eds., 2003).

⁵³ *New State Ice Co. v. Liebmann*, 285 U.S. 262, 311 (1932) ("To stay experimentation in things social and economic is a grave responsibility. Denial of the right to experiment may be fraught with serious consequences to the Nation. It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.") (Brandeis, J., dissenting).

⁵⁴ For example, the Department of Transportation's (DOT) choice to use imaging rather than character-based technology for digitizing its dockets has locked the agency into the practices defined by that technology choice for the last decade. Interview with Neil Eisner, Assistant General Counsel for Regulation and Enforcement, DOT, in Washington, D.C. (June 16, 2003). There is a high degree of lock-in associated with the implementation of a large-scale IT project, making such technology projects expensive and risky. *See* ORG. FOR ECON. CO-OPERATION & DEV. (OECD), *THE HIDDEN THREAT TO E-GOVERNMENT: AVOIDING LARGE GOVERNMENT IT FAILURES* (Public Management Policy Brief No. 8, 2001), available at <http://www.oecd.org/dataoecd/19/12/1901677.pdf>.

⁵⁵ Canada has developed a federal policy on consultation and citizen engagement. Finland passed a government resolution that declares the government's aim to create opportunities for citizen participation. The Netherlands offers a policy aimed at "maintaining, enlarging and improving people's involvement in matters of general interest by leaving or transferring responsibility to local authorities and citizen and their organizations." All of these recognize government's enabling role. OECD, *supra* note 36, at 42; *see also* Carol Kushner & Michael Rachlis, *Civic Lessons: Strategies to Increase Consumer Involvement in Health Policy Development*, in 5 NAT'L FORUM ON HEALTH, CANADA HEALTH ACTION: BUILDING ON THE LEGACY 295 (1998); Jonathan Lomas, *Reluctant Rationers: Public Input to Health Care Priorities*, 2 J. HEALTH SERVS. RES. POL'Y 103 (1997).

⁵⁶ *See* Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, June 25, 1998, art. 3, United Nations Economic Commission for Europe (ensuring access to information and rights to participation in decisionmaking), at <http://www.unece.org/env/pp/documents/cep43e.pdf>; Congress of Local and Regional Authorities of Europe, Council of Europe, Resolution 76, June 16, 1999, art. 14 ("New information technologies when properly used can in particular offer possibilities to provide for a broader participation of all citizens at the grassroots level in the decisions

To predict the impact—both positive and negative—of e-rulemaking on public participation, Part II looks at how citizen consultation has been practiced and at the problems perceived to be associated with it. The discussion will explore how the lack of adequate means to realize public consultation has bolstered distrust of it.

Next, Part III discusses the current state of electronic rulemaking on the agency level and the central Federal Electronic Rulemaking Initiative. That Part then proposes a series of tools to produce a more deliberative notice-and-comment process. These innovations are relatively straightforward and cost-effective, and they work within the existing legal and cultural paradigms of rulemaking. They aim both to correct the problems to which technology may give rise and to exploit the unique advantages of the technology to improve the process. They range from ideas for syndicating notice of proposed rulemakings to the websites of relevant civic groups to displaying dockets graphically so as to be more intelligible to the average user to setting up online collaborative journals (weblogs) for discussions of compliance. These examples, which are listed in the Index, strengthen the case for promoting e-rulemaking as democratic practice.

Whereas Part III lays out a blueprint for civic innovation for the immediate term (based on the current rulemaking process), Part IV proposes a path for more innovative thinking in e-government, namely the development of new e-rulemaking methods that respond to the participatory potential offered by the Web. Part IV calls explicitly for a process of civic innovation and design to foster the development of these innovations. In addition to proposing specific methodological designs⁵⁷ for enhanced deliberation, this Part illustrates the interrelationship between technological design, procedural structure, and democratic practices. These designs—and the methodologies they actualize—operationalize practices that meet specific goals (information gathering, drafting a rule and negotiating consensus around it, and finally, education and implementation). Technology can be employed to improve consultation, not with a single notice-and-comment process, but by offering a

concerning them. . . .”) (original punctuation omitted), at http://www.coe.int/T/E/C/rae/%5F5%2E%5FTexts/2%2E%5F%20Adopted%5Ftexts/2._Resolutions/1999/Res.76%20E.pdf?L=E.

⁵⁷ Unlike Henry Perritt's report to the Administrative Conference, this is not an explication of particular technologies. Rather, it is a theoretical exploration with illustrations of how technology might be used to implement procedural change, and it does not depend on any one technological tool or architecture. See Henry H. Perritt, Jr., *Electronic Dockets: Use of Information Technology in Rulemaking and Adjudication*, Report to the Administrative Conference of the United States, Oct. 19, 1995, available at http://www.kentlaw.edu/classes/rstaudt/internetlaw/casebook/electronic_dockets.htm.

range of dialogic methodologies⁵⁸ and presentation interfaces to the community of rulemaking practice. This Part draws on developed methodologies from civic life that have been employed to enable participation by groups in decisionmaking processes. It then addresses how these experiences might be translated to the Internet, by transforming them into speech tools in order to achieve greater scale and convenience.

Finally, Part V calls for evaluating the success of these practices. As long as no consensus exists as to what constitutes “better” citizen participation, it is important to have a range of clearly articulated metrics. Measuring e-rulemaking on the basis of its success at engaging the public will shift the emphasis of policy and focus investment on technology designed to realize the right to participate. Agencies should be required pursuant to the E-Government Act to pilot various participative practices and gather the necessary data on them that will allow the Office of Management and Budget (OMB) to evaluate their success for citizen participation. Only in this way can OMB identify the best practices and code them into the design of the e-rulemaking toolkit. Though technology makes participation practicable, only law can make it a reality.

I. THEORY: RULEMAKING AND PUBLIC CONSULTATION: CURRENT IMPEDIMENTS TO DELIBERATIVE AND PARTICIPATIVE CONSULTATION

A. *The Legal Framework (or Lack Thereof)*

E-rulemaking emerges against the backdrop of longstanding distrust of public participation in traditional rulemaking. Public participation and the “new feudalism” of bureaucratic rulemaking stand in deep, unresolved conflict with one another.⁵⁹ The former pays homage to participatory, democratic

⁵⁸ Because the technology makes it possible to institutionalize different dialogic processes, further study of what kind of communication is appropriate in which context is necessary and is a subject this Article treats in some depth in subsequent sections. See McFarlane, *supra* note 20, at 913-14 (“[P]rocess depends on context. Participation theory could be enhanced if it could account for the different types of settings in which successful consensus building and decision-making take place.”).

⁵⁹ The “New Feudalism,” a phrase coined by Roscoe Pound to describe the rise of the bureaucratic state, is aptly borrowed by Gerald Frug. As Frug points out in his magisterial article on the ideology of bureaucracy, the democratic legitimation of bureaucracy is a failure. Managerial domination and personal alienation have unnecessarily become the hallmarks of American bureaucracy. See Gerald E. Frug, *The Ideology of Bureaucracy in American Law*, 97 HARV. L. REV. 1276, 1278 (1984) (“Corporate and administrative law have embodied a series of different attempts to convince us that these characteristics do not permit those who wield bureaucratic power to violate the freedom of those subjected to it. I argue in this Article that all of these

traditions,⁶⁰ and the latter to the goal of efficiency. Despite half a century of the right to participate in rulemaking, the practices of public participation in administrative rulemaking are not as widespread among the population as might be expected.⁶¹ While neither participation nor dissatisfaction with it can be precisely measured, there is a persistent sense of its inadequacy. When, despite vociferous and voluminous public opposition to lifting media cross-ownership restrictions, the Federal Communications Commission (FCC) does so anyway, we are left wondering what purpose the notice and comment process really serves.⁶²

Part II first argues that the failure of the APA to set even minimum standards for public input reflects the belief that too much democracy is bad for the healthy functioning of the bureaucracy⁶³ and has contributed to the failure of participative practices in informal rulemaking. As a general matter the APA requires that a draft rule be published and that the interested public be allowed to comment in writing.⁶⁴ The APA gives agencies the discretion to

defenses of bureaucratic power are no more than variations on a single story about the acceptability of bureaucratic organization and that this story, far from building a convincing case for bureaucracy, is a mechanism of deception.”)

⁶⁰ See *De Jonge v. Oregon*, 299 U.S. 353, 365 (1937) (First Amendment rights are to be preserved in order “to 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.”).

⁶¹ Cornelius Kerwin contends that, for a variety of reasons, participation in rulemaking is not particularly common or frequent. Interest groups, rather than individuals, are the predominant participants. See KERWIN, *supra* note 15, at 178-79 (discussing actual patterns of participation); see also THOMAS C. BEIERLE, *DEMOCRACY ON-LINE: AN EVALUATION OF THE NATIONAL DIALOGUE ON PUBLIC INVOLVEMENT IN EPA DECISIONS 12* (Resources for the Future Report, 2002) (noting that, though the consultation process increased the number of participants, the voices were not necessarily new), available at <http://www.rff.org/rff/Documents/RFF-RPT-demonline-exec-sum.pdf>.

⁶² Over a twenty-month period of consultation, the FCC received over 500,000 comments. Report and Order and Notice of Proposed Rulemaking, 18 F.C.C.R. 13,620, 13,624 (June 2, 2003), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-03-127A1.pdf; see also Fed. Communications Comm’n, *Media Ownership Policy Re-Examination*, at <http://www.fcc.gov/ownership/> (last updated Jan. 20, 2004).

⁶³ The Attorney General’s manual interpreting the then recently enacted APA offers three pages of analysis of rulemaking procedures, almost all of which are devoted to formal rulemaking. TOM C. CLARK, U.S. DEP’T OF JUSTICE, *ATTORNEY GENERAL’S MANUAL ON THE ADMINISTRATIVE PROCEDURE ACT 26* (1947), available at <http://www.oalj.dol.gov/public/apa/refmnc/agtc.htm>. The absence of greater procedural requirements also has its root in the political demands of the period. See McNollgast, *The Political Origins of the Administrative Procedure Act*, 15 J.L. ECON. & ORG. 180, 199 (1999) (arguing that the APA’s limited procedural constraints were the result of a balancing between congressional New Dealers and the President’s wishes to sustain agencies’ discretionary behavior and their desire to avoid excessive executive control in the event of a Republican president).

⁶⁴ Administrative Procedure Act, 5 U.S.C. § 553(c) (2000) (“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. After consideration of the

determine their own procedures. Though it could be claimed that the APA, by its silence, was designed to encourage statute writers to specify consultative practices in individual authorizing statutes,⁶⁵ it has become an acceptable ceiling rather than a floor for participatory practice. Numerous scholars have critiqued this absence of requirements,⁶⁶ which fails to establish a framework for useful participation. Other scholars have criticized the superabundance of external requirements (e.g., executive and congressional review) that have been laid on top of the informal rulemaking process, but without encouraging citizen involvement.⁶⁷ In reality, agency procedure is more complex than the minimal requirements of the APA would suggest. Nonetheless, as Part II also argues, there is a resistance to participation in practice as well, primarily because it is difficult to manage and resource-intensive to carry out. Whether one views rulemaking as a negotiation among stakeholders or an information-gathering process of experts, the lack of tools to make participation possible has weakened participation as a right. Theoretical justifications founder against participation's ultimate impracticality. This distrust of participation contributes to the illogical failure, explored in Part III, to use interactive technology to make rulemaking more participative. The solution need not be

relevant matter presented, the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose. When rules are required by statute to be made on the record after opportunity for an agency hearing, sections 556 and 557 of this title apply instead of this subsection.”).

⁶⁵ BUREAU OF NAT’L AFFAIRS, ADMINISTRATIVE PROCEDURE ACT, at inside cover (1946) (“[T]he diverse nature of substantive matters subject to agency control—ranging from the form and content of bottle labels to the dissolution of a billion dollar public utility holding company—precludes the establishment of any single legislative mold sufficiently pliable to satisfy the requirements of necessary federal regulation. Therefore, although the federal administrative agencies will be obliged to operate within the general framework of the new statute, they will also be obliged to follow their natural lines of development under the specific statutes which created them.”); cf. Recommendation of the Administrative Conference of the United States, Procedures in Addition to Notice and the Opportunity for Comment in Informal Rulemaking (Recommendation No. 76-3), 1 C.F.R. § 305.76-3 (1976) (calling for no additional procedures and observing that “[t]he Conference’s Recommendation 72-5 stated that in rulemaking of general applicability involving substantive rules ‘Congress ordinarily should not impose mandatory procedural requirements other than those required by 5 U.S.C. 553’”), available at <http://www.law.fsu.edu/library/admin/acus/305763.html>.

⁶⁶ DAVIS, *supra* note 2; THEODORE J. LOWI, THE END OF LIBERALISM: THE SECOND REPUBLIC OF THE UNITED STATES 92-126 (2d ed. 1979); DAVID SCHOENBROD, POWER WITHOUT RESPONSIBILITY (1993); W. Kip Viscusi, *Regulating the Regulators*, 63 U. CHI. L. REV. 1423 (1996). Though Edward Rubin, too, complains about the “vapid set of requirements,” which are based on inappropriate models, he does not believe that they should be replaced with any greater emphasis on public participation. Edward Rubin, *It’s Time to Make the Administrative Procedure Act Administrative*, 89 CORNELL L. REV. 95 (2003) (arguing for an instrumentally rational approach to rulemaking that relies less on public participation).

⁶⁷ E.g., McGarity, *supra* note 45.

to rewrite the APA⁶⁸ but to use technology to strengthen participative practices within the APA's flexible framework.

B. *The Princess and the Pea*

The APA's spare public consultation provisions⁶⁹ have institutionalized the deep-seated belief that the public, especially unorganized individuals or small interest groups, is an irritant—the pea to the agency's princess—unduly influencing and burdening the expert⁷⁰ who alone possesses the knowledge and impartial sangfroid to govern in the public interest.⁷¹ This is a notion endemic to all theories of the bureaucratic state.⁷² Whereas democracy is to be practiced at the polling booth, bureaucrats are not supposed to feel the pressures of direct democratic involvement. Too much public participation can corrupt the

⁶⁸ Cf. Rubin, *supra* note 66, at 96 (noting that the APA was out of date when enacted and that it fails to codify a truly administrative paradigm instead of resorting to quasi-legislative and quasi-judicial practice).

⁶⁹ Administrative Procedure Act, 5 U.S.C. § 553(c) (2000) (“[T]he 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.”); see McGarity, *supra* note 45, at 1443 (“[I]t is difficult, however, to see how the informal rulemaking process could be made much simpler.”); Robert L. Rabin, *Federal Regulation in Historical Perspective*, 38 STAN. L. REV. 1189, 1265 (1986) (observing that the “APA rulemaking scheme is notable primarily for the absence of constraint it places on agency officials”).

⁷⁰ Martin Shapiro, *The Administrative Procedure Act: A Fortieth Anniversary Symposium*, 72 VA. L. REV. 447, 449 (1986) (“One basic element of the New Deal ideology was a dedication to that most American cluster of political ideas—the pragmatism of James and Dewey that engendered and became combined with the Progressives’ notion that powerful central political authorities guided by technical expertise could develop good working solutions to major social and economic problems.”).

⁷¹ According to the Bureau of National Affairs’s contemporaneous analysis of the legislative history of the APA, the Act represents a compromise between the principle of public participation and the opinion of agency officials that “the technical and complex fields in which they operate can be suitably administered in the interests of the public only if the administrators and their expert staffs are permitted a certain amount of statutory freedom.” BUREAU OF NAT’L AFFAIRS, *supra* note 65, at 4.

⁷² Frug breaks down the paradigms into formalist (bureaucracy as rationalized mechanism), expertocratic (bureaucracy as expert managerialism), judicial review model (bureaucracy legitimized through the rule of law), and market/pluralist (bureaucracy legitimized through market forces and interest group intervention). See Frug, *supra* note 59, at 1282-84. Robert Reich and Richard Stewart offer different typologies, but both also portray the persistence of an ideological and intellectual justification for a largely unaccountable administrative apparatus in the midst of a democratic political culture. See Robert B. Reich, *Public Administration and Public Deliberation: An Interpretive Essay*, 94 YALE L.J. 1617 (1985) (arguing that historical justifications have failed to inspire confidence among citizens); Richard B. Stewart, *Administrative Law in the Twenty-First Century*, 78 N.Y.U. L. REV. 437 (2003) [hereinafter Stewart, *Administrative Law*]; Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1671-76 (1975). But as Bruce Williams and Albert Matheny point out, all of these rationales seek to justify a hierarchical and exclusionary discourse that undermines democracy. Stewart points out that these different theoretical visions have been additive, combining to justify bureaucracy despite its opposition to self-governing democratic practice. See BRUCE A. WILLIAMS & ALBERT R. MATHENY, *DEMOCRACY, DIALOGUE, AND ENVIRONMENTAL DISPUTES: THE CONTESTED LANGUAGES OF SOCIAL REGULATION* (1995).

dispassionate discourse of rulemakers with the distortions of private interests. Executive and congressional oversight offers a democratic check.⁷³ The more “complicated and specialized modern culture becomes,” writes Max Weber,⁷⁴ “the more its external supporting apparatus demands the personally detached and strictly objective *expert*, in lieu of the lord who was moved by personal sympathy and favor, by grace and gratitude.”⁷⁵ The theory of the bureaucratic state, as articulated by Weber and advanced by many American scholars,⁷⁶ rests on the notion that bureaucrats must “regulate the matter abstractly”⁷⁷ for the public good.⁷⁸ Whereas administrative officials need some input from the public in order to craft informed rules, too much public consultation is not desirable. The public must be kept at bay, near enough to be consulted when necessary, but far away enough to limit its direct participation.⁷⁹ “Equality

⁷³ Martin Shapiro notes that legislation influenced by the New Deal created a rulemaking system that provided for almost unfettered executive discretion and that, though some judicial review was called for as a compromise with conservatives, in reality, courts initially exercised quite little. See Shapiro, *supra* note 70, at 451-54. For more on the history of the APA, see Rabin, *supra* note 69, at 1189 (identifying the dominant themes in the history of administrative law).

⁷⁴ Rubin agrees that Weber is very much still relevant today as the theorist of the bureaucratic state whose work is most central to all contemporary understanding of bureaucracy. See Rubin, *supra* note 66, at 99 (“[T]he classic characterization of [administration] as a novel and distinctive mode of governance was formulated by Max Weber.”).

⁷⁵ 3 MAX WEBER, *ECONOMY AND SOCIETY* 975 (Günther Roth & Claus Wittich eds., Bedminster Press 1968) (1921).

⁷⁶ This applies especially to strong New Dealers contemporaneous with the APA and, again, to supporters of a strong executive in the Nixon and Reagan administrations. This distrust was used to justify greater presidential control over the rulemaking process and the enactment of subsequent executive orders institutionalizing presidential review. KERWIN, *supra* note 15, at 224-38; James F. Blumstein, *Regulatory Review by the Executive Office of the President: An Overview of Policy Analysis of Current Issues*, 51 DUKE L. J. 851, 858-59 (2001) (discussing origins of Executive Order 12,291, which established centralized presidential oversight); Harold H. Bruff, *Presidential Management of Agency Rulemaking*, 57 GEO. WASH. L. REV. 533 (1989) (highlighting Nixon’s “Quality of Life” review, an interagency review of proposed regulations dealing with environmental quality and consumer protection); Lloyd N. Cutler, *The Case for Presidential Intervention in Regulatory Rulemaking by the Executive Branch*, 56 TUL. L. REV. 830, 833-37 (1982); Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245 (2001) (defending Clinton’s use of regulation to further his policies); Rabin, *supra* note 69; Peter L. Strauss & Cass R. Sunstein, *The Role of the President and OMB in Informal Rulemaking*, 38 ADMIN. L. REV. 181 (1986); Ann Rosenfield, Note, *Presidential Policy Management of Agency Rules Under Reagan Order 12,498*, 38 ADMIN. L. REV. 63 (1986).

⁷⁷ 3 WEBER, *supra* note 75, at 958.

⁷⁸ See Shapiro, *supra* note 70, at 447; see also WALTER GELLHORN, *FEDERAL ADMINISTRATIVE PROCEEDINGS* 116-44 (1941) (observing that the unorganized public interest is represented by the agency and its personnel); JAMES M. LANDIS, *THE ADMINISTRATIVE PROCESS* 6 (1938) (arguing that the role of administration is to protect the public).

⁷⁹ Frug, *supra* note 59, at 1382 (“Why do they build bureaucracies? . . . We should like to suggest that they are trying to evade face-to-face relationships and situations of personal dependency whose authoritarian tone they cannot bear. This view suggests that all four models of bureaucracy are attempts to escape from the problems of face-to-face human relationships; all of them promise us that human relationships—even

before the law' and the demand for legal guarantees against arbitrariness demand a formal and rational 'objectivity' of administration."⁸⁰ This is distinct from "the personal discretion flowing from the 'grace' of the old patrimonial domination."⁸¹ Citizen consultation practices that introduce personal contact with individuals may endanger the neutral administrative state.⁸² The goal of an impartial bureaucracy is not the problem; rather it is the resulting distrust of public participation.

By requiring public participation and making it open to all comers, § 553 of the APA acknowledges some role for the public in the quasi-legislative process of rulemaking but imposes almost no requirements,⁸³ nor does it encourage the development of any by the agencies.⁸⁴ Agency officials, like legislators, must have a mechanism by which to solicit information. But the emphasis is on the agency's ability to consult the public as it wishes.⁸⁵

The APA was enacted during a period in which federal agencies were given vast power to exercise their managerial expertise at running the nation's

relationships built on hierarchy and separation—can be made unthreatening through some organizational arrangement. Within each bureaucratic vision, theorists seek to mediate human interactions with a device that transcends ordinary human qualities; they would protect us from each other through formal rules, the impersonality of expertise, or the intervention of the courts, the market, or the political process. I have argued in this Article, however, that all of these mediations are forms of deception. Each of them conceals the exercise of personalized, human domination in the organizations within which we work and live." (quoting MICHAEL CROZIER, *THE BUREAUCRATIC PHENOMENON* 54 (1964)). Frug argues that this notion of keeping the people at arm's length is necessary for bureaucratic domination and masked by the theoretic rationales proffered in its defense. I would add that this distancing is institutionalized through practice.

⁸⁰ 3 WEBER, *supra* note 75, at 979-80.

⁸¹ *Id.*

⁸² The South Korea Online Procedures Enhancement for civil applications (OPEN) project, which allows a citizen to track administrative applications via a website, is designed to reduce corruption and increase transparency by substituting routinized tracking for interpersonal contact. South Korea Online Procedures Enhancement for civil applications (OPEN), at http://english.seoul.go.kr/gover/initiatives/inti_12cor_02.htm (last visited Mar. 31, 2004).

⁸³ The APA provides: "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. After consideration of the relevant matter presented the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose." 5 U.S.C. § 553(c) (2000); *see also* KERWIN, *supra* note 15, at 54; Gellhorn, *supra* note 14, at 369; Rubin, *supra* note 66, at 106 ("Rulemaking is a generic term for legislation.").

⁸⁴ ATTORNEY GEN.'S COMM. ON ADMIN. PROCEDURE, *ADMINISTRATIVE PROCEDURE IN GOVERNMENT AGENCIES*, S. DOC. NO. 77-8, at 1137 (1st Sess. 1941) ("An agency need not invent procedures where it has no reason to establish any procedures.").

⁸⁵ Officials must be able to "eternally refresh [their] vigor from the stream of democratic desires." Stewart, *Administrative Law*, *supra* note 77, at 441 (quoting JAMES M. LANDIS, *THE ADMINISTRATIVE PROCESS* 6 (1938)).

economy.⁸⁶ It is this procedural light touch that is sometimes credited⁸⁷ with the longstanding success of the APA. The notice-and-comment framework has survived without significant alteration. The APA enshrined the right of rule writers to consult the public without imposing any burden on them to do so.⁸⁸ Under the APA, agencies are free to decide on appropriate forms of written participation for rule writers⁸⁹ and are not required to acknowledge comments received. They need only publish, along with the final rule, a “concise general statement of their basis and purpose.”⁹⁰ Though, in practice, agencies often provide substantial discussions of the rationales underlying a rule, they are not obliged to respond to comments. This raises the question of the extent to which comments matter at all.⁹¹

In practice, agencies engage in a variety of consultative practices because they need the information the public can provide or because political exigencies demand participation to legitimate the process. For the most part, each agency has a regular constituency of regulated parties and inside-the-Beltway interest groups.⁹² This is not to say that interest group participation has no benefits, but it may come at the expense of individual participation and in forms that are not as democratically accountable as they might otherwise be.

⁸⁶ *Id.* at 440-41.

⁸⁷ Attorney General Tom C. Clark told the Senate Judiciary Committee in 1946 that “previous attempts to enact general procedural legislation have been unsuccessful generally because they failed to recognize the significant and inherent differences between the tasks of courts and those of administrative agencies or because, in their zeal for simplicity and uniformity, they proposed too narrow and rigid a mold.” S. REP. NO. 752, 79th Cong., 1st Sess., app. B (1945), reprinted in ADMINISTRATIVE PROCEDURE ACT: LEGISLATIVE HISTORY, 79TH CONGRESS, 1944-45, at 223 (1946); Shapiro, *supra* note 70, at 447; Peter L. Strauss, *Changing Times: The APA at Fifty*, 63 U. CHI. L. REV. 1389 (1996) (noting that the flexibility of rulemaking provisions has enabled them to be applied, without amendment, for fifty years).

⁸⁸ Kerwin contends that establishing the notice-and-comment process was of more symbolic than substantive importance. It proffered minimal information and access to those who wanted to get involved. Effective participation still would require organization, resources and political sophistication. KERWIN, *supra* note 15, at 165.

⁸⁹ Unless otherwise provided by statute, the agency writing the rule determines the procedures for participation based upon its own assessment of the need. *Id.* at 44. Kerwin reports that today 51% of agencies surveyed reported that the program office developing the rule had authority to develop the form of public participation. However, in 26% of the agencies another office, often one with greater political authority within the agency, makes that determination. A further 23% reported that the authorizing statute or longstanding agency policy determines procedure. *Id.* at 138.

⁹⁰ 5 U.S.C. § 553(c) (2000).

⁹¹ The Attorney General’s Manual of 1947 recommends the publication of a pro forma express recital that all relevant matter has been considered. CLARK, *supra* note 63, at 31.

⁹² For research on negotiated rulemaking, Coglianese examined over 1500 comments filed in two dozen rulemakings with the EPA and found that individual citizens had submitted fewer than 6% of the comments in contrast to the participation by industry groups, corporations, and state and local governments. COGLIANESE, *supra* note 50, at 4.

“There is something vaguely troubling, especially to a judge, about the image of all those legally required written comments flowing in, to be time-stamped and filed by the back-room myrmidons, while interest group representatives whisper into the ears of the agency’s top officials over steak and champagne dinners.”⁹³

Much of this communication between agency officials and the interest group representatives occurs on an informal, *ex parte* basis before the rule is drafted. Once the draft has been promulgated and a great deal of thinking, research, and investment has gone into the process, comments demanding change are likely to be seen as a nuisance.⁹⁴

The technological reality has reinforced and perpetuated this idealized notion of the insular bureaucrat. Participation has been difficult to implement and, as a result, it does not get done. There have not been adequate speech tools to structure and manage the consultative process, leading agencies to argue—with justification—that communication beyond a certain limited point is impracticable, onerous, and contrary to the idea of bureaucracy.

1. *Democratic Resistance to Public Participation*

There is a perception of serious problems with rulemaking, and with participation in particular. This is exacerbated by a reciprocal “power play” through language.⁹⁵ Agency officials use technocratic and managerial discourse, which excludes the ordinary citizen and, in turn, reinforces how difficult it is for the public to participate. An unbridgeable disconnect emerges between technical and legal experts and the untrained public. One glance at the legalese in any notice of proposed rulemaking in the *Federal Register* supports this point. Furthermore, the use of this managerial, expert language⁹⁶ encourages participants to be reactive. If a proposal is too complex for me to understand, I can easily criticize it but I would not trust myself to offer an alternative. This failure of language further reinforces the distrust of the participation process, because the practice of rulemaking depends upon successful communication.

⁹³ Rubin, *supra* note 66, at 120.

⁹⁴ *Id.*

⁹⁵ ROBIN TOLMECH LAKOFF, *THE LANGUAGE WAR* 59 (2000).

⁹⁶ WILLIAMS & MATHENY, *supra* note 72, at 41 (noting that managerial discourse relies on a false notion of the objectivity of science).

With the increasing scientific and financial complexity of rulemaking⁹⁷ and burdensome compliance requirements incumbent upon officials in the rulemaking process (e.g., economic and environmental analyses, reports to Congress and the Executive), rulemakers and those affected by rules have little time and fewer resources to handle consultation, especially when consultative processes produce voluminous objections.⁹⁸ The difficulty of practice widens the chasm in communication. The APA, which fails to prescribe any procedures to bridge this chasm, allows a vacuum in which unmanageable communication flourishes.

Critics have offered many reasons to justify resistance to public participation by agencies and citizens. They decry a range of defects, from regulatory capture of the consultation process by large organizations and lobbyists⁹⁹ to excessive participation by individuals¹⁰⁰ who carp but offer little information to inform the process. Agency officials complain of overwork and a high “noise-to-signal” ratio. Excessive input delays the rulemaking process. Citizens and critics complain that little awareness of rulemaking exists and that the government has failed to invest in informing the public about its right to participate. Even when a proposed rule is announced—and agencies sometimes advertise participation opportunities¹⁰¹—the wider public is ill equipped to participate, participation comes in a form that is not useful to the agency, or average citizens do not get heard without hiring expensive lawyers and lobbyists.

The difficulty of effective communication about complex subject matter across vast distances buttresses actual and perceived impediments to participative consultation. Though critics have questioned public participation, their arguments fail to connect the problems of participation to the underlying shortcomings in the communicative processes. Without a doubt, the problems of rulemaking go beyond the practical difficulty of participation. Regulatory

⁹⁷ Around the time of the APA's enactment, there lingered a perception that many people remained “as yet untouched by the onrush of mechanical invention.” GELLHORN, *supra* note 78, at 116.

⁹⁸ The most infamous example is a case of formal rulemaking involving the peanut content of peanut butter, a process which extended over nine years and yielded a 7736-page transcript. *See* *Corn Products Co. v. FDA*, 427 F.2d 511 (3d Cir. 1970) (upholding the peanut butter rule); *see also* *Ass'n of Nat'l Advertisers Inc. v. FTC*, 627 F.2d 1151, 1167 n.34 (D.C. Cir. 1979) (describing the peanut butter rulemaking), *cert. denied*, 447 U.S. 921 (1980).

⁹⁹ Rubin, *supra* note 66, at 102.

¹⁰⁰ Jim Rossi, *Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking*, 92 NW. U. L. REV. 173, 217 (1997).

¹⁰¹ KERWIN, *supra* note 15, at 172 (describing the FDA's experience with sending out letters and literature and conducting a television survey to advertise a rulemaking).

capture and adversarial relationships are features of our political culture. But they are invoked to justify the failure to invest in the tools and methods that, at least in part, might eventually ameliorate these shortcomings. At the same time, these critiques must be kept in mind when designing new systems for rulemaking. The success of these systems will be measured by the extent to which they alleviate existing problems.

I have grouped these common criticisms in the literature into six broad categories:

(1) Regulatory Capture: The agency is “captured” by organized interest groups, leading to a bias in rulemaking.¹⁰² The regulator needs to be protected from this undue influence, which threatens the balancing of interests and the rationality of the process.¹⁰³

(2) Adversarial Relationship: The relationship of the regulator to the regulated is adversarial.¹⁰⁴ Therefore greater participation may even be an obstacle to reform. This relationship leads to extreme positions being taken in the participation process. Absent transformative deliberation, participants express private interests rather than public rationales.¹⁰⁵ Such contentiousness distracts from scientific decisionmaking in the public interest.¹⁰⁶

¹⁰² See, e.g., Rubin, *supra* note 66, at 102 (noting that the APA's use of public participation practices relies on large organizations, such as business firms, labor unions, and organized interest groups who have the necessary resources); see also ROBERT C. FELLMETH, *THE INTERSTATE COMMERCE OMISSION: THE PUBLIC INTEREST AND THE ICC* (1970) (discussing Ralph Nader's report on the Interstate Commerce Commission); RALPH NADER ET AL., *TAMING THE GIANT CORPORATION* (1976); WILLIAM WEST, *ADMINISTRATIVE RULEMAKING: POLITICS AND PROCESSES* (1985) (observing that participation in rulemaking is generally limited to well-organized, well-funded interests); Stewart, *Administrative Law*, *supra* note 72, at 441 (discussing 1960s and 1970s critique of regulatory capture led by Ralph Nader).

¹⁰³ Reich, *supra* note 77, at 1619-21 (discussing interest group intermediation).

¹⁰⁴ Cf. Philip J. Harter, *Negotiating Regulations: A Cure for Malaise*, 71 *GEO. L.J.* 1 (1982) (arguing that regulatory negotiation represents an innovative solution to the problem of rulemaking's adversarial culture). For example, in a recent Copyright Office rulemaking on the rates and terms of digital performance right royalties, the public was invited to file written objections and to state the complaining party's “substantial interest” in the proceeding and what the party found objectionable. This rulemaking, like so many others, is set up only to encourage complaints rather than deliberation. Digital Performance Right in Sound Recordings and Ephemeral Recordings: Notice of Proposed Rulemaking, 68 *Fed. Reg.* 27,506 (May 20, 2003).

¹⁰⁵ See McGarity, *supra* note 45, at 1397 (1992) (“[I]nformal rulemaking has to some extent been a victim of its own success. Because it was initially so efficient in forewarning individuals and groups forewarning about how the agency was planning to affect them, it has provided powerful political constituencies with ample opportunity to mobilize against individual rulemaking initiatives.”).

¹⁰⁶ Reich, *supra* note 72, at 1621-23 (discussing net-benefit maximization vision of administration).

(3) Some Participants Know Too Much: The playing field is not level. Only those intimately involved in a particular issue participate.¹⁰⁷ The agency often depends on information provided by those most affected by regulation and must be safeguarded from their biases.¹⁰⁸ These insiders may be informed, but they may not be open-minded. More outsiders are necessary.

(4) Some Participants Know Too Little: Public consultation is largely unnecessary except to the extent that it enables the expert regulator to ascertain knowable data.¹⁰⁹ But, in general, the public is ill informed about complex regulatory matters. Beyond a handful of educated industry players, the public has little to offer to inform the process and help in crafting better rules. Most public comments are of little value and overburden the regulator with excessive paperwork. On the whole, there is too much public participation, and it is too ill informed to be useful.

(5) Over-Representation: Agencies tend to regulate the same industries again and again.¹¹⁰ These players and a handful of highly organized interest groups¹¹¹ wield excessive power at the agency bargaining table.¹¹² Their relationships with agency officials occur largely behind closed doors without public scrutiny.

¹⁰⁷ Cramton, *supra* note 24, at 530.

¹⁰⁸ Music Choice, a provider of digital music radio programming to satellite cable and TV operators, filed a rulemaking petition with the Copyright Office to request that office rules be amended to allow for greater participation by parties other than large copyright owners and complaining of closed-door practices in connection with royalty rate setting. See Determination of Reasonable Rates and Terms for the Digital Performance of Sound Recordings by Preexisting Subscription Services, 68 Fed. Reg. 4744, 4745 (Jan. 30, 2003) (to be codified at 37 C.F.R. pt. 260).

¹⁰⁹ See WILLIAMS & MATHENY, *supra* note 72, at 11-17 (discussing the managerial discourse in regulation that leads to a belief that expert bureaucrats must ascertain an objective public interest).

¹¹⁰ Mancur Olson has noted that group organization is essential to political and market action and that the capacity of a group to function well depends, in part, on its size. The group must be large enough to offer a preferential mode of acting over pure individual action, yet small enough to allow each member to make a difference. In fact, small groups will often further their interests better than large groups. OLSON, *supra* note 14, at 53-65.

¹¹¹ Litigants in the leading administrative law cases are all well-organized and well-funded interest groups such as the Natural Resources Defense Council, the Motor Vehicle Manufacturers Association, and the Chocolate Manufacturers Association. Rubin, *supra* note 66, at 102. Although the prospect of litigation is costly and unlikely to be undertaken by individuals or small groups, because these groups are so involved in work before the agency, the same critique can be applied to the notice-and-comment process. See *Chevron U.S.A. v. Natural Res. Def. Council*, 467 U.S. 837 (1984); *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983); *Chocolate Mfrs. Ass'n of U.S. v. Block*, 755 F.2d 1098 (4th Cir. 1985).

¹¹² Carey Coglianese has analyzed participation in two dozen rulemaking proceedings in which of 1500 comments filed, only 6% came from citizens, 60% were submitted by corporations and industry groups, and 25% came from government entities. COGLIANESE, *supra* note 50, at 4-5 (analyzing the implications of the use of technology in administrative rulemaking).

(6) Under-Representation: Many of those affected by regulation, either directly or indirectly, are too poorly informed and organized to participate efficiently in the process. Groups do not represent all interests and those that do may not have many resources. There are no mechanisms in place by which to elicit arguments from those with little representation even though they may have valuable insights to share.

These complaints about rulemaking reject, not the theory of participation, but an implementation that results in lack of information and unequal opportunities for participation.

C. Rationales for Public Participation

Despite its many flaws, public participation serves a variety of purposes for agency officials, for participants, and for democratic political culture.¹¹³ These purposes, grounded in differing theories of democracy, are invoked to justify participation even in the face of the work it imposes.¹¹⁴ There are those convinced that, flaws aside, participation strengthens individual autonomy and the individual's right of self-governance; others steadfastly argue that participation serves the general public interest and subsumes individual preferences to the common good by channeling public opinion into consensual policy solutions. But the assumption common to all of these paradigmatic rationales is that participation produces "better" rules, where "better" may be understood broadly to refer to any improvement in the quality of the rule, be it the intelligence of the draft or the ease of its eventual implementation.

¹¹³ There is extensive literature on public participation in rulemaking generally, though much of it focuses on rights of standing and intervention in formal and adjudicatory proceedings, rather than in informal rulemaking. Recommendation of the Administrative Conference of the United States, *Public Participation in Administrative Hearings* (Recommendation No. 71-6), 1 C.F.R. § 305.71-6 (1971), available at <http://www.law.fsu.edu/library/admin/acus/305716.html>; Arthur Earl Bonfield, *Public Participation in Federal Rulemaking Relating to Public Property, Loans, Grants, Benefits, or Contracts*, 118 U. PA. L. REV. 540 (1970); Cramton, *supra* note 24 (arguing that broadened participation will give administrative decisions greater legitimacy); Jody Freeman, *Collaborative Governance in the Administrative States*, 45 UCLA L. REV. 1 (1997); THOMAS C. BEIERLE, *DISCUSSING THE RULES: ELECTRONIC RULEMAKING AND DEMOCRATIC DELIBERATION* (Resources for the Future, Discussion Paper No. 03-22, 2003), available at <http://www.rff.org/Documents/RFF-DP-03-2.pdf>.

¹¹⁴ In the same way that the First Amendment enhances self-governance and the marketplace of ideas, improves human autonomy and offers a social safety valve, checks abuse of power, and develops the American character, so, too, do myriad, often competing rationales justify participation. Ultimately, the purpose of the right to participate is to ensure the writing of the best possible rule in the public interest, but even in the face of problems with it, we preserve the right because of its additional social benefits.

The administrative law literature suggests three justifications for why participation improves rulemaking: it helps ascertain the “truth” and elicit information to inform rule writing; it strengthens the legitimacy of the process by making it democratically accountable; and it facilitates implementation by building social cohesion around the rule as authoritative. So if the Department of Transportation (DOT) wants to enact a regulation pertaining to the use of seatbelts, it needs to know more about how the public uses seatbelts; it needs to build public support for such a regulation in the face of likely opposition; and the auto industry, consumer groups, and drivers all need to feel that they have had a say in the process, at the very least, to ensure their subsequent compliance.

The rationales for public participation break down into fifteen more specific propositions. Consulting the public (1) ensures the rule’s grounding in empirical fact;¹¹⁵ (2) informs the rulemaking and helps the agency official write more lapidary rules; and (3) elicits public opinion on all facets of an issue and its potential impact, including from those not anticipated to be affected.¹¹⁶ Public consultation also provides an opportunity to (4) test the waters of public reaction to a proposed rule. Public satisfaction is not the sine qua non, but if a rule’s author receives thousands of angry comments, he can (5) respond better to citizens’ objections and prepare for potential litigation and other increased costs of compliance.

Public consultation is not only an opportunity to predict public anger but a useful (6) “safety valve”¹¹⁷ that promotes social cohesion. Allowing citizens to participate in the rulemaking process ensures the (7) legitimacy of the rulemaking and builds confidence among the parties, and in the process.¹¹⁸ If citizens play a democratically accountable role in writing the rule, the rule acquires greater legitimacy¹¹⁹ and they are (8) more likely to comply with it.

¹¹⁵ Harter, *supra* note 104, at 21; see also REGULATORY IMPACT UNIT, CABINET OFFICE (U.K.), CODE OF PRACTICE ON WRITTEN CONSULTATION 4 (Nov. 2004) (“The main purpose [of consultation] is to improve decision-making, by ensuring that decisions are soundly based on evidence, that they take account of the views and experience of those affected by them, that innovative and creative options are considered and that new arrangements are workable.”), available at http://www.cabinet-office.gov.uk/regulation/docs/consultation/pdf/code_pdf.pdf; Freeman, *supra* note 113, at 27 (asserting that participation enhances the information basis of a rule); Gellhorn, *supra* note 14, at 361 (noting that public participation “assur[es] responsive and responsible decisions”).

¹¹⁶ See Steven Croley, *Making Rules: An Introduction*, 93 MICH. L. REV. 1511, 1519 (1995) (discussing rulemaking as a facilitator of information exchange between agencies and outside parties).

¹¹⁷ Gellhorn, *supra* note 14, at 361.

¹¹⁸ See, e.g., Freeman, *supra* note 113, at 27 (arguing that participation increases legitimacy).

¹¹⁹ For a lengthier discussion of the definition of democratic legitimacy, see BETH NOVECK, DIMPLED-

This (9) reduces resistance among regulated groups and lowers the cost of implementation.¹²⁰ For citizens, public participation in rulemaking provides an opportunity for (10) democratic self-governance and a chance to play a role in this important legislative process. It gives the public a voice in making important public decisions about the (11) allocation of scarce resources¹²¹ in society. Participation, if organized with these goals in mind, also (12) enfranchises the powerless and dilutes regulatory capture, affording an opportunity for everyone's opinion to be counted. Having to consult the public also forces the agency to be (13) more accountable to the public and (14) more transparent. It shines the light of public scrutiny on rulemaking, an important regulatory activity, which would otherwise be subject to few democratic controls. Finally, (15) public participation in rulemaking is applauded for its role in "breeding citizenship"¹²² by offering an avenue for active participation in the life of the polity. Participation sharpens democratic skills, instills a sense of civic responsibility, and deepens democratic political culture. By cultivating participation in this domain, participation reinforces democratic practice throughout civic life and cultivates the moral imperative as well as the general will. In any given rulemaking procedure, or within any particular agency culture, any one of these rationales for participation may weigh more heavily than another.

D. The Practice of Public Consultation and Participation in Informal Rulemaking

The APA defines a rule as "the whole or a part of an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy."¹²³ Rulemaking encompasses almost limitless subject matter. Within the loose framework of existing law and

HANGING-PREGNANT-CHAD.COM: THE IMPACT OF INTERNET TECHNOLOGY ON DEMOCRATIC LEGITIMACY, (Center for Applied Policy Research, Working Paper, 2001), available at http://www.cap-info.de/triangle/download/noveck_e.pdf.

¹²⁰ KERWIN, *supra* note 15, at 159.

¹²¹ GUIDO CALABRESI & PHILIP BOBBITT, TRAGIC CHOICES (1978) (discussing social decisionmaking regarding the allocation of scarce resources such as transplant organs).

¹²² Rossi, *supra* note 100, at 188 (noting that participation "inspir[es] a sense of civic responsibility"); COGLIANESE, *supra* note 50, at 12 (discussing participation as citizenship); see also Jane Mansbridge, *Does Participation Make Better Citizens?*, GOOD SOC'Y, Spring 1995, at 3, 3-4 ("Participation does make better citizens. I believe it, but I can't prove it. And neither can anyone else."), available at <http://www.bsos.umd.edu/pegs/mansbrid.html>.

¹²³ Administrative Procedure Act, 5 U.S.C. § 551(4) (2000).

policy, agencies enact rules about everything under the sun.¹²⁴ Congress enacts legislation that expresses broad statements of policy, leaving it to federal agencies, departments, and administrations to implement the policy through the detailed prescriptions of rules. Rules translate a statute's intent into specific measures for compliance.¹²⁵ Though all levels of government engaged in rulemaking even before the APA, commentators agree that, with the enactment of sweeping legislation in the 1970s, regulating the environment, workplace, and consumer safety, rulemaking has exploded.¹²⁶

Because legislative rules are designed to express universal statements of policy,¹²⁷ participation should be relevant, significant, and widely practiced. In fact, participation is currently a feature of all rulemaking,¹²⁸ but it is neither maximally effective nor democratic. The Attorney General's Committee on Administrative Procedure detailed the use of public hearings, comment periods, conferences, and advisory committees well before the enactment of the APA.¹²⁹ In the same year, Walter Gellhorn celebrated the fact that the administrative process was providing machinery—such as county committees of farmers and referenda among tobacco producers—for the average citizen “to meet government.”¹³⁰ The FCC endorsed the use of listeners' councils to police the work of licensed public-interest broadcasters.¹³¹ The Housing Act of 1954 contained a community participation requirement,¹³² as does much land use and environmental regulation today.¹³³ During its reformist periods in the

¹²⁴ KERWIN, *supra* note 15, at 4 (“Rules covered a large range of topics in 1946; in the early twenty-first century the scope is virtually limitless.”).

¹²⁵ *See id.* at 22-23. In addition, agencies enact “interpretive” rules, which do not create new policy but instruct the public on compliance with its legal obligations. *Id.* There are also “procedural” rules that govern the internal running of agencies and govern interaction with them. *Id.* This Article focuses on legislative rules, which are the centerpiece of substantive administrative rulemaking and the only ones subject to the public participation requirements of the APA.

¹²⁶ *See id.* at 13-15.

¹²⁷ Colin S. Diver, *Policymaking Paradigms in Administrative Law*, 95 HARV. L. REV. 393, 393-94 (1981); *see also* Cramton, *supra* note 24, at 531 (“[Rulemaking] is performing functions of great public moment which have significant effects for great numbers of people.”).

¹²⁸ On processes of citizen participation, *see generally* CITIZEN PARTICIPATION IN AMERICA (Stuart Langton ed., 1978), and CITIZEN PARTICIPATION IN PUBLIC DECISION MAKING (Jack DeSario & Stuart Langton eds., 1987).

¹²⁹ CLARK, *supra* note 63, at 79-80.

¹³⁰ GELLHORN, *supra* note 78, at 122.

¹³¹ *See* DONALD L. GUIMARY, *CITIZENS' GROUPS AND BROADCASTING* (1975) (surveying the work of citizens' radio councils and the waxing and waning of support for them by the FCC and the broadcast industry).

¹³² Housing Act of 1954, Pub. L. No. 83-560, ch. 649, 68 Stat. 590, 600 (1955).

¹³³ *See* Margaret A. Moote et al., *Theory in Practice: Applying Participatory Democracy Theory to Public Land Planning*, 21 ENVTL. MGMT. 877 (1997) (discussing the Bureau of Land Management's use of a more

1930s and 1970s, Congress frequently prescribed public participation in rulemakings implementing social legislation. Agencies now not only take written comments, they hold public hearings, consult with experts in advisory committees,¹³⁴ and work with interest group stakeholders in negotiated rulemakings.¹³⁵ Public participation also occurs after the fact through intervention in agency adjudications, private and public watchdog programs to ensure compliance,¹³⁶ and citizen suits.¹³⁷ There is no doubt that participation takes place in different forms, but there are few prescribed methodologies designed to achieve specific outcomes, recruit new participants, or exploit interactive technology to improve participative capacity.

In Part II, I turn from a background of institutional distrust, haphazard practice, and benign neglect to address the effect of the Internet on public participation.

II. PRACTICE: UNMAKING THE PROCRUSTEAN BED OF TECHNOLOGICAL UNIFORMITY

The incorporation of information and communication technologies into the making of administrative rules creates the potential for a fundamental overhaul of the work of bureaucracy.¹³⁸ Almost all rulemaking agencies have begun to experiment with the use of e-rulemaking technology.¹³⁹ Several scholars—

participatory method of public land use management); *see also* McFarlane, *supra* note 20, at 866-92 (surveying history of citizen participation requirements in urban development programs, especially Great Society legislation).

¹³⁴ Federal Advisory Committee Act, Pub. L. No. 92-463, 86 Stat. 770 (1972) (codified as amended at 5 U.S.C. app. 2 §§ 1-15 (2000)).

¹³⁵ Negotiated Rulemaking Act of 1990, Pub. L. No. 101-648, 104 Stat. 4969 (codified as amended at 5 U.S.C. §§ 561-570 (2000)) (encouraging agencies to use this innovative dispute resolution process for soliciting stakeholder comments to enhance the informal rulemaking process); *see supra* notes 18, 92 and accompanying text.

¹³⁶ *See, e.g.*, *F.C.C. v. Pacifica Found.*, 438 U.S. 726 (1978) (concerning a citizen's complaint to the FCC about indecent language on radio station broadcast leading to FCC sanction of licensee).

¹³⁷ *See, e.g.*, Louis L. Jaffe, *The Citizen as Litigant in Public Actions: The Non-Hohfeldian or Ideological Plaintiff*, 116 U. PA. L. REV. 1033 (1968).

¹³⁸ New technology presents the challenge of "nothing less than how to design transformation of the rulemaking process as a whole." JEFFREY S. LUBBERS, *THE FUTURE OF ELECTRONIC RULEMAKING: A RESEARCH AGENDA 4* (Kennedy Sch. of Gov't, Harvard Univ., Working Paper No. RPP-2002-04, 2002), available at <http://www.ksg.harvard.edu/cbg/research/rpp/RPP-2002-04.pdf>; *see also* CARY COGLIANESE, *E-RULEMAKING: INFORMATION TECHNOLOGY AND THE REGULATORY PROCESS* (Kennedy Sch. of Gov't, Harvard Univ., Working Paper No. RPP-2003-05, 2003), available at <http://www.ksg.harvard.edu/cbg/research/rpp/RPP-2003-05.pdf>.

¹³⁹ KERWIN, *supra* note 15, at 193.

lawyers¹⁴⁰ and computer scientists¹⁴¹—are exploring the transformative role that Web-based technologies play in rulemaking.¹⁴² The revolutionary potential of e-rulemaking lies in two characteristics of the newer technologies: the graphical user interface of the World Wide Web, which makes it easy to present data in a readily accessible and appealing format, and the interactive communications of the underlying Internet protocol. With the inexorable expansion of Internet access into the home and workplace,¹⁴³ technology is being transformed from a back-office productivity tool into the primary interface between citizen and government. Though there are many people without access to the machines or the know-how to use them, the mandate by

¹⁴⁰ Brandon & Carlitz, *supra* note 46; Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277 (1998); Jeffrey S. Lubbers, *The Administrative Law Agenda for the Next Decade*, 49 ADMIN. L. REV. 159 (1997); Perritt, *supra* note 61; Stuart Shulman et al., *Electronic Rulemaking: A Public Participation Research Agenda for the Social Sciences*, 21 SOC. SCI. COMPUTER REV. 162 (2003); COGLIANESE, *supra* note 138; COGLIANESE, *supra* note 50; LUBBERS, *supra* note 138; Shulman, *supra* note 37, at 20; *see also* U.S. GEN. ACCOUNTING OFFICE, FEDERAL RULEMAKING: AGENCIES' USE OF INFORMATION TECHNOLOGY TO FACILITATE PUBLIC PARTICIPATION (2000) (recommending online access to regulatory supporting materials), available at <http://purl.access.gpo.gov/GPO/LPS11374>; Perritt, *supra* note 30, at 79.

¹⁴¹ Professors Eduard Hovy of the University of Southern California and Elizabeth Liddy of Syracuse University work on natural language processing and e-government. Professor Kincho Law of Stanford University is developing compliance tools. *See* Info. Scis. Inst., Univ. of S. Cal., Publications (listing publications of Professor Hovy), at <http://www.isi.edu/natural-language/people/hovy.html> (last visited Apr. 22, 2004); *see also* Ctr. for Natural Language Processing, Syracuse Univ., Publications (listing publications of Professor Liddy and others), at <http://www.cnlp.org/publications/pub.asp> (last visited Apr. 22, 2004); Eng'g Informatics Group, Stanford Univ., Publications (listing publications of Professor Law), at <http://eil.stanford.edu/law/> (last visited Apr. 22, 2004).

¹⁴² Whereas earlier technologies, such as word processors and hard drives, may have made internal processes more efficient, "e-rulemaking" refers specifically to the use of Web-based technology. Recommendation of the Administrative Conference of the United States, Federal Agency Use of Computers in Acquiring and Releasing Information (Recommendation No. 88-10), 1 C.F.R. § 305.88-10 ¶ H (1988), available at <http://www.law.fsu.edu/library/admin/acus/3058810.html>. In a recommendation of the Administrative Conference, published long before the advent of the commercial World Wide Web, the Conference proposed that "[a]gencies should experiment with electronic means of providing public participation in rulemaking, adjudication and other administrative proceedings." *Id.*

¹⁴³ In 2001 there were reportedly over 100 million Internet hosts in the United States, a jump of forty-five percent over the prior year. *See* Press Release, Telcordia Technologies, Internet Hosts Reach 100 Million Worldwide (Jan. 5, 2001), available at <http://emailwire.com/news/int374.shtml>. This represents a dramatic change from 1995, the year that Microsoft's Internet Explorer was first released. Tim Berners-Lee invented and released the very first Web browser shortly before this in 1991. *See* TIM BERNERS-LEE, WEAVING THE WEB (2000). Perritt has written extensively about the lack of access to technology as a key impediment to electronic filing. *See* Perritt, *supra* note 30; Perritt, *supra* note 57. Though the divide between technology haves and have-nots has not closed in the United States, access to technology is far more widely available. Furthermore, access from the home is not a prerequisite.

government to put rulemaking online will transform the Web into the "storefront" for government business.¹⁴⁴

The growing literature on the democratizing potential of the Internet,¹⁴⁵ which discusses how technology might improve direct,¹⁴⁶ representative,¹⁴⁷ and deliberative¹⁴⁸ models of democratic culture, taps into the fascination with the transformative role of the Internet in governance.¹⁴⁹ However, far from the anodyne conclusion that technology will enhance democratic governance, the consensus in more recent literature is that technology may enable or disable various activities of democracy¹⁵⁰ and bring about change, albeit not necessarily for the better. This holds true for technology and administrative practice.

¹⁴⁴ See E-Government Act of 2002, Pub. L. No. 107-347, 116 Stat. 2899.

¹⁴⁵ See, e.g., TED BECKER & CHRISTA DARYL SLATON, *THE FUTURE OF TELEDEMOCRACY* (2000); CYBERDEMOCRACY: TECHNOLOGY, CITIES AND CIVIC NETWORKS (Roza Tsagarousianou et al. eds., 1998); LAWRENCE K. GROSSMAN, *THE ELECTRONIC REPUBLIC: RESHAPING DEMOCRACY IN THE INFORMATION AGE* (1995); CHRISTA DARYL SLATON, *TELEVOTE: EXPANDING CITIZEN PARTICIPATION IN THE QUANTUM AGE* (1992); CASS SUNSTEIN, *REPUBLIC.COM* (2001); JAMES A. THURBER & COLTON C. CAMPBELL, *CONGRESS AND THE INTERNET* (2003); ANTHONY G. WILHELM, *DEMOCRACY IN THE DIGITAL AGE: CHALLENGES TO POLITICAL LIFE IN CYBERSPACE* (2000); see also A. Michael Froomkin, *Habermas@discourse.net: Toward a Critical Theory of Cyberspace*, 116 HARV. L. REV. 749 (2003); Eben Moglen & Pamela S. Karlan, *The Soul of a New Political Machine: The Online, the Color Line and Electronic Democracy*, 34 LOY. L.A. L. REV. 1089 (2001); Beth S. Noveck, *supra* note 41; Beth Simone Noveck, *Transparent Space: Law, Technology and Deliberative Democracy in the Information Society*, 3 CULTURAL VALUES 472 (1999); Oren Perez, *Electronic Democracy as a Multi-Dimensional Praxis*, 4 N.C. J.L. & TECH. 275 (2003).

¹⁴⁶ See, e.g., CITIZENS AS LEGISLATORS: DIRECT DEMOCRACY IN THE UNITED STATES (Shaun Bowler et al. eds., 1998); THOMAS E. CRONIN, *DIRECT DEMOCRACY: THE POLITICS OF INITIATIVE, REFERENDUM, AND RECALL* (1989); JOHN HASKELL, *DIRECT DEMOCRACY OR REPRESENTATIVE GOVERNMENT?: DISPELLING THE POPULIST MYTH* (2001); Elizabeth Garrett, *Who Directs Direct Democracy?*, 4 U. CHI. L. SCH. ROUNDTABLE 17 (1997); Nathaniel A. Persily, *The Peculiar Geography of Direct Democracy: Why the Initiative, Referendum and Recall Developed in the American West*, 2 MICH. L. & POL'Y REV. 11 (1997); cf. Sherman J. Clark, *A Populist Critique of Direct Democracy*, 112 HARV. L. REV. 434 (1998).

¹⁴⁷ *THE FEDERALIST PAPERS* (Isaac Kramnick ed., Penguin Books 1987) (1787-88); JOHN GASTIL, *BY POPULAR DEMAND: REVITALIZING REPRESENTATIVE DEMOCRACY THROUGH DELIBERATIVE ELECTIONS* (2000); cf. LANI GUINIER, *THE TYRANNY OF THE MAJORITY: FUNDAMENTAL FAIRNESS IN REPRESENTATIVE DEMOCRACY* (1994).

¹⁴⁸ See BARBER, *supra* note 11; JAMES BOHMAN, *PUBLIC DELIBERATION: PLURALISM, COMPLEXITY, AND DEMOCRACY* (1996); *DELIBERATIVE DEMOCRACY* (John Elster ed., 1998); *DELIBERATIVE DEMOCRACY: ESSAYS ON REASON AND POLITICS* (James Bohman & William Rehg eds., 1997); AMY GUTMANN & DENNIS THOMPSON, *DEMOCRACY AND DISAGREEMENT* (1996); Joshua Cohen, *Deliberation and Democratic Legitimacy*, in *CONTEMPORARY POLITICAL PHILOSOPHY: AN ANTHOLOGY* 143 (Robert E. Goodin & Philip Pettit eds., 1997).

¹⁴⁹ See WHO RULES THE NET?: *INTERNET GOVERNANCE AND JURISDICTION* (Adam Thierer & Clyde Wayne Crews Jr., eds., 2003).

¹⁵⁰ See generally Yuval Levin, *Politics After the Internet*, PUBLIC INTEREST, Fall 2002, at 80 (observing that the Internet is bringing about some change in politics but not all of it is good).

This Part analyzes the likely long-term impact of current designs for e-rulemaking. Large-scale technology systems remain in place for a long time and are difficult to change. Hence, today's choice of technology determines tomorrow's practice.¹⁵¹ Once implemented, the technological infrastructure will remain in place. This Part argues that the current design proposal for electronic rulemaking will fail to improve citizen participation and to realize the opportunity presented by e-rulemaking. The E-Rulemaking Initiative merely transposes the statutory approach of notice and comment, adopting metaphorically for cyberspace the paper-based method of submitting written comments. Nothing explains why one-click commenting is the best design choice. Increasing the number of comments without giving rule writers and agency officials the tools to manage them pays lip service to participation while setting up the conditions to undermine its effectiveness. Instead, innovations in the notice and comment process should be designed to foster communities of practice.

While putting "notice" on the Web as is makes more information available, it does little to make it more useful or to translate the information into the knowledge necessary to participate in rulemaking.¹⁵² It does not adequately tie that information to the practices of participation. Whereas e-rulemaking makes "comment" faster, it does little to make it more thoughtful or manageable for regulators. In fact, by enabling a potential deluge, it is likely to undermine the right of participation. This impending failure is the direct result of a technology design process that is closed and fails to take into account the desired outcomes of rulemaking. Setting those goals should itself be a participatory process.

The bulk of this Part then proposes the development of tools for use by regulators and participants to improve the participatory quality of rulemaking.¹⁵³ These innovations are not exclusive but are illustrative of how

¹⁵¹ GYÖRGY LUKÁCS, *HISTORY AND CLASS CONSCIOUSNESS* 83-110 (Rodney Livingstone trans., MIT Press ed. 1971) (1967) (discussing reification in history).

¹⁵² Information is not knowledge. Information overload often creates a more profound impediment to knowledge than a lack of information. Professor Thomas McGarity offers a profound illustration of this point. McGarity, *supra* note 45, at 1387 ("The 'concise general statement of basis and purpose' for the original primary and secondary ambient air quality standards promulgated under the Clean Air Act Amendments of 1970 consisted of a single page in the Federal Register when they were promulgated in 1971. The preamble to the 1987 revision of a single primary standard consumed 36 pages in the Federal Register and was supported by a 100-plus-page staff paper, a lengthy Regulatory Impact Analysis that cost the agency millions of dollars, and a multi-volume criteria document.") (internal citations omitted); *see also* Noveck, *supra* note 41.

¹⁵³ These proposals are listed separately in the Index.

to think about designing for participation. While Part IV will propose new communicative methods for participation, this Part focuses on the current mechanics of rulemaking and suggests software tools to improve participatory processes within the existing framework.

A. E-Rulemaking Policy

The current trend of e-rulemaking policy is toward centralization of administrative practice. Instead of focusing on how technology can be used to manage the communicative processes of participation, current efforts are focused on exploiting the storage capacity of new tools to centralize document management—not surprisingly, given that in 2002 the size of the *Federal Register* swelled to 75,606 pages.¹⁵⁴ Such a focus directs resources away from the interactivity of the technology and shifts the center of attention from active participation toward passive information gathering. The focus is entirely on the organization of discrete documents, rather than on the interpersonal relationships of rulemaking. Information is viewed as somehow standing apart from the process.

The centralization of electronic government by agencies¹⁵⁵ began under President Clinton with the recommendation of the Gore Commission on Reinventing Government (formerly the National Performance Review).¹⁵⁶ The E-Government Act was introduced in the Senate in May 2001.¹⁵⁷ In part, it codified President Bush's E-Government Action Plan,¹⁵⁸ which calls for greater use of technology by federal agencies to foster "citizen-centric" rather than "bureaucracy-centered" government.¹⁵⁹ Specifically with regard to rule-

¹⁵⁴ CLYDE WAYNE CREWS, JR., TEN THOUSAND COMMANDMENTS: AN ANNUAL SNAPSHOT OF THE FEDERAL REGULATORY STATE 9 fig.6 (2003) (illustrating the number of *Federal Register* pages from 1993 to 2002).

¹⁵⁵ NAT'L PERFORMANCE REVIEW, *REG04: Enhance Public Awareness and Participation*, in IMPROVING REGULATORY SYSTEMS (Sept. 1993), available at <http://govinfo.library.unt.edu/npr/library/reports/reg04.html>.

¹⁵⁶ Pres. Bill Clinton, Remarks by the President in Announcement of the Initiative to Streamline Government (Mar. 3, 1993), available at 1993 WL 366817; Press Release, White House Office of Domestic Policy, A Revolution in Government (Mar. 3, 1993), available at 1993 WL 366800.

¹⁵⁷ Introduced in the Senate (S. 803) by Senator Joseph Lieberman and subsequently in the House (H.R. 2458) by Rep. James Turner, the legislation passed unanimously. For a complete summary of the bill, its contents and action taken on it, see *Bill Summary & Status for the 107th Congress*, at <http://thomas.loc.gov/cgi-bin/bdquery/z?d107:SN00803:@@L&summ2=m&> (last visited Mar. 31, 2004).

¹⁵⁸ News Release, Office of Mgmt. & Budget, OMB Outlines New Federal E-Government Strategy: 23 Initiatives Will Help Improve Customer Service and Efficiency (Oct. 25, 2001), at <http://www.whitehouse.gov/omb/pubpress/2001-54.html>; egov, E-Gov Initiatives at a Glance, at http://www.whitehouse.gov/omb/egov/downloads/E-Gov_Initiatives.pdf (last modified Mar. 4, 2004).

¹⁵⁹ Pres. George W. Bush, E-Government's Role, U.S. Gen. Servs. Admin. (July 2002) ("Government

making, it requires all agencies to “accept submissions under section 553(c) of Title 5, United States Code, so-called ‘Notice and Comment’ or informal rulemaking by electronic means.”¹⁶⁰ The E-Government Act also goes beyond the e-mail status quo. It promotes the transition by federal agencies to fully electronic¹⁶¹ informal rulemaking via the World Wide Web.¹⁶² This is not to say that paper will be eliminated but that agencies will be required to store and make accessible all rulemaking activity online and permit electronic commenting.

The Act gives control over the E-Rulemaking Initiative to OMB,¹⁶³ which will create the tools for e-rulemaking. Rather than create a new entity responsible for the government-wide project, OMB has delegated responsibility for e-rulemaking to the EPA’s Office of Environmental Information (OEI),¹⁶⁴ the office responsible for the EPA’s e-rulemaking efforts. Though technically part of EPA, the E-Rulemaking Initiative project team has dedicated offices. Whereas OMB could have created a coequal governance structure, putting representatives of each of the major rulemaking agencies¹⁶⁵ or delegates from the Chief Information Officers (CIO) Council¹⁶⁶ in charge, it

should be citizen-centered, results-oriented, and market-based.”), available at http://www.estrategy.gov/it_policy.cfm#role.

¹⁶⁰ E-Government Act of 2002, Pub. L. No. 107-347, § 206(c), 116 Stat. 2899, 2916.

¹⁶¹ The Government Paperwork Elimination Act also requires that by October 21, 2003, federal agencies provide the public with the option of submitting information electronically. 44 U.S.C § 3504 (2000).

¹⁶² E-Government Act of 2002, Pub. L. No. 107-347, §206(d)(1), 116 Stat. 2899, 2916 (“To the extent practicable, as determined by the agency in consultation with the Director, agencies shall ensure that a publicly accessible Federal Government website contains electronic dockets for rulemakings under section 553 of title 5, United States Code.”)

¹⁶³ OMB is the creation of statute. Budget and Accounting Act of 1921, Pub. L. No. 67-13, 42 Stat. 20 (creating the Bureau of the Budget which became the Office of Management and Budget in 1970).

¹⁶⁴ The Office of Environmental Information, an office of the EPA, describes itself as follows:

In October 1999, the EPA Administrator created a new information office. The Office of Environmental Information (OEI) has central responsibility over information management, policy and technology. Today the demand for high-quality environmental information is growing. OEI will improve the way EPA collects, manages, analyzes and provides access to environmental information for the American public. Creating the office was a collaborative process with input from a wide range of staff and stakeholders, both internal and external to EPA.

U.S. Env'tl. Prot. Agency, About OEI, at <http://www.epa.gov/oei/about.htm> (last modified Mar. 18, 2004).

¹⁶⁵ See CREWS, *supra* note 154, at 1 (noting that the five most active rule-producing agencies, Transportation, Treasury, Agriculture, Interior, and the EPA, account for fifty percent of all rules under consideration).

¹⁶⁶ The CIO Council, created by Exec. Order No. 13,011 (1996), serves as the principal interagency forum for improving practices in the design, modernization, use, sharing, and performance of federal government agency information resources. See Chief Information Officers Council, at <http://www.cio.gov> (last visited Apr. 1, 2004).

designated OEI as the manager with other agencies performing an advisory role.¹⁶⁷ OMB will collect money from each of the agencies to support this and the other e-government initiatives.

Under the OMB plan, regulations.gov will house all rulemaking activity.¹⁶⁸ Whereas the final choice of information architecture (i.e., one database or more) is not yet resolved as of this writing, rulemaking, from the point of view of the citizen, will take place at one central location in cyberspace.¹⁶⁹ It will also put the rulemaking process under the closer control and oversight of the Executive. Two arguments, in particular, support this centralization plan. Coordinating spending on large-scale technology implementations will lead to an ultimate cost-saving as compared to an agency-by-agency approach.¹⁷⁰ Second, a single interface by which the public engages in rulemaking facilitates participation by reducing the costs of learning different systems.¹⁷¹

This consolidation process began with the launch of regulations.gov, a website¹⁷² for searching all federal agency rulemakings.¹⁷³ In its current form, regulations.gov is a central point from which to search agency dockets for open rulemakings and to comment on them by means of a text box or to get instructions for commenting by snail mail or e-mail. This website currently supplements each agency's Web presence and its offline rulemaking activities. It does not now replace agency websites, nor does it offer any tools beyond simple search and comment capability.¹⁷⁴ But the much-debated plan is to

¹⁶⁷ Even the governance board has been transformed into an advisory council. They are the EPA (the lead partner) with the FCC, the General Services Administration, the Government Printing Office, the Departments of Agriculture, Defense, Health and Human Services, Housing and Urban Development, Justice, Labor, and Transportation, and the National Archives and Records Administration. See Regulations.gov, at <http://www.regulations.gov/eRulemaking-3.cfm> (last modified May 6, 2004).

¹⁶⁸ BOLTEN MEMORANDUM, *supra* note 4.

¹⁶⁹ Oscar Morales, Presentation to New York Law School Institute for Information Law and Policy Summer Fellows (June 16, 2003) (on file with author).

¹⁷⁰ U.S. GEN. ACCOUNTING OFFICE, *supra* note 31, at 7.

¹⁷¹ See Democracy Design Workshop, *eRulemaking: Law, Policy and Technology for Democratic Participation*, at <http://www.nyls.edu/pages/1521.asp> (last modified Mar. 29, 2004) (discussing legal questions raised by electronic rulemaking).

¹⁷² On January 23, 2003, the cornerstone of the E-Rulemaking Initiative was laid by OEI. See Regulations.gov, at <http://www.regulations.gov> (last modified Apr. 25, 2004).

¹⁷³ See BOLTEN MEMORANDUM, *supra* note 4, at 4 (directing agencies to make public regulatory dockets electronically accessible and searchable using the regulations.gov website and to accept electronic submissions).

¹⁷⁴ The website allows the public to participate in agency rulemaking by providing a venue online to learn about proposed regulations and to submit comments. The public can access the website and perform searches among federal agencies to see notices of proposed rules, along with other pertinent information. Comments can then be directly submitted to the few agencies that accept electronic comments. The submission process

expand regulations.gov into the *sole* source for electronic rulemaking for all agencies¹⁷⁵ and to develop electronic tools to support the work of rule writers across the government. Regulations.gov represents a commitment to digitizing the rulemaking process and is a placeholder for a rulemaking space that may, eventually, replace existing agency websites with a centralized information warehouse. This signals a departure, not only from traditional rulemaking, but also from e-rulemaking as it has been practiced for the last decade.

Regulations.gov is just the beginning. The E-Rulemaking Initiative has three planned “modules.”¹⁷⁶ The first is to provide an interim search and comment website.¹⁷⁷ Regulations.gov currently goes part of the way by offering an interface to search some agency rulemakings. OMB’s plan is to expand the site to provide access to all rulemaking agencies and to enable commenting on those rules. Module 1 puts the simplest form of the paper-based process online. The second module is the creation of a centralized “Federal government-wide docket system.”¹⁷⁸ The plan is to have a repository of rulemaking information to facilitate searching. But the move from separate agency systems to a single information source will be a Herculean (or perhaps Sisyphean) information technology project. In this process, EPA has arrogated to itself the role of information archivist for all federal agencies. The third module calls for the building of an “Electronic Desktop,”¹⁷⁹ a seamless, integrated, unified, and cost-effective regulatory management workspace; in other words, a one-stop administration of rulemaking.

does not validate the integrity of the information by requiring identification from the submitter and, thus, much unusable data may be generated. The unidirectional process also does little to foster government-to-citizen interaction—allowing citizens to send comments but with no feedback or confirmation by the agency. All agencies under the umbrella of this website, however, have not adopted the method of electronic comment. The Department of Education and the Drug Enforcement Agency, for example, do not accept electronic comment submissions for proposed rules on the *Federal Register*. Rather, commenters are guided through a comment form that instructs the commenter to print the document and send it by way of traditional mail. See Regulations.gov, at <http://www.regulations.gov> (last modified Apr. 25, 2004).

¹⁷⁵ To be clear, the goal is to have the citizen-participant experience “one stop shopping” by going to a single website. The “back-end” architecture has, however, not yet been determined. There may, in fact, continue to be multiple computer systems running at each agency which appear to be brought together under a single interface.

¹⁷⁶ Morales, *supra* note 169.

¹⁷⁷ Rick Otis, Office of Envtl. Info., e-Rulemaking, Presentation Before John F. Kennedy School of Government, Harvard University 8 (Jan. 21-22, 2003), at http://www.ksg.harvard.edu/cbg/Conferences/rpp_rulemaking/Otis_Presentation.pdf.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.* at 9.

B. *E-Rulemaking Practice on an Agency Level*

One can observe three trends to date. First, e-rulemaking has largely been practiced on an agency-by-agency (not a centralized) basis, with the greatest innovation coming from the significant rulemaking agencies.¹⁸⁰ Second, with the exception of a few online consultation experiments,¹⁸¹ technology has been employed less to facilitate participation and more to manage voluminous documentary overload.¹⁸² Third, to the extent that online participation has existed, it has meant little more than adding e-mail to snail mail and fax as available delivery mechanisms. Centralized e-rulemaking is currently developing within the framework created by these constraints.

Though every agency has a website, only a handful of actively rulemaking agencies uses the Web for notice-and-comment rulemaking.¹⁸³ That is to say, they provide some informational resources (not merely final rules) to enable participation in the informal rulemaking process. By one count, there are thirty such e-rulemaking websites currently in operation.¹⁸⁴ The first U.S. entity to experiment with technology for online rulemaking was the Nuclear Regulatory Commission (NRC), which piloted a Web-based repository of rulemaking forms in the mid-1990s. Today e-rulemaking sites range from those that, at a

¹⁸⁰ The Department of Labor is an agency with a significant e-rulemaking presence, though the online rulemaking capabilities only provide links to information and offer no opportunity for direct participation. See U.S. Dep't of Labor, *Rulemaking: Information About Rulemaking at the Department of Labor*, at <http://www.dol.gov/dol/compliance/compliance-rulemaking.htm> (last modified Apr. 1, 2004).

¹⁸¹ The Nuclear Regulatory Commission's RuleNet pilot project in 1996 and the EPA's work with Information Renaissance in 2001 were just such experiments, which used computer bulletin boards to foster a deliberative dialogue among a limited public interested in participating in the rulemakings at issue. See KERWIN, *supra* note 15, at 195; Michele Ferenz & Colin Rule, *RuleNet: An Experiment in Online Consensus Building*, in LAWRENCE SUSSKIND ET AL., *THE CONSENSUS BUILDING HANDBOOK* 879-80 (1999). In July 2001, the EPA conducted a two-week online discussion using just such online bulletin boards as a mode of public participation in EPA rulemaking. See BEIERLE, *supra* note 61.

¹⁸² The creation of a free, Web-based, digitized *Federal Register* at <http://www.gpoaccess.gov/fr/index.html>, *Code of Federal Regulations* at <http://www.gpoaccess.gov/cfr/index.html>, and *Unified Agenda of Federal Regulatory and Deregulatory Actions* at <http://www.reginfo.gov>, is an extraordinary achievement and a necessary precursor to enhancing participation.

¹⁸³ The DOT website at <http://www.dot.gov> regularly posts requests for comments on its home page and allows the public to fill out an online form for submission. The Docket Management System at the DOT site and the "eDocket" system at the EPA site, <http://www.epa.gov>, also allow users to conduct simple and advanced searches on dockets, download and print documents, as well as post comments. In contrast, although the Department of Labor provides customer surveys and online forms, there is no functionality whatsoever for commenting on dockets on their website, <http://www.dol.gov>. For a list of current e-rulemaking sites, see the National Archives and Record Administration's website on public participation in electronic rulemaking, at http://www.archives.gov/federal_register/public_participation/rulemaking_email.html (last modified Apr. 1, 2004) [hereinafter NARA E-Rulemaking Website].

¹⁸⁴ See NARA E-Rulemaking Website, *supra* note 183.

minimum, post information about current regulatory dockets to those that allow citizens to post comments online, or upload comments via a website such as the NRC's RuleForum.¹⁸⁵ The Occupational Safety and Health Administration (OSHA), for example, posts its regulatory docket with a searchable directory of the names, summaries, and text of both proposed and final rules.¹⁸⁶ Dockets can be browsed or searched by word or index category.¹⁸⁷

E-rulemaking websites offer one of three types of functionality: a digital reading room, e-docketing, and e-comment systems. Many agencies' websites provide access to the text of their rulemakings by linking to documents from the *Federal Register* (digital reading room). The most advanced e-rulemaking agencies, the EPA, the DOT,¹⁸⁸ and the Department of Labor maintain their current dockets entirely in electronic form (e-docket) and allow the public access to almost all of the documents in the docket of a proposed rule, not simply the draft of the rule itself.¹⁸⁹ They also provide opportunities for the public to comment (e-comment) on a draft rulemaking or propose a draft rulemaking directly via the website as an alternative to paper-based comments. These e-comment sites go beyond mere e-mail, which many agencies and departments accept, and connect information about the docket to comments submitted by allowing both to be displayed in parallel windows. E-comment is only in its earliest stages.

C. Citizen Participation and E-Rulemaking

Under the APA, rulemaking has three statutorily defined steps leading up to the implementation of a rule: notice, comment, and publication. E-rulemaking tracks these steps. There is currently no attempt, as I shall explore, to examine how technology changes the process and to redesign new models

¹⁸⁵ U.S. Nuclear Regulatory Comm'n, Rulemaking-RuleForum, at <http://www.nrc.gov/what-we-do/regulatory/rulemaking.html> (last modified Jan. 14, 2004).

¹⁸⁶ U.S. Dep't of Labor, Occupational Safety & Health Admin., Docket Office Home Page, at <http://dockets.osha.gov> (last visited Apr. 1, 2004).

¹⁸⁷ *Id.*

¹⁸⁸ Eisner, *supra* note 54 (providing information pertaining to the DOT's current e-rulemaking efforts).

¹⁸⁹ See U.S. Department of Transportation, at <http://www.dot.gov> (last modified Apr. 1, 2004); see also U.S. Environmental Protection Agency, at <http://www.epa.gov> (last modified Mar. 31, 2004). Non-documentary sources (e.g., three-dimensional models) are still kept in their original form. Also, internal correspondence, while in electronic format, is not made available to the public via the Web. Eisner, *supra* note 54.

for participation in the digital environment. Present e-rulemaking efforts treat cyberspace as an adjunct to and mirror of the paper-based system.

This is not to suggest that e-rulemaking as currently practiced is without merit. The efficiency gains from disseminating information via the World Wide Web could be extraordinary. However, the simple translation from paper to pixel raises concerns about both the kind of participation being fostered and the lost opportunity to improve it.

D. Notice

Notice provides the informational prerequisite to participation. Without knowledge of a proposed rule's existence, participation is impossible. Notice also provides an advance opportunity to become informed and, hopefully, to shape a reasoned opinion. The state-of-the-art practitioners of electronic rulemaking—a limited number of rule-intensive agencies—publish notice electronically as well as on paper. In addition to the text or summary of a proposed rule, the early adopters of e-rulemaking publish the complete docket electronically. They create an electronic “infospace” for each rulemaking by posting the draft rule and related information. The first module of the E-Rulemaking Initiative offers electronic notice of agency rulemakings searchable by topic, agency, or keyword.¹⁹⁰ A search returns a list of results that, in turn, link to “.pdf” copies of proposed rules as printed in the *Federal Register*. Under the E-Government Act, all agencies must ensure that the entire regulatory docket is made available online in order that it can eventually be searched from the central portal.¹⁹¹

Since 1995, the DOT has managed its regulatory docket electronically and has made its dockets available to the general public via the World Wide Web since 1997. Important rulemakings with significant precedential value are being back-scanned into the system.¹⁹² Once a draft rule is promulgated and assigned a docket number, it is published in the *Federal Register* (in paper and

¹⁹⁰ The EPA and DOT have made efforts for dockets to be searchable online via agency websites, but popular research systems such as Westlaw and LexisNexis have yet to integrate this capability into their systems. Neither allows for the retrieval of dockets. For example, Lexis has an “Administrative Materials” database, but provides no way to search for open agency dockets.

¹⁹¹ See *supra* note 162.

¹⁹² The DOT Dockets Office reviews incoming materials to assure they meet filing requirements. Eisner, *supra* note 54. The materials are then registered and scanned in the Docket Management System (DMS). The EPA also transcribes paper-based comments into its eDOCKET system. Most comments are available for viewing online within three business days after receipt. *Id.*

electronic formats) and made available via the Internet through the DOT's Docket Management System (DMS).¹⁹³ The DMS provides access to the rulemaking (and adjudicatory) dockets of ten DOT agencies through one interface. The DMS contains not only the draft rule but also every major document relating to it, expanding "notice" to give the public a richer base of informational resources. EPA, too, maintains a similar electronic system, called eDocket.¹⁹⁴ In the DMS, draft rules are searchable by keyword and docket number as well as by text. Additional items in the docket are indexed and searchable by means of a forty-item indexing system.¹⁹⁵

These Web-based interfaces make draft rules and rulemaking dockets accessible to the public and to agency staff. The public can read documents, and the tools provide authorized agency officials with the functionality to manipulate them. DMS and eDocket are accessible anywhere in the world, twenty-four hours a day via the World Wide Web. The DOT also offers a "listserv" (an electronic newsletter) to subscribers interested in learning about proposed rulemakings via e-mail. The Internet expands the availability of information beyond those with access to the physical docket rooms or with the resources to hire lawyers and lobbyists. This gives access, for example, to the disabled, who are regularly affected by DOT rulemakings on transportation and accommodation issues.¹⁹⁶ The DOT makes these documents available at no charge, further democratizing access to the information necessary to participate in the rulemaking process. All paper documents, including handwritten comments relating to a given rule, are scanned into the system.

Notice of the rulemaking process is thereby extended well beyond a small circle of large business and other well-organized interest groups. By locating

¹⁹³ Dep't of Transp., Docket Management System, at <http://dms.dot.gov> (last modified Apr. 1, 2004).

¹⁹⁴ See U.S. Env't Prot. Agency, EPA Dockets, at <http://www.epa.gov/edockets> (last modified Apr. 1, 2004). It allows the user to search, download, and print documents from open dockets. Docket material is available from a limited number of subdivisions of EPA back to May 2002. U.S. Env't Prot. Agency, EPA Dockets, About eDOCKET, at http://cascade.epa.gov/RightSite/dk_public_faqs.htm (last modified Apr. 1, 2004). Searching and commenting on dockets does not require registration and can be done anonymously as long as the user agrees to the Terms of Service of the website. *Id.* In contrast, DOT's DMS system includes all DOT dockets. Browsing can be done anonymously, but registration is required in order to comment on an open docket. See Dep't of Transp., Electronic Submissions, at <http://dmses.dot.gov/submit/> (last modified Apr. 1, 2004).

¹⁹⁵ Submissions are not word-searchable because they are scanned in as images rather than as text. Eisner, *supra* note 54.

¹⁹⁶ See Boarding Assistance for Aircraft, 49 C.F.R. § 27.72 (2001) (amending DOT's rules implementing the Air Carrier Access Act of 1986 (ACAA) and section 504 of the Rehabilitation Act of 1973 to require airports and air carriers to provide boarding assistance to individuals with disabilities); see also Nondiscrimination on the Basis of Disability in Air Travel, 14 C.F.R. § 382.41.

notice on the Web, instead of exclusively on paper, the electronic docket management system disseminates notice beyond “insiders.” Web-based notice, theoretically, should help to dilute regulatory capture and inform those who would otherwise know too little—or nothing at all.

Eventually, the DOT’s and EPA’s practice of digitizing their dockets will become the norm, if for no other reason than the cost savings generated by maintaining dockets in electronic format. However, both federal agencies individually and the central regulations.gov website present the dockets as if they were paper. The infospace set aside for rulemaking is organized by discrete documents and grouped by individual rulemaking, not by subject matter or by industry. E-rulemaking does not yet enrich the information with links to other data or put it within the social context of rulemaking practice. The infospace is controlled exclusively by the agency. Even an expert has trouble finding,¹⁹⁷ let alone manipulating, the information in ways conducive to group deliberation. Data in the system will continue to be inaccessible to ordinary citizens, not by dint of being difficult to access, but by being impossible to navigate.

E. Notice—Innovations

Electronic publication of the notice of proposed rulemaking via an agency’s website represents a giant leap forward over paper-based notice. Notice and related information are available to anyone with access to the Internet. However, more information is not necessarily better. The availability of information via the Web does not mean that it is well organized, easy to find, or that citizens know how to use it. It may, in fact, so overwhelm the reader as to diminish his or her overall level of knowledge.

Much can be done within the current framework both to avert the pitfalls from posting rules and their dockets online and to improve the usability of information presented. Each of the design suggestions in this section derives from the premise that: (1) providing notice means delivering information in a format useful to the intended recipients for informing participation; (2) some recipients are nonexpert, individual citizens; (3) information is most successfully disseminated among communities of interest; (4) information will be used across rulemakings by communities over time and should be controlled

¹⁹⁷ Cary Coglianese explained that it took him forty-five minutes to find the text of an open rulemaking discussed in a *New York Times* article. Cary Coglianese, Address at the National Science Foundation National Conference on Digital Government Research (May 20, 2003).

by these communities (or, more accurately, should not be controlled only by government); and (5) information should be tied to the social context of communications in rulemaking.

Communities of interest want to create their own discussion, debate, and commentary to parallel official sources. There are over two million active weblogs in existence.¹⁹⁸ While agencies are responsible for publishing notice of a rule and its reply date, innovation in the notice process should be geared toward ongoing efforts to empower and enlarge the community of practice participating in rulemaking on specific issues. Competing sources of opinions and information must be allowed to flourish and inform the process.

1. MyRulemaking and Visual Tools

A sense of community can be cultivated by enabling those interested in participating in rulemaking to create a MyRulemaking homepage.¹⁹⁹ Registered participants would have the option to save notices of proposed rulemakings (NPRMs) for later reference. A horizontal bar graph, for example, might display how much time has elapsed in each comment process of interest to the participant. Over successive days, participants can track the progress of various rulemakings by clicking on the visual representation marked “Notices” on this homepage. On their MyRulemaking homepage, participants might save notices, documents, discussion transcripts, and contact lists, as well as view a history of their participation. With such improvements, “notice” will not be an isolated event but part of a web of informational resources connecting the participant, the issues, and other participants. An events list might show news of new comments posted in response to a comment posted by the owner of a page.

2. Plain English Presentation

Currently, draft rules are text-searchable by word, and other documents are searchable by index term. Eventually, natural language searches²⁰⁰ that

¹⁹⁸ *Technorati Tracks Two Million Blogs* (Apr. 9, 2004), at <http://www.stargeek.com/item/90809.html>.

¹⁹⁹ The idea for this innovation was proposed by members of the Fall 2003 Seminar on Law, Technology, and Democracy at New York Law School. For postings of class projects and a syllabus, see Democracy Design Workshop, Syllabus, at <http://www.nyls.edu/pages/1653.asp> (last modified Mar. 29, 2004).

²⁰⁰ See *supra* note 141 (citing work of Professors Hovy, Law, and Liddy); see also Brandon & Carlitz, *supra* note 46, at 1440-41 (“Agencies should not limit access to the commentary to a search engine, as USDA did during its organic food marketing rulemaking. Research suggests that search engines give users a false sense that they have reviewed the appropriate documents when retrieval is often spotty. In contrast, an online

produce narrower, more meaningful results in response to search queries will be possible. Such a search capability would allow a user to query the database of proposed rules—for example, “I’d like to see all rules relating to airplanes”—so that even the novice could search without pre-existing knowledge.²⁰¹ For now, presentation should be tailored to the user with appropriate displays for different audiences.²⁰² Clicking on “Expert User” would bring up the detailed text first, while clicking on “New User” would display a summary in plain English and options to view the full text. This simple enhancement would make the process more accessible to all kinds of users.

3. *Searching Parts of Rules*

Currently, draft rules are posted whole cloth, each one as a single document. If the technology were used to its fullest, citizens could search parts of rules and view links between the rule, the authorizing statute, and scientific data supporting each part of the rule. The rule would be a piece of a larger informational fabric connecting authorizing legislation to all related rulemakings past and present.

4. *Versioning and Enhanced InfoSpace*

In much the same way as it has become commonplace to use “track changes” or versioning available with all popular word processing software, agencies can publish competing versions of a draft to illustrate the evolution of a rule and promote a particular choice of language.²⁰³ These improved publishing and searching features should facilitate more informed participation by those reading the rule. At the same time, the need to create such links will foster more precision on the part of those writing the rule. The design of such publication features will stimulate better practices, such as having to supply reasoning to support the choice of particular language. This design of the technology for giving notice can transform information into knowledge.

index allows the public to browse the docket to locate comments made by organizations, trade associations and public interest groups and to learn the perspectives of these groups.”)

²⁰¹ At present, in most e-rulemaking systems, searches can be performed by word or keyword or by browsing regulatory dockets by number.

²⁰² See generally EDWARD R. TUFTE, ENVISIONING INFORMATION (1990); EDWARD R. TUFTE, THE VISUAL DISPLAY OF QUANTITATIVE INFORMATION (1983).

²⁰³ This is already being done by some agencies. For example, NRC’s RuleForum displays the evolution of the draft rule through multiple versions. See U.S. Nuclear Regulatory Comm’n, *supra* note 185.

5. *Rule Summaries and Rule Questions*

Previously, agencies published either the text of the proposed rule or a summary of the rule in the *Federal Register*.²⁰⁴ The APA provides that notice of a proposed rulemaking include “either the terms or substance of the proposed rule or a description of the subjects and issues involved.”²⁰⁵ If publishing electronically, an agency does not have to choose. It can publish both. It can also offer summaries in both plain English, and technical language, as well as summaries both of the basis for and the likely implications of a given rule. In addition, e-rulemaking tools can be designed to further target notice. They should allow a rule writer to generate a list of questions in response to which it is particularly interested in receiving comments: for example, “We are looking for guidance on the following ten issues on which there is conflicting data.” Agency officials frequently ask for such specific feedback and the practice can be institutionalized through software, costlessly encouraging rule writers to be specific and stimulating the public to respond with the most relevant information.

6. *Syndicating Publication*

Presently, the notice requirement only serves to create an information bottleneck, channeling information into a very limited number of locations accessible to only a few players. Enter technology. With Rich Site Summary (RSS) feeds,²⁰⁶ the agency no longer has to limit itself to publication of notice

²⁰⁴ There was a preference for printing the summary instead of the rule itself. The Attorney General’s manual for compliance with the APA advised agencies against publication of the actual text, suggesting that it would only serve to confuse the public. CLARK, *supra* note 63 (“It is suggested that each agency consider the desirability of using [a description of the subjects and issues involved] if publication of the proposed rule in full would unduly burden the Federal Register or would in fact be less informative to the public.”). Indeed, the APA itself provides for omission of notice altogether where the agency has good cause or such notice would be “impracticable, unnecessary, or contrary to the public interest.” 5 U.S.C. § 553(b)(3)(B) (2000). Because notice is meant to serve as the basis for participation, the thought is that it should guide citizens to the most relevant information. See, e.g., *AFL-CIO v. Donovan*, 757 F.2d 330 (D.C. Cir. 1985) (striking down proposal to amend regulation because agency had published entire regulation without indicating sections to be amended). The final rule is meant to be the “logical outgrowth” of the notice. See, e.g., *Shell Oil Co. v. EPA*, 950 F.2d 741, 750-52 (D.C. Cir. 1991).

²⁰⁵ Administrative Procedure Act, 5 U.S.C. §553(b)(3).

²⁰⁶ The evidence is mounting that e-mail is no longer an efficient means for ethical publishers to reach subscribers, and subscription technologies like RSS are preferred. RSS enables a content publisher to syndicate its headlines to another website.

RSS allows potential readers of a Web site to view part of its content—typically headlines and short blurbs—without having to visit the content directly (unless they want to click through to it). Viewing is done with a piece of software separate from the Web browser, the RSS aggregator,

in the *Federal Register*, on the agency website, or on a handful of federal government websites. Every time DOT promulgates a new draft and posts it, notice could automatically be sent, not only to a DOT listserv²⁰⁷ serving a few hundred subscribers, but published to a variety of trade publications, university websites, nongovernmental organizations, and other civic groups, thereby providing a massive audience with notice of the proposed rulemaking and stimulating a much wider civic conversation about the implications of the rulemaking. Again, if these locations are cultivated as civic communities participating in the process, news should regularly flow from the agency to the community and back again. RSS can be used to report on discussions, studies, and related information, in addition to merely providing notice of proposed rulemaking. It could also be posted to the related websites of every state and municipality, taking advantage of the fact that most Americans intersect with government at a local, rather than a federal level. After all, state and local governments are frequent participants in the process themselves.

Ernest Gellhorn called over thirty years ago for publication of notice to the media and trade associations.²⁰⁸ Yet we are only just beginning to realize this vision. Such an innovation would provide the informational basis for interest groups to survey and engage their own membership.

7. *New Publication Channels*

Improved notice can stimulate greater participation in the rulemaking process if new channels for receiving notice are available, such as public rulemaking kiosks, CD-ROMs, public service messages, subway ads, and the like. New technologies can be employed to reach people other than via the desktop and to improve the informational base of those participating offline as well. Finally, flagging the likely audiences for a particular rulemaking will

which the consumer uses to subscribe to “feeds” produced by favorite Internet publishers. The feeds are constantly updated as the publishers add new content.

Steve Outing, *Stop the Presses*, EDITOR & PUBLISHER.COM (Aug. 27, 2003) at http://www.editorandpublisher.com/editorandpublisher/features_columns/article_display.jsp?vnu_content_id=1963664. For more on RSS, see M. Moffat, *RSS—A Primer for Publishers & Content Providers*, at http://www.eevl.ac.uk/rss_primer/ (Aug. 20, 2003).

²⁰⁷ The DOT listserv is available at <http://dms.dot.gov/emailNotification/index.cfm>. Examples of other agencies with listservs include the EPA and the FCC. See *infra* note 232.

²⁰⁸ Gellhorn, *supra* note 14, at 402 (“Coverage in the news media is perhaps the most effective way of reaching the average citizen, and public interest groups and agencies should make special efforts to encourage reporting of their activities. Factual press releases written in lay language should explain the significance of the proceedings and the opportunities for public participation.”) (footnote omitted).

help channel notice to the appropriate parties early on. For example, a proposed DOT rule can be labeled as “Of Interest to the Trucking Industry” so that citizens can search for rules of greater relevance to them. Alternatively, proposed rules can be labeled with the problem they attempt to solve: for example, “Reducing Trucking Accidents.”

The above are simple examples of powerful information management strategies that marry the logic of participative practice to current technological know-how.

F. Comment

In the comment process, comments may arrive in a variety of forms, such as via fax machine or e-mail,²⁰⁹ none of which is structured to make the process more manageable. Use of these new technologies has often produced a deluge. At the same time, commenters are sometimes reluctant to use new technology, even when permitted. Many still prefer to submit hard copies of their comments so they take up space on a regulator’s desk. In many cases, prolix comments arrive at the eleventh hour, hand-delivered minutes before the deadline to thwart instant electronic access to the comments of corporate rivals. Or interest groups prefer to bury the regulator under a mountain of postcards.²¹⁰

While available electronically, this farrago of comments is neither organized nor sorted by any meaningful search criteria. Whether submitted via e-mail or paper, there is currently nothing about the design of the process that reduces regulatory capture, fosters less adversarial posturing, or encourages better informed participation or greater representation of those who are not participating in the process. If anything, e-commenting arguably exacerbates

²⁰⁹ The DOT has permitted electronic commenting since 1998. This is the earliest ongoing interactive system among the agencies. Eisner, *supra* note 54.

²¹⁰ Efforts by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) to regulate weapons have been greeted by thousands of postcard responses coordinated by the National Rifle Association (NRA), known for its ability to inundate lawmakers with postcards. For example, in 1989, ATF suspended the import of some semiautomatic long guns that looked like assault rifles prohibited by the Gun Control Act of 1968. Immediately after, it was discovered that one could legally avoid this restriction by importing the banned guns as parts. In making regulations to implement this law, ATF ignored that detail, and first announced a regulation that a rifle or shotgun need have as few as two imported parts to be covered by this law, rather than be wholly made out of imported parts. In the face of protest during the comment period, organized in large part by the NRA, ATF relented and rewrote the regulation. See BUREAU OF ALCOHOL, TOBACCO & FIREARMS, U.S. DEP’T OF TREASURY, REPORT AND RECOMMENDATION OF THE ATF WORKING GROUP ON THE IMPORTABILITY OF CERTAIN SEMIAUTOMATIC RIFLES (July 6, 1989).

the problem of everyone speaking and no one listening. When many comments are submitted, commenters as well as agency officials do not have the resources to consider the merits of each and formulate considered replies. Even the review of the comments has to be outsourced. In order to craft a comment worthy of consideration and careful reading by the agency, a commenter may hire a lawyer to prepare a thoroughly documented response to major points in the draft, reducing the cost savings of electronic commenting. Even if permitted to submit comments electronically, the commenter and her lawyer may prefer to bypass the electronic submission and ensure that a paper comment takes up physical space. Even when one files via the Web, unassisted by lawyers, comments still end up as a disconnected series of printouts—a pile of paper—on the other end.

Though electronic notice arguably makes no one worse off, electronic comment may not only miss an opportunity, it may actually reduce the efficacy of the existing process. As currently devised, the online comment process pre-addresses the electronic mail envelope to route the comment to the appropriate recipient. It makes it easier for anyone to comment on a rulemaking easily and quickly. But it is unclear why eliminating the “speed limit” on this portion of the information superhighway improves the rulemaking process.²¹¹ Little about the current tools or their planned development suggests that electronic commenting will make comments more informed, more responsive to other comments, more reasoned, or reasonable.

G. *Comment—Innovations*

Technology, if designed with participation in mind, in the near term could effect straightforward improvements to the traditional comment process. “Click Here to Comment” is a potential travesty for the democratic process, which might be averted through relatively minor design adaptations. None of the following proposals requires much by way of change in procedures or organizational practice at the agency level, and none is costly. Again, as with the notice process, it is important to focus first on the goals at this stage and to design the comment process so as to realize those goals. At the simplest level, the need here is to avoid the potential pitfalls of current e-rulemaking websites, such as the solicitation of too many unhelpful comments. The process could be greatly improved, for example, through the use of software that generates the right forms and asks the right questions.

²¹¹ JAMES GLEICK, *FASTER: THE ACCELERATION OF JUST ABOUT EVERYTHING* (1999).

The traditional comment process suffers, among other defects, from the ease with which anyone can participate, overwhelming the process and diluting its effectiveness. The current design encourages a referendum rather than considered replies, and the comments generated typically represent too many of the same point of view. In addition to the development of new methods to inform rule writing,²¹² immediate improvements can be realized by means of better tools.

The following innovations to the comment process are all designed, first, to be cost effective and easy to implement. Second, they shift the emphasis from the comment as a stand-alone information object to something more connected to the rule, the other comments, and the community involved in shaping it. Third, they more accurately label information to make it more useful. Finally, common to these innovations is a focus on enabling conversation within the user community.

1. Accountable Participation

In the first place, e-rulemaking now creates an incentive for anonymity and dilutes accountable participation. Using Web-based technologies, agencies can and should make use of authentication technologies to ensure the identity of commenters, encourage accountability, and decrease spam in the system. Nothing in the APA or any other source of law mandates either anonymous or accountable comment. Agencies lack resources to authenticate paper-based signatures in any case. If, for example, the DOT receives a comment on the letterhead of the General Counsel's office of General Motors, it must take the signature at face value. Since it is fraud to forge the signature, the risk of criminal penalty creates a disincentive to lying, as does the work involved in perpetrating the forgery. However, when the comment is submitted through the equivalent of an electronic "suggestion box" on the Web, those authenticity safeguards are diluted. The electronic form already diminishes the authority of the signatory and facilitates misrepresentation. Anyone can type anything in the box. But even when the commenter does not misrepresent his identity, the mere fact that he need not have one discourages responsible membership in an ongoing policymaking community. By facilitating anonymous participation, e-rulemaking diminishes the incentive to be accountable and truthful. The "postcard campaign" that produces merely a quantity of comments rather than quality participation should be discouraged.

²¹² See discussion *infra* Part IV.

It is outside the scope of this Article to argue for accountability over anonymity in rulemaking. Regardless, e-rulemaking provides an opportunity to do both: namely, to offer Web-based options for anonymous and accountable participation, by reducing the incentive to misrepresent identities or forge e-mail addresses. Interfaces can be designed to permit both anonymous and accountable participation, or to make one or the other mandatory. Commenters should have the option to authenticate postings with digital signatures verified by digital certificates.²¹³ Alternatively, and more simply, the system might require a verification of return address by sending a confirming e-mail to the address indicated by the commenter, requesting confirmation that the person at this address, in fact, wished to post the stated comment.²¹⁴ At the very least, where both are an option, accountability can be made the “default rule” to encourage accountable participation, while anonymity is offered as a second choice. Instructions on the website should explain these underlying value choices to potential participants and the consequences of choosing one interface over the other. The flexibility of the technology makes it easy to enable different modes of participation in parallel.

2. *Rule Descriptors and Taxonomies*

The second step in facilitating better comments is to ensure that open rulemakings are easily located. Those interested in the process must be able to find rulemakings by subject matter—by community of interest—and not simply on a document-by-document basis. Eventually, citizens will be able to search both the draft texts and other comments by means of natural language queries. But in the interim, information and communication technologies can still make the process more accessible. If rules are catalogued by means of a consistent set of searchable index terms,²¹⁵ citizens can search them more easily.

²¹³ The E-Government Act of 2002 calls for the “compatibility of executive agency methods for use and acceptance of electronic signatures” and the establishment of a “framework to allow efficient interoperability among Executive agencies when using electronic signatures, including processing of digital signatures.” Pub. L. No. 107-347, § 203(c), 116 Stat. 2899, 2910.

²¹⁴ This is the technique employed, for example, by the White House, which now requires confirmation of e-mails sent to the President. See The White House, White House Web Mail, at <http://www.whitehouse.gov/webmail> (last visited Apr. 1, 2004). It is debatable whether, in the context of direct, one-to-one communication with the President, anonymity should not in fact be permissible and encouraged. In the rulemaking context, however, where a deliberative, informed, and iterative conversation about policy options is required, accountability should be the default rule.

²¹⁵ The notion of using a consistent set of content descriptors to self-label content draws on the experience of labeling Internet content in the context of filtering and child protection. The underlying notion is to allow

Each title of the *Code of Federal Regulations* (e.g., “Banking” or “Telecommunications” or “Transportation”) could have its own set of content descriptors or content labels. These descriptive taxonomies will serve as an indexing scheme to facilitate sorting and retrieval. A rule writer will select from among a list of labels by which to index the rule. Ideally, the interface will also allow participants to suggest additional labels. Participants should be able to draw connections between rules and supporting materials submitted by other participants. In other words, like amazon.com, the system might suggest paths for browsing: “Readers interested in this rulemaking also found the following of interest”

Each taxonomy would be a list long enough to describe a rule adequately, yet not so long that a user would be unable to scan it as part of a drop-down menu. Someone searching for a rule selects the relevant title of the code, clicks all the descriptors that apply, and then performs a search for draft rules with open comment periods. These searches are weighted to return, for example, all those (1) open, (2) transportation-related rules concerning (3) trucks and (4) safety, first. These taxonomies could be used not only to index draft and final rules, but to catalogue other documents in the docket as well. A user may be interested in all of the documents relating to a specific rule, and she knows the rule number, but she may also be interested in all scientific data in the system relating to clean air or truck safety regardless of the specific rulemaking. The descriptive terms in each of the taxonomies would correspond to electronic “meta-tags”²¹⁶ that would be embedded in each document, making it easily retrievable without the need for natural language searching. A standard indexing scheme allows documents to be organized in various useful ways: by document number, by date, by subject matter, by personal preference, and by group ranking.

content creators, who are in the best position to evaluate their content, to label themselves and, at the same time, to use a consistent set of labels to enable end-users to search content easily on the basis of those keywords. The number of labels has to be adequate to describe all possible content in the system, yet not too many so as to overwhelm the user. For more on self-labeling systems, see Jack M. Balkin, Beth S. Noveck, & Kermit Roosevelt, *Rating and Filtering: A Best Practices Model*, in *PROTECTING OUR CHILDREN ON THE INTERNET: TOWARDS A NEW CULTURE OF RESPONSIBILITY* 199 (Jens Waltermann & Marcel Machill eds., 2000).

²¹⁶ A meta-tag is an optional HTML coding that is used to specify information about a Web document. The information provided in a meta-tag is used by search engines to index a page so that someone searching for the kind of information the page contains will be able to find it. A Web page author uses these tags to help his or her page get noticed when an Internet surfer queries a search engine for a particular keyword or topic. HARRY NEWTON, *NEWTON'S TELECOM DICTIONARY: THE OFFICIAL DICTIONARY OF TELECOMMUNICATIONS AND THE INTERNET* 493 (15th ed. 1999).

The construction of a centralized database and common set of search tools would create the framework to develop a unified system of meta-tags to entitle and index rules systematically. The community of stakeholders and users should participate in building this tagging system. If properly designed and implemented, a common naming system, transparent to the public, will make it easier to find rules and to understand how they are organized.

3. *Signing onto a Comment and Social Bookmarks*

Third, tools could be employed to allow citizens to “sign onto” a comment by endorsing its content without necessarily suggesting any affiliation with the author. Alternatively, they could reference a comment by means of a hyperlink that can be dragged and dropped from one comment into another. Even better, they could reference whole clusters of comments, offering so-called “social bookmarks”²¹⁷ to relevant discussions. This would serve several purposes: it would reduce the quantity of comments while providing an opportunity to participate; it would enable commenters to be more deliberative and responsive to one another and it would deepen the informational resources available to the community by linking together relevant comments across rulemakings on a particular topic.

4. *Commenting on Whole or Part*

Fourth, in the next generation of e-rulemaking tools, agencies should be able to segment a rule to allow for comment on a specific part as well as on the whole. A commenter does not necessarily have to choose. She can offer a comment on the rule in its entirety and flag particular sections of the rule for revision. In that way, rule writers can get a sense of which parts of the rule are provoking the greatest ire. They can review comments on a particular part and reserve reading of other comments for later. Citizens can also limit their reading of comments to those on a particular part of the rule. This kind of segmentation makes particularly good sense when the rule is long, complicated, technical, and involves diverse issues. The rule writer should be able to segment the rule, labeling individual sections for comment. When reading the rule, these sections would be clearly delineated for the viewer, and she can select the subsection to which her comment applies. Commenters, in turn, would be able to suggest new subsections or categories for comment,

²¹⁷ Social bookmarks allow the user to mark whole lists of links. See, e.g., del.icio.us, at <http://del.icio.us> (last modified Apr. 1, 2004) (created by joshua-delicious@burri.to).

which can be proposed, accepted by the rule writer, and incorporated into the comment interface.²¹⁸ These simple design modifications would ensure that comments are directly responsive to each other and to the rule.

5. *Commenting on Substance and Form*

Fifth, citizens should have the option, for each section of a draft rule, to comment on form, or substance, or both. A commenter might have a proposal for improving the language with a suggested textual amendment and the rationales to support such a change. Proposals as to form—that is, those suggesting merely linguistic changes—might be separated from proposals as to substance to allow for more useful processing. A commenter could select a line of text and click on “Propose Amended Language” which would bring up an interface with two boxes marked “New Text” and “Reasons for Change.” By offering options for types of participation, such a tool might capture useful ideas that would otherwise be lost. This bifurcation of form and substance should, once again, create an incentive to participate.

6. *Comment-Writing Guidelines and Positive Reinforcement*

Sixth, the Web could be used to enforce comment-writing guidelines and improve the quality of comments as inputted. Agencies currently provide brief mechanical directions on how to comment on a proposed rulemaking. Now the software can embed those rules. For example, a commenter could be provided with a text-input box and asked to provide a ten-word summary of a comment without which the comment could not be submitted. She could then be given a list of fifty applicable keywords and asked to “check all that apply” to index her comment. Or maybe she has to indicate whether her comment comprises an objection to the rule (or a part), a revision to the rule (or a part), or support for the rule (or a part). On-screen instructions would provide helpful hints in formulating a position, as would spell-checking software. Finally, the system should thank a user for posting a comment and following the directions. Positive reinforcement is essential to cultivating good practices.²¹⁹

²¹⁸ As discussed in Part IV, the design of e-rulemaking tools should build upon the collaborative ethic of Internet culture and allow citizens to participate in the design of the system. By tapping into the knowledge at the periphery, the resulting tools will be more innovative and effective.

²¹⁹ Associated Press, *Berlin to Get Trash Cans That Can Talk* (Nov. 20, 2003) (speculating that positive reinforcement will encourage people to throw away trash and observing that receptacles will say thank you in several languages), available at <http://www.globetechnology.com/servlet/story/RTGAM.20031121.gthaynov21/BNStory/Technology/>.

7. *Supporting Data*

Comments should be both informed and informative, and ideally should be supported by reasons. This not only lends credibility to the comments, it provides additional sources of information to educate rulemakers and the public. That information may be rhetorical or it may be in the form of legal precedents, scientific data and studies, mathematical algorithms and statistical analyses, multimedia simulations, or even two- and three-dimensional models. To promote this kind of information-rich comment, a seventh innovation would be to design an interface that provides room to input data in support of a point. Again, this modification does not require costly technology, just a better design.

At the outset, data format issues would just involve accepting attachments to electronic comments, rather than merely the text of the comment itself, which regulations.gov now does. But beyond that, e-rulemaking tools might “support” different data formats. Specifically, e-rulemaking tools might make it possible to read data written in a particular program regardless of whether the viewer owns that program. At the simplest level, the e-rulemaking website might provide conversion tools to render all two-dimensional data as .pdf files regardless of the original format and then provide a free link to download the .pdf software reader. A more robust version would ensure that the end user could “play with” the data without corrupting the original file. Furthermore, when the commenter wishes to submit a three-dimensional object, such as a tire tread in support of a rulemaking regarding the safe width of tires, or a plastic architectural model in opposition to a rule regarding door-openings that comply with the Americans with Disabilities Act (ADA),²²⁰ the commenter should have to file a comment using the online interface. The e-rulemaking website would provide a matching tracking number with which to label the three-dimensional object and link it to the written comment. The user would describe the object—in text and by uploading a digital image—so that other users might have an approximate idea of what has been submitted. The object would arrive at the agency’s docket office with the attached tracking number to allow the rule writer to have the full benefit of seeing and feeling the depth of

²²⁰ See Kincho H. Law et al., *Information Infrastructure for Regulation Management and Compliance Checking* (paper delivered to National Conference on Digital Government Research, Boston, May 21-23, 2001), available at <http://www.digitalgovernment.org/library/library/dgo2001/DGOMAC/MEDIA/KERR.PDF>; see also REGNET/REGBASE, at <http://eil.stanford.edu/regnet/> (last modified Apr. 1, 2004) (hosting the Regbase project, an information management framework for checking compliance with environmental and accessibility regulations).

tire tread or the shape of the door-opening and to tie that visual evidence back to the original written comments supporting it. Naturally, such a feature makes sense for agencies that typically receive or would like to receive nondocumentary evidence.

Providing interfaces for the submission of supporting evidence informs the rulemaking process but raises the risk of accidental distribution of nonpublic materials over the Internet. This could create a disincentive to participation in the process and delegitimize online rulemaking, driving participants off the Web and back to paper. However, technology design can also help improve the handling of confidential business information (CBI),²²¹ such as trade secrets, critical infrastructure information²²² as well as copyrighted materials, all of which may be included in the regulatory docket or in a comment but which are not subject to disclosure under the Freedom of Information Act.²²³

8. *Labeling and Licensing Copyrighted Information*

Therefore, an eighth area of innovation is to make it easier to include relevant confidential and proprietary information to inform a rulemaking without risking inappropriate or illegal dissemination. This might foster better participation both by offering the security that is an incentive to participation and additional sources of data to inform it.²²⁴ One simple innovation is to amend the comment interface to allow the user to designate an attachment as nonpublic CBI or critical infrastructure information by means of a drop-down menu. Once designated, that data could be encrypted and transmitted to the relevant official but not made available to the public. Instead, the viewing public would see that an attachment had been provided, the title of that attachment, and a note that the material was nonpublic CBI. Thus transparency in the process would be maintained while safeguarding confidentiality. A user could further specify the copyright treatment that should apply to a given work by identifying the holder of the copyright and the name and e-mail address to which one must apply for permission to

²²¹ Freedom of Information Act, 5 U.S.C. § 552(b)(4) (2000) (providing that CBI is exempt from Freedom of Information Act disclosure).

²²² *Id.* § 552(b)(1)(A) (providing that such information is exempt from Freedom of Information Act disclosure); Homeland Security Act of 2002, 6 U.S.C. § 133(a)(1)(A) (West Supp. 2003) (exempting "voluntarily shared critical infrastructure information" from disclosure under the Freedom of Information Act).

²²³ See *Doe v. Chao*, 306 F.3d 170 (4th Cir. 2002), *aff'd*, 124 S. Ct. 1204 (2004) (suit by coal miners against the Department of Labor for accidental disclosure of social security numbers and benefits information).

²²⁴ See generally Schwartz, *supra* note 34.

redistribute the information. As in the Creative Commons system,²²⁵ users could select from among different licensing regimes to apply to work posted online. With a few clicks, the Creative Commons, a nonprofit organization devoted to providing alternative, more flexible, and easy-to-use copyright licenses for digital works, makes it possible for an author to apply a license indicating whether a work may be freely copied, whether or not attribution is required, whether commercial use is permissible, and whether derivative works may be made. These licenses appear both in English and as digital “meta-tags” labeling the work in machine-readable code. Such a scheme should be adapted for submissions to government agencies and made directly available through the e-rulemaking website.

9. Two-Tier Authentication

Ninth, if we want to encourage more deliberative responses to other comments, this raises the question of how the new ability to search comments easily by author will impact privacy and how, in turn, that will impact participation. The system should offer a mechanism for encrypting personal data and a two-tier registration system to safeguard participants from spammers. The fact that comments can be searched by author does not mean such a capability is necessarily desirable. Does designing for participation mean that the general public should know my views on a particular topic or those of General Motors or the Audubon Society? When my name is “googled,” should my response to an open rulemaking be the first item returned for the world to see? Should commercial data miners have access to my postings? Should a political party or a public interest group be allowed to mine for comments? Accountability is desirable in order to foster responsible participation, yet the overwhelmingly public nature of open comment on the Internet may undermine informational self-determination. On the other hand, rulemaking is designed to be a public process, and the public enjoys the right of access to all documents, including comments. Making comments readily and publicly available promotes accountability.

The first step in solving this policy dilemma is to prevent abuse of the process by third parties. One solution to the problem of “spambots” harvesting the Net for names and live e-mail addresses is to create a two-tier

²²⁵ See Creative Commons, at <http://www.creativecommons.org> (last visited Apr. 1, 2004).

authentication system²²⁶ whereby the participant's e-mail address is registered as part of the user profile and is accessible to the agency without being available to the public. The user would register and receive a registration name or code, provided by the agency. An interested member of the public could look up the name associated with the registration name but not the e-mail address. This is but one technical solution to prevent names and e-mail addresses from being harvested off the e-rulemaking site while, at the same time, promoting open and deliberative participation.

10. Threaded Comments

In addition to having the option to sign onto a particular comment in order to reduce the number of new comments filed, Web technology can be employed to enable commenting on comments already submitted. Before we turn to the question of new online discussion methodologies, it would be a simple step—tenth on our list of inexpensive innovations—to offer the option of replying to another comment in place of filing one's own comment. This would provide a mechanism for greater deliberation and responsiveness even in the context of the traditional written notice-and-comment process. It would also reduce the quantity of comments by creating relationships between them and grouping comments with replies as a linked discussion of a single idea. Comments and reply-comments would be presented in a threaded format, and the comment would link to all responses to that comment. Similarly, each response would link back to the original comment and to other reply-comments. The viewer (whether the rule writer or a member of the public) would have the option to view the comments and replies ("thread") as connected ("threaded") text. Alternatively, the user could view the set of comment-and-replies represented as a graphical image showing the comment and the constellation of reply-comments surrounding it, enabling easier and more intuitive navigation of the information landscape. That graphical image might indicate by color-coding the number of times particular threads have been read.

11. Comment Summaries

Eleventh, users would have the option to write summaries of comment-and-reply constellations as a way to provide additional analysis and offer another

²²⁶ E-Authentication Policy for Federal Agencies, Request for Comments, 68 Fed. Reg. 41,370 (July 11, 2003).

form of input into the process. Technology that allows for summarizing and rating comments will help to sort comments by relevance and quality and facilitate the creation of user reputation. Reputation in a social process enhances accountability and cultivates belonging. This also makes the information more manageable. To allow the user to see the viewpoint of the author and his relationship to the process, these summaries would not be anonymous. It would be important to know the identity of the commenter who does the summarizing. Determining whether the summary of comments in response to a rulemaking on ADA compliance comes from an association of builders and developers rather than from an organization representing the disabled is relevant to an informed assessment of the summary. In any event, these summaries would provide an avenue for highly deliberative and responsive comments that address and respond to other comments in the process. Again, graphical tools can be employed to represent the relationships between comments and summaries and to link a commenter to his comments.

12. Narrative Styles

Twelfth, the substance of comments can be further categorized as types of comments in ways that undermine the “expertocratic” discourse and facilitate the inclusion of nontraditional but useful comments. To promote the participation of nonexperts and less well-structured and well-funded organizations, the new interfaces could enable a commenter to tell a relevant story supported by historical and ethical arguments. The tools could allow the participant to label or color-code the comment as a “narrative/story comment,” for example. Another commenter might submit and label a brief supported by legal precedent and another a scientific report. Explicitly making space available for alternative discourses while labeling them validates such comments and simultaneously enables the rule writer to recognize relevant differences between them and to read scientific, legal, political, and ethical arguments at appropriate points in the process. Users should be able to place a comment in more than one category if it contains both legal and scientific data, for example, and even to suggest new categories. By identifying the types of supporting arguments, it becomes easier to route the comment to the reader most qualified to assess the data. There is a risk that segregating the comments by style could lead to one type being more highly valued than another. That risk, I would argue, is preferable to having a hodgepodge of equally useless comments largely ignored by the rulemakers, except to the extent necessary to comply with the APA.

13. Visualization Tools

Done right, more sophisticated visualization tools²²⁷ will eventually be worth integrating into the comment process. Such tools include those that aid in mapping public preferences, graphically capturing and charting viewpoints, quantitatively analyzing inputs, and enabling the regulator to make sense of the data. Imagine being able to see who is participating in a rulemaking process on a map that sorts comments by industry or background. Imagine comments being charted on a scatterplot so that participants can visualize where different arguments lie and how they are clustered. Or imagine visualization tools²²⁸ that show how a random group of commenters felt about a proposal.²²⁹

In forthcoming work,²³¹ I have discussed the use of virtual and digital worlds and videogames for improving public participation. Such games,²³² as

²²⁷ For example, the graphical decisionmaking tool, Virtual Workroom, and other tools designed by Professor David Johnson of the New York Law School. Professor Johnson's curriculum vitae is available at New York Law School, People, at <http://www.nyls.edu/pages/2075.asp> (last modified Mar. 29, 2004).

²²⁸ Esty, *supra* note 47, at 163 ("Additional 'realization' gains have come from advances in the visual display of information. While no one could see the ozone layer thinning, computer-generated representations of the expanding Antarctic ozone hole helped to induce global action in response to the release of CFCs and other ozone-depleting chemicals. In fact, one of the areas of greatest promise from a more data-driven approach to environmental protection is the ability to overcome cognitive failures that have plagued problem identification and policymaking. Indeed, from the dawning of the Enlightenment to the present day, a fundamental tenet of science and intellectual inquiry more broadly is the belief that better evidence (particularly empirical support) will yield better answers to questions. As John Stuart Mill famously observed, 'Wrong opinions and practices gradually yield to fact and argument.'") (footnotes omitted).

²²⁹ Susan Crawford proposes such an idea for use in the classroom. See Susan Crawford Blog, Class Design, at http://scrawford.blogware.com/blog/_archives/2004/1/15/13982.html (Jan. 15, 2004).

²³¹ Beth Simone Noveck, *Democracy: The Videogame*, 49 N.Y.L. SCH. L. REV. (forthcoming 2004); see also New York Law School, The State of Play: Law, Games and Virtual Worlds, at <http://www.nyls.edu/games> (last modified Mar. 31, 2004) (a conference held at New York Law School, November 13-15, 2003).

²³² The planning department of Tampere, Finland offers a game on its World Wide Web homepage. The object is to settle two thousand recent 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. 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 community. At the same time, it communicates to constituents the difficult choices involved in serving competing interests. For a description of the project, see JARI SEPPÄLÄ, VERKKOMEDIA OSALLISTUMISEN VÄLINEENÄ—CASE TAMPEREEN KAUPUNKISUUNNITTELUPELI (2000) (in Finnish), available at <http://www.tampere.fi/viy/tyontekijat/jari/gradu.pdf>; see also Jari Seppälä, *City of Tampere: Turning Civic Participation into Reality via the Internet*, 9 STUD. INFORMATICS & CONTROL (Dec. 2000), available at http://www.ici.ro/ici/revista/sic2000_4/art05.htm.

well as new forms of deliberation and chat technology, collaborative publishing tools, and new applications designed for ubiquitous media like cell phones, suggest the future. In the meantime, as this section has shown, there are many cost-effective and immediate-term improvements that can be implemented.

H. Publication

The third stage of rulemaking is publishing the rule and, of necessity, educating the public as to the terms of compliance. This phase is not yet reflected in the work of the E-Rulemaking Initiative. However, it presents perhaps the best opportunity for building rulemaking communities, because it uses the requirements of compliance to connect affected parties.

The APA requires publication of the final draft rule in the *Federal Register*. As with the notice process, publishing the final rule online enables interested third parties to republish the information and widely disseminate news of the rule. After publication of the rule, agencies also have begun to use the Web to provide materials about the rule, including compliance guides, answers to frequently asked questions (FAQs) and additional information.

Agencies, however, have also begun to experiment with technology to improve end-user compliance education. They are using listservs²³³ to notify subscribers about recently enacted rules. Agencies also publish compliance guidelines, frequently in plain English, to educate the public about the practicalities of compliance with particular rulemakings. These vary in their organization from site to site with some linking compliance directly to particular rules and others presented thematically.²³⁴ These resources are designed to aid citizens and businesses in complying with important rules, but there is currently no government-wide directory of compliance guides.

²³³ The following agencies offer electronic listservs in connection with rulemaking: Departments of Defense, Education, Health and Human Services, and Transportation and, among the non-cabinet-level agencies, the EPA, the National Archives and Records Administration, and the Small Business Administration. These listservs can be accessed at NARA E-Rulemaking Website, *supra* note 183. However, other agencies, such as the FCC and the Copyright Office, issue electronic newsletters informing subscribers of all comings-and-goings at the agency.

²³⁴ The Federal Aviation Administration (DOT) Regulation and Certification Group offers a whole variety of compliance materials on its website. Fed. Aviation Admin., Regulation and Certification Group—AVR, at <http://www.faa.gov/avr/> (last modified Mar. 9, 2004) (handbooks and bulletins). The Office of Hazardous Materials (EPA) does the same. Office of Hazardous Materials Safety, OHM Publications & Reports, at <http://hazmat.dot.gov/pubs.htm> (last visited Apr. 1, 2004) (information and brochures).

As with the other phases of e-rulemaking, there is still no evidence that the current use of technology in this final phase of rulemaking furthers the goals of, or overcomes the problems with, the process or improves participation in it. Assuming that publishing notice of final rules on the Web will improve public knowledge, the question is, “at what cost”? In an effort to cut costs, will agencies rely excessively on Web-based education mechanisms and cut back on other public education initiatives regardless of who is being reached and whether compliance measures are actually improving?²³⁵

I. Publication—Innovations

Many of the innovations proposed for the other stages of e-rulemaking are applicable to improving publication. Dissemination of the final rule can use the same distribution mechanisms as notice does. However, rethinking the published rule, not as a separate information object, but as one step in building the knowledge and enriching the infospace within a regulated community, begins to generate innovations for e-rulemaking.

Agencies are already required under the Small Business Regulatory Enforcement Fairness Act²³⁶ to publish one or more compliance guides for each rule or group of related rules for which it is required to prepare a final regulatory analysis under the Act. Rule writers should have publishing tools and guidelines available to them to publish compliance guides online. With a mind-mapping tool²³⁷ a rule writer can translate the rule into a step-by-step compliance diagram. These diagrams should be interactive, permitting a user to determine compliance by clicking on each step or answering a questionnaire. If all the necessary steps are selected, for example, a button marked “In Compliance” lights up.²³⁸

Again, compliance guides, like notice and comment, need to be indexed and easily searchable. Compliance guides accompanying published rules can form the basis for ongoing comment and discussion by the regulated

²³⁵ See, e.g., David A. Lieb, *For Spending-Slashing States, Less Paper and More Internet*, MIAMI HERALD.COM (July 27, 2003) (“[C]ash-strapped government agencies are putting more and more materials online—not necessarily to make the information more accessible, but to save money.”), at <http://www.miami.com/mld/miamiherald/business/6397854.htm>.

²³⁶ Small Business Regulatory Enforcement Fairness Act of 1996, enacted by Contract with America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (codified at 5 U.S.C. §§ 601, 801-808).

²³⁷ See, e.g., MindJet, Experience MindManager, the Visual Tool for Brainstorming & Planning, at <http://www.mindjet.com> (last visited Apr. 1, 2004).

²³⁸ The Interactive Statute is a project headed by Professor David R. Johnson, at the Institute for Information Law and Policy at New York Law School.

community. E-rulemaking should provide the space and the tools for the community to launch compliance weblogs where those affected can discuss the rule. Weblogs will provide an opportunity for the community to trade ideas and share knowledge. Their advice, ideas, and experiences with compliance may, in turn, be incorporated into the compliance guides. Though there may be, initially, an “authoritative” agency-authored compliance guide, the resulting knowledge gathered from the community can transform the guide into a “Wiki,” or collaboratively authored encyclopedia of compliance.²³⁹ Availability of tools for self-publication will make the discussion more transparent so the agency is aware of which areas of compliance are proving to be most vexing to the public and where confusion is arising. Those responsible for compliance can find each other via the weblog and reduce the costs of compliance through increased exchange of information.

Other innovations in this area include the work of researchers at Stanford University,²⁴⁰ who are experimenting with new multimedia modeling tools that allow architects to test draft blueprints for compliance with the ADA. Using this dynamic, Web-based software, builders can ascertain, for example, whether a given design can accommodate a turning wheelchair. If successful, they may be able to adapt this into a turnkey solution.

The above discussion illustrates how new technology might be employed to build a more engaged participation process. By starting from the goal of making participation work better, administrators can design software that structures the flow of information and communication in ways conducive to participation. Though all of these innovations fulfill the basic statutory requirements of notice, comment, and publication, they go well beyond this right and flesh out a set of practices enabled by the design of the software itself.

²³⁹ For the definition of a Wiki, see Front Page, at <http://c2.com/cgi/wiki> (last modified Apr. 27, 2004). For an example of a Wiki, see the Wikipedia, a collaboratively user-authored encyclopedia, at <http://en.wikipedia.org/wiki/> (last modified Apr. 26, 2004).

²⁴⁰ See sources cited *supra* note 220.

IV. INNOVATION: BUILDING PARTICIPATIVE CAPACITY²⁴¹ THROUGH NEW MODELS FOR ONLINE CITIZEN POLICY JURIES

In Part III, I asked how technology might be used to effect notice so as to reach a wider audience with more useful information and to remedy the deficit of democratic representation plaguing the current process. Knowing that the Web makes commenting faster, I asked if government could employ technology to make it, instead, more deliberative and informed.²⁴² In Part III, I also inquired how we should design the tools to make notice, comment, and publication more manageable and effective. How can we move away from thinking about information and communication as discrete “pieces of paper” and toward an informational ecosystem of rulemaking? As we inquire about the design of tools, however, we next have to ask: if we change the tools, should we rethink the process in order to maximize the benefit to democracy to be had from these new technologies?

Part IV proposes transposing methods for conducting citizen policy juries to the Web and augmenting these well-developed methodologies both with the kind of visual and other tools discussed in Part III and with other technologies to enable these juries to run themselves. In this Part, I will explore, through the description of specific methodologies, how information and communication technology might be employed to elaborate on existing participation methods. Instead of desultorily transposing the notice-and-comment process to the Web, agency officials should design a set of rulemaking tools that leverage technology to build the skills and know-how for participation through more effective methods.²⁴³ But it is not enough to have tools; methods of communicative action that transform them into speech tools are also needed. The *interpersonal processes* of rulemaking need to be translated into a new design for the digital environment. Incremental

²⁴¹ Traditionally, capacity-building is used in the context of development economics to refer to fostering indigenous capabilities and strengths. But where strong democratic culture is atrophied or not as well developed as it might be, it is important to foster democratic practices. See generally DEBORAH EADE, CAPACITY BUILDING: AN APPROACH TO PEOPLE-CENTRED DEVELOPMENT (1997); BROOK MANVILLE & JOSIAH OBER, COMPANY OF CITIZENS: WHAT THE WORLD'S FIRST DEMOCRACY TEACHES LEADERS ABOUT CREATING GREAT ORGANIZATIONS (2003).

²⁴² See Cass Sunstein, *Factions, Self-Interest, and the APA: Four Lessons Since 1946*, 72 VA. L. REV. 271 (1986) (proposing more deliberative rulemaking in order to temper undue interest group influence by processes of dialogue); see also Reich, *supra* note 72.

²⁴³ Brandon and Carlitz also advocate the development of innovations for use in connection with electronic rulemaking. Brandon & Carlitz, *supra* note 46 (advocating use of electronic docket rooms and online policy dialogues in rulemaking).

improvements can be made to the existing Web-based interfaces, as proposed in Part III, but moving rulemaking into cyberspace presents an opportunity to experiment with new forms of participation—new methods of dialogue and decisionmaking—that may now be practicable with the advent of global communication and information technology. New models can be institutionalized in an e-rulemaking “toolkit” and mapped into the design of its code.

By having standard, but not uniform, models for discussion and dialogue, participants can initiate communication structured to achieve necessary outcomes (based on desired values). Participation is fundamentally a dialogic process that reflects human relationships. It depends, therefore, on effective methods of communication to realize it. Managing documents and organizing paper are necessary to inform those processes but should follow from the dictates of managing people and organizing their ideas. This is not to suggest that spontaneous and nonhierarchical discussions about policy initiated by individuals or civic groups should be subordinated to organized, government-led dialogues. To the contrary, a toolkit is vital to enable the public to create forums for discussion as an alternative to face-to-face lobbying. To manage this group deliberation online and from a distance, however, requires methods as much as tools.

The Web is still too new and our experience with it is too limited to know the best way to organize human interactions around complex issues online. In contrast, while we have the experience, we do not have a great deal of analytical understanding of best practices for citizen participation offline.²⁴⁴ We do not yet know how to translate such practices successfully to the Internet.²⁴⁵

²⁴⁴ One of these practices is negotiated rulemaking, the much-touted attempt at consensus-based stakeholder negotiation. Because “reg neg” has produced such substantial literature in the decade since its inception, this Article does not treat it and instead focuses on new models that might be employed. However, the conclusion that rulemaking best practices might be mapped into the code of e-rulemaking tools applies equally to negotiated rulemaking. Furthermore, trying negotiated rulemaking in cyberspace would bring down costs and allow administrators to experiment with it more frequently and to better evaluate its results. See Philip J. Harter, *Dispute Resolution and Administrative Law: The History, Needs, and Future of a Complex Relationship*, 29 VILL. L. REV. 1393 (1983-84); Harter, *supra* note 104; Henry H. Perritt, Jr., *Negotiated Rulemaking Before Federal Agencies: Evaluation of Recommendations by the Administrative Conference of the United States*, 74 GEO. L.J. 1625, 1647-67, 1682-86 (1986).

²⁴⁵ See E-Government Bulletin Seminar: Secrets of Successful E-Participation and E-Consultation, at <http://www.electronic-government.com/secrets.htm> (last visited Apr. 1, 2004) (a workshop held October 28, 2003).

Part IV proposes to examine nongovernmental models for engaging citizens in policymaking in order to gain a better understanding of the mechanics of successful practices.²⁴⁶ This Part then examines how these methods might be translated to the Internet via an e-rulemaking toolkit. There are methodological paradigms from civic life that offer documented models for consulting citizens on complex and contentious scientific subject matter. They share much in common, as do all dialogic processes for decisionmaking. They are replicable small group dialogue models for conducting public participation.²⁴⁷ For example, the Scandinavians have long practiced worker participation. These participative processes are being practiced, furthermore, in arenas where efficiency and the bottom line are paramount. The Danish have a well-developed model for citizen consultation in the creation of science and technology policy (a model that has just been adopted here by statute in the context of nanotechnology).²⁴⁸ In the United States, several nongovernmental organizations have developed and used novel methods for consulting the public on the local level.²⁴⁹ This Article argues for using the mass communications technology of the Internet to experiment with these models, evaluating the results and, eventually, implementing the software to replicate these and other methods in the design of the e-rulemaking toolkit.

The difficult process of translating dialogic methodology for policy juries from real space to cyberspace necessitates, first, articulating the desired outcomes of the process. To determine whether a particular interpersonal method “works” and constitutes a best practice to be embedded in the tools, we need to know what we are trying to achieve. Outcomes are not the same at each point in the rulemaking process. Public participation in rulemaking involves three primary practices: first, identifying and defining the problem;

²⁴⁶ Identifying goals can be helpful in mapping a legal system and determining how it functions. It is also important for identifying when the goals and the functions of a legal system diverge. See Lynn M. LoPucki, *The Systems Approach to Law*, 82 CORNELL L. REV. 479, 482 (1997); see also Paul M. Schwartz, *Voting Technology and Democracy*, 77 N.Y.U. L. REV. 625, 630 (2003) (“Systems analysis is well-suited for attempts to improve technology; it views machines and social institutions alike as parts of organized larger systems and it seeks to understand and ameliorate inconsistencies in system design and performance.”).

²⁴⁷ See Gretchen Ann Groth, *Dialogue in Corporations*, in INTERGROUP DIALOGUE: DELIBERATIVE DEMOCRACY IN SCHOOL, COLLEGE, COMMUNITY AND WORKPLACE 194, 194-209 (David Schoem & Sylvia Hurtado eds., 2001) (discussing models of corporate dialogue processes for addressing diversity); see also YANKLOVICH, *MAGIC OF DIALOGUE*, *supra* note 28, at 35-46 (distinguishing dialogue from other forms of communication as a special form of problem-solving talk).

²⁴⁸ See 21st Century Nanotechnology Research and Development Act, S. 189, 108th Cong. § 2(b)(10)(D) (2003); *infra* note 275 and accompanying text.

²⁴⁹ JAMES L. CREIGHTON, *INVOLVING CITIZENS IN COMMUNITY DECISION MAKING: A GUIDEBOOK* (1992) (discussing when and how to involve the public in decisionmaking).

second, deciding on a course of action, preparing a draft rule, and reaching consensus about it; and, finally, implementing the solution. Making participation more effective and manageable means something different at each stage.

Instead of mere “notice,” the aim of the initial phase is to identify and define the particular social or economic problem at issue and begin to weigh the costs of competing policy solutions. There needs to be a fluid give-and-take of information and discussion. The goal of the second stage is to achieve a workable and legitimate solution based on a wide range of public input. This public comment phase must also be free of abuses like spamming and defamatory speech that might create a disincentive to participation. The third phase aims to build consensus around the solution and promote compliance. It provides an opportunity to create a community of practice around rulemaking areas.

For this reason, Part IV argues in favor of an eventual shift away from designing in terms of the statutory categories of notice, comment, and publication and toward a reconceptualization of rulemaking as a set of goal-oriented interpersonal processes. Only then can best methodological practices be identified and mapped into the code of technology.

Finally, by articulating the desired outcomes, these new methods for practicing rulemaking can be benchmarked for success and evaluated for their effectiveness,²⁵⁰ as will be discussed in Part V.

A. Step 1: Model a Set of Practices for Defining the Problem

Initially, in the rulemaking process, the agency is trying to develop a policy approach in response to a legislative mandate. To do so requires identifying the problem(s) and weighing a range of possible solutions. This is the opportunity for the agency to become expert, for example, in seat belts, fuel efficiency, or solar power, to understand the affected constituents and their interests, and to preview the debate and rancor that the issue is likely to provoke during a rulemaking. It is also the opportunity for the agency to determine its priorities and set the agenda for rulemaking under the legislation. By launching the citizen participation process early, before the agenda is finalized and before resources and political will are invested in a single policy

²⁵⁰ We need to distinguish decisionmaking processes from pure dialogue or training. Though all based on communication, they are differently designed, and aim to achieve different outcomes.

and a particular draft,²⁵¹ the agency allows more time for members of the public to get informed and involved. Rule writers can seek public input earlier in the process when it may be of greater use to them.²⁵² The chance to participate in setting the agenda and to have a say in the proposed solution also creates new incentives for the public to participate. The agency can articulate its priorities early and therefore channel citizens' investment of time and effort into participating in ways that are useful for public policymaking. Or the public can push back and help the agency to rethink its agenda. Early notice provides an opportunity for the agency, stakeholders, and the public to identify the affected and interested parties and begin to develop a deliberative community to participate in crafting any subsequent rules.

The desired outcome at this stage can be characterized as obtaining helpful and meaningful ideas from diverse audiences. These include scientific and subject-matter experts, affected stakeholders, and interested but inexpert citizens. This section explores methods for engaging in exactly this kind of consultative exercise. The point is not to prescribe the best practice, but to illustrate possible methods to be tested. By incorporating precise methods for running consultative exercises, these offline methodologies might translate well into technologically-enabled speech tools for e-rulemaking.

1. *Offline Models*

To manage efficient deliberative dialogue at this stage, agencies should reject an unstructured comment process in favor of an organized consultative process with clear rules and measurable outcomes. Nonprofit groups, schools, local governments, and other community and issue-oriented organizations often use the National Issues Forum (NIF) dialogic methodology as a tool to organize deliberations on important national issues. The Kettering Institute, the creator of NIF, employs NIF to focus deliberation on important issues and produces books of case studies, including moderator guides and agendas designed to enable these discussions.²⁵³ The goal of NIF is to help diverse

²⁵¹ Professor McGarity points out that once an agency has incurred the "considerable expense and turmoil" of drafting a rule, "it has every incentive to leave well enough alone. Once the legal and political dust has settled, an agency is inclined to let sleeping dogs lie." McGarity, *supra* note 45, at 1390. Commentary, especially when it serves to reject the draft, is not welcome. *See id.*

²⁵² *See, e.g.,* NAT'L PERFORMANCE REVIEW, *supra* note 155 ("Without exception, everyone from outside the government whom the National Performance Review (NPR) interviewed on the regulatory process—whether from industry or public interest groups—said they wanted earlier and more frequent opportunities to participate in the rulemaking process.").

²⁵³ National Issues Forums, at <http://www.nifi.org> (last visited Apr. 1, 2004).

members of communities deliberate about real world issues and to “find a shared sense of direction before making decisions.”²⁵⁴

In the traditional model, NIFs are organized into either small discussion circles, typically of eight to ten people, or larger group forums that meet in a central location. Participants are provided with balanced background materials that frame the issue at hand and present different views on an issue as a starting point for discussion. In the first session, the moderator²⁵⁵ facilitates a review of the background material. In a subsequent session participants discuss different positions on the given issue. In larger NIFs the organizer often administers pre- and post-discussion surveys to solicit reactions to different statements of the problem. Though the NIF format is often used as a method to achieve consensus on an issue, it need not be so limited and can serve, instead, as a model for successful deliberation on a difficult policy issue of national import.

The moderator documents all that happens at the forums. The goal is to get a sense of the public voice and a general direction for public action. In addition, NIF provides a space for interested individuals to work individually or together to help remedy a public problem. Moderators from around the country report the results from their forums. These results are compiled and posted on the website for each issue.

Whereas NIF might be a worthwhile model for organizing stakeholder discussion, agencies might look to another model, the Study Circle, for an example of how to conduct citizen consultation. Administered by the Topsfield Foundation of Connecticut,²⁵⁶ the Study Circles Foundation has provided the model and the resources to assist over 200 communities with running deliberative processes. In a Study Circle, eight to ten participants engage in structured, moderated dialogue according to a set agenda for at least

²⁵⁴ For more on the methodology of the National Issues Forum, see National Issues Forum, About Us, at <http://www.nifi.org/about/faq.aspx> (last visited Apr. 1, 2004).

²⁵⁵ The National Issues Forum methodology of best practices is funded by the Kettering Foundation. The National Issues Forum Institute provides training guides for local moderators who help to keep discussions lively and relevant. They also encourage members to think not only as individuals but also as members of the community. The moderator conducts the initial review of materials and postdeliberation reflection, and also makes sure the participants examine equally all choices. For a limited number of issues each year, the National Issues Forum publishes moderator guides, starter videotapes, and issue guides for participants. See *id.*

²⁵⁶ The Study Circles Resource Center was founded by the Topsfield Foundation in 1989. For more information, see Study Circles Resource Center, at <http://www.studycircles.org> (last visited Apr. 1, 2004). See also Martha L. McCoy & Patrick L. Scully, *Deliberative Dialogue to Expand Civic Engagement: What Kind of Talk Does Democracy Need?*, 91 NAT'L CIVIC REV. 117 (2002).

four two-hour sessions. The organizing principles of a Study Circle are rooted in traditional democratic theory and deliberative practice and are designed to foster the dignified public airing of the reasoned views of diverse participants. The process is designed to enable the articulation of policy options,²⁵⁷ the exploration of how others view a problem and its solutions, and the search for common ground among a number of options, even when disagreement is rife.²⁵⁸

Moderation is critical to running a successful Study Circle, because it provides the necessary structure and discipline for the group and ensures that the group sticks to the topic and agenda while maintaining a productive and civil tone. The Study Circles Foundation provides a wide array of resources to train Study Circle moderators and to train the trainers. These materials offer information on everything from how to set the agenda and tone to evaluating the project.²⁵⁹ Each session of a Study Circle is designed to focus discussion on a specific part of the larger problem.

For example, along with the League of Women Voters and University Women, citizens of a community in Oklahoma sponsored a Study Circle called "Balancing Justice."²⁶⁰ The purpose of the forum was not to make definitive policy recommendations or to achieve consensus, but to stimulate grassroots discussion. Interested participants met in groups of eight over a three-week period to discuss different problems facing the criminal justice system. Groups contained people from all professions and income levels, including some people involved in law enforcement and justice. The small planning committee decided that the sessions would focus on the issues of rehabilitation, punishment, and deterrence. After all the topics were discussed, each group submitted a ranked list of what they thought were the most important issues as well as some suggestions about how to address them. This typical Study Circle then compiled a report from all the groups' recommendations.

²⁵⁷ See MATHEWS & MCAFEE, *supra* note 27; see also RICKMAN, *supra* note 27.

²⁵⁸ DAVID MATHEWS, *POLITICS FOR PEOPLE: FINDING A RESPONSIBLE PUBLIC VOICE* 188-90 (1994) (discussing the outcomes of deliberation). David Mathews is the President of the Kettering Foundation, which administers the National Issues Forums, discussed *supra* notes 252-54 and accompanying text. See Kettering Foundation, Officers, at <http://www.kettering.org/Officers/officers.html> (last visited Apr. 1, 2004).

²⁵⁹ See Study Circles Resource Ctr., Making Study Circles Happen: Organizing Community-Wide Dialogue for Action and Change, at <http://www.studyircles.org/pages/hap.html> (last visited Apr. 27, 2004).

²⁶⁰ According to the Study Circles website, "[o]ne result of the 'Balancing Justice in Oklahoma' study circle program was a new state law that embraced the policy ideas upheld by the study circle participants." Study Circles Resource Ctr., Success Stories: Balancing Justice in New York, at <http://www.studyircles.org/pages/success/sucny.html> (last visited Apr. 1, 2004).

Study Circles offer a well-defined and tested procedure for deliberation. The model has been successfully replicated hundreds of times. Social scientists have evaluated the results and have provided valuable analysis for use in revising and refining the process.

2. *Moving the Models Online*

One can imagine translating the NIF, Study Circle, or analogous deliberation format to the Web for use in connection with advance planning for a rulemaking. These dialogue methods can be used to improve consultation with scientists²⁶¹ and expert advisory committees²⁶² as well as individuals. Moving these methods online along with the information and tools²⁶³ necessary to conduct them would allow agencies to manage the consultation process and to “scale” its use to a wider audience. If embedded in software, such methods can be used by the agency, but also by organizations, stakeholder groups, and other members of the community of practice wishing to organize group deliberations.

In earlier work²⁶⁴ I examined the basic features of online deliberation and described in detail Unchat, a design experiment in building software for synchronous deliberation online. Unchat enabled the translation of deliberative methodologies into the online space. The software permits a small group (up to thirty in one room) to engage in a structured moderated discussion via the Web. Conversational rules are embedded in and enforced by the software itself. But, unlike an ordinary discussion tool, Unchat lets the group itself decide on those rules and even vote for new moderators at the end of specified tenures. This so-called “self-moderation” system allows for structured deliberation while maintaining a system of participatory governance by the group. In this way, it is ideally suited for instantiating different discussion methodologies online.

²⁶¹ Andrew C. Revkin, *White House Proposes Reviews for Studies on New Regulations*, N.Y. TIMES, Aug. 29, 2003, at A12 (discussing White House proposal to create a standardized annual process that requires all agencies to list planned scientific studies and method of review).

²⁶² Federal Advisory Committee Act, Pub. L. No. 92-463, 86 Stat. 770 (1972) (codified as amended at 5 U.S.C. app. 2 §§ 1-15 (2000)).

²⁶³ Any e-rulemaking project should also consider which tools to offer to the general public, such as those to enable calculations, the posting of mathematical formulas and publication of multimedia simulations, graphs, charts, and related materials. Above all, both internal scientific experts as well as members of the industrial-scientific and academic-scientific communities need to be consulted regarding the design of tools to aid the public in participating in the rulemaking process.

²⁶⁴ Noveck, *supra* note 9.

Harvard's Berkman Center for Internet and Society has pioneered its own methodology for discussion embedded in a software tool, the H2O Rotisserie system.²⁶⁵ Designed to improve upon traditional threaded messaging systems for classroom use, the Rotisserie is a tool-based method for structured online discussions. Unlike Unchat, which mimics the immediacy of real-time conversation, Rotisserie is a semisynchronous system. It also structures the conversation to ensure better timing and flow. In this method, the discussion is broken up into rounds. Although users can post messages at anytime, they are not published to others until a round closes. "This structure allows users to put significant thought into their responses rather than competing with other participants to post first."²⁶⁶ Also, to ensure discussion by all, the system distributes at least one user comment to one other user. Because no one in the group knows another's positions until after posting his own, an open exchange of ideas may be facilitated.

E-rulemaking software should offer a range of tools, like Unchat or Rotisserie, that transpose different discussion methodologies to the online environment and enable participants in the process to create policy juries. While the tools will be available to members of the public as well so that they can convene discussions about rulemaking policy, the agency can initiate its own series of consultations to help it in setting the agenda for rulemaking policy and establish discussion calendars for draft rules. For each session, the agency would publish a detailed agenda and guide for discussion. Rule writers might choose to follow the same discussion format—as these methodologies prescribe—in order to ensure outcomes that can be compared and evaluated and to ensure that groups stay on topic and maintain civility.

Agency officials would not prevent anyone from participating but would request of all those who choose to participate that they commit to the work required of them in this deliberative process. By joining such a discussion, participants would be signaling a willingness to deliberate and not to defect. For those unwilling to participate in all the sessions or to inform themselves adequately, other avenues of input will be available, such as the traditional "Click Here to Comment" process as augmented by the innovations prescribed in Part III.

²⁶⁵ Berkman Ctr. for Internet & Soc'y, H2O Project, Rotisserie, at <http://h2oproject.law.harvard.edu/rotisserie.html> (last visited Apr. 1, 2004).

²⁶⁶ *Id.*

Agency officials, professional facilitators, or citizens themselves will act as online moderators to guide consultative discussions. Members of each discussion group might take turns running the dialogue and share the responsibility and control as in Unchat. Although these discussions would take place via the World Wide Web, the Web could serve as a coordinating point and information repository to organize face-to-face forums on a local level.

AmericaSpeaks,²⁶⁷ which has pioneered a format for eliciting feedback from as many as 5000 people at a time, has already had some experience with translating its model to the Internet. By partnering with a company called Web Lab,²⁶⁸ AmericaSpeaks has solicited the input of hundreds of online participants working in parallel with their face-to-face counterparts in public consultations.²⁶⁹

AmericaSpeaks, like Study Circles or NIFs, offers a tested methodology for managing and organizing public feedback. Because these formats are democratically organized, replicable across a wide number of participants, and enjoy a documented track record, they merit consideration as Web-based citizens jury models.

Further, these methods can be built into the software for rulemaking. Like WebLab, Unchat, or a weblog, these discussion processes, if properly

²⁶⁷ See AmericaSpeaks, Welcome, at <http://www.americaspeaks.org> (last visited Apr. 1, 2004). By using the group dialogue with ten to twelve people at a table, but employing networked computers to connect each of the small groups with a central facilitator, AmericaSpeaks runs manageable forums that provide information to and obtain input from the general public. The organization, based in Washington, D.C., has conducted "Twenty-First Century Town Halls" on such topics as the self-governance of Washington, D.C.: The Citizen Summit II took place on October 6, 2001, in Washington, D.C. See AmericaSpeaks, Projects, at <http://www.americaspeaks.org/projects/citizensummit.html> (last visited Apr. 1, 2004). Typically, participants meet in a large room with hundreds of people and divide into roundtable discussions, each led by a trained facilitator. One group member takes down the ideas on an electronic flipchart. These in turn are transmitted to idea "sifters" who identify emerging themes from the small-group discussions. Wireless keypad voting technology is used during the course of the meeting to gauge reaction to ideas put forth by speakers and leaders. The results are broadcast on large screens in the front of the room. These in-conference polls are also used to modify the direction of the conversation as the conference proceeds. See AmericaSpeaks, Electronic Town Meeting Design, at <http://www.americaspeaks.org/design.html> (last visited Apr. 27, 2004).

²⁶⁸ Web Lab produced a report and evaluation of the Listening to the City project. See CIVIC ALLIANCE TO REBUILD DOWNTOWN NEW YORK, LISTENING TO THE CITY: REPORT OF PROCEEDINGS (2002), available at http://www.weblab.org/ltc/LTC_Report.pdf. Web Lab is the progenitor of the Small Group Dialogue method for sorting large numbers of people into discussion-size circles via bulletin boards. For more on Web Lab and its methodology, see Web Lab, Home, at <http://www.weblab.org/home.html> (last visited Apr. 1, 2004).

²⁶⁹ On July 20, 2002, AmericaSpeaks brought together 5000 people in New York City for the Listening to the City project in order to get public input and feedback on proposed designs for rebuilding the World Trade Center site. The feedback generated led to the existing proposals being scrapped and the launch of a new search to find an acceptable design.

coordinated, can run without centralized control. This reduces agency workload and better enables participation to flourish as a self-governing process without time-consuming management by rulemakers. For example, a link marked "Click Here to Set Up an Unchat Session" would walk the citizen through the fully automated planning steps of producing a small group deliberation on policy.

B. Step 2: Model a Set of Practices from Draft to Final Draft

Whereas the first phase is concerned with gathering information to understand the problem, the second phase centers around the creation of a draft and soliciting comment on it consistent with the APA. At this stage in the process the desired outcomes are different than before. Now, rather than soliciting information widely, the agency needs to communicate its draft—and the nature of the information and the choices involved—to the affected and interested public. The public needs to be able to provide feedback on the choices embodied in the draft, and that feedback has to reach the persons actually writing the rule. The regulators and the public use this opportunity to understand the draft and anticipate the consequences of its language and the policy choices reflected therein. Again, it is not necessarily consensus that is sought at this point, although it may be useful to get the public to "buy into" the draft. The outcomes desired here are achieving better communication, obtaining any information relevant to revising the draft, and communicating that information to and from the right sources. But both the information and the communication need to be managed and targeted to produce the best possible draft. There is a risk with e-rulemaking, as presently conceived, that because of the central collection of data, it may not flow to those who need it most in the agencies²⁷⁰ and that it will be too voluminous to be of any use. But the hope is that technology can be employed to make the desired communication more manageable and break up the bottleneck of decisionmaking within agencies.²⁷¹

²⁷⁰ See Esty, *supra* note 47.

²⁷¹ William F. Pedersen, Jr., *Formal Records and Informal Rulemaking*, 85 YALE L.J. 38, 58 (1975-76) ("[T]he briefing package to which the discussion of a proposed rule is reduced at the steering committee stage is often unable to convey an adequate notion of the complex, uncertain and ambiguous nature of the information and the choices involved. Even when officials realize this and the matter is important, they are often far too busy to master the data. The attitude of these officials toward the regulation in question is thus significantly influenced by which staff members are trusted, which present their case more plausibly, who won last time, and other considerations extraneous to the technical complexities of the regulation itself.")

Once again, the agency needs to engage in this exchange with different publics of varying interests and levels of sophistication. First, stakeholders who will be directly regulated need to participate. This usually engages industry, industry associations, and those bearing the burden of compliance. Second, the draft may be of great interest to those who are not regulated directly but who are affected by the proposed rule and share in the burden of compliance. Whereas the first group might comprise car manufacturers responding to a rule on seatbelts, the second group might include all interested drivers, auto safety organizations, and other relevant civic groups, such as the Automobile Association of America. The same dialogic mechanisms described in connection with soliciting information in Phase 1 might be retargeted to solicit feedback at this stage, but with the agenda for conversation redesigned to focus on a constructive discussion of the draft. Rules of discussion would be added to ensure that participants comment on the text and that the conversation stays on topic. Incentives—such as awards or honors for helpful participation—might be employed to encourage participation that promotes the goals of the process. However, unlike in the first phase, agency officials in the second phase are probably more intimately involved in communicating the draft and its rationales to the public and engaging the public directly in consultation about the draft. The need for official involvement will impact the timing and structure of the chosen practices.

At this stage, three other dialogic models designed to produce feedback on a specific policy proposal might also be employed: the Danish Consensus Conference,²⁷² the Jefferson Center model for the Citizens Jury, both

²⁷² The Loka Institute, an American nonprofit organization, suggests that the U.S. government use the Conference Technology methodology for establishing citizen panels to consult on scientific policy in this country.

Citizen panels involve small groups of ordinary citizens assembled to examine important societal issues about research and technology. These citizens are selected in much the same way that we now choose juries in cases of law—but with greater commitment to represent diverse experiences. The panels study and discuss relevant documents, develop an agenda of major public issues to address, hear expert testimony from those doing the research, listen to arguments about technical applications and consequences presented by various sides, deliberate on their findings, and write reports based on consensus items developed among the panelists. This gives policy-makers and everyone else a much better sense of where the common ground lies among citizens who do not have a direct political or economic stake in the issue under consideration—i.e., the majority of the population. Citizen panels are good government, good for business, and good for America's families and communities.

Loka Alert, *Help Make History: Urge Senate to Vote for Public Participation in Nanotechnology Policy*, at http://www.loka.org/alerts/loka_alert_9.7.htm (June 17, 2003).

transposable to the Web, and the Group Report Authoring Support System (GRASS), a Web tool for drafting in contentious policy contexts.²⁷³ The Danish Consensus Conference is a tool used by the Danish Board of Technology,²⁷⁴ an administrative agency of the Danish government, to create a concise public policy statement on a complex technical issue.²⁷⁵ The method was also just mandated by the U.S. Congress for use in conducting citizens juries on nanotechnology policy.²⁷⁶

The aim of the Consensus Conference is to give regulators a sense of general public opinion on difficult scientific policy issues by presenting information to a small group of citizens for their reasoned discussion and feedback.²⁷⁷ The consultative group of about sixteen people is selected from among interested members of the general public, though no one with a direct tie to the issue may participate. Sometimes the consultative group meets for two days at a time over several weeks; at other times the meeting lasts for three straight days. The citizen group reads background information and receives presentations from a panel of professional experts with whom the participants interact throughout the conference. At the end of the meeting, the participants develop consensual conclusions, which are published. The consensus framework allows for “nuanced viewpoints and citizen-defined framing of the issues that can indicate how a position may shift, depending upon different

²⁷³ See Michael S.H. Heng & Aldo de Moor, *From Habermas's Communicative Theory to Practice on the Internet*, 13 INFO. SYS. J. 331 (2003).

²⁷⁴ The Danish Board of Technology has organized twenty-two such Consensus Conferences since developing the methodology in 1987. See Danish Bd. of Tech., *Methods*, at <http://www.tekno.dk/subpage.php3?survey=16&language=uk> (last visited Mar. 15, 2004). For more on the range of consultative methodologies employed, see *id.* See also OECD, *Two Analyses of Digital Communication Between Citizens and Public Institutions*, at <http://www1.oecd.org/puma/focus/compend/denmark/govcit.htm> (Oct. 1999).

²⁷⁵ The model has been emulated by other groups. For example, the Norwegians have organized consensus conferences on the introduction of genetically modified foods in Norway. See Alf J. Mørkrid, *Consensus Conferences on Genetically Modified Food in Norway*, in OECD, *supra* note 36, at 223-37. Mørkrid suggests that consensus conferences are ideally suited to topics that are on the political agenda and of public interest when there are conflicting views among scientists or politicians on the topic and there is sufficient scientific and factual information to guide laymen in participating in the process.

²⁷⁶ The statute provides, in relevant part, “through the National Nanotechnology Coordination Office established in section 3, for public input and outreach to be integrated into the Program by the convening of regular and ongoing public discussions, through mechanisms such as citizens’ panels, consensus conferences, and educational events, as appropriate. . . .” 21st Century Nanotechnology Research and Development Act, S. 189, 108th Cong. § 2(b)(10)(D) (2003).

²⁷⁷ For example, the Consensus Conference model was employed in North Carolina to gather citizen feedback on genetically modified foods during a conference held on February 18, 2002. News Release, N.C. State University News Service, *Citizen Conferences Offer Public a Voice in Biotechnology Issues* (Feb. 13, 2002), available at http://www.ncsu.edu/news/press_releases/02_02/44.htm.

conditions or situations.”²⁷⁸ The Danish Consensus Conference is specifically designed and often used to analyze broad, complicated, and contentious social issues such as cloning and abortion. It also helps bridge the gap between the public, experts, and politicians.

The Jefferson Center in Minneapolis²⁷⁹ has developed a very similar best practice model, which promotes the use of randomly selected, representative, and informed “citizens juries”²⁸⁰ to deliberate on specific policy proposals. For example, the League of Women Voters at Washington State University wanted to urge the state to institute a Citizen’s Initiative Review (CIR), a process that allows a group of citizens to examine ballot initiatives and present their findings to the public before the votes are cast. With the help of the Jefferson Center, the League convened a citizens jury of twenty-five jurors from Washington to examine the CIR. The jury was chosen in response to a random telephone poll of the general population and selected to reflect diversity of political affiliation, education, background, and race. For two days, the group heard opinions for and against the CIR initiatives from policymakers and knowledgeable individuals. In citizens juries, initial votes are often taken to determine in which direction the group should focus its efforts. For example, on the second day of the Washington citizens jury, the group voted 23 to 2 in favor of further examination of the CIR proposal. For the next two days, they looked closely at the plan and modified it. They took a vote on the fourth day and decided, this time 24 to 1, that they would recommend their modified version to become state law.²⁸¹

As with the notice phase, the consultation about the draft might transpose either of these methodologies to the Web. Because each method specifies a set number of participants, a text to discuss, a prescribed number of sessions, and a thematic agenda, each method’s rules can be embedded into software, allowing the regulator, for example, to “click here to create a citizens jury.” The technology not only automates the set-up of the consultative exercise and enables it to be replicated among thousands of participants at decreasing

²⁷⁸ Daniel Blume, *Engaging Citizens in the Danish Health Care Sector*, in OECD, *supra* note 36, at 117.

²⁷⁹ See Jefferson Center, at <http://www.jefferson-center.org> (2002).

²⁸⁰ The cost of a citizens jury ranges from \$25,000 to \$90,000 depending on the scale of implementation. The factors that most affect the cost are geographic breadth, the number of participants, and the amount of Jefferson Center staff time needed to manage the problems of the project. Implementing the process via the Web would significantly reduce the cost. See Jefferson Center, *Frequently Asked Questions About the Citizens Jury Process*, at <http://www.jefferson-center.org/faqs.htm> (2002).

²⁸¹ See Jefferson Center, *Citizens Jury on the Citizens Initiative Review*, at <http://www.jefferson-center.org/CIR%20overview.htm> (2002).

marginal cost, it also permits innovations on the original method. For example, it is easier using Web-based technology to include a "visual poll" to take the measure of the group's opinion and represent it graphically back to the group.

GRASS,²⁸² a Web-based prototype developed by researchers at the University of Tilburg in the Netherlands already translates to the Internet a system for producing concise reports authored by groups. Using socio-technical design principles deriving from Habermas's theory of communicative action, they have built a software structure for collaborative drafting within the social context of stakeholder deliberations.²⁸³ The tool embeds a specific methodology designed to achieve an open forum where all views can be taken into account and consensus can be reached. GRASS would lend itself easily to adaptation for collaborative drafting of a rule or the authoring of comments by a set of stakeholders. It is a prime example of a speech tool designed around a set of normative democratic values that also produces a useful outcome.

C. Step 3: Implement the Rule and Educate the Public

Finally, in the third information and communication phase, the public is educated about the final rule and compliance with it. This phase particularly impacts the industries being regulated, as well as the general public. Significant methodological innovation in this area should draw on experience with knowledge management to identify best practices for discussing compliance. Something as simple as a weblog can then be employed to organize structured discussions of compliance.

The methods employed at other stages can also be modified to accomplish the goals of this phase of the process. It is very important for the agency, especially, to have these structured speech tools available to it for conducting manageable, organized, and meaningful opportunities for participation in which the software enforces equal chances to speak and to be heard.

²⁸² Heng & de Moor, *supra* note 272.

²⁸³ *Id.*

V. POLICY: INSTITUTIONALIZING PUBLIC PARTICIPATION IN ELECTRONIC RULEMAKING

A. *Evaluating Participation at the Agency Level*

Part IV examined a series of participative methodologies from various domains of practice and suggested that they be coded into the design of e-rulemaking tools. These innovations, which tie workable processes to powerful technology, would be used to render the activities of participation, including information gathering, negotiating a draft, and implementing the solution, more manageable and collaborative. A rulemaker in the future, for example, should be able to select "Create a Study Circle" from a menu of available Web-based tools and have the software guide him in creating and running a deliberative forum to enable participative practice in connection with a rulemaking. The transcripts from such practices will then enrich the infospace around which participants will blog and link and continue the discussion.

But having these speech tools is still not enough to institutionalize participative practice in rulemaking. In order to genuinely improve participation (and to justify and prioritize spending on e-rulemaking innovations), it is essential to develop metrics for evaluating the success of e-rulemaking. That will require determining measurable outcomes that can be tracked and evaluated over time. Of course, it is extremely difficult to measure anything as slippery as participation in any precise way. Not only is there no consensus as to what should be measured or what constitutes success, but evaluation is costly and time-consuming. Additional technology, including polling and rating software, would bring down such costs and assist with the necessary trial-and-error.

It is possible to move beyond talking about how new technology might simply "improve citizen participation" or "write better rules" and to devise more workable metrics. The deeply rooted distrust of participation discussed in Part II has given rise to complaints about a number of shortcomings that must be addressed if there is to be a better process. Success can be measured, in part, against the degree to which e-rulemaking practices overcome those shortcomings. OMB should employ visual tools to measure and display success in rulemaking. Initially, these metrics might inquire about the extent to which pilot implementations:

- (1) Increase the number of individual participants in each rulemaking;
- (2) Increase the number of repeat and ongoing participants across the rulemaking process;
- (3) Increase the number of new and more diverse participants across the rulemaking process;
- (4) Increase the number of comments received per rulemaking;
- (5) Increase the number of comments actually read by rule writers;
- (6) Increase the deliberative quality of comments, where “deliberative” is measured by responsiveness to other comments, focus on the subject matter, answering the question asked, use of information, and relevance to rule writers and to other commenters;
- (7) Increase satisfaction among agency officials with the process;
- (8) Increase compliance with rules;
- (9) Decrease the time required to conduct public participation in connection with a given rulemaking;
- (10) Decrease the time spent to process comments received (among other measures of efficiency);
- (11) Decrease litigation; and
- (12) Gather public feedback on successful practices.

Defining the precise metrics for each agency should grow out of the experience and input of agency officials, interest groups, and citizens, and each agency should be responsible for setting its own goals for participation. DOT knows best what would constitute better rulemaking and better participation in its area of expertise. EPA knows its stakeholders and which groups are and are not being heard. The agencies have the knowledge and experience internally to set goals for public participation in connection with the agency’s use of electronic rulemaking. These metrics, however, should not be set on a rule-by-rule basis, or they are likely to be influenced by the politics of particular rulemakings.

A process of institutionalizing the measurement of citizen participation can be established within the normal course of agency strategic planning: defining metrics should be the subject of a rulemaking for each agency or agency subdivision. The initial rulemaking should be followed up with ongoing dialogue between the agency and the public. Participants need to be repeatedly canvassed for their experiences with public participation, and e-rulemaking tools should be designed to capture this feedback. It would be a simple matter, for example, to e-mail a comment form to each participant in a rulemaking-related process and to ask related interest groups to canvas their membership for feedback about the process. Technology can be used to tap into the norms of collaboration already prevalent on the Net by encouraging people to contribute to identifying best practices.²⁸⁴ This knowledge should be solicited, not by measuring satisfaction or happiness with specific policy choices, but by asking participants to reflect upon the fairness of the process, the opportunity for all to be heard, and the quality of other people's participation. Participant satisfaction, while one of the easiest variables to measure, is more likely to be driven by specific political concerns and private interests rather than by a frank assessment of how well public participation practices are meeting the ongoing needs of rule writers and the relevant public.

Developing metrics for evaluation at an agency level and determining whether they are being met will be the best way to convince officials to make the changes required to institute new e-rulemaking practices. Officials, stakeholders, and the public all have a right to be convinced of the "return on investment" before investing the time, budgetary resources, and manpower required to implement new ways of practicing rulemaking. Because technology makes it easy to try various dialogic methodologies, agencies can begin with pilot implementations of consultative practices and measure their success against predefined metrics. In the process of experimentation, agencies will be able not only to further refine the best practices for doing rulemaking, but also to better determine the appropriate mechanisms to measure their success.

²⁸⁴ Lior Jacob Strahilevitz, *Charismatic Code, Social Norms, and the Emergence of Cooperation on the File-Swapping Networks*, 89 VA. L. REV. 505 (2003).

B. Evaluating Participation Centrally: OMB Oversight of Participative Practice

While agencies must be responsible for implementing the appropriate participation practices, there remains some need for centralized oversight of participation across agencies. Central coordination is necessary to ensure adequate evaluation of results. It enables the comparison of methods across agencies and across subject matter areas. Placing responsibility for evaluation in a central authority also decreases the burden on agencies and facilitates independent review of data. At the same time, centralizing administrative practices increases the potential for political control and manipulation.

First, centralized evaluation enables a comparison of results and independent review of the data. Second, such centralization facilitates dissemination and publication of meaningful results. This enhances the transparency of the process by providing an extra check on agency self-assessment and an incentive for agencies to be more accountable to the public. Third, if OMB puts citizen participation practices at the forefront and requires relevant data to be gathered, then agencies must shift their focus to this democratic priority or risk illegitimacy.

Fourth and most important, measuring the success of citizen participation practices focuses OMB's attention and its investment on technology designed to produce success in terms of these democratic outcomes. It puts citizens at the forefront of the rulemaking agenda and helps to realize the stated goal of "citizen-centered" e-government.²⁸⁵ As OMB considers which tools and procedures to implement as part of a centralized e-rulemaking toolkit, it must do so on the basis of successful experimentation with technologically-enabled practices that further the democratic mandate of citizen participation. OMB, under the E-Government Act, is in fact responsible for designing the e-government toolkit. OMB can use its authority to mandate compliance through a variety of legal measures, including older statutory mechanisms or, preferably, through the E-Government Act of 2002.²⁸⁶ Therefore, OMB should ensure that investments are made in e-rulemaking tools that measurably strengthen democratic practice.

²⁸⁵ See Bush, *supra* note 159.

²⁸⁶ Pub. L. No. 107-347, 116 Stat. 2899.

As part of the review that agencies conduct under the Regulatory Flexibility Act (RFA),²⁸⁷ agencies might be asked to provide a public participation strategy and discuss innovative measures that will be used to engage a wider public in rulemaking. However, the Chief Counsel for Advocacy of the Small Business Administration is responsible for review of these analyses,²⁸⁸ and the Chief Counsel may not be the appropriate official in every case to assess participative practices. Also, agencies are not required to submit analyses under the RFA when there is no significant impact on smaller entities.²⁸⁹ Agencies might, instead or in addition, be required to prepare separate participation reports under the authority of an executive order requiring OMB review, such as the Regulatory Planning Process order.²⁹⁰ As part of the biennial review of each agency's regulatory agenda, the Office of Information and Regulatory Affairs²⁹¹ at OMB might require all agencies to include a plan for improving participation.

Whereas these older mechanisms offer the benefit of being well-established processes for centralized review of agency activity, if the purpose of studying participative practice is to create technology that enables participation, then it makes most sense to institutionalize evaluation as part of the E-Government Act. Under the Act, agencies already must provide annual updates on implementation of the Act's provisions to OMB.²⁹² This would itself be a perfect opportunity—if the President would demand it—for agencies to report on the piloting of new citizen participation initiatives that promote citizen-centric e-government. It would ensure that the necessary data reaches the authorities responsible for developing the e-government toolkit.

Such an Executive Order or implementing plan under the E-Government Act should require agencies to develop citizen participation plans on a forward-looking basis and develop metrics, in consultation with OMB, for

²⁸⁷ Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. §§ 601-612 (2000)); see Paul R. Verkuil, *A Critical Guide to the Regulatory Flexibility Act*, 1982 DUKE L.J. 213.

²⁸⁸ 5 U.S.C. § 609(b)(1) (2000).

²⁸⁹ *Id.* § 602(a)(1).

²⁹⁰ Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 17, 1981) (requiring agencies to submit regulatory impact analyses of their major regulations to Director of OMB) (Reagan); Exec. Order No. 12,498, 50 Fed. Reg. 1036 (Jan. 4, 1985) (requiring agencies to submit plans for future rulemakings to Director of OMB) (Reagan); Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993) (establishing regulatory review structure and increasing OIRA role) (Clinton), *amended by* Exec. Order No. 13,258, 67 Fed. Reg. 9385 (Feb. 26, 2002) (eliminating role of Vice President in regulatory review structure) (G.W. Bush).

²⁹¹ See Office of Mgmt. & Budget, Office of Information and Regulatory Affairs, at <http://www.whitehouse.gov/omb/info/reg/> (last modified Apr. 27, 2004).

²⁹² BOLTEN MEMORANDUM, *supra* note 4.

evaluating past practices. EPA has already had some experience with developing such consultative plans.²⁹³ In these citizen participation reports, agencies will apply to OMB for funding provided by the E-Government Act to pilot innovative electronic methods to enhance future rulemaking. In the plan, agencies will propose a certain number of pilots and a timeline for evaluating their success. OMB will provide financial support and technological assistance for these practices and will try to ensure that many agencies conduct similar pilots using the same methodology in order to ensure that adequate data can be gathered.

Once the democratic experiments have been implemented and the data gathered, assessing the success of different practices and translating them into replicable models will be the work of the CIO Council and its staff. The CIO Council, which represents a wide variety of agencies, will be able to look at what did and did not work in different contexts and recommend to OMB the creation of specific tools that implement best practices. In this way, all agencies and the public will have a voice in developing the specifications for e-rulemaking tools and the practices they enable.

As a further incentive to devote more attention to improving public consultation in informal rulemaking, OMB could give awards to the agencies that develop the best public consultation practices and are most successful at using the Web for public participation. Creating a "participation award" would signal the importance of "citizen-centric" e-government to the public and to Congress.

By supporting democratic experimentation at the agency level, OMB would tap into innovation even at the periphery of government operations, while managing best practice development and distribution from the center. As the central authority, it can coordinate a continual process of experimentation, analysis, and knowledge-sharing that redistributes in-

²⁹³ EPA Administrator Christie Whitman issued the new Public Involvement Policy on June 6, 2003. The policy gives clear guidance to EPA staff on effective ways to involve the public in all of the agency's programs and activities. The Public Involvement Policy recommends these seven basic steps for effective public involvement: (1) plan and budget; (2) identify whom to involve; (3) consider providing assistance; (4) provide information; (5) conduct involvement; (6) review input and provide feedback; and (7) evaluate public involvement. The new policy recognizes: the public's changing needs; new statutes and regulations; expanded public participation techniques and media (e.g. the Internet); the importance of partnerships and technical assistance; and increased state, tribal, and local government capacity to carry out programs. EPA also released *Framework for Implementing EPA's Public Involvement Policy and Response to Comments on EPA's Draft 2000 Public Involvement Policy*. See *Env'tl. Prot. Agency, Public Involvement Policy*, at <http://www.epa.gov/publicinvolvement/policy2003/index.htm> (last modified July 8, 2003).

formation about best practices from the center back to the periphery. Once processes are analyzed and fine-tuned into best practices, OMB can construct the final tools to implement and take them to scale as part of a national e-government initiative. Having OMB construct the toolkit saves money, enhances the quality of the technology produced, and enables centralized publication at regulations.gov of both the tools and the manuals for how to use them. If the practices are online, interest groups, civic organizations, and others can replicate them, thereby multiplying the practice and deepening the culture of participation. By transforming participation from an abstract right into a practicable set of procedures to enable citizens to participate in every stage of the rulemaking process, the federal government could be a pioneer in civic innovation and teach the next generation to “do democracy” in the digital age.

VI. CONCLUSION

Electronic rulemaking is a foregone conclusion. Federal agencies have invested millions in the technology to move administrative practice online. Now the E-Government Act has set in motion a longstanding plan to centralize the work of agencies into one technological system that will serve as a massive file cabinet for the bureaucracy and enable more of the public to have access to more documents than ever before. But electronic rulemaking as currently envisioned fails to take account of opportunities technology offers for public participation in rulemaking. The fact that software permits the “mapping” of normative methods for interpersonal communication and group deliberation into its code should prompt a rethinking of rulemaking under the APA. Technology might not only make the process of citizen consultation practicable, it could also help to realize its participative potential.

By designing the tools and methods of rulemaking to foster greater participation, e-rulemaking could cultivate communities of rulemaking practice. This does not call for one kind of tool or method but for a toolkit of alternative ways of working, enforced by software, to enable participation in different modes and to achieve the different outcomes necessary at each stage of the rulemaking process. The socio-technical information systems of rulemaking should help citizens and rulemakers alike to engender the communicative processes necessary for group collaboration in policymaking.

If technology is used to get the word out about rulemaking and its importance for setting the policies that govern every aspect of public and

private life, engaged citizens will emerge who want to participate and who can be galvanized to stay involved and interested. Government will not and should not attempt to control the entire rulemaking process. Instead, e-rulemaking should allow these communities to flourish and have access to the information necessary for informed participation. To the extent that agencies do officially consult the public, they should do so using speech tools designed around proven small group deliberation methodologies. Agencies should not, however, limit themselves to parochial policy juries of a dozen or two, but should exploit the technology's scale to replicate these discussions and develop a genuine sense of the public interest.

What will render such dialogues practicable is having the right tools and the right methods to structure communication, label information, and set both within the social context of the rulemaking process. This Article puts forward numerous proposals for tools and methods, but to determine what actually constitutes the "right" or the "best" models for the toolkit—and to decide what merits extensive investment—requires a process of experimentation and evaluation according to metrics designed to measure improvements in public participation. Only by institutionalizing public participation metrics will regulators take the mandate seriously and will citizens be convinced of the relevance and value of public comment. Commitment to the process is essential to maintaining communities of rulemaking practice. Also, we have to measure success if we are to determine what types of rulemakings are best suited to use with each speech tool.

Though the innovations proposed are inexpensive, pilot projects will inevitably be costly and time-consuming to run. Savings can be realized if OMB communicates its need for e-rulemaking tools to the open source technology development community. Given the opportunity, members of the rulemaking community, too, will share in the work of refining methods. The remaining expense will still be more than justified if the result is civic innovation that enables genuine citizen participation to inform and democratize rule writing.

Participation in rulemaking is one of the most fundamental, important, and far-reaching of democratic rights. Its exercise will soon depend on the technological systems that implement it. Technological systems for information and communications management embed normative values. Therefore, how we design those systems—whether or not they are truly citizen-centric—is crucial to our vision of the administrative state. Nor is the

importance of technology design limited to rulemaking alone. Public technology systems will change our political culture in every area of government. Without attention to how they are designed, these systems may further attenuate representative institutions and weaken the right of participation. But the potential for strong communities of practice, which exploit the technology to work across time, distance, and diversity, to make rules together shines out like a beacon through the ether: *publicus ex machina!*

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