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Habermas@discourse.net: Toward a Critical Theory of Cyberspace

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ARTICLES

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A. Michael Froomkin*

INTRODUCTION

In what has been called "a monumental achievement . . . that provides a systematic account of major issues in contemporary jurisprudence, constitutional theory, political and social philosophy, and the theory of democracy,"[1] Jürgen Habermas has proposed a discourse ethics as the basis for testing the legitimacy of legal institutions. Habermas seeks to identify and explain a method for justifying valid law and legal institutions, or at least the procedures necessary to make legitimate law. His approach blends an abstract theory of justice with a sociological theory of law that is grounded in empirical observations.[2] Attempting to bring moral philosophy into the realm of political science, Habermas seeks nothing less than to describe a system that can validate moral choices, notably those about how society should be organized. Habermas proposes a way to identify norms that are presumptively legitimate because they were reached according to morally justified procedures. In so doing, Habermas directly confronts the most difficult obstacles to moralizing about social organization, including the fact/value distinction,[3] false consciousness,[4] and the injustices

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[1] Michel Rosenfeld, *Law as Discourse: Bridging the Gap Between Democracy and Rights*, 108 HARV. L. REV. 1163, 1164 (1995) (reviewing JÜRGEN HABERMAS, BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY (William Rehg trans., 1995) [hereinafter BETWEEN FACTS AND NORMS]).

[2] *See id.*

[3] *See, e.g.*, JÜRGEN HABERMAS, MORAL CONSCIOUSNESS AND COMMUNICATIVE ACTION 176–77 (Christian Lenhardt & Shierry Weber Nicholsen trans., 1990) [hereinafter MORAL CONSCIOUSNESS].

[4] False consciousness is the "holding of beliefs that are contrary to one's personal or group interest and which thereby contribute to the maintenance of the disadvantaged position of the self or the group." John T. Jost & Mahzarin R. Banaji, *The Role of Stereotyping in System-Justification and the Production of False Consciousness*, 33 BRIT. J. SOC. PSYCHOL. 1, 3 (1994).

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and imbalances caused by unequal distributions of power and knowl-
edge. The outcome of this inquiry is of enormous relevance to the con-
struction and legitimacy of the legal system,[5] especially because
Habermas argues that only a social system that guarantees basic civil
rights and enables meaningful participation by all those affected by a
decision can make legitimate decisions.

In the spirit of Habermas's project of linking sociological observa-
tion with legal philosophy,[6] this Article offers an analysis of the Inter-
net standards processes — complex nongovernmental international
rulemaking discourses. This Article suggests that one of these dis-
courses is a concrete example of a rulemaking process that meets
Habermas's notoriously demanding procedural conditions for a dis-
course capable of legitimating its outcomes. This unusual discourse is
conducted by the Internet Engineering Task Force (IETF), which uses
it to set the basic technical standards that define Internet functions.

Identifying a practical discourse[7] that meets Habermas's conditions
does not by itself prove the truth of Habermas's procedural theory of
justice. Rather, it removes the potentially crushing empirical objection
that the theory is too demanding for real-life application. If Haber-
mas's account of procedural legitimation is right, it should be capable
of application. Conversely, if it were impossible to conduct a deci-
sionmaking process in the manner that Habermas argues is necessary
to legitimate outcomes, then his theory of justice would be, at the very
least, incomplete.[8]

Standards discourses are but a tiny fraction of the conversations
enabled by the Internet. This Article does not suggest that discourse
on the Internet as a whole meets Habermas's condition for the genera-
tion of legitimate rules, limiting its claim to only a much smaller,
slightly more formalized, set of cooperative procedures that make the

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[5] BETWEEN FACTS AND NORMS, *supra* note 1, at xl–xli.

[6] *See, e.g., id.* at 288.

[7] A practical discourse is a discourse about norms relating to practical things, such as "the
questions of the good life." *See id.* at 60; *see also* THOMAS MCCARTHY, THE CRITICAL
THEORY OF JÜRGEN HABERMAS 312–14 (1978). The term is meant to contrast with "theoreti-
cal discourse," which is discourse about truth claims of an idealized nature, derived from reason.
See id. at 291–310 (explaining Habermas's view of "theoretical discourse"). "Practical discourse
may be understood as a communicative process that induces all participants *simultaneously* to
engage in ideal role taking in virtue of its form, that is, solely on the basis of unavoidable univer-
sal presuppositions of argumentation." JÜRGEN HABERMAS, JUSTIFICATION AND
APPLICATION: REMARKS ON DISCOURSE ETHICS 50 (Ciaran Cronin trans., 1993) [hereinafter
JUSTIFICATION]. As explained below, participants in a practical discourse bring to it certain
commitments including an honest desire to tell the truth and to be understood. *See infra* pp. 771–
73.

[8] *Cf.* IMMANUEL KANT, *On the Common Saying: "This May Be True in Theory, but It Does
Not Apply in Practice"*, *in* KANT'S POLITICAL WRITINGS 61, 61 (Hans Reiss ed., H.B. Nisbet
trans., 1971) (concluding that if a theory does not work in practice, it shows a need for more the-
ory).

other Internet discourses possible.[9]   Still, even one documented exam-
ple of discourse ethics in action may disarm the oft-heard criticism
that the Habermasian project cannot be achieved in practice.[10]

Habermas's work provides a standpoint from which social institu-
tions that fail to live up to his very demanding standards can be cri-
tiqued in the hopes of making them more legitimate and more just.
Armed with evidence that Habermasian discourse is achievable, this
Article surveys other Internet-based developments that may approach
the Habermasian ideal or, as in the case of the Internet Corporation
for Assigned Names and Numbers (ICANN), that already claim a spe-
cial form of legitimacy.   This Article finds most of these other stan-
dard-setting procedures wanting in comparison to the IETF.

Habermas seeks not only to define when a rulemaking system can
claim legitimacy for its outputs, but also to describe tendencies that af-
fect a modern society's ability to realize his theory.[11] Speaking more as
a sociologist than a philosopher, Habermas has also suggested that the
forces needed to push public decisionmaking in the directions advo-
cated by his philosophy are likely to come from a re-energized, activist,
engaged citizenry working together to create new small-scale commu-
nicative associative institutions that over time either merge into larger
ones or at least join forces.   Like Habermas's idea of a practical dis-
course, this has the ring of something that may sound fine in theory
but is difficult to put into practice.   New technology may, however, in-
crease the likelihood of achieving the Habermasian scenario of diverse
citizens' groups engaging in practical discourses of their own.   Tech-
nology may not compel outcomes, but it certainly can make difficult
things easier.[12]   Although it is far too early to claim that the Internet
will realize this Habermasian vision, this Article suggests how new
Internet tools might, in time, help actualize this scenario.[13]

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[9] For essays with grander ambitions, see Mark Poster, *CyberDemocracy: Internet and the
Public Sphere* (1995), at http://www.humanities.uci.edu/mposter/writings/democ.html; and Alinta
Thornton, *Does Internet Create Democracy?* (2002), at http://www.zip.com.au/~athornto//.

[10] *See* Stephen Chilton, *The Problem of Agreement in Republicanism, Proceduralism, and the
Mature Dewey: A "Two Moments of Discourse Ethics" Analysis*, at http://www.d.umn.edu/
~schilton/Articles/Tilburg.html (last modified Jan. 24, 2001) ("[D]iscourse ethics is frustrating, be-
cause it demands more agreement than we seem capable of."). Even a friendly interpreter such as
William Rehg asks, "Is discourse ethics at all feasible?" WILLIAM REHG, INSIGHT AND
SOLIDARITY: A STUDY IN THE DISCOURSE ETHICS OF JÜRGEN HABERMAS 83 (1994). Rehg
grapples with the question but does not really resolve it. *See id.* at 83, 244–49.

[11] *See* Hugh Baxter, *System and Lifeworld in Habermas's Theory of Law*, 23 CARDOZO L.
REV. 473, 473 (2002) [hereinafter Baxter, *System and Lifeworld*] (noting the two complementary
themes in Habermas's work).

[12] *Cf.* RANDAL L. SCHWARTZ & TOM PHOENIX, LEARNING PERL (3d ed. 2001) (noting on
cover: "Making Easy Things Easy & Hard Things Possible").

[13] In so doing it also provides an implicit critique of the thesis advanced by Cass Sunstein that
the Internet fragments communities and kills discourse. *See* CASS SUNSTEIN, REPUBLIC.COM
71–80 (2001).

Part I of this Article outlines a portion of Habermas's theory of discourse ethics that is suitable for empirical testing, and situates these elements of Habermas's work in the larger context of critical theory. Part II is a social and institutional history of the IETF's Internet Standards process; it argues that participants in the IETF are engaged in a very high level of discourse, and are self-consciously documenting that discourse and its procedures.

In light of the description provided in Part II, Part III argues that the IETF is an international phenomenon that conforms well to the requirements of Habermas's discourse ethics. In short, Part III asserts that one element of the Internet Standards process meets Habermas's requirements for a practical discourse. This is a very limited claim. Part III does *not* assert that discussion over the Internet as a whole in any way complies with Habermas's ideals, and indeed there is ample evidence in most discussion groups that it does not. Nor does Part III suggest that computer-mediated communications are necessarily the harbinger of a new, more democratic and legitimate regional, national, or international town meeting (although Part V suggests that there are some encouraging signs that the private sphere might be reorganized with the right tools and that this transformation might have healthy effects on the public sphere)[14] Part III also does not claim that the Internet Standards process takes place in an "ideal speech situation"; it claims only that the standards process closely approximates, and may in fact be, the "best practical discourse." And, as more fully described below, even if Part III is right about the legitimacy of the Internet Standards process, it makes only limited claims concerning the implications for other processes: that they look bad in comparison, and that one argument for their legitimacy — that they are the best one can do under the circumstances — is eroded. The existence of even one example of a functioning Habermasian discourse should inspire attempts to make other decisions in as legitimate and participatory a manner as possible.

In another way, though, the objectives of this Article may be less modest. Habermas himself has argued that the liberal democratic systems with constitutional guarantees that protect basic human rights are, if not practical discourse in action, at least on the right track. Only a legal system based on human rights and popular sovereignty

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[14] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 360 ("The public sphere can best be described as a network for communicating information and points of view . . . the streams of communication are, in the process, filtered and synthesized in such a way that they coalesce into bundles of topically specified *public* opinions. . . . [T]o the extent that [the public sphere] extends to politically relevant questions, it leaves their specialized treatment to the political system.").

could produce legitimate rules.[15] Habermas writes approvingly of the work of John Ely, Frank Michelman, Cass Sunstein, Bruce Ackerman, and other modern U.S. constitutional theorists.[16] He praises them for addressing the countermajoritarian dilemma by suggesting that the Supreme Court's key role is to police the fundamental procedural regulations that define access to the political system, such as voting and free speech.[17] Habermas does not appear, however, to believe that the U.S. political system successfully engages in the practical discourse required to legitimate rules,[18] only that it shares features with such a system. Indeed, so far as I am aware, there has not been to date a documented example of an important contemporary rulemaking process whose procedures comply with the requirements of Habermasian discourse ethics.[19]

Part IV addresses other Internet standards processes, both informal and formal, in the spirit of critique informed by Habermas's writing and the example of the conformity of the IETF procedures to the requirements of discourse theory. This Part asserts that the Internet is a complex, predominantly self-regulating system. Although national governments and a few international agreements regulate certain aspects of the Internet, these regulations generally cover few of the technical standards and almost none of the social standards. Despite the

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[15] "[T]he *discourse theory of law* conceives constitutional democracy as institutionalizing — by way of legitimate law ... — the procedures and communicative presuppositions for a discursive opinion- and will-formation that in turn makes possible ... legitimate lawmaking." *Id.* at 437. Indeed, Habermas suggests that "in complex societies, morality can become effective beyond the local level only by being translated into the legal code." *Id.* at 110. And, "[t]his legal institutionalization of specific procedures and conditions of communication is what makes possible the effective utilization of equal communicative freedom and at the same time *enjoins* the pragmatic, ethical, and moral use of practical reason or, as the case may be, the fair balance of interests." *Id.* at 170.

[16] *See id.* at 261–86.

[17] *E.g.*, *id.* at 267–86.

[18] *See, e.g.*, *id.* at 286, 321, 327–28, 356–57.

[19] Proposals to set up discourse-based institutions include CHARLES J. FOX & HUGH T. MILLER, POSTMODERN PUBLIC ADMINSTRATION: TOWARDS DISCOURSE (1995); and Bruce Ackerman & James Fishkin, Deliberation Day (Feb. 4, 2000) (unpublished manuscript, presented at the Deliberating About Deliberative Democracy conference, University of Texas), *available at* http://www.la.utexas.edu/conf2000/papers/DeliberationDay.pdf. There has, in addition, been a considerable amount of very interesting and closely related recent writing regarding spontaneous order and norm-formation. *See, e.g.*, ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES (1991); DAVID FRIEDMAN, HIDDEN ORDER: THE ECONOMICS OF EVERYDAY LIFE (1996); Mark A. Lemley, *The Law and Economics of Internet Norms*, 73 CHI.-KENT L. REV. 1257 (1998); Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295 (1998); Gunther Teubener, *'Global Bukowina': Legal Pluralism in the World Society, in* GLOBAL LAW WITHOUT A STATE 3 (Gunther Teubener ed., 1997); Symposium, *Law, Economics, & Norms*, 144 U. PA. L. REV. 1643 (1996).

general absence of applicable national or international law, the Internet is an orderly anarchy.

Decisionmaking concerning fundamental issues of Internet management (including both technical matters and issues of social propriety) is primarily by consensus. The processes of consensus formation and action based on consensus take several forms, notably:

- "negotiated consensus": explicit consensus or near-consensus reached after negotiations open to all interested parties with the capacity and stamina to participate. The primary location for the development of this consensus is the IETF, an unincorporated association of ever-changing membership;
- "market consensus": de facto technical standards are created by the mass adoption of a particular product or standard considered superior to its competitors;
- "delegation": a trusted party, often an individual or small committee, is considered sufficiently knowledgeable or reliable to monopolize the task of making decisions, which are then implemented, sometimes automatically, by others. The trusted party is usually a self-selected volunteer, and is almost never elected;
- "mass revenge": Internet participants react to a perceived threat by either ostracizing or, in more extreme cases, launching electronic attacks (for example, "email bombings") on persons who fail to comply with certain fundamental social norms. A milder form of the same sanctions is used to enforce "netiquette."[20]

Although some of these informal standards processes exhibit attributes of the best practical discourse, few adhere to it as well as the IETF. The outcomes of most of these processes, therefore, do not enjoy the same legitimacy as those of the IETF.

Similarly, merely claiming to adopt procedures modeled on the IETF procedures does not make an institution's decisions legitimate. This is demonstrated by a critique of an increasingly assertive Internet standards body, ICANN.[21] ICANN claims to be a consensus-based

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[20] "Netiquette" is network etiquette, the basic rules of politeness for online behavior. *See* S. Hambridge, Netiquette Guidelines (Network Working Group, Request for Comments No. 1855) (Oct. 1995) [hereinafter RFC 1855], *available at* http://www.ietf.org/rfc/rfc1855.txt.

[21] *See generally* A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN To Route Around the APA and the Constitution*, 50 DUKE L.J. 17 (2000) [hereinafter Froomkin, *Wrong Turn*], *available at* http://www.law.miami.edu/froomkin/articles/icann.pdf. For a spirited debate evaluating *Wrong Turn*, see Joe Sims & Cynthia L. Bauerly, *A Response to Professor Froomkin: Why ICANN Does Not Violate the APA or the Constitution*, 6 J. SMALL & EMERGING BUS. L. 65 (2002); A. Michael Froomkin, *Form and Substance in Cyberspace*, 6 J. SMALL & EMERGING BUS. L. 93 (2002); Joe Sims & Cynthia L. Bauerly, *A Reply to Professor Froomkin's Form and Substance in Cyberspace*, 6 J. SMALL & EMERGING BUS. L. 125 (2002).

technical coordination and standards body; it clothes itself in legitimacy akin to that of the IETF, but in fact ICANN cannot share in the IETF's legitimacy. Part IV suggests that if the Internet Standards process has special legitimacy, then it follows that its special virtues are worth preserving, and that alternate Internet governance models lacking the IETF's virtues should be viewed with caution.

Finally, Part V offers some preliminary speculation about the ways in which new technology might help widen, deepen, and enrich Habermasian discourse, although recognizing that this outcome is anything but inevitable. The Internet supports a variety of new tools that show a potential for enabling not just discourse, but good discourse. While it is far too soon to claim that the widespread diffusion and use of these tools, or their successors, might actualize the best practical discourse in an ever-wider section of society, it is not too soon to hope — and perhaps to install some software.

I. HABERMAS ON DISCOURSE THEORY

[I]t is no accident that legal philosophy, in search of contact with social reality, has migrated into the law schools.[22]

Jürgen Habermas has recently offered a discourse ethics, a reformulation of the philosophical foundations of legal and social organization. Given the breadth and complexity of Habermas's work, a short summary can do no more than sketch the outlines of the relevant parts of his argument. This Part briefly situates Habermas's social theory in relation to modern movements in critical theory, sets out a summary of Habermas's suggestion that communicative action suffices to provide a procedural grounding for the design of fundamental political institutions, and contrasts discourse ethics with earlier articulations of Habermas's theory, notably those that relied on an "ideal speech situation." This Part is not designed to persuade one of the validity, much less prove the truth, of Habermas's theories, but only to describe them.[23]

The Habermasian project is broad, and it is impossible for an introductory summary to do it justice. The project includes an attempt

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[22] BETWEEN FACTS AND NORMS, *supra* note 1, at xli.

[23] For a much richer, if somewhat critical, exposition of Habermas's theories as applied to the legal system, see Baxter, *System and Lifeworld*, *supra* note 11; Hugh Baxter, *Habermas's Discourse Theory of Law and Democracy*, 50 BUFF. L. REV. 205 (2002); Symposium, *Exploring Habermas on Law and Democracy*, 76 DENV. U. L. REV. 927 (1999); Symposium, *Habermas on Law and Democracy: Critical Exchanges (Part 1)*, 17 CARDOZO L. REV. 767 (1996); Symposium, *Habermas on Law and Democracy: Critical Exchanges (Part 2)*, 17 CARDOZO L. REV. 1239 (1996).

to describe a concept of reason that is neither utterly selfish nor anchored in transcendence. It envisions a relationship between ideology and society that is neither totalitarian (or totalizing) nor irrelevant or ignored.[24] It is a socially oriented philosophy that grapples with the basic questions of modernity, and which, despite its roots in the Frankfurt School, remains anchored in modernity and rebuffs postmodern approaches.

A central question of modernity and one at the heart of much of Habermas's work, is how society should be organized, or more specifically, how we can justify social choices in a world of fundamental moral egalitarianism. In short, Habermas grapples with questions such as: what legal rules are justified, can both democracy and justice be realized, and what are the proper legal and practical relationships between the state and the individual, and among individuals? Habermas finds his answers in a demanding proceduralist conception of legitimacy. Though much has changed over time, Habermas's work exhibits a consistent commitment to liberal democratic values, to the importance of law, to the rule of law, and to the special importance of human rights. To Habermas, law is neither autonomous from society nor endogenous to it. Law is an essential element of the capitalist economic system, a system Habermas considers suspect because he finds that it encourages people to treat others as instruments of production rather than as equals. Law is a key part of society's replication and legitimation of itself. Law is a coercive force. It is the handmaiden of a dangerously expansionist bureaucratic and administrative state. Yet law is simultaneously rich in emancipatory potential and the bulwark of personal freedom. Indeed, personal freedom protected by law is a necessary (if not sufficient) condition for a legitimate decisionmaking system. Only when participants are free and uncoerced can they subject normative claims to the sort of discussion that produces legitimate outcomes.

Lawyers in the United States are familiar with these debates under the rubrics of republicanism, the countermajoritarian dilemma, positivism, and even natural law. Political philosophers' attempts to resolve them include communitarian theories and social contractarian theories,[25] sometimes with imaginary bargains in a hypothetical original position.[26] Habermas's approach is different. It seeks to reconcile the commitment to individual equality and autonomy with the constraints of constitutional democracy while simultaneously recognizing

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[24] *See* Stephen K. White, *Reason, Modernity, and Democracy, in* THE CAMBRIDGE COMPANION TO HABERMAS 13 (Stephen K. White ed., 1995).

[25] *See, e.g.*, DAVID GAUTHIER, MORALS BY AGREEMENT (1988).

[26] *See* JOHN RAWLS, A THEORY OF JUSTICE 15–19 (Harvard Univ. Press rev. ed. 1999) (1971).

and adjusting for the existence of material inequality in society. "A legal order *is* legitimate to the extent that it equally secures the co-original private and political autonomy of its citizens; at the same time, however, it *owes* its legitimacy to the forms of communication in which alone this autonomy can express and prove itself."[27] It makes assertions about the necessity of basic rights of freedom of speech and association. Habermas's claim is that these tensions can be reconciled by a fundamentally proceduralist theory.[28]

At the core of Habermas's approach lies a moral theory, an attempt to construct a "moral point of view" that rational people employ when justifying and evaluating norms. This stance, a meld of pure reason and lived experience rather than pure Kantian reason, obliges the adoption of procedures that allow for a special type of discourse as a means of debating value claims. These procedures do more than provide for the right sort of debate. The use of discursive procedures that comply with Habermas's strictures also creates a sort of virtuous circle, as the participants become socialized into taking responsibility for collective decisionmaking and thinking more clearly about their own and other people's interests.

Two complementary ideas — one ostensibly substantive, the other clearly procedural — lie at the heart of Habermas's discourse ethics. Much like Kant, Habermas believes that rationality can be used to reason out (some) truths about values. In particular, Habermas argues that reason, albeit reason informed by our experiences, directs us to certain general conclusions about the conditions that must exist in society before it is capable of making valid decisions: "basic rights that citizens must mutually grant one another if they want to legitimately regulate their life in common."[29] Again like Kant, Habermas believes that these truths transcend the individual and that rational people can come to agree on them — although Habermas does not claim that the applications of these truths are timeless or transcend all issues of history and culture.[30] For Habermas these truths concern only the fundamental, primarily procedural conditions (for example, basic equality, lack of coercion) needed to conduct a debate whose outcome deserves

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[27] BETWEEN FACTS AND NORMS, *supra* note 1, at 409.
   After the formal guarantee of private autonomy has proven insufficient, and after social intervention through law also threatens the very private autonomy it means to restore, the only solution consists in thematizing the connection between forms of communication that *simultaneously* guarantee private and public autonomy *in the very conditions from which they emerge.*
Id.
[28] *See id.* at 118–30, 455–56.
[29] *Id.* at 118 (discussing regulation "by means of positive law").
[30] "The crux of the challenge is constructively to maintain the tension between the strongly idealizing, context-transcending claims of reason and the always limited contexts in which human reason must ply its trade." *Id.* at xiii–xiv.

to be considered legitimate.[31] Habermas also asserts, empirically, that
adherence to these principles tends to produce a necessary sense of le-
gitimacy among participants in legal institutions.[32] Unlike fundamen-
tal choices about human rights necessary to conduct legitimating dis-
courses, most decisions about practical political questions, including
some about rights, do not gain their legitimacy from abstract reason.
While Habermas's conception of the fruits of pure reason may require
some form of the welfare state to ensure that everyone has some degree
of autonomy,[33] we do not look to pure reason to find the optimal tax
rate. Instead, practical decisions are legitimated by reference to the
procedures used to decide them, provided that the procedures are
themselves legitimate.

A. Critical Theory

A critical theory claims to be a special form of knowledge. It
claims to provide a guide to human action, at least in some general (as
opposed to strictly personal) areas — such as the definition and
achievement of social justice and the correct regulation of human in-
teractions[34] — by helping people understand their true interests and by
helping them escape from ideological coercion. Critical theories are
"reflexive"; a critical theory always includes an account of itself, of

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[31] Habermas also advances a similar principle, the universalization principle (U): "*All* affected
can accept the consequences and the side effects its *general* observance can be anticipated to have
for the satisfaction of *everyone's* interests (and these consequences are preferred to those of known
alternative possibilities for regulation)." MORAL CONSCIOUSNESS, *supra* note 3, at 65. *See gen-
erally* REHG, *supra* note 10 (providing a thorough discussion of (U)). Habermas's principle of
(U) has been criticized. *See, e.g.*, SEYLA BENHABIB, CRITIQUE, NORM, AND UTOPIA: A
STUDY OF THE FOUNDATIONS OF CRITICAL THEORY 301–09 (1986).

Habermas states that (U) differs from the discourse principle (D), discussed below, in that
(D) "already *presupposes* that we *can* justify our choice for a norm." MORAL CONSCIOUSNESS,
supra note 3, at 66. Seyla Benhabib argues that (U) may be redundant. *See* BENHABIB, *supra*,
at 308. For Rehg's response to her critique, see REHG, *supra* note 10, at 65–69. The relationship
between (U) and (D) is obscure, even odd: (U) justifies (D), but part of that justification of (D) re-
lies on the claim that (D) is a way, maybe the only way, to instantiate (U) in practice. Since (U) is
valid, so is (D). But a key part of the justification for (U) is that it follows from a rational, honest
commitment to discourse. At some point self-reflexivity begins to resemble . . . circularity.

In *Between Facts and Norms*, Habermas substantially revised the account of the relation
between (U) and (D) originally offered in *Moral Consciousness and Communicative Action*. An
account of the differences appears in a series of postings from John Victor Peterson,
jvpeters@midway.uchicago.edu, to habermas@lists.village.virginia.edu (Mar. 14–Apr. 21, 1999), *at*
http://lists.village.virginia.edu/listservs/spoons/habermas.archive/habermas.9903 *and* http://lists.
village.virginia.edu/listservs/spoons/habermas.archive/habermas.9904.

[32] This is a sociological observation, not a truth claim derived from abstract reason.
BETWEEN FACTS AND NORMS, *supra* note 1, at 120–22.

[33] *See id.* at 122–24.

[34] *See* Ciaran Cronin, *Translator's Introduction* to JUSTIFICATION, *supra* note 7, at xxiii.

how the theory came to be.[35] A critical theory is an account of morality that is sensitive to the historically contingent nature of the culture that spawned it: by "adopting a hypothetical stance towards their own traditions and on this basis grasping their own cultural relativity,"[36] participants in the formation of a critical theory take a questioning stance toward their own practices while nonetheless avoiding the paralysis of moral relativism. Habermas's approach, however, is not necessarily typical. He accepts the equal validity of differing value systems, which means that there cannot be a timeless agreement on many basic questions of morality,[37] yet simultaneously argues that fundamental value claims based on a limited rational consensus are possible. There is a limit, however, to how much rational consensus can be reached regarding fundamental values, as "what is capable of commanding universal assent becomes restricted to the *procedure* of rational will formation."[38] We may not be able to agree abstractly on what is the good, but within a community that shares commonalities of communication, we can at least agree abstractly on how to make valid decisions.

Critical theorists believe that purely descriptive theories cannot generate moral understanding. Similarly, recipes, purely technological information (for example, instruction books), and even many political agendas are dismissed as seeking only to achieve short-term goals, to manipulate the world in some way. A reflexively consistent theory, critical theorists argue, differs from all of these because it aims to increase understanding, to enlighten participants about their true interests and those of their community.[39]

Imagine a society with an enduringly vulgar-Hobbesian value system, a people who, having come through years of horrible famine and privation, "recognize a full stomach as the only good — they routinely steal food from the very young, the old, and the infirm, leaving them to die — and their chief joy in life seems to be Schadenfreude."[40] Per-

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[35] *See generally* RAYMOND GEUSS, THE IDEA OF A CRITICAL THEORY (1981). Kant, too, arguably outlined a theory possessing this characteristic, at least if one were to combine two of Kant's essays. *See* IMMANUEL KANT, *An Answer to the Question: 'What is Enlightenment?'*, reprinted in KANT'S POLITICAL WRITINGS, *supra* note 8, at 54; IMMANUEL KANT, *Perpetual Peace: A Philosophic Sketch*, reprinted in KANT'S POLITICAL WRITINGS, *supra* note 8, at 93.

[36] JUSTIFICATION, *supra* note 7, at 157.

[37] *See id.* at 37 ("The principle of universalization . . . must relieve participants in argumentation of the burden of taking into account the multitude of completely unforeseeable future situations in justifying norms.").

[38] *Id.* at 150.

[39] *See* JÜRGEN HABERMAS, KNOWLEDGE AND HUMAN INTERESTS 310 (Jeremy J. Shapiro, trans., Polity Press ed. 1987) (1972) [hereinafter HUMAN INTERESTS].

[40] GEUSS, *supra* note 35, at 49–50 (citng COLIN M. TURNBULL, THE MOUNTAIN PEOPLE 280 (1972)). Geuss used Colin Turnbull's writing about the Ik, who inhabit Uganda, as the basis for his example of Hobbesian predators. Turnbull's depiction of the Ik has been criticized. *See*

haps one would wish to convince these people that their way of life is not ideal, particularly if the food crisis that is thought to have formed their value system is now past. But, in this society, a well-fed, healthy Hobbesian predator is simply a better predator. And no matter how well-informed these predators become about facts, no matter how good their descriptive theories, their values endure, even if they somehow acquire an abstract, scientific understanding that their preferences are pathological. The case of the well-informed, or even perfectly informed, person in this society is akin to that of the unreformed alcoholic: the alcoholic may rationally apprehend that drinking is wrong, perhaps fatal, yet he or she still chooses to drink.[41] Only if we are willing to make the claim that these preferences are somehow wrong, that this people's circumstances and history have rendered them unable to appreciate their true interests, can we justify overruling their value system, and then only as the result of the right sort of discursive procedure.

Many people would be prepared to admit to a moral intuition that there is something wrong with a value system that promotes theft and cruelty. But post-Nietzschean relativism makes this claim difficult to defend unless one is prepared to invoke a deity.[42] Habermas argues that flawed ideologies can be criticized legitimately without making a purely moral judgment if one can devise an adequate self-reflexive critical theory.[43] Such a theory contains an "ought" anyone able to participate in unfettered discourse could rationally be expected to respect[44] because, like the Kantian theory from which it springs, a

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Bruce Bower, *The Forager King*, SCIENCE NEWS (Sept. 9, 2000), *available at* http://www.findarticles.com/cf_o/m1200/mag.html; Richard V. Hoffman, *Pariah Dogs or Pharaohs: Who Are the Ik?, at* http://home1.gte.net/hoffmanr/Ikintro.htm (last modified July 18, 2002).

[41] *Cf.* TURNBULL, *supra* note 40, at 280–81 (depicting the Ik as amoral or evil). A later visitor paints a different picture:

> I know the Ik as far different than the ogres depicted in Turnbull's book. To be sure, the Ik have not been easy to reach . . . Nor have they been as easy to work with (what Turnbull mistook as the "inherent evil" of Ik society would be the weariness, mistrust, hunger, and fear felt by *any* society exposed to constant drought, famine, and intertribal warfare!) as, say, Margaret Mead's Samoans. But they have shown us that they not only deeply care about each other as family, friends, and human beings, but are determined to preserve their language and culture in the face of formidable odds.

Richard V. Hoffman, *Gentle Genocide for a Throwaway Tribe? The Future of the Ik, at* http://home1.gte.net/hoffmanr/future.htm (last modified July 18, 2002).

[42] Neo-Aristotelians such as Alasdair MacIntyre argue that people such as Hobbesian predators can and should be criticized from the standpoint of a cultural tradition. *See generally* ALASDAIR MACINTYRE, AFTER VIRTUE (2d ed. 1984). This argument does not, however, explain why Hobbesian predators, who may be no part of that tradition, should feel obligated to pay attention.

[43] *See* 1 JÜRGEN HABERMAS, THE THEORY OF COMMUNICATIVE ACTION 41–42 (Thomas McCarthy trans., 1984) [hereinafter 1 COMMUNICATIVE ACTION] (discussing social critique as akin to therapy).

[44] *See* GEUSS, *supra* note 35, at 57.

self-reflexive theory arises from the application of reason, logic, and especially self-reflection and historical understanding, rather than from a transcendent source.[45] Habermas does not claim that reason alone allows one to make value choices. Rather, he claims that in order for a normative claim to be regarded as legitimate, it must be able to be justified in a special kind of discourse. Because the conditions of that discourse include allowing everyone to speak and considering everyone's interests, it is hard to imagine that systematic exploitation of the weak would survive this (hypothesized) debate. Similarly, Habermas's discursive procedure likely imposes limits on the amount of force that can be used to coerce even evildoers. Habermas himself argues that one cannot fairly accuse discourse ethics of "the charge of abetting, let alone justifying, totalitarian ways of doing things," because the "maxim that the end justifies the means is utterly incompatible" with discourse ethics.[46]

The hallmark of a self-reflexive theory is that it includes an account of itself — that is, an explanation of its own origins and perhaps of why those origins entitle it to the peculiar status it claims. As theories that asserted this property, Habermas cited the unfortunate examples of Marxism and psychoanalysis.[47] Marxism purported to explain not only what form the revolution should take, but also how Marxism as a revolutionary theory had emerged as a necessary consequence of a particular moment in history. Similarly, in the political or legal context, a reflexively consistent theory will outline both a desired outcome and the circumstances that necessitate a change from whatever approach to moral or political issues is currently favored.

Unlike mainstream Marxists, however, Habermas maintains that a self-reflexive theory is not scientific or predictive;[48] a self-reflexive the-

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[45] One criticism of this argument is that it seems to take more knowledge to achieve a self-reflexive state than it would be reasonable to expect persons to have in real circumstances. Indeed, much earlier writing about critical theory either begins by positing or ends by requiring an ideal speech situation. *See, e.g.,* Thomas McCarthy, *Translator's Introduction,* to JÜRGEN HABERMAS, LEGITIMATION CRISIS xvi–xviii (Thomas McCarthy trans., 1975) [hereinafter LEGITIMATION CRISIS] (discussing Habermas's earlier works).

[46] JÜRGEN HABERMAS, *Morality and Ethical Life: Does Hegel's Critique of Kant Apply to Discourse Ethics?, in* MORAL CONSCIOUSNESS, *supra* note 3, at 195, 208.

[47] For a discussion demonstrating that these were unfortunate examples to choose, see MCCARTHY, *supra* note 7, at 213–72.

[48] For a summary of some of Habermas's differences with Marxists and with Marcuse, Horkheimer, Adorno, and the other originators of Critical Theory known as the Frankfurt School, see generally GEUSS, *supra* note 35, at 4–31; Jeffrey Alexander, *Habermas and Critical Theory: Beyond the Marxian Dilemma?, in* COMMUNICATIVE ACTION: ESSAYS ON JÜRGEN HABERMAS'S *The Theory of Communicative Action* 49 (Axel Honneth & Hans Joas eds., Jeremy Gaines & Doris L. Jones trans., 1991). Habermas discusses his differences with the "Marxian heritage" in Jürgen Habermas, *A Reply to My Critics, in* HABERMAS, CRITICAL DEBATES 219, 220–29 (John B. Thompson & David Held eds., 1982) [hereinafter Habermas, *Reply to My Critics*].

ory does not say that Hobbesian predators can or will be brought to see the pathology of their belief system through the action of some desired or inevitable social process. Rather, Habermas sees critical theory as being assertive and hypothetical, taking this form: if persons were sufficiently aware of their condition, both physical and cognitive, and *if* they were aware of the theory, then rationality would require that they adopt the conclusion suggested by the theory.[49]

A theory that is self-reflexively consistent is, Habermas claims, one that moral actors would form if competent to do so.[50] Originally, Habermas appeared to require a level of free discourse and a level of competence among participants — a set of conditions sometimes called an "ideal speech situation" — that appeared impossible to achieve in real life. An ideal speech situation would occur if the parties to the discourse were armed not only with an accurate descriptive theory (including a correct account of their history), but also with perfect knowledge of the sorts of preferences theoretically possible. In addition, the moral actors would need the reflective capacity to appreciate the causal relation between what they or their ancestors had experienced in the past and their current preferences — their ideology. But that is not all: at least in this earlier version of discourse theory, in addition to understanding the benefits of, say, cooperation, Hobbesian predators would also have to understand that given different preferences they would be, and would feel, better off than now.[51] This understanding is more than Hobbesian predators, not to mention other persons closer to home, are likely to be capable of. As described in the next sections, Habermas's more recent writings suggest that a democratic system can legitimately seek to aid Hobbesian predators and others, even against their will, by adhering to procedures that are just within the realm of the possible.

B. Substantive Criteria

The substantive element of discourse theory addresses both the individual and the legal system.[52] At the individual level, it begins with

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[49] *See* GEUSS, *supra* note 35, at 57.

[50] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 462; HUMAN INTERESTS, *supra* note 39, at 310.

[51] *See* GEUSS, *supra* note 35, at 52–54. A norm is valid only if "[a]ll affected can accept the consequences and the side effects its general observance can be anticipated to have for the satisfaction for everyone's interests (and these consequences are preferred to those of known alternative possibilities for regulation)." JÜRGEN HABERMAS, *Discourse Ethics: Notes on a Program of Philosophical Justification, in* MORAL CONSCIOUSNESS, *supra* note 3, at 43, 65 [hereinafter HABERMAS, *Discourse Ethics*] (emphasis removed) (footnote omitted).

[52] Some have argued that unlike earlier versions of Habermas's theory, the latest discourse ethics contains no substantive component at all, being only a "formalistic" moral theory. *See* KENNETH BAYNES, THE NORMATIVE GROUNDS OF SOCIAL CRITICISM 109 (1992). A for-

a basic commitment to the fundamental moral equality, and equal moral worth, of all persons.[53]   Citizens must acknowledge certain minimum universal rights if they wish to live together legitimately under the rule of law.[54]   At the systemic level, a legitimate legal system must be made up of those rules that would have been enacted as a result of the best practical discourse.[55]

The individual and systemic requirements are intertwined; they have a reflexive relationship. If a social and legal system reproduces itself in a way that disables honest discourse among citizens, then it deserves to be criticized: it is not legitimate, and is potentially evil. A Hobbesian predator's value system is more than just repulsive to outsiders — it is substantively invalid in terms of discourse ethics because by putting such heightened value on short-term selfish material gain and so little value on the needs or rights of anyone other than the individual, it prevents the victims of that worldview from engaging in the very discourse that might allow them to learn why they are making themselves so miserable. In contrast, a social system that encourages citizens to embark on the intellectual exercise of viewing life from the perspective of others — to try to walk in each others' shoes,[56] to respect each other enough to engage in honest discourse, and to recognize in each other basic rights so as to create sufficient autonomy to make discourse possible — is on the path to legitimate lawmaking. Such a society enjoys at least a relative legitimacy,[57] even if the rules in place today are not the ones that discourse theory would demand.

Habermas's own discussion of a concrete political agenda includes recommendations for increased decentralization in order to allow pluralistic decisionmaking. Decentralization also serves to counteract the "generation of mass loyalty" sought (and increasingly, he believes, achieved) by mass institutions such as political parties and states.[58] Habermas seems to be suggesting that under these conditions, the best practical discourse cannot be achieved directly within society as a whole; subgroups must break off to form smaller discourse communities, either to practice good discourse or to create the conditions under

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malistic moral theory does not generate moral commands. Rather, it "specifies an argumentative procedure that any norm must satisfy if it is to be morally acceptable." *Id.*

[53] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 108 ("The moral principle first results when one specifies the general discourse principle for those norms that can be justified if and *only* if equal consideration is given to the interests of all those who are possibly involved.").

[54] *See id.* at 82.

[55] *See id.* at 459.

[56] *See* 1 COMMUNICATIVE ACTION, *supra* note 43, at 42. Ideally, participants need to be *capable* of walking in the shoes of all other potential participants in the discourse, although they do not actually have to imagine themselves as each of the other participants, since that would not be practicable.

[57] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 101–04, 110.

[58] *See* BAYNES, *supra* note 52, at 179–80.

which someday a coming together of many parts may produce a suita-
bly discursive whole:

> [T]he question remains of how, under the conditions of mass democracies
> constituted as social-welfare states, . . . discursive formation of opinion and
> will can be institutionalized in such a fashion that it becomes possible to
> bridge the gap between enlightened self-interest and orientation to the
> common good, between the roles of client and citizen.[59]

It seems that one solution — or is it a hope?[60] — is for the mem-
bers of each subgroup to build good discourse habits in the hothouse of
a distinctive community where the commonalities of experience and
tastes make good discourse, and perhaps agreement, easier. Once in-
culcated in the practices of proper discourse, participants in these
small communities can venture out and engage in dialogue with others
from different backgrounds who have also undergone similar
(re)formative experiences.[61]

Ultimately, Habermas "locates rational collective will formation
outside formal organizations of every sort."[62] As Habermas puts it,
"[d]iscourses do not govern. They generate a communicative power
that cannot take the place of administration but can only influence it.
This influence is limited to the procurement and withdrawal of legiti-
mation."[63] Over time, Habermas has changed his account of the
means by which "spontaneously formed publics" affect public deci-
sions. Where in earlier writings he categorized civil society as part of
the public sphere, in *Between Facts and Norms* Habermas relocates
civil society in the "lifeworld," that is, the sphere centered around pri-

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[59] Jürgen Habermas, *Further Reflections on the Public Sphere* (Thomas Burger trans.), *in*
HABERMAS AND THE PUBLIC SPHERE 421, 448–49 (Craig Calhoun ed., 1992) [hereinafter
Habermas, *Further Reflections*].

[60] In his essay *Further Reflections on the Public Sphere*, Habermas suggests that "the question
of whether, and to what extent, a public sphere dominated by mass media provides a realistic
chance for the members of civil society, in their competition with the political and economic in-
vaders' media power, to bring about changes in the spectrum of values, topics, and reasons . . . ,
to open it up in an innovative way, and to screen it critically" is a question "that cannot be an-
swered without considerable empirical research." *Id.* at 455. *See also* BETWEEN FACTS AND
NORMS, *supra* note 1, at 366–67, 373–84.

[61] At that point, however, Habermas seems to accept that the exchange may degenerate into
"bargaining" because consensus cannot be reached. *See* BETWEEN FACTS AND NORMS, *supra*
note 1, at 165–67. He is prepared to accept a bargained compromise if the outcome is (1) better
than no agreement at all; (2) addresses the problem of free riders; and (3) excludes "exploited par-
ties who contribute more to the cooperative effort than they gain from it." *Id.* at 166. Haber-
mas's definition of exploitation is oddly Marxist here, as it seems to require that there be equal
gains (no extraction of surplus!) on both sides. How one measures this is not explained. *See id.*

[62] Thomas McCarthy, *Practical Discourse: On the Relation of Morality to Politics, in*
HABERMAS AND THE PUBLIC SPHERE, *supra* note 59, at 51, 63.

[63] Habermas, *Further Reflections, supra* note 59, at 452. In this context, Habermas uses "ad-
ministration" to mean more or less "government" or "the state."

vate life. Although important,[64] this change need not concern us here, as both versions accept and build on the empirical reality that discourses in civil society do sometimes — but only sometimes — have an influence on formalized public policy decisionmaking in government and elsewhere.

C. Discourse Ethics and Practical Discourses

Habermas's critics have argued that the demanding discourse required to actualize discourse ethics is nothing more than an unrealizable, imaginative construct. To the extent that Habermas may have, in his earlier work, relied upon an "ideal speech situation," this criticism had more than a little justice.[65] But in his more recent work, particularly in *Between Facts and Norms* and *The Theory of Communicative Action*, Habermas has provided an account of discourse ethics that depends upon an ideal that is realizable, although it does call for a far more demanding type of discourse than one commonly encounters in the political arena.[66]

Habermas does not claim that people can resolve all problems simply by sitting around and talking about them from the heart — this proposition would be silly and naïve. Instead, he recognizes that, in real life, much social interaction is "strategic," meaning that people bring their personal agendas to many discourses and seek to exercise their power and influence to achieve what they consider to be advantageous results, rather than selflessly seeking the true and the just. Strategic communication[67] consists of using guile or force, such as economic threats or promises, rather than attempting to persuade others of the rational merits of one's cause.

Guarding against strategic communication in oneself and others is particularly difficult: it requires that participants in discourse understand that their true interests will be better served by a more honest

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[64] For a lucid discussion of the significance of this change, see Baxter, *System and Lifeworld, supra* note 11, at 580–81.

[65] *See infra* pp. 796–97; BETWEEN FACTS AND NORMS, *supra* note 1, at 322–23; 1 COMMUNICATIVE ACTION, *supra* note 43, at 25; *see also, e.g.*, Michael K. Power, *Habermas and the Counterfactual Imagination*, 17 CARDOZO L. REV. 1005 (1996). Habermas himself denies this, arguing that critics — or translators — misinterpreted the term "ideal speech situation." *See* Jürgen Habermas, *Reply to Symposium Participants: Benjamin N. Cardozo School of Law*, 17 CARDOZO L. REV. 1477, 1518–20 (1996). Habermas claims that he always intended the term "ideal speech situation" to be a counterfactual, or an idealization, not a realistic prerequisite to the realization of discourse ethics. *See* JUSTIFICATION, *supra* note 7, at 163–64.

[66] 1 COMMUNICATIVE ACTION, *supra* note 43; 2 JÜRGEN HABERMAS, THE THEORY OF COMMUNICATIVE ACTION: LIFEWORLD AND SYSTEM: A CRITIQUE OF FUNCTIONALIST REASON (Thomas McCarthy trans., Beacon Press 1987) (1981) [hereinafter 2 COMMUNICATIVE ACTION].

[67] This is also known as strategic behavior. *See, e.g.*, Habermas, *Reply to My Critics, supra* note 48, at 236 (noting that conditions creating false consciousness "often" occur).

policy. Habermas does not make this assertion on the basis of a utili-
tarian calculation of enlightened self-interest. Instead, he grounds the
claim in reason and the commitments that he argues a rational party
must make when actually trying to communicate with another person,
rather than simply attempting to manipulate him or her.

The problem of strategic communication compounds the difficulties
inherent in a person's search for the right life strategy. Habermas is
acutely sensitive to the problem of self deception, a concern similar to
other critical theorists' acceptance of Marx's concern with the problem
of false consciousness. People do not necessarily have a sufficient un-
derstanding of their own circumstances to figure out what is best for
them, either because of cognitive shortcomings or because the nature
of their society warps their understandings. While it may be that some
people are so deluded that they cannot recognize what is good for
them even when it is explained to them, this phenomenon need not be
widespread. Explanation, education, discussion, and even therapy
may serve to allow everyone except those suffering from the worst
forms of self-delusion to understand (or, at least, better understand)
their true interests.

Indeed, this task of consciousness-raising is one of the objectives of
a critical theory.[68] Nonetheless, Habermas argues that because people
often are the victims of strategic action, including economic coercion,
individuals might not recognize what is best for them even if it were
explained to them. Therefore, in Habermas's view, because we live in
a society that has not provided all of the rights, including economic
rights, needed to provide a reliable basis for a discourse free of coer-
cion, life in modern capitalist liberal democracies provides an uncer-
tain foundation for a reasoned understanding of one's true interests.[69]

In the spirit of the Frankfurt School, some of Habermas's earlier
work was directly concerned with the task of "ideology critique," a
form of social criticism designed to help reveal contradictions and in-
justice in the reigning ideologies and worldviews of liberal democra-
cies, notably the problems of economic, legal, and ideological domina-
tion.[70] Given that there is no consensus fundamental justification for a
community's values, Habermas showed how the existence of these
problems and divisions makes society vulnerable to a "legitimation cri-
sis," in which the fundamental justifications for the social order be-
come increasingly difficult to explain once the citizens start asking un-
comfortable questions. The government and administration may be
efficient, but citizens are seriously uneasy about them. When this un-

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[68] *See* 2 COMMUNICATIVE ACTION, *supra* note 66, at 20–22; MCCARTHY, *supra* note 7, at
88.

[69] *See generally* HUMAN INTERESTS, *supra* note 39.

[70] *See, e.g.*, LEGITIMATION CRISIS, *supra* note 45, at 36–37, 142–43.

easiness arises, the "social solidarity preserved in legal structures" is "endangered" and "in need of continual regeneration."[71]   Citizens should be uncomfortable about the moral foundations of the social order because the social order is neither based on consensus nor on a morally verifiable set of values.[72]   To a great extent, law substitutes for moral solidarity, because the legal system articulates the behaviors that the community or its representatives have labeled as acceptable.   Absent the sort of discourse Habermas believes would produce an outcome we should recognize as legitimate, society relies on a discourse in which power and law together shape the terms of debate.   "Legal norms . . . make possible highly artificial communities, associations of free and equal legal persons whose integration is based simultaneously on the threat of external sanctions and the supposition of a rationally motivated agreement."[73]   While law and power provide the requisite degree of order, citizens in a democracy also seek a degree of personal autonomy that threatens to undermine that order.   As a practical matter, modern liberal democracies strike a balance: citizens accept laws as legitimate when they provide at least some personal autonomy for individuals and sufficient autonomy for public institutions.

Given a world vulnerable to false consciousness, one in which potentially everyone is insufficiently informed to understand his or her true interests, how can a moral theory that depends on communication among rational parties hope to achieve an agreed outcome, much less a morally defensible one? John Rawls imagined an "original position" in which people behind a "veil of ignorance" would make agreements about the organization of society without knowing what their actual tastes or endowments might turn out to be.[74]   Although Habermas's earlier work appeared to rely on an equally hypothetical account — that of an "ideal knowledge state" — his more recent work, notably *The Theory of Communicative Action* and *Between Facts and Norms*, argues that no such assumption is necessary.

In his description of discourse ethics, Habermas now suggests that, in order to decide how a community should regulate its social interactions, parties must adopt a perspective similar to a very limited form of Kant's categorical imperative, one of impartiality in the search for consensus as to what all could will.[75] Habermas calls this intermediate level of discourse the "discourse principle, (D)" which he defines as:

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[71] BETWEEN FACTS AND NORMS, *supra* note 1, at xlii.

[72] *Cf.* LEGITIMATION CRISIS, *supra* note 45, at 36–37, 142–43.

[73] BETWEEN FACTS AND NORMS, *supra* note 1, at 8.

[74] RAWLS, *supra* note 26, at 15–19.

[75] Habermas claims that this formulation is in fact what he originally meant, but that readers were distracted by his use of the term "ideal speech situation." JUSTIFICATION, *supra* note 7, at 163–64.

"[j]ust those action norms are valid to which all possibly affected persons could agree as participants in rational discourses."[76] He also argues that

> "rational discourse" should include *any* attempt to reach an understanding over problematic validity claims insofar as this takes place under conditions of communication that enable the free processing of topics and contributions, information and reasons. . . . The expression also refers indirectly to bargaining processes insofar as these are regulated by discursively grounded procedures.[77]

Habermas's discourse principle lies somewhere between Kant's purely moral vision of ethical and rational obligation on the one hand, and civic republican accounts that emphasize civic virtue or shared traditions on the other.[78] Even so, at this level of generality, the discourse principle is still quite abstract, and it is not evident how a society could achieve it in practice.

Debates about social issues, be they constitutional, legislative, regulatory, or other rulemaking debates, involve social concerns that are not timeless. Habermas accepts that real-life discourse is always informed by — and, compared to Kantian pure reason, a prisoner of — the circumstances of the participants.[79] A debate on social organization — on how to achieve the good life — is invariably based on contingent facts and the experiences of the participants who have neither perfect information nor infinite time.[80] Lacking perfect knowledge, mere humans cannot be certain that any rule they choose has met the

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[76] BETWEEN FACTS AND NORMS, *supra* note 1, at 107. In *Moral Consciousness*, Habermas defines (D) as: "[o]nly those norms can claim to be valid that meet (or could meet) with the approval of all affected in their capacity *as participants in a practical discourse*." HABERMAS, *Discourse Ethics, supra* note 51, at 66.

[77] BETWEEN FACTS AND NORMS, *supra* note 1, at 107–08.

[78] *Cf.* MICHAEL J. SANDEL, LIBERALISM AND THE LIMITS OF JUSTICE (1982); Robert M. Cover, *The Supreme Court, 1982 Term—Foreword: Nomos and Narrative,* 97 HARV. L. REV. 1, 4 (1983); Frank Michelman, *Law's Republic,* 97 YALE L.J. 1493, 1493 (1988); Frank Michelman, *The Supreme Court, 1985 Term—Foreword: Traces of Self-Government,* 100 HARV. L. REV. 4, 17–36 (1986); Cass R. Sunstein, *Beyond the Republican Revival,* 97 YALE L.J. 1539 (1988); *cf. also* Red Lion Broad. Co. v. FCC, 395 U.S. 367, 390 (1969) (asserting "the right of the public to receive suitable access to social, political, esthetic, moral, and other ideas and experiences"). *But see* Steven G. Gey, *The Unfortunate Revival of Civic Republicanism,* 141 U. PA. L. REV. 801 (1993).

[79] *See* HABERMAS, *Discourse Ethics, supra* note 51, at 103.
> [P]ractical discourses depend on content brought to them from outside. It would be utterly pointless to engage in a practical discourse without a horizon provided by the lifeworld of a specific social group and without real conflicts in a concrete situation in which the actors consider it incumbent upon them to reach a consensual means of regulating some controversial social matter.

Id. "Participants can distance themselves from norms . . . only to the extent necessary to assume a hypothetical attitude toward them. Individuals who have been socialized cannot take a hypothetical attitude toward the form of life and the personal life history that have shaped their own identity." *Id.* at 104.

[80] *See id.* at 92.

standard of the discourse principle. Instead, the best we can hope for is to achieve provisionally legitimate rules through a process in which participants, genuinely seeking to reach the ideal, meet certain minimum conditions essential to the achievement of a "practical discourse."[81]

Habermas admits that "[t]he principle of discourse ethics (D) makes reference to a *procedure*, namely the discursive redemption of normative claims to validity. To that extent discourse ethics can properly be characterized as *formal*, for it provides no substantive guidelines but only a procedure: practical discourse."[82] However, this admission may concede less than it seems, since Habermas also asserts that because discourse ethics is founded on procedural norms that require individual respect and equality of participation, it "can be expected to say something relevant about substance as well and . . . about the hidden link between justice and the common good . . . ."[83]

Be that as it may, people cannot engage in real-life discourses capable of generating legitimate norms that we can definitely claim to have satisfied the discourse principle. Rather, people are capable only of "practical discourse," which, at best, produces provisionally legitimate laws or rules that apply only to the group or polity that produced them. The discourse principle generates minimum parameters for this practical discourse: participants must "take part, freely and equally, in a cooperative search for truth, where nothing coerces anyone except the force of the better argument. . . . Practical discourse can also be viewed as a communicative process *simultaneously* exhorting *all* participants to ideal role taking."[84] Outcomes tainted by threat, force, coercion, trickery, or impairment of participants are not legitimate.

To achieve Habermasian practical discourse, participants must come as close as possible to an ideal in which "(1) all voices in any way relevant get a hearing, (2) the best arguments available to us given our present state of knowledge are brought to bear, and (3) only the unforced force of the better argument determines the 'yes' and 'no' responses of the participants."[85] Rather than seeing even these require-

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[81] BETWEEN FACTS AND NORMS, *supra* note 1, at 324, 449–455, 462.

[82] HABERMAS, *Discourse Ethics, supra* note 51, at 103.

[83] *Id.* at 202.

[84] *Id.* at 198.

[85] JUSTIFICATION, *supra* note 7, at 163; *see also* ROBERT ALEXY, A THEORY OF LEGAL ARGUMENTATION 120 (Ruth Adler & Neil MacCormack trans., Oxford Univ. Press 1989) (1978); HABERMAS, *Discourse Ethics, supra* note 51, at 89. Perhaps because of the criticism his "ideal speech" formulation received, Habermas's more recent writings make a point of acknowledging the realities of communication and moral reasoning. Like Kant before him, Habermas sees practical human reasoning as ordinarily relying on "maxims," that is, "the more or less trivial, situational rules of action by which an individual customarily regulates his actions." JUSTIFICATION, *supra* note 7, at 6–7. Maxims are critical to how people actually live: "Maxims constitute in general the smallest units in a network of operative customs in which the identity and life projects of

ments as unrealistic or utopian, Habermas argues that the commitments required for practical discourse arise from a good faith commitment to honest debate. Once parties undertake to debate with one another nonstrategically, they embark on a course that requires all affected parties to deliberate together in a reasoned conversation that aims at reasoned agreement. This requirement, Habermas claims, emanates from the requirements of reason and the cognitive requirements of language.[86] Specifically, Habermas argues that the decision to communicate carries four implicit assertions that anyone who honestly seeks to communicate presupposes:[87] (1) that the utterance is comprehensible, (2) that the utterance is true, (3) that the speaker is truthful, and (4) that the utterance is the right one for the situation.[88] These shared fundamental values, without which Habermas claims

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an individual (or group) are concretized; they regulate the course of daily life, modes of interaction, the ways in which problems are addressed and conflicts resolved, and so forth." *Id.* at 7. A maxim is elevated to a rule of moral conduct if a group engaged in practical discourse would conclude that it should serve as a general rule of conduct. In contrast, whether or not a maxim is a rule of moral conduct, individuals may still reflect on the ethical problem whether to adopt the maxim as a guide to personal conduct. Habermas views this personal ethical choice as involving a different thought process and different considerations from reasoning via a more general moral view. Personal ethical reasoning can, however, be affected by moral reasoning. *Id.* at 7–10.

   [86] *See* BAYNES, *supra* note 52, at 113; 2 COMMUNICATIVE ACTION, *supra* note 66, at 148; Cronin, *supra* note 34, at xxiii. "Communicative action ... depends on the use of language oriented to mutual understanding. This use of language functions in such a way that the participants either agree on the validity claimed for their speech acts or identify points of disagreement, which they conjointly take into consideration in the course of further interaction." BETWEEN FACTS AND NORMS, *supra* note 1, at 18.

>   In philosophical ethics, it is by no means agreed that the validity claims connected with
>   norms of action, upon which commands or "ought" sentences are based, can, analogously
>   to truth claims, be redeemed discursively. In everyday life, however, no one would enter
>   into moral argumentation if he did not start from the strong presupposition that a
>   grounded consensus could in principle be achieved among those involved. In my view,
>   this follows with conceptual necessity from the *meaning* of normative validity claims.
>   Norms of action appear in their domains of validity with the claim to express, in relation
>   to some matter requiring regulation, an interest *common to all* those affected and thus to
>   *deserve* general recognition. For this reason valid norms must be capable in principle of
>   meeting with the rationally motivated approval of everyone affected under the conditions
>   that neutralize all motives except that of cooperatively seeking the truth. We rely
>   on this intuitive knowledge whenever we engage in moral argument; the "moral point of
>   view" is rooted in these presuppositions.

1 COMMUNICATIVE ACTION, *supra* note 43, at 19 (footnotes omitted).

   [87] A person who decides to lie violates the requirement of the type of communicative activity that Habermas describes. *See* JÜRGEN HABERMAS, *What Is Universal Pragmatics?*, *in* COMMUNICATION AND THE EVOLUTION OF SOCIETY 1, 41 (Thomas McCarthy trans., Beacon Press ed. 1979) (1976) [hereinafter HABERMAS, *Universal Pragmatics*]; *see also* 1 COMMUNICATIVE ACTION, *supra* note 43, at 99, 115–17; *infra* p. 773.

   [88] *See* HABERMAS, *Universal Pragmatics*, *supra* note 87, at 59–60. This is a confusing formulation which means, among other things, that the speaker is not trying to confuse the listener, and that the speaker sincerely believes that what he or she said is relevant and capable of being understood.

any real discourse is impossible,[89] suffice to provide a foundation for an ethic of social interaction.

Practical discourse, Habermas writes, is "a procedure for testing the validity of norms that are being proposed and hypothetically considered for adoption."[90] Although the discourse principle does not require that communications between parties be "ideal" in order to generate legitimate rules, it nevertheless demands that parties at least engage in a practical discourse that is the best it can be. While, even without procedures necessary for a practical discourse, rules can be legitimate if they are the same ones that participants would have adopted under the proper procedures, we cannot be sure when we have met that condition or that proper procedures have been used.[91] The parties have to understand the limited, contingent nature of any agreement they may reach in order to remain open to further possible improvements.[92]

Since discourse lies at the heart of Habermas's vision of the collective formation of legitimate rules, his theory inevitably requires a fairly strong understanding of the community in which the discourse will take place. If nothing else, members of the community must be able to communicate with one another. Habermas rejects the idea that a common language is required. Rather, what is required is the practical ability to understand statements sufficiently to evaluate the reasons for their acceptance.[93] Community members must also agree on fundamental concepts so that meaningful communication is possible. Indeed, participants need to be sufficiently familiar with one another's worldviews, or at least be able to reconstruct them mentally when needed:

> In order to understand an utterance in the paradigm case of a speech act oriented to reaching understanding, the interpreter has to be familiar with the conditions of [an utterance's] validity; he has to know under what conditions the validity claim linked with it is acceptable, that is, would have to be acknowledged by a hearer. But where could the interpreter obtain this knowledge if not from the context . . . ? He can understand the

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[89] 1 COMMUNICATIVE ACTION, *supra* note 43, at 115–16.

[90] HABERMAS, *Discourse Ethics, supra* note 51, at 103.

[91] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 107. While in spirit this resembles a theory of the second best, it is nowhere near as precise or mechanical.

[92] *See* HABERMAS, *Discourse Ethics, supra* note 51, at 103 (explaining that discourses are always situated within the lifeworld of participants).

[93] Exactly how one does this, even when all parties to the conversation share a common native language, proves to be a difficult philosophical issue. Indeed, "[t]he problem of interpretation is domestic as well as foreign: it surfaces for speakers of the same language in the form of the question, how can it be determined that the language is the same? . . . All understanding of the speech of another involves radical interpretation." DONALD DAVIDSON, INQUIRIES INTO TRUTH AND INTERPRETATION 125 (1984); *see also* WILLARD V. QUINE, ONTOLOGICAL RELATIVITY AND OTHER ESSAYS 1–25 (1997).

meaning of communicative acts only because they are embedded in con-
texts of *action* oriented to reaching understanding. . . .[94]

Thus, a completely formless society, or an anarchy in which people not
only live separate lives but hold divergent aesthetics so alien to one
another's that they defy mutual comprehension, is not capable of en-
gaging in the practices that allow it to generate legitimate rules.

It does not follow, however, that a society in which participants are
capable of understanding one another will be able to govern itself
through some Rousseauian process of collective will-formation com-
bined with direct democracy.[95] Understanding does not suffice to com-
pel agreement on matters of substance; only fundamental procedural
parameters for testing proposed norms derive from reasoned agree-
ment and understanding. Indeed, Habermas argues that total "plural-
ism and pure procedural justice are ultimately incompatible."[96]

Given the "multiplicity of individual life projects and collective
forms of life," Habermas asserts that only the procedures of discourse
required to achieve rational agreement can command universal as-
sent.[97] Habermas responds to the criticism that some people may have
no interest in participating in or achieving universal assent, and might
instead prefer to agree to disagree, or choose to disagree entirely, by
stating that this objection misunderstands his point. It would be per-
fectly consistent with discourse ethics, for example, for a group to
agree that it will decide disputed questions by majority vote, given the
need to make decisions in real time, so long as the "decision [is]
reached under discursive conditions that lend their results the pre-
sumption of rationality: the content of a decision reached in accor-
dance with due procedure must be such as can count as the rationally
motivated but fallible result of a discussion provisionally brought to a
close under the pressure of time."[98] In other words, procedurally
sound discourses allow us to claim that their outputs are legitimate,

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[94] 1 COMMUNICATIVE ACTION, *supra* note 43, at 115. Of those who are so deviant that they
cannot communicate with others, Habermas says:

> These extreme cases only confirm that the partialities and sensibilities of the wishes and
> feelings that can be expressed in value judgments also stand in internal relations to rea-
> sons and arguments. Anyone who is so privatistic in his attitudes and evaluations that
> they cannot be explained and rendered plausible by appeals to standards of evaluation is
> not behaving rationally.

Id. at 17. William Rehg's formulation focuses on a minimum level of trust needed for discourse to
occur rather than on the ability to enter into a foreign sensibility. *See* REHG, *supra* note 10, at
246–48.

[95] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 100–04 (critiquing Rousseau).

[96] *Id.* at 480–90; *see also* Michel Rosenfeld, *Can Rights, Democracy, and Justice be Reconciled
Through Discourse Theory? Reflections on Habermas's Proceduralist Paradigm of Law*, 17 CAR-
DOZO L. REV. 791, 821 (1996).

[97] JUSTIFICATION, *supra* note 7, at 150.

[98] *Id.* at 159; *see also* BETWEEN FACTS AND NORMS, *supra* note 1, at 449–50. This formula-
tion begins to resemble social contract theory.

and hence to enforce the rules even against resisting nonparticipants. As for persons who just wish to disagree, presumably they are invited to participate in the discourse, but if they persistently refuse the invitation, the discourse must proceed as best as it can without them, just as it does without those persons who consider themselves so superior that they do not think the participants are worthy partners for debate.[99] If coercive rules result from a practical discourse in which the coerced were welcome to participate, then the results, Habermas argues, nevertheless satisfy the discourse principle.[100]

Conversely, some discourses — many, maybe all, discourses — do not meet Habermas's conditions. One of the functions of Habermas's critical theory is to encourage and justify critiques of these discourses and of the processes that produce them.[101] Furthermore, because we are aware of the limitations of our knowledge and rationality, even if we find ourselves participating in a discourse that seems procedurally adequate, we should be ready to question that belief about the process.

Does it make sense to use a theory designed to liberate people to justify coercing even Hobbesian predators?[102] Can a practical discourse legitimate the use of force against them? The answer must be yes, although once one accepts that even a self-reflexive theory may not succeed in emancipating all Hobbesian predators, one is reduced to making normative claims on the basis of what a consensus of other people in the community believe would be in their interests. While this creates a danger of imperialism, the alternative is to give up in the face of evil; indeed, it provides additional incentives for strategic displays of greed and intransigence.

Some processes, however, are better than others. Some may even conform to the "discursive conditions that lend their results the presumption of rationality."[103] In what follows, I will use the term "best practical discourse" to mean a practical discourse that meets, or comes extremely close to meeting,[104] Habermas's exacting conditions for a

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[99] *Cf.* Rosenfeld, *supra* note 96, at 811–12.

[100] *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 107 (stating (D) as requiring agreement "to which all possibly affected persons could agree as participants in rational discourses," not to which they actually agree).

[101] *See* GEUSS, *supra* note 35, at 4–44; Habermas, *Reply to My Critics, supra* note 48, at 225–26; HUMAN INTERESTS, *supra* note 39, at 313–14; *cf.* PAUL PICCONE, *General Introduction, in* THE ESSENTIAL FRANKFURT SCHOOL READER xii, xvi (Andrew Arato & Eike Gebhardt eds., 1982).

[102] Habermas seeks to liberate people with his discourse theory in a number of ways, including setting a standard against which unjust and illegitimate regimes can be measured, creating a virtuous circle among those who take part in discourses that are free from coercion and mistaken ideas about the legitimacy of regimes produced by coercion.

[103] JUSTIFICATION, *supra* note 7, at 159.

[104] The qualification bridges a possible gap between an idealized vision of discourse and the reality. Habermas accepts that a discourse produces legitimate norms when his conditions are

practical discourse. This term may not be strictly in accord with
Habermas's account of practical discourse because it implies that
something less than the "best" might be also be a practical discourse.
Habermas's work is slightly ambiguous regarding how good a dis-
course has to be to validate norms that can generate rules that we
should respect as legitimate. Even if one accepts, as Habermas insists
one must, the reading that a discourse need not be "ideal,"[105] some of
Habermas's writings seem to suggest that only a process that perfectly
meets his lesser "practical" discourse criteria can legitimate out-
comes.[106] Perhaps anything else is only a failed try, and we should
criticize it in the hopes of achieving something better. Nevertheless,
Habermas's discussion of the process of lawmaking seems to acknowl-
edge the inevitability of human fallibility:

> Due to their idealizing content, the universal presuppositions of argumen-
> tation can only be approximately fulfilled. Moreover, because there is no
> criterion independent of the argumentative process, one can judge only
> from the participant's perspective whether these demanding presupposi-
> tions have been sufficiently fulfilled in a given case. This by itself war-
> rants an openness to the possibility that provisionally justified views might
> have to be revised in the light of new information and arguments.[107]

And, in discussing discourse in a democratic polity:

> As soon as we conceive intentional social relations as communicatively
> mediated in the sense proposed, we are no longer dealing with disembod-
> ied, omniscient beings who exist beyond the empirical realm and are ca-
> pable of context-free action, so to speak. Rather, we are concerned with
> finite, embodied actors who are socialized in concrete forms of life, situ-
> ated in historical time and social space, and caught up in networks of
> communicative action. In fallibly interpreting a given situation, such ac-
> tors must draw from resources supplied by their lifeworld and not under
> their control. This does not deny the contingency of given traditions and
> forms of life any more than it does the pluralism of existing subcultures,
> worldviews, and interest positions. On the other hand, actors are not sim-
> ply *at the mercy* of their lifeworld. For the lifeworld can in turn reproduce
> itself only through communicative action, and that means through proc-
> esses of reaching understanding that depend on the actors' responding
> with yes or no to criticizable validity claims. *The normative fault line that*

"sufficiently satisfied." BETWEEN FACTS AND NORMS, *supra* note 1, at 178; 1
COMMUNICATIVE ACTION, *supra* note 43, at 25; *see also* REHG, *supra* note 10, at 182 (noting
that "one may rightly ask whether discourse ethics does not abstract too much from the empirical
limitations of real actors and their conflicts").

[105] *See supra* note 65 & pp. 770–71.

[106] *See, e.g.,* BETWEEN FACTS AND NORMS, *supra* note 1, at 127 ("[J]ust those norms deserve
to be valid that could meet with the approval of those potentially affected, insofar as the latter
participate in rational discourses. Hence the desire political rights *must guarantee* participation in
all deliberative and decisional processes . . . ." (emphasis added)).

[107] *Id.* at 178.

appears with this ability to say no marks the finite freedom of persons
who have to be *convinced* whenever sheer force is not supposed to inter-
vene. Yet, even under such ideal conditions, discourses and bargaining
can develop their problem-solving force only insofar as the problems at
hand are sensitively perceived, adequately described, and productively an-
swered in the light of a reflexive, posttraditional transmission of culture.
Reaching mutual understanding through discourse indeed guarantees that
issues, reasons, and information are handled reasonably, but such under-
standing still depends on contexts characterized by a capacity for learning,
both at the cultural and the personal level.[108]

This is a somewhat limited accommodation of human frailty. And
granted, achieving the best practical discourse is not easy. In fact,
some have said it is not possible,[109] but I will argue below that the
Internet Standards process actualizes the best practical discourse.

II. THE INTERNET STANDARDS PROCESS: A DISCOURSE ABOUT DISCOURSE

The Internet can be seen as a giant electronic talkfest, a medium
that is discourse-mad. For most users the Internet is an exchange of
information, a good part of which is debate and argument — discourse
itself, albeit not always the calmest, and most certainly not often ad-
hering to the strictures derived from Habermas's discourse principle.
In contrast, the Internet standards processes discussed in this Part are
usually not part of the ordinary Internet discourse — rather than being
about politics, art, or commerce, the Internet standards processes are
the discourses that establish the framework for all other Internet-based
discourses.[110]

The perfect discourse would include all those affected by its out-
come.[111] The Internet standards process does not involve every poten-
tial user of the Internet, nor even everyone who uses the Internet. It
is, however, open to all, although in practical terms only those who use
the Internet would find it easy to participate. Before discussing the
ways in which these standards processes fit Habermas's discourse eth-

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[108] *Id.* at 324–25.

[109] *See supra* p. 767.

[110] Many of the standards process discussions, of course, concern purely technical matters; even
these discussions, however, are at times influenced by a conception of how the technologies will be
used and what that might imply for the communicative freedom of Internet users. *See, e.g.,*
Internet Architecture Board, IAB Technical Comment on the Unique DNS Root (Network Work-
ing Group, Request for Comments No. 2826) (May, 2000), *available at* http://www.ietf.org/rfc/
rfc2826.txt (discussing the technical necessity of having a single Internet domain naming system,
but noting the issue's impact on Internet governance policy).

[111] *See* Niklas Luhmann, Quod Omnes Tangit: *Remarks On Jürgen Habermas's Legal Theory,*
17 CARDOZO L. REV. 883, 884 (1996).

ics, it is necessary to understand a little about the Internet and the technical standards that make it possible.

A. What Is the Internet?

The Internet is not one thing; it is the interconnection of many things — the (potential) interconnection between any of millions of computers located around the world. Each of these computers is independently managed by persons who have chosen to adhere to common communications standards that enable two computers to share data even if they are far apart and have no direct line of communication. There is no single program one uses to gain access to the Internet; instead there is a plethora of programs that adhere to the "Internet protocols."

The wide variety of devices that collectively form the Internet are able to communicate with each other because of a series of openly developed, openly published, and frequently updated technical standards, many of which depend on other preexisting standards.[112] The TCP/IP[113] standard is one of the fundamental standards that make the Internet possible. Its most important feature is that it defines a packet switching network, in which data is broken up into standardized packets that are then routed to their destination via an indeterminate number of intermediaries.[114] Thus, two parties do not need to be in direct contact to communicate, and neither sender nor receiver need to know or care about the route that their data will take.[115] Under

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[112] *See* Scott O. Bradner, The Internet Standards Process — Revision 3, at 15 (Network Working Group, Request for Comments No. 2026) (Oct. 1996), *available at* http://www.ietf.org/rfc/rfc2026.txt [hereinafter RFC 2026].

[113] TCP/IP is the fundamental communication standard on which the Internet has relied: "TCP" stands for "Transmission Control Protocol," while "IP" stands for "Internet Protocol." *See generally* Information Sciences Institute, Internet Protocol (University of Southern California, Request for Comments No. 791) (Sept. 1981), *available at* http://www.ietf.org/rfc/rfc791.txt (presenting the IP technical specification); Information Sciences Institute, Transmission Control Protocol (University of Southern California, Request for Comments No. 793) (Sept. 1981), *available at* http://www.ietf.org/rfc/rfc793.txt (presenting the specification for TCP); Gary C. Kessler & Steven D. Shepard, A Primer On Internet and TCP/IP Tools (Network Working Group, Request for Comments No. 2151) (June 1997), *available at* http://www.ietf.org/rfc/rfc2151.txt (describing "commonly available TCP/IP and Internet tools and utilities" such as the File Transfer Protocol, Telnet, and the World Wide Web); Vinton G. Cerf & Robert E. Kahn, *A Protocol for Packet Network Interconnection*, 22 IEEE TRANS. ON COMM. 637 (1974), *available at* http://www.worldcom.com/global/resources/cerfs_up/technical_writings/protocol_paper/ (proposing a protocol design for intercommunication among multiple packet switching networks).

[114] *See* Bruce Sterling, *Internet*, MAG. OF FANTASY & SCI. FICTION, Feb. 1993, at 99–101; *cf.* Barry M. Leiner et al., *A Brief History of the Internet*, *at* http://www.isoc.org/internet/history /brief.shtml (last modified Aug. 4, 2000) (distinguishing packet switching networks from circuit switching networks, in which data is streamed over a single connection that carries the entire transmission from sender to receiver).

[115] More importantly from a technical standpoint, the computers in the network can all communicate without knowing anything about the network technology carrying their messages.

TCP/IP, as each intermediary receives a data packet intended for a party farther away, it forwards the packet along whatever route seems most convenient.[116] It is likely that multiple packets originating from a single long data stream will use more than one route to reach a far destination where they will be reassembled.[117] This ability to send data over many alternate routes creates a built-in resilience to communication barriers that otherwise might make it difficult for two motivated speakers to use the Internet to communicate — their data need only route around any blockage.[118]

The prevalence of TCP/IP enables the functions that have come to be identified with the Internet.[119] A user who has access to one of these functions does not necessarily have access to other functions, because the user's level of access is determined by the type of computer available, the capacity of the Internet connection, the cost of access, the software available, and the policy of the person or organization operating that computer.[120] Some national governments impose constraints on Internet connectivity. However, once a person is connected via a computer that he or she controls, it is very difficult for any government to impose an effective technological limit on what is accessible via the Internet.[121] Of course, the Internet is not inherently unregulable; rather, current Internet Standards — many of them

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[116] It is as if rather than telephoning a friend, you were to tape record your message, cut it up into equal pieces, and hand the pieces to people heading in the general direction of the intended recipient. Each time people carrying tape meet anyone going in the right direction, they can hand over as many pieces of tape as that person can comfortably carry. Eventually the message would get where it needs to go.

[117] This decentralized, anarchic method of sending information appealed to the Internet's early sponsor, the U.S. Department of Defense, which was intrigued by a communications network that could continue to function even if a major catastrophe (such as a nuclear war) destroyed a large fraction of the system:

> If big pieces of the network had been blown away, that simply wouldn't matter; the packets would still stay airborne, lateralled wildly across the field by whatever nodes happened to survive. This rather haphazard delivery system might be "inefficient" in the usual sense (especially compared to, say, the telephone system) — but it would be extremely rugged.

Sterling, *supra* note 114, at 100.

[118] As John Gilmore put it, "[t]he Net interprets censorship as damage and routes around it." *Redefining Community*, INFO. WK., Nov. 29, 1993, at 28, 30 (quoting John Gilmore) (internal quotation marks omitted).

[119] These include the World Wide Web (Web), electronic mail (email), Usenet, a common file transfer protocol (FTP), and Internet Relay Chat (IRC). *See* Kessler & Shepard, *supra* note 113 (describing several Internet utilities, such as FTP, Usenet, and the Web).

[120] *Cf.* David H. Crocker, To Be "On" the Internet (Networking Working Group, Request for Comments No. 1775) (Mar. 1995), *available at* http://www.ietf.org/rfc/rfc1775.txt (describing varying levels of user access to the Internet).

[121] *See* A. Michael Froomkin, *The Internet as a Source of Regulatory Arbitrage, in* BORDERS IN CYBERSPACE: INFORMATION POLICY AND THE GLOBAL INFORMATION STRUCTURE 129, 140–142 (Brian Kahin & Charles Nesson eds., 1997), *available at* http://www.law.miami.edu/~froomkin/articles/arbitr.htm; James Boyle, *Foucault in Cyberspace: Surveillance, Sovereignty,*

regulable; rather, current Internet Standards — many of them jealously guarded by the participants in the Internet Standards process — make imposing certain types of regulation very difficult.[122]

In the earliest days of the Internet and its predecessors, almost everyone who used the network was either involved in building it or worked for an organization that had a role in its creation.[123]   As the

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and Hardwired Censors, 66 U. CIN. L. REV. 177, 183 (1997) (explaining why the Internet is "specially resistant to state regulation").

   Sufficiently motivated governments remain able to regulate persons and firms that have a presence or have assets over which the government can assert jurisdiction and prevent those parties from placing content on the Internet. What most governments still cannot effectively do, short of full-time keystroke, screen capture, or processor-level surveillance, is prevent even a slightly motivated person from accessing material available online. Unless subjected to visual observation or onsite electronic monitoring, a user can use proxies located elsewhere to forward encrypted content that no eavesdropper can monitor. *See, e.g.*, Anonymizer.com, Secure Tunneling, *at* http://www.anonymizer.com/services/ssh.shtml ("You can use your Anonymizer Secure Tunneling account to encrypt the Internet activity between your computer [and] our servers. This prevents any servers between you and us, such as your ISP, from monitoring your activities. Anonymizer Secure Tunneling accounts allow you to encrypt your incoming and outgoing email, surfing and news posts through a method known as port forwarding.").

   The recent decision in the French Yahoo! Case, *UEJF et Licra c/Yahoo! Inc.*, No. RG: 00/05308 (T.G.I. Paris 20, Nov. 2000), *available at* http://www.juriscom.net/txt/jurisfr/cti/tgiparis20001120.pdf (ordering Yahoo! to block access to Nazi-themed material that was illegal to display in France) does not alter this conclusion. The decision was in many ways "a mundane exercise in the analysis of territorial sovereignty and personal jurisdiction." Joel R. Reidenberg, *Yahoo and Democracy on the Internet*, 42 JURIMETRICS J. 261, 264 (2002).

   [122] *See* Froomkin, *supra* note 121, at 133–140 (discussing use of encryption to circumvent controls on Internet access). Certainly Lessig's "principle of bovinity" — "[t]iny controls, consistently enforced, are enough to direct very large animals," LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 57 (1999) — suggests that even permeable barriers may impose sufficient costs on many people to effectively block their access. But this works only so long as there is no particular felt need for what is being blocked, and no one is providing instructions on how to circumvent the blocks. The example of DVD region codes suggests to me that bovinity is overrated: people in the United Kingdom, for example, have learned it is cheaper to buy DVDs online from U.S. sellers and have them shipped to the United Kingdom than it is to buy them locally. The U.S. DVDs, however, are coded for region 1, while DVDs and players sold in the United Kingdom are coded for region 2, resulting in an inability to play the DVDs. *See* DVD Demystified, DVD FAQ § 1.10 *at* http://www.dvddemystified.com/dvdfaq.html (revised Nov. 13, 2002). A plethora of websites now explain in careful detail how to circumvent region coding, and region code changing programs such as DVD Genie are available online for free. *See, e.g.*, DVD Genie Download, *at* http://www.inmatrix.com/files/dvdgenie_download.shtml; *see also* DVD Region Patches, *at* http://regionhacks.datatestlab.com/ (last visited Dec. 7, 2002) (listing a wide variety of patches and programs to allow region coded DVDs to be played anywhere). Alternately, users of some operating systems may be able to edit their settings manually to circumvent region code locking. *See, e.g.*, Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX L. REV. 553, 582 (1998) [hereinafter Reidenberg, *Lex Informatica*]; Joel R. Reidenberg, *Governing Networks and Rule-Making in Cyberspace*, 45 EMORY L. J. 911, 926 (1996) [hereinafter Reidenberg, *Governing Networks*]; John Walker, How to Play DVDs with any Region Code on Windows 98, *at* http://www.fourmilab.ch/documents/dvdregion/ (last updated Dec. 30, 1998).

   [123] *See generally* KATIE HAFNER & MATTHEW LYON, WHERE WIZARDS STAY UP LATE (1996) (chronicling the early years of the Internet); Internet Architecture Board, A Brief History of

network grew, it reached larger and larger circles of people.[124] Today's Internet is an amalgam of many earlier networks, each of whose operators felt a need to interconnect with other networks — or were pressured by their users to join the Internet. The relationship between the Internet and commercial consumer information providers such as America Online (AOL) exemplifies this convergence. At their inception these services provided no connectivity to the Internet, limiting customers to their own proprietary networks.[125] They then began to offer limited gateways for the exchange of electronic mail. Now they allow their users to gain access to the Web and most other Internet services.[126] The increasing internationalization and commercialization

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the Internet [Architecture] [Activities] Board, *at* http://www.iab.org/iab-history.html (last modified Oct. 21, 2002) (listing original members of the IAB).

[124] *See* Vinton Cerf, *A Brief History of the Internet and Related Networks, at* http://www.isoc.org/internet/history/cerf.shtml (last updated Nov. 18, 2001) (noting the expansion of Internet use from computer scientists and engineers to a broad variety of people). In 1983, there were perhaps 200 computers on the precursor of the modern Internet, the ARPANET. *See* Gary H. Anthes, *Summit Addresses Growth, Security Issues for Internet*, COMPUTERWORLD, Apr. 24, 1995, at 67, 67 (quoting estimates made by Vinton Cerf). As of January 1993, there were more than 1.3 million computers with a regular connection to the system. *See* Internet Software Consortium, Internet Domain Survey, *at* http://www.isc.org/ds/www-200101/index.html (Jan. 2001). In 1995, there were perhaps 5 million Internet hosts. Anthes, *supra*, at 67 (quoting estimates made by Vinton Cerf). A large fraction of these hosts were located outside the United States. *See, e.g., Database*, U.S. NEWS & WORLD REP., Feb. 27, 1995, at 14 (estimating that there were 4.8 million total Internet hosts, and 3.2 million in the United States); *Surge of Business Interest*, FIN. TIMES, Mar. 1, 1995, at xviii (estimating that there were 5 million total Internet hosts, of which about 1.7 million were in the United States). In January 2001, there were more than 100 million hosts worldwide. *See* Internet Software Consortium, *supra* (reporting 109,574,429 hosts based upon queries to the Domain Name System); Matrix.net, *at* http://web.archive. org/web/20010801143230/http://www.matrix.net/index.html (reporting 142,595,000 hosts) (last visited Dec. 7, 2002); *cf.* Andy Scherrer, How Matrix.Net Gets its Host Counts, *at* http://web .archive.org/web/20010811063520/www.matrix.net/research/library/how_matrix_gets_its_host_cou nts.html (last visited Dec. 7, 2002).

     There were only a "handful of networks" interconnected in 1983. Vinton Cerf, as told to Bernard Aboba, *How the Internet Came To Be, in* BERNARD ABOBA, THE ONLINE USER'S ENCYCLOPEDIA: BULLETIN BOARDS AND BEYOND 527, 532 (1993) [hereinafter Cerf Interview], *available at* http://www.virtualschool.edu/mon/Internet/CerfHowInternetCame2B.html. A 1993 estimate suggested that the Internet connected to approximately 10,000 networks and 1.3 million users. *Id.* By May 2002, the Internet reached far into the general population of most industrialized countries, with an estimated 605.6 million users worldwide. Nua Internet, *How Many Online?, at* http://www.nua.com/surveys/how_many_online/index.html (last visited Dec. 7, 2002).

[125] *See Internet History in a Nutshell, at* http://www.techforecast.com/tutorials/S-2002/iws-internethistory.htm (last visited Dec. 7, 2002) (noting that in the 1980s, Compuserve, AOL, and Prodigy were independent online service providers, and did not become ISPs until 1990–92).

[126] *See, e.g.,* Cerf, *supra* note 124 (describing two early networking projects, BITNET and CSNET, and recounting how they either disappeared or became connected to the Internet); Cerf Interview, *supra* note 124, at 532 (describing the connection to the Internet of numerous "intermediate level" networks).

of the Internet,[127] as well as the simple increase in the number of users, has created new constituencies.[128] What had once been the preserve of computer science and electrical engineering departments, and of computer nerds, now raises legal, social, and commercial policy questions ranging from pricing to privacy.[129] There are now more than one billion publicly readable web pages on the Internet.[130] Aggregate world Internet data traffic doubles approximately every six months.[131]

B. A Short Social and Institutional History of Internet Standard-Making

The history of Internet Standards begins with the story of how Internet protocols came into being. The negotiated consent procedure used to set those early protocols became the template for subsequent decisionmaking on technical standards. In addition, the Internet Standards process served as an example for subsequent virtual communities, perhaps because some of the early participants in the Internet Standards process carried the habits they had developed into new environments. The founders of the Internet Standards processes benefited from the confluence of several unusual circumstances that probably facilitated the creation of a best practical discourse.

Among these happy accidents: the founders were starting from scratch, rather than inheriting a system of decisionmaking that created endowments or advantages,[132] and the early participants were graduate students who tended to know each other, shared a common professional socialization, and were relatively equal in (low) status. In addition, the project of Internet Standard-making proved, especially in its

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[127] *See* Internet Software Consortium, *Distribution of Top-Level Domain Names by Host Count Jul 2002, at* http://www.isc.org/ds/WWW-200207/dist-bynum.html (last visited Dec. 7, 2002) (giving an idea of the distribution of Internet hosts across different countries or different kinds of organizations by listing numbers of hosts sorted by "top-level domains" — two-letter country codes like .uk or .jp, or three-letter codes like .com or .edu which suggest the type of entity); *see also* Network Wizards, Distribution by Top-Level Domain Name by Name, *at* http://www.nw.com/zone/WWW/dist-byname.html (last visited Dec. 7, 2002).

[128] Cerf Interview, *supra* note 124, at 532.

[129] *Id.*

[130] Matrix.net Internet Timeline, *at* http://web.archive.org/web/20011023103742/http://www.matrix.net/research/timeline.html (last visited Dec. 7, 2002).

[131] Lawrence G. Roberts, *Internet Growth Trends, at* http://www.ziplink.net/~lroberts/IEEEGrowthTrends/IEEEComputer12-99.htm (last visited Dec. 7, 2002). An estimated 25 billion email messages were sent in 1995. *See* Nina Burns, *E-mail Beyond the LAN*, PC MAG., Apr. 25, 1995, at 102, 102. The Internet now carries an estimated 31 billion emails per day. *See* Nick Farrell, *You Have Mail: 31 Billion a Day, at* http://www.vnunet.com/News/1135485 (Sept. 30, 2002).

[132] One cannot, however, make any claim that the founders' position in any way resembled a Rawlsian original position, since they most certainly knew who they were, if not who they would be.

early days, to provide few opportunities for strategic behavior,[133] since the "game" was non-zero-sum and the possibilities for bluffs and lies about the standards themselves were low because claims to technical merit were subject to empirical validation. Perhaps the attitude this engendered spilled over to the debates about how the standard-making process should be organized — a subject less amenable to on-the-spot testing. And, not least, the founders of the Internet Standards process were naturally self-reflexive, being very self-conscious about the importance of getting the process right.[134] Perhaps as a result of all these factors, they designed a system that minimized their own personal advantages as first-movers. Interestingly, there is no real evidence that these founders thought about what they were doing in terms of political science, much less Frankfurt-School style philosophy,[135] although it is clear they felt a need to legitimate both their decisions and their role in making them.

   1. The Prehistoric Period: 1968–1972. — The founders of the Internet Standards process established its basic ground rules well before the network was called the "Internet." In 1968, the Advanced Research Projects Agency (ARPA)[136] expressed interest in a packet-switching network.[137] That summer, the four existing ARPA computer science contractors (University of California at Los Angeles (UCLA), Stanford Research Institute (SRI), University of California at Santa Barbara (UCSB), and University of Utah) met to discuss what this network might look like.[138] Although they came up with more questions than answers, one participant commented that "we did come to one conclusion: We ought to meet again. Over the next several months, we managed to parlay that idea into a series of exchange meetings at each of our sites, thereby setting the most important precedent in protocol design"[139] — that of a nomadic, collegial, open and consensus-based process.[140]

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[133] *See supra* p. 767.

[134] *See, e.g.,* J. Reynolds & J. Postel, The Request for Comments Reference Guide 2 (Network Working Group, Request for Comments No. 1000) (Aug. 1987), *available at* http://www.ietf.org /rfc/rfc1000.txt [hereinafter RFC 1000] (quoting Stephen D. Crocker, The Origins of RFCs).

[135] Whether that absence helps explain the founders' success at engaging in and institutionalizing a best practical discourse, or makes it that much more remarkable, is itself an interesting question, but not one addressed in this Article.

[136] ARPA became DARPA, the Defense Advanced Research Projects Agency, in 1972. *See* HAFNER & LYON, *supra* note 123, at 219.

[137] *See* Lawrence G. Roberts, *Internet Chronology 1960–2001, at* http://www.packet.cc/ internet.html (last visited Dec. 7, 2002) (noting ARPA's award of the original network contract to BBN in December, 1968).

[138] *See* RFC 1000, *supra* note 134, at 1–2.

[139] *Id.* at 2.

[140] *Id.*

Most of the attendees at the early "Network Working Group" meetings were graduate students at UCLA and the University of Utah. In the words of a founder-member, "we expected that a professional crew would show up eventually to take over the problems we were dealing with."[141] Instead, the initial group of six people found themselves in charge by default.[142] By March 1969, the de facto design team concluded that it would have to begin documenting its work, if only to protect its members from recriminations later.[143] The Network Working Group issued its first documentation in April 1969.[144] Steven Crocker, the author of the first standards document, entitled it a "Request for Comments" (RFC) because, as Vint Cerf relates, "we were just graduate students at the time and so had no authority. So we had to find a way to document what we were doing without acting like we were imposing anything on anyone."[145] Crocker later recalled:

> I remember having great fear that we would offend whomever the official protocol designers were, and I spent a sleepless night composing humble words for our notes. The basic ground rules were that anyone could say anything and that nothing was official. And to emphasize the point, I labeled the notes "Request for Comments."[146]

Following Crocker's lead, the other members of the design team also called their standards documents RFCs. Originally, RFCs were working documents to be used within a small community.[147] They included everything from technical papers to notes of a discussion.[148] "If a protocol seemed interesting, someone implemented it and if the implementation was useful, it was copied to similar systems on the net."[149]

As the network protocol and hardware began to function, and the number of linked machines on what came to be known as the ARPANET grew to double digits,[150] the number of attendees at Net-

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[141] *Id.*

[142] *Id.* ("[W]hile BBN [the ARPA contractor] didn't take over the protocol design process, we kept expecting that an official protocol design team would announce itself.").

[143] *See id.* at 2–3.

[144] *See, e.g.*, Steve Crocker, Documentation Conventions (Network Working Group, Request for Comments No. 3) (Apr. 1969), *available at* http://www.ietf.org/rfc/rfc3.txt ("The Network Working Group seems to consist of Steve Carr of Utah, Jeff Rulifson and Bill Duvall at SRI, and Steve Crocker and Gerard Deloche at UCLA. Membership is not closed.").

[145] Cerf Interview, *supra* note 124, at 528 (Cerf participated in the early development of Internet protocols while a graduate student at UCLA).

[146] RFC 1000, *supra* note 134, at 3 (quoting Stephen D. Crocker, first RFC editor).

[147] *See* David H. Crocker, *Making Standards the IETF Way*, STANDARDVIEW, Sept. 1993, at 48, 50, *available at* http://www.isoc.org/internet/standards/papers/crocker-on-standards.shtml.

[148] *See, e.g.*, V. Cerf (Network Working Group, Request for Comments No. 21) (Oct. 1969), *available at* http://www.ietf.org/rfc/rfc21.txt (giving brief notes from a network meeting).

[149] Crocker, *supra* note 147, at 50.

[150] In 1971 there were fifteen computers linked to the network, by 1972 there were 37. Sterling, *supra* note 114, at 100.

work Working Group meetings grew to as many as 100 per session.[151] With the increasing number of participants, RFCs proliferated. RFC 1 issued in April 1969;[152] RFC 50 issued one year later, in April, 1970;[153] RFC 100 issued ten months after that, in February, 1971;[154] the next eighteen months saw another fifty percent increase in the rate of production, with RFC 400 issued in October 1972.[155]

2. *Formalization Begins: 1972–1986.* — The informal Network Working Group formally became the International Network Working Group (INWG) in 1972.[156] Vinton Cerf, one of the original graduate students, organized and chaired the INWG for the first four years.[157] Meanwhile, in 1973, the United States Defense Advanced Research Projects Agency (DARPA) initiated the "Internetting project" which would lead to the creation of the modern Internet.[158] In 1979, Cerf, who had become the DARPA[159] program manager for the Internet project, established the Internet Configuration Control Board (ICCB) as an informal committee to advise DARPA and "to guide the technical evolution of the protocol suite."[160]

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[151] *See* Michael Hauben, *History of ARPANET, Part II: The Network Working Group*, at http://www.dei.isep.ipp.pt/docs/arpa--2.html (last visited Dec. 7, 2002).

[152] Steve Crocker (Network Working Group, Request for Comments No. 1) (Apr. 1969), *available at* http://www.ietf.org/rfc/rfc1.txt.

[153] E. Harslen & J. Heafner, Comments on the Meyer Proposal (Network Working Group, Request for Comments No. 50) (Apr. 1970), *available at* http://www.ietf.org/rfc/rfc50.txt.

[154] P. Karp, Categorization and Guide to NWG/RFCs (Network Working Group, Request for Comments No. 100) (Feb. 1971), *available at* http://www.ietf.org/rfc/rfc100.txt.

[155] A. McKenzie, Traffic Statistics (Network Working Group, Request for Comments No. 400) (Sept. 1972), *available at* http://www.ietf.org/rfc/rfc400.txt. As of September 2002, there were 3371 RFCs, *see* Request for Comments http://www.ietf.org/rfc, and hundreds more are continually in various stages of preparation. The contemporary RFC procedure is described in more detail elsewhere in this article. *See infra* pp. 813–14. Not all RFCs are standards, however. Some are informational, others are "experimental" or "historic." *See* C. Huitema et al., Not All RFCs Are Standards 1–2 (Network Working Group, Request for Comments No. 1796) (Apr. 1995), *available at* http://www.ietf.org/rfc/rfc1796.txt.

[156] *See* Robert H'obbes' Zakon, Hobbes' Internet Timeline v5.6, *at* http://www.zakon.org /robert/internet/timeline (last visited Dec. 7, 2002) (noting that the International Network Working Group was formed in October 1972).

[157] Cerf Interview *supra* note 124, at 529.

[158] *See* Cerf, *supra* note 124.

[159] "In July 1975, the ARPANET was transferred by DARPA to the Defense Communications Agency (now the Defense Information Systems Agency) as an operational network." *Id.* at 530.

[160] V. Cerf, The Internet Activities Board 1–2 (Network Working Group, Request for Comments No. 1120) (Sept. 1989), *available at* http://www.ietf.org/rfc/rfc1120.txt [hereinafter RFC 1120]. There is some disagreement in the sources about the founding date of the ICCB. RFC 902 says it was founded in 1981, J. Postel & J. Reynolds, ARPA — Internet Protocol Policy 1 (Network Working Group, Request for Comments No. 902) (July 1984), *available at* http://www.ietf.org/rfc/rfc902.txt, but most secondary sources say 1979, *e.g.*, Vinton Cerf, ICANN: Internet Corporation for Assigned Names and Numbers (Presentation, MCI Worldcom), *available at* http://www.icann.org/presentations/icann-un-cerf.ppt (Apr. 2000). Dr. David C. Clark, from MIT, was named the chairman of this committee. RFC 1120, *supra*, at 2.

In 1983, Cerf's successor at DARPA reorganized the ICCB into several task forces and dubbed the reorganized group the Internet Activities Board (IAB).[161]   Like its predecessors (the informal Network Working Group, the INWG, and the ICCB), the IAB was a very transparent organization from its inception. It publicized its meetings, published its minutes, welcomed standardization proposals from anyone with the time and energy to make them, created informal task forces open to all comers that developed new draft standards, and subjected all proposed standards to public comment before adopting them.[162]   But the IAB itself remained something of a small, private, self-selected, self-perpetuating,[163] and highly meritocratic club that could do what it liked, subject to the very real constraint of peer review and the need to conform at least loosely to its federal paymaster's needs.[164]

3. *IETF Formed, Further Formalization: 1986–1992.* — The public's role in Internet standard setting became formalized in 1986, when the IAB created the Internet Engineering Task Force (IETF).[165]   Although the IAB also created several other task forces at the same time,[166] the IETF was special: the IAB asked it to take over "the general responsibility for making the Internet work and for the resolution of all short- and mid-range protocol and architectural issues required

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The ICCB set the basic structure for everything that was to follow. *See* Crocker, *supra* note 147, at 50 ("Initially consisting of eight members, this focus is essentially the management structure that is in place today."). Although the ICCB had a United States focus, dictated in part by the funding of the ARPANET, this focus was partly offset by the parallel foundation of the International Collaboration Board (ICB). The ICB served European and Canadian interests, including issues arising from the Atlantic Packet Satellite Network (SATNET), which included Norway, the United Kingdom, Italy, and Germany. *See id.*

[161] RFC 1120, *supra* note 160, at 2.

[162] *See generally* HAFNER & LYON, *supra* note 123, at 258; S. Bradner, The Internet Standards Process (Network Working Group, Request for Comments No. 2026), *available at* http://www.ietf.org/rfc/rfc2026.txt (Oct. 1996); Lyman Chapin, The Internet Standards Process (Network Working Group, Request for Comments No. 1310), *available at* http:// www.ietf.org/rfc/rfc1310.txt (Mar. 1992).

[163] *See* Leiner, *supra* note 114.

[164] *See* RFC 1120, *supra* note 160, at 2–3 (noting that IAB "[m]embership changes with time to adjust to the current realities of the research interests of the participants, the needs of the Internet system and the concerns of the U.S. Government, university and industrial sponsors of the elements of the Internet"). Indeed, the representative from DARPA was the same Vint Cerf who had been present at the creation, and who had one IAB seat ex officio. *See* Internet Architecture Board, *supra* note 123.

[165] *See* Overview of the IETF, *at* http://www.ietf.org/overview.html (last visited Dec. 7, 2002) (giving a basic introduction to the contemporary IETF).

[166] One other important task force created in 1986 deserves mention: Internet Research Task Force (IRTF) created to consider long-term research problems in the Internet. *See* S. Harris, The Tao of IETF — A Novice's Guide to the Internet Engineering Task Force 4 (Network Working Group, Request for Comments No. 3160) (Aug. 2001), *available at* http://www.ietf.org/rfc/rfc3160.txt.

to make the Internet function effectively."[167] In so doing, the IAB divested itself of the main part of the standard-creation work and relegated itself to making the final decisions in a supervisory, appellate, and managerial role. The IETF became the main forum in which the technical standards were proposed, tested, and debated.[168] The IAB remained primarily a reviewing body, with increasingly little direct participation in the standards drafting process.[169]

As the Internet became larger and more international, the IAB explored the possibility of associating with an existing standards body, but was unable to reach an arrangement it found satisfactory.[170] Matters were further complicated by a dispute with the International Organization for Standardization (ISO), the voluntary, nontreaty, umbrella body for international standards. The ISO refused to accept TCP/IP (the fundamental Internet protocol) as an ISO standard, preferring a competing system called Open Systems Interconnection. Despite, and perhaps because of, the IAB's inability to form an alliance with an existing standards body, participants in the IAB's standard-making process recall "increased concern regarding the standards process itself" as "the Internet grew beyond its primarily research roots to include both a broad user community and increased commercial activity."[171] As a result, "[i]ncreased attention was paid to making the process open and fair."[172]

4. Institutionalization and Legitimation: 1992–1995. — As the Internet Standards process evolved, it continued to permit unlimited grassroots participation in the detail work of creating and debating standards through the IETF. This openness to participation in the IETF, and the relative openness to agenda-setting by outsiders,[173] was balanced by allowing specialist groups such as the IAB to retain veto power over proposed standards. The IAB also retained considerable

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[167] *See* V. Cerf, The Internet Activities Board 4 (Network Working Group, Request for Comments No. 1160) (May 1990), *available at* http://www.ietf.org/rfc/rfc1160.txt. This function was delegated to the Internet Engineering Steering Group (IESG), which managed the IETF. *Id.*

[168] *See* Internet Activities Board & Internet Engineering Steering Group, The Internet Standards Process — Revision 2, at 5–6 (Network Working Group, Request for Comments No. 1602) (Mar. 1994), *available at* http://www.ietf.org/rfc/rfc1602.txt [hereinafter RFC 1602].

[169] *See* The 2nd Boston Tea Party, *at* http://www2.aus.us.mids.org/mn/1007/tea.html (2000) [hereinafter Boston Tea Party]. In 1989, the IAB, which until that time oversaw many "task forces," changed its structure to leave only two, including the (somewhat changed) IETF. *See supra* p. 786. The IAB endured several reorganizations from 1983 to 1994, when the current charter was drafted. *See* Harris, *supra* note 166.

[170] Crocker, *supra* note 147, at 50.

[171] *See* Leiner, *supra* note 114.

[172] *See id.*

[173] The IESG and the IAB act as filters, screening out what they consider duplicative or irrelevant proposals for IETF working groups. They also tend to block proposals for creation of working groups that are unable to demonstrate that a number of people appear interested in contributing to the discussion of the standard.

control over the terms of reference given to the almost ad hoc task forces that created standards by drafting and debating RFCs. As the IETF grew and became dominated by people who had not been among the original designers of the Internet, earlier informal arrangements proved insufficient to legitimate IAB decisions. In 1992, the IETF faced its own legitimation crisis regarding its decisionmaking processes. It resolved this crisis in a manner that not only demonstrated the strength of its consensus-based procedures, but also produced new procedures better adapted to a growing organization and accepted as fair by participants. These new procedures then served to legitimate the authority of the reformed organization to make subsequent standards decisions.

(a) *The Internet Architecture Board (IAB)*. — In 1992, after some failed attempts to find a satisfactory partner among existing standards organizations,[174] the IAB agreed to become a subsidiary of the newly formed Internet Society (ISOC), a body created in January 1992 by many of the same people who had founded the Internet Standards process itself.[175] Under the agreement, the IAB would retain responsibility for "oversight of the architecture of the worldwide multi-protocol Internet," including continued standards and publication efforts.[176]

Before that agreement could be formalized, however, a crisis erupted that prompted important democratizing changes in the structure of the bodies that supervised and managed the standards process, the IAB and the Internet Engineering Steering Group (IESG). The trouble resulted from the Kobe, Japan ISOC meeting of June 1992. There, "ISOC Trustees approved a new charter for the IAB to reflect the proposed relationship."[177] As part of the move, the IAB changed its name to the Internet Architecture Board. The IAB thus became a technical advisory group of the ISOC, responsible for providing over-

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[174] *See supra* p. 787.

[175] The Internet Society (ISOC) was founded in January 1992 as an independent, international "professional society that is concerned with the growth and evolution of the worldwide Internet, with the way in which the Internet is and can be used, and with the social, political, and technical issues that arise as a result." RFC 1602, *supra* note 168, at 6. The ISOC was incorporated as a nonprofit organization in Washington, D.C., Internet Society, *All About the Internet Society*, http://www.isoc.org/isoc/general (last visited Dec. 7, 2002), and Vinton Cerf became its first president.

[176] For a description of the IAB prior to this voluntary merger, see *supra* p. 786.

[177] IETF Secretariat et al., The Tao of IETF: A Guide for New Attendees of the Internet Engineering Task Force 3 (Network Working Group, Request for Comments No. 1718) (Nov. 1994), *available at* http://www.ietf.org/rfc/rfc1718.txt [hereinafter RFC 1718]. The 1992 IAB Charter appears as L. Chapin, Charter of the Internet Architecture Board (IAB) (Network Working Group, Request for Comments No. 1358) (Aug. 1992), *available at* http://www.ietf.org /rfc/rfc1358.txt. The current charter appears at Internet Architecture Board, Charter of the Internet Architecture Board (IAB) (Network Working Group, Request for Comments No. 2850) (May 2000), *available at* http://www.ietf.org/rfc/rfc2850.txt [hereinafter RFC 2850].

sight of the architecture of the Internet and its protocols, although the membership of the IAB remained unchanged.[178] Members of the IAB subsequently explained the name change as designed to reflect the final separation of the IAB from direct participation in the operational activities of the Internet.[179]

At the meeting held Kobe, however, the IAB failed to approve a recommendation from the IESG regarding the IP protocol's management of the rapidly increasing number of computer addresses on the Internet.[180] The IESG's recommendations were based on the prior work of an IETF task force, but the IAB felt that the solution failed to address long-term issues.[181] A few days after the Kobe meeting, the IAB returned the IESG proposal with a controversial substitute proposal of its own.[182] To the ever-growing IETF membership, some of whom felt the IAB had gradually lost touch with the people drafting the actual standards,[183] this was at best drafting, not reviewing; at worst it was usurpation, and it set off a firestorm of criticism of the IAB proposal.[184]

At first the criticism was on technical grounds.[185] But by the Boston IETF meeting in July 1992, only a few days later, the objections had broadened:

> [I]n the absence of a coherent IAB response, the IETF community rapidly began to ask the question of whether the IAB-IETF relationship (already under scrutiny due to the ISOC transition) was useful. One member cheerfully suggested that the IETF re-enact the Boston Tea Party with the IAB members simulating the tea. Memories of other IETF-IAB frictions resurfaced. Furthermore, in a spectacular bit of bad timing, on July 9th it was announced that the IAB had changed its name from the Internet Activities

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[178] *See* Internet [Architecture] [Activities] Board: Known History, http://www.wia.org/pub/iab-history.htm (last visited Dec. 7, 2002) ("IAB decided to constitute itself in the form of a committee of the newly forming Internet Society — which met as a Board of Directors in June 1992 and accepted the IAB as a committee. Most of the IAB members were Internet Society Board members anyway, so this was a ready fait accompli.").

[179] Crocker, *supra* note 147, at 50.

[180] *See* S. Crocker, The Process for Organization of Internet Standards Working Group (POISED) 1 (Network Working Group, Request for Comments No. 1640) (June 1994), *available at* http://www.ietf.org/rfc/rfc1640.txt [hereinafter RFC 1640].

[181] *Id.*

[182] *See* Boston Tea Party, *supra* note 169.

[183] *See id.*

[184] RFC 1640, *supra* note 180; *see also* Boston Tea Party, *supra* note 169.

[185] Boston Tea Party, *supra* note 169 ("The IETF response to the IAB document was swift. Within a day of the posting of the IAB document, the IETF mailing list was filled with e-mail from senior Internet figures condemning the decision. In many cases, the people condemning the decision were close friends of the IAB members and the vigor of their postings shows just how shocked they were by the IAB announcement. At the same time, because so many of the parties knew each other, the discussion was careful to focus on technical issues and for the most part, avoid name calling. It was clear that many people just expected the IAB to say 'oops, we goofed' and for the process to move on.").

Board to the Internet Architecture Board, in a move widely taken to reflect an IAB view that the IETF wasn't qualified to oversee the Internet architecture.[186]

It became clear that many members of the IETF objected to the self-perpetuating nature of the IAB, its members' potentially unlimited terms, and its vague and general powers over Internet Standards.[187]

As a result of these complaints, ISOC President Vinton Cerf called for the formation of a working group to examine the IAB's role and procedures and to make curative proposals.[188] This became the Process for Organization of Internet Standards Working Group (POISED), with Steve Crocker, the author of the first RFC,[189] as its original chair.

Crocker's working group faced difficult problems for which it found innovative solutions that served to revise and legitimate the IETF-IAB structure. As the committee itself recognized, it was easy to say that the IAB should represent the consensus of the participants in the IETF, but the very openness that the IETF so valued made polling its membership problematic:

> [T]here was a strong feeling in the community that the IAB and IESG members should be selected with the consensus of the community. A natural mechanism for doing this is through formal voting. However, a formal voting process requires formal delineation of who's enfranchised. One of the strengths of the IETF is there isn't any formal membership requirement, nor is there a tradition of decision through votes. Decisions are generally reached by consensus with mediation by leaders when necessary.[190]

Traditional voting works badly as a means of making representative decisions if the potential electorate is in constant flux and is open to all comers.

The working group returned with consensus recommendations that radically altered the process used to select IAB members. The IAB would have thirteen voting members, composed of the IETF chair and twelve full members who each would serve for a term of two years, but without term limits. Each year the ISOC Board of Trustees would select six IAB members from a list of nominees prepared by a nomi-

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186 *Id.*

187 *See* RFC 1640, *supra* note 180, at 1–4.

188 Cerf's speech at the IETF meeting was apparently masterful: "Cerf . . . gave a wonderful speech stating that there were no secret agendas and the IAB had 'nothing to hide,' all the while removing a large fraction of his clothing." Boston Tea Party, *supra* note 169. Cerf asked the working group to consider: (1) "Procedures for making appointments to the [IAB]"; (2) "Procedures for resolving disagreements among the IETF, IESG, and IAB in matters pertaining to the Internet Standards"; and (3) "Methods for ensuring that for any particular Internet Standard, procedures have been followed satisfactorily by all parties so that everyone with an interest has had a fair opportunity to be heard." RFC 1640, *supra* note 180, at 6.

189 *See supra* p. 784.

190 RFC 1640, *supra* note 180, at 3.

nating committee of the IETF.[191] The composition of this nominating committee (the "NomCom") was the linchpin of the new system.

The change from a self-selected leadership to one chosen by representatives of a broader membership worried the IETF members involved in creating and monitoring the new procedures for two reasons. First, IETF veterans were deeply concerned that the new system ensure that the persons gaining office in the IAB and the IESG were people of sufficient technical competence and the right temperament for the job. Second, as a corollary, they wished to minimize the chance that someone might act strategically to gain office in the IAB or the IESG, whether out of careerist motives or in search of the egoistic gratification of office.[192] In particular, they sought to minimize the chance that anyone could campaign for a job and to ensure that the NomCom members enjoyed personal contact with the potential nominees. These considerations, as well as a desire to create a process that was fair in appearance and reality, required a legitimate process that would not degenerate into a popularity contest.

These problems remained unresolved at the start of the IETF meeting in Washington, D.C. in 1992, resulting in a "series of late night meetings."[193] Working by consensus, the participants in these meetings found an elegant solution to their problem. Instead of trying to use conventional elections, they proposed relying on volunteerism and randomness to achieve a fair result.[194] Every year, the IETF would select a NomCom, consisting of a nonvoting chair designated by the ISOC and seven members randomly chosen from a pool of volunteers. Because this pool was limited to "[a]ny person who took part in two IETF meetings in the last two years,"[195] nominators would likely have some personal knowledge of candidates. The NomCom would have to put forward at least one name per opening and could put forward more than one if it wished. The ISOC Trustees would then select the

[191] Internet Architecture Board, Charter of the Internet Architecture Board (IAB) 1 (Network Working Group, Request for Comments No. 1601) (Mar. 1994), *available at* http://www.ietf.org /rfc/rfc1601.txt [hereinafter RFC 1601]. "[T]he IETF chair shall be approved by a vote of the 12 full IAB members then sitting." *Id.* The IETF subsequently replaced RFC 1601 with four other documents. *See* RFC 2850, *supra* note 177, at 6 (noting the replacement of RFC 1601 with RFC 2850 and three other documents). Although these documents make changes, none affect the basic structures discussed here in the text.

[192] *See* Boston Tea Party, *supra* note 169 ("[M]any of the people who contributed most to the Internet standards process had a firm dislike of elections. They did not like the personal politics that voting implied.").

[193] *Id.*

[194] For a discussion of the use of randomness to achieve democratic results, see Akhil Reed Amar, Note, *Choosing Representatives by Lottery Voting*, 93 YALE L.J. 1283 (1984).

[195] RFC 1601, *supra* note 191, at 1. "The nomination committee also includes four non-voting liaison members, one designated by each of the Board of Trustees of the Internet Society, the IAB, the IESG, and the IRSG." *Id.* at 2.

IAB new members from among the nominees, and the IAB would approve nominees to the IESG.[196]

The IETF endorsed this proposal[197] in a moment of "classic self organization."[198] While the IAB had once been entirely self-selected and accountable only through peer review and the marketplace, it now acquired some quasi-democratic legitimacy because its members were selected by the IETF subject to ISOC approval.[199] Anyone could become a full member of the IETF by attending two meetings, and the ISOC was open to anyone willing and able to join for a small annual fee. The ISOC, however, changed to a less democratic governance structure in 2001.[200] The degree of democracy in ISOC is potentially significant due to its power to block nominations to the IAB, although this power has yet to be exercised.

(b) *The Internet Engineering Task Force (IETF)*. — Then, as now, the IETF played a crucial role in the standard-setting process.[201] In particular, the IETF does most of the actual day-to-day work of standard writing, and randomly selected members of the IETF control the nominations to the IAB, the body that oversees the process.[202] The IETF has no general membership; instead, it is made up of volunteers, many of whom attend the IETF's triennial meetings. Meetings are open to all, and anyone connected to the Internet can join the email mailing lists that discuss potential standards.[203] Although the IETF plays a role in the selection of the IAB, it is not part of or subject to

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[196] *See* RFC 1718, *supra* note 177, at 3.

[197] *See* Boston Tea Party, *supra* note 169 ("The resolution was presented to the IETF plenary meeting for approval, and . . . because the IETF lacked any mechanism for voting, the resolution was approved by having proponents and opponents hum and determining which hum was the loudest.").

[198] Einar Stefferud, *Global Sense Musings (on the Internet Paradigm)* (Sept. 11, 1997), *at* http://www.open-rsc.org/essays/stef/musings/.

[199] *See* RFC 1601, *supra* note 191.

[200] Until 2001, paid-up individual members elected the entire ISOC Board of Directors. ISOC adopted a new structure in which the majority of the Board is chosen by organizational (i.e., primarily corporate) members who purchase institutional memberships, and by the standards organizations. Individuals are no longer asked to buy memberships, but these memberships no longer carry a right to participate in the direct election of the Board. Instead, ISOC's fifty chapters collectively elect three members of the Board.

The first chapter-based election proved somewhat disorganized and controversial, however, because ISOC decided that chapter presidents would cast the chapter's vote, and the level of consultation with the chapter membership varied enormously. In addition, it is unclear how many of the fifty active chapters ISOC actually managed to contact to tell them they should vote. For details, see Welcome to Open-ISOC.org!, *at* http://www.open-isoc.org/ (last modified June 11, 2002); Mario Chiari, *Discussion on ISOC Governance* 2–6 (June 13, 2002), *available at* http://www.chiari.org/governance.pdf; and Randy Wright, *ISOC Elections Disenfranchise Individuals* (May 13, 2002), *at* http://zope.isoc-ny.org/isoc-ny/1021319402/index_html.

[201] *See* RFC 1602, *supra* note 168, at 5–6.

[202] *See supra* pp. 787, 792.

[203] *See* RFC 1718, *supra* note 177, at 2, 4.

the IAB or ISOC. Indeed it is not entirely clear to the membership
who, if anyone, "owns" the IETF, or for that matter, who is liable if it
is sued.[204]

The once small IETF meetings began to grow, attracting upward
of 700 attendees with many others participating in the standards proc-
ess entirely by email.[205] Approximately one-third of those attending
were IETF newcomers.[206] Then, as now, everyone who attended a
meeting had an equal right to participate. The flavor of IETF meet-
ings in this period is perhaps best illustrated by the "Dress Code" for
attendees:

> Since attendees must wear their name tags, they must also wear shirts or
> blouses. Pants or skirts are also highly recommended. Seriously though,
> many newcomers are often embarrassed when they show up Monday
> morning in suits, to discover that everybody else is wearing t-shirts, jeans
> (shorts, if weather permits) and sandals. There are those in the IETF who
> refuse to wear anything other than suits. Fortunately, they are well known
> (for other reasons) so they are forgiven this particular idiosyncrasy. The
> general rule is "dress for the weather" (unless you plan to work so hard
> that you won't go outside, in which case, "dress for comfort" is the
> rule!).[207]

The IETF is divided into several areas of specialization, each with
an area chairman who supervises work in that area (and has a virtual
veto on the creation of new projects in that area). Each area is further
subdivided into several working groups. These groups work to achieve
specified goals such as the creation of an informational document or a
protocol specification. Working groups ordinarily have a finite lifetime
and are expected to disband once they achieve their goals.[208] A work-
ing group has no official membership other than the chair or co-chairs
appointed by the IESG. Everyone who joins the working group's
mailing list is entitled to equal participation.[209]

The day-to-day continuity of the IETF is ensured by an IETF Se-
cretariat that organizes meetings and manages the IETF's website,[210]

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[204] *See* Paul Mockapetris, POISED '95 BOF, http://mirror.averse.net/pub/ietf/ietfonlinepro
ceedings/95apr/area.and.wg.reports/gen/poised95/poised95-minutes-95apr.txt (last visited Dec. 7,
2002) (reporting on the POISED meeting held at the April 1995 IETF meeting).

[205] Crocker, *supra* note 147, at 50.

[206] RFC 1718, *supra* note 177, at 1. This changed later. Meanwhile, corporate interests came
to dominate the ISOC Board. *See supra* note 200 and accompanying text.

[207] RFC 1718, *supra* note 177, at 6.

[208] *See id.* at 3–4.

[209] *Id.* at 4.

[210] The IETF Secretariat organizes the triennial meetings and provides institutional continuity
between meetings by, for example, maintaining a website. The Secretariat is administered by the
Corporation for National Research Initiatives, with funding from U.S. government agencies and
the Internet Society. The Secretariat also maintains the online Internet Repository, a set of IETF
documents. Crocker, *supra* note 147, at 51.

and by the IESG. The IESG controls whether a proposed standard can be promoted to draft standard status and then to final approval. IESG custom requires that the proposed standard have been implemented in at least two functioning products to be promoted to Draft Standard status.[211] The IAB chooses IESG members from nominations made by a nominating committee drawn from the IETF.[212] The IETF chair is also the chair of the IESG.[213]

    5. The Internet Standard Creation Process Today (1996–Present). — The Requests for Comments series remains the heart of the Internet Standards process.[214] New Internet Standards begin with a Proposed Standard, which anyone can originate. The IESG then writes a charter for an IETF working group and appoints a working group chair. The working group works via email and at IETF meetings.

    If approved by the IETF and the IESG as a proposal worthy of discussion, the Proposed Standard is considered by the IETF working group. IETF working groups reach decisions through "'rough' consensus."[215] This means something less than full unanimity but something more than a simple majority of those present. Voting is discouraged in favor of finding a way to agree on what was the dominant opinion of those attending the meeting. As working groups have no formal membership, voting is in any case impractical. Parties who believe that their voices were unjustly ignored must either live with the result or appeal it to IETF leaders, the IESG, and ultimately to the IAB.[216] Once the working group has reached a "rough consensus," it submits its work to the IESG for public review and ultimate approval as a Draft Standard.[217]

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[211] *See* RFC 2026, *supra* note 112.

[212] *See supra* pp. 791–92.

[213] Appeals from IESG decisions go to the IAB. RFC 1602, *supra* note 168, at 6. *See also* RFC 2026, *supra* note 112, at 21–22; RFC 1718, *supra* note 177, at 3.

[214] *See* RFC 1718, *supra* note 177, at 15 (explaining that not all RFCs are Internet Standards, but all Internet Standards are RFCs).

[215] Crocker, *supra* note 147, at 51.

[216] The "rough consensus" procedure
    guarantees moments of divisiveness, since parties that lose various debates will occasionally feel that they were not given a fair opportunity to express their views or that the consensus of the working group was not accurately read. All such expressions of concern are taken very seriously by the IETF management. More than most, this is a system that operates on an underlying sense of the good will and integrity of its participants. Often, claims of "undue" process will cause a brief delay in the standard-track progression of a specification, while a review is conducted. While frustrating to those who did the work of technical development, these delays usually measure a small number of weeks and are vital to ensuring that the process which developed the specification was fair.
Id. at 52.

[217] *Id.* at 51.

A Proposed Standard can usually become a Draft Standard when there exist at least two independent implementations that have inter-operated to test all functions and the specification has been a Proposed Standard for at least six months.[218] The requirement that there be at least two products produced by different companies using the standard is important. It means that no completely proprietary standard can ever become an Internet Standard. For example, a company is free to retain full control over a patented technology, but its product cannot become an Internet Standard. The proprietary technology may, how-ever, be "incorporated by reference" into a standard if the proprietors agree to give licenses to the technology on "specified, reasonable, non-discriminatory terms."[219] When a Draft Standard has demonstrated its worth in the field and at least four more months have passed, it can become a full Internet Standard and be published as an RFC.[220]

As the IETF continues to grow, the Internet Standard process is showing signs of strain. Attendance at the forty-ninth IETF meeting in December, 2000 exceeded 2800 persons.[221] Even after the dot.com bubble burst, attendance at the three meetings in 2001 averaged just under 2000 persons.[222] The continued high attendance at IETF meet-ings hinders informal relationships among participants because per-sonal and professional familiarity declines. Decisions regarding stan-dards now have important financial consequences for would-be providers of Internet hardware and software, and tempers can flare when tens of millions of dollars are at stake.[223] Furthermore, "[w]hile more people are participating, the number of senior, experienced con-tributors has not risen proportionately. . . . Without [their] guidance, working groups run the serious risk of hav[ing] good consensus about a bad design."[224]

IETF veterans are concerned about these problems. They have addressed these issues as if they were an Internet Standards problem. As with any technical problem, they are discussing it, writing papers about it, and trying to design systems that are participatory and yet fault-tolerant. Changes are proposed in incremental steps, and every-one understands that if a design fails in the field, it will have to be re-

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[218] *See id.*; RFC 2026, *supra* note 112, at 15.

[219] RFC 2026, *supra* note 112, at 30; *see also infra* p. 813.

[220] Crocker, *supra* note 147, at 51.

[221] *See* IETF, Past Meetings of the IETF, *available at* http://www.ietf.org/meetings/pastmeetings.html (last visited Dec. 7, 2002).

[222] *See id.* (giving figures of 1691, 2226, and 1822 for the Salt Lake City, London, and Minnea-polis meetings, respectively).

[223] *See* Crocker, *supra* note 147, at 53.

[224] *Id. But see generally* Reidenberg, *supra* note 121 (arguing that the standards process suffers from technical elitism and devalues greater participation).

placed.[225]   The general IETF list routinely features discussions in which participants revisit basic structural questions.[226]

III. THE INTERNET STANDARDS PROCESS AS A CASE STUDY IN DISCOURSE ETHICS

One of the most trenchant critiques of Habermas's project for an ethics based on discourse is that it is fine in theory but proves unworkable in real life. Thus, for example, Niklas Luhmann notes:

> Habermas does not locate the problem on the level of actually occurring communications . . . . Instead, he employs a theory of how the reasonable coordination of action can take place if assured of the freely rendered agreement of all involved. . . .
>
>   . . . .
>
>   That such communications *could* take place, is not a satisfactory answer. If the theme "facticity and validity" is to retain its meaning, they must, at some point, also take place in fact.[227]

Indeed, Habermas's original vision of an "ideal speech situation" was often criticized as utopian. The subsequent reformulation into conditions for "practical discourse" similarly has been criticized as requiring "unlimited transparency in human life by demanding that all evaluative commitments be understood as voluntary commitments that are publicly justifiable."[228]   In this view, even if one agrees in principle that "only those norms can claim to be valid that meet (or could meet) with the approval of all affected in their capacity *as participants in a practical discourse*,"[229] the sad fact is that "practical discourse" of this

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[225] "In general, the IETF is applying its own technical design philosophy to its own operation. So far, the technique seems to be working. With luck, it will demonstrate the same analytic likelihood of failure, with the same experiential fact of continued success." Crocker, *supra* note 147, at 54.

[226] The POISSON list also examined IETF structures. *See* IETF March 1999 Proceedings § 2.2.3 (Process for Organization of Internet Standards ONg (poisson)), *available at* http://www.ietf.org/proceedings/99mar/ (last visited Dec. 7, 2002). The organizers explained the name "POISSON" as follows:

>   The tricky part of describing the IETF process, certainly in the fast changing world of the Internet, is that when you describe the process in too much detail, the IETF loses its flexibility, when you describe too little it becomes unmanageable. This is therefore a slippery subject, hence the name POISSON, which is French for fish. The French word also serves to indicate the international aspect of the WG.
>
>   Furthermore the IETF operates by consensus, which sometimes seems to have a POISSON distribution.

Id.

[227] Luhmann, *supra* note 111, at 885, 898.

[228] Cronin, *supra* note 34, at xxv; *see also* BERNARD WILLIAMS, ETHICS AND THE LIMITS OF PHILOSOPHY 18, 27–38, 100–01, 174 (1985).

[229] REHG, *supra* note 10, at 30 (quoting HABERMAS, *Discourse Ethics*, *supra* note 51, at 66).

demanding type is impossible in our constrained lives.   Although
Habermas himself rejects this criticism,[230] it resonates with many.[231]

Part III suggests that this critique is falsified by the account in Part
II. It argues that the Internet Standards-making institutions and proc-
esses are international phenomena that conform relatively well to the
discourse required to actualize Habermas's discourse ethics. The
participants in the IETF engage in constant discourse, continually re-
flect on their actions, and routinely document their reflections in a self-
conscious manner.

Part III then considers and rejects the two most substantial
counterarguments to this Article.   The first counterargument claims
that the Internet Standards process is a mere scientific or technical
discourse that lacks the fundamentally political character of discourses
in the public sphere. While it is certainly correct that a substantial
part of Internet Standard-setting is only technical standard-setting, it
is at times much more, and it is at these moments that reflexive self-
understanding is most pronounced. Part III also reiterates the argu-
ment that in a world where critics have, with some reason, questioned
whether there was *any* "point" where the best practical discourse
could "take place in fact," even one seemingly small real-life example
of a discourse that approximately satisfies Habermas's conditions is
significant.

A second counterargument might admit that there is more to the
Internet Standards process than mere technical standard-setting, but
would suggest that the Internet Standards process is somehow a par-
ticularly easy case.   In this view, the special qualities of the IETF
mean that, for all practical purposes, Habermasian discourse ethics
remains a counterfactual supposition at best, and a fantasy at worst.
There is great force in the observation that the Internet Standards
process is a special case in at least three ways, which cannot all be rep-
licated in other situations involving difficult decisions. First, partici-
pants are likely to be especially good at using the Internet to commu-
nicate. Second, members of the IETF, although drawn from around
the world, are likely to share a professional socialization and are pre-
dominantly male. Third, the main subject of debate, Internet Stan-
dards, is fundamentally a non-zero-sum game, where most participants
stand to gain from the existence of *some* standard. Exit also tends to
be easy; if a person is dissatisfied with one standard, it is often, but

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[230] Habermas rejects the critique, arguing that there would be no other way to go about dis-
cussing "just norms of social interaction." *See* Cronin, *supra* note 34, at xxvi.

[231] For a particularly elegant critique of Habermas's reliance on "counterfactual" assertions,
including some about the nature of discourse, see Power, *supra* note 65, at 1013–14.

not always,[232] practicable to create a competing standard and to allow the standards to duke it out in the market.[233]

The criticism that the Internet Standards process benefits from unique conditions and thus defies replication may be irrefutable even if it is wrong. I am aware of no other examples of the best practical discourse in action, and it is clear that their discovery is no easy matter. Alternatively, as Part V below explains, it is possible to imagine — although it is still too early to predict — that Internet-based community discussion tools will continue to evolve to the point where they will so improve the quality of discourse that we will see a revitalization of what Habermas calls the public sphere.[234] If this is an attractive prospect, then surely evidence that a best practical discourse can be achieved, if only in the hothouse, is of value. The question is whether the distinctive qualities of this case should lead us to despair about other cases, or encourage us by its existence. I prefer hope, although I acknowledge the size of the challenge.

A. The IETF Standards Process as the Best Practical Discourse

There is a striking similarity between the procedures used to generate Internet Standards via the IETF and Habermas's account of the properties that a practical discourse requires in order to legitimate the rules it produces.[235]

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[232] The International Domain Name (IDN) group is an example of a context where it would be impracticable to create a competing standard. The DNS standard currently uses a very limited character set composed of certain case-insensitive ASCII characters. Thus, domain names can only contain the roman alphabet, integers, and dashes; WWW.LAW.TM is identical to WwW.lAw.Tm. There is no provision for Han or Kanji characters in domain names, nor even an "ö." The IDN group is working to set a standard for the representation of most non-ASCII characters in domain names by means of agreed translation tables. If there were to be more than one set of translation tables, there would be no guarantee that a given non-ASCII domain name would always be translated to the same set of ASCII characters, which in turn might mean that the DNS would return inconsistent and even unpredictable results depending on which translation table a user happened to encounter. *See* Patrik Faltstrom, et al., *Internationalizing Domain Names in Applications (IDNA)*, *at* http://www.globecom.net/ietf/draft/draft-ietf-idn-idna-o6.txt (Jan 7, 2002).

[233] Although they are not standards in the same sense, many open source software projects work on a similar consensus basis. The parallel is not perfect, however, because open software projects, unlike true standards, are disciplined by the threat of exit and by the possibility of code "forks." *See* Rick Moen, *Fear of Forking: How the GPL Keeps Linux Unified and Strong*, LINUXCARE, *at* http://www.linuxcare.com/viewpoints/article/11-17-99.epl (Nov. 17, 1999).

[234] For a discussion of Habermas's definition of the public sphere, see *infra* p. 857.

[235] *See generally* Part II, *supra* pp. 777–96. As Michel Rosenfeld summarizes, Habermas argues that

> the legitimacy of law is to be gauged from the standpoint of a collectivity of strangers who mutually recognize one another as equals and jointly engage in communicative action to establish a legal order to which they could all accord their unconstrained acquiescence. By means of communicative action, a reconstructive process is established through which the relevant group of strangers need only accept as legitimate those laws

The standard-generating procedures evolved to make formal Internet Standards exhibit a high degree of openness and transparency. They also exhibit a surprising degree of self-consciousness, or reflexivity, in that IETF participants have a common story that explains how the IETF came to be and why its outputs are legitimate. Both the opinions that are brought to the standards-making process and the "rough consensus" that emerges from it are understood by many parties as "voluntary commitments that are publicly justifiable."[236] Overall, although the IETF standards process is not characterized as an "ideal speech situation" — being composed of real people of necessarily limited cognitive capacity, existing in real time — it nonetheless meets, or very closely approximates, the still-exacting criteria of Habermasian practical discourse.

As Habermas defines it, a proper practical discourse requires that "all voices in any way relevant get a hearing."[237] IETF working groups are open to anyone with the ability to attend meetings or to participate in email discussion groups. All participants are formally equal, and in practice all have equal access to at least the email part of the discussion, which includes written reports summarizing relevant discussions at IETF in-person meetings. Discourse ethics require that people listen to other nonstrategic participants in the discourse, at least as time permits. As a majority of the subscribers to most email lists are silent "lurkers," one does not actually know to what extent this silent majority is following the debate and actually forming part of the consensus, or simply not focusing on the issues at all. Then again, one does not usually know how many people in an in-person meeting, or even in a class, are daydreaming.

Mailing lists differ from meetings in ways that may have implications for the claim that all participants have equal access to the email lists run by the IETF.[238] In a meeting, only one person has the floor at a time. Having the floor places a claim on the attention of other participants, even if only because the noise may be hard to ignore. In contrast, in a mailing list debate much more parallel discourse is possible, which increases the chances of everyone having his or her say. At the same time, however, it is much easier to ignore people. Indeed, the process of ignoring people can be automated with mail filtering software (sometimes called a "bozo filter") that prevents mail from

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which they would all agree both to enact as autonomous legislators and to follow as law
abiding subjects.

Rosenfeld, *supra* note 96, at 805.

[236] *See supra* p. 796.

[237] JUSTIFICATION, *supra* note 7, at 163.

[238] For other potential peculiarities of email communication, such as pseudonymity and "flaming," see *infra* p. 800.

unwanted sources from ever reaching one's email inbox. IETF working groups do not have bozo filters built in, though some working groups apply basic spam filters,[239] and many of the participants likely use customized filters for their personal email. In addition, a well-known, privately hosted version of the IETF general email list filters out certain people and content for the convenience of interested parties.[240] In short, everyone can express his or her views in an unfettered manner, but not everyone is necessarily listening.

Email communication also differs from in-person speech — but perhaps not from ordinary printed communication — in ways that could either enhance or undermine a computer-mediated best practical discourse. On one hand, email enables anonymous and pseudonymous speech, which encourages the timorous.[241] On the other hand, electronic communication may enable certain dysfunctional communications practices.[242] For example, electronic communications media may remove inhibitions against intemperate speech, leading to nasty personal messages known as "flaming." Any such attempt to intimidate or to otherwise coerce participants in a discourse in particular circumstances amounts to what Habermas calls strategic behavior.[243] Although email filters make it much easier to ignore flaming, flames can undermine an online discussion and even kill it if they become the norm.

Flames are not unknown to IETF lists, but several practices combine to reduce their incidence. First, the great majority of IETF mailing lists are temporary and task-oriented. Participants are self-selected

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[239] *See* IESG, *Guidance For Spam-Control on IETF Mailing Lists, at* http://www.ietf.org /IESG/STATEMENTS/mail-submit-policy.txt (last visited Dec. 7, 2002).

[240] *See* The IETF_Censored mailing list, *at* http://carmen.ipv6.cselt.it/ietf_censored.html (last visited Dec. 7, 2002). The list owner explains:

> At times, the IETF list is subject to debates that have little to do with the purposes for which the IETF list was created. Some people would appreciate a 'quieter' forum for the relevant debates that take place, but the IETF's policy of openness has so far prevented the IETF from imposing any censorship policy on the IETF@ietf.org list. . . . [T]he filters have been set so that persons and discussions that are, in the view of Raffaele D'Albenzio, irrelevant to the IETF list are not forwarded.

Id. The maintainer of the IETF_Censored list posts the list of banned people and words on a web page, http://carmen.ipv6.cselt.it/ietf_censored.html, and also, "for fun," provides an alternate mailing list consisting only of the rejected messages. *See id.* In June 2002 there were 138 subscribers to the IETF_Censored list. E-mail from Raffaele D'Albenzio to Michael Froomkin, Professor of Law, University of Miami School of Law (June 19, 2002) (on file with the Harvard Law School Library).

[241] *See generally* A. Michael Froomkin, *Flood Control on the Information Ocean: Living with Anonymity, Digital Cash, and Distributed Databases*, 15 U. PITT. J.L. & COM. 395 (1996), *available at* http://www.law.miami.edu/~froomkin/articles/ocean.htm.

[242] A sobering list of examples of dysfunctional communications behavior online can be found in Roger Clarke, *Net-Ethiquette: Mini Case Studies of Dysfunctional Human Behaviour on the Net* (1998), http://www.anu.edu.au/people/Roger.Clarke/II/Netethiquettecases.

[243] *See supra* note 67.

because of their interest in achieving a specific goal, after which the list disbands. More durable lists, such as the permanent IETF general list and the long-running POISSON list,[244] are more vulnerable to strategic communication, but the culture of the IETF, and perhaps private emails to those who overstep the mark, seem to prevent this sort of behavior from becoming a major problem.

Second, Habermas suggests that the best practical discourse requires that "the best arguments available to us given our present state of knowledge are brought to bear."[245] By their nature, IETF groups tend to attract individuals with experience in the subject area of the proposed standards. Anyone else would probably be bored to death. Certainly my own personal experiences on IETF mailing lists such as SPKI,[246] POISSON,[247] Raven,[248] and the general IETF list suggest that the discussion is usually apposite, thoughtful, and civil. Other lists sometimes fare less well. POISSON, which was the default forum for discussions about process, sometimes received complaints of dictatorial practices, and tried to find ways to solve or route around them.

Habermas's third condition for the best practical discourse is that "only the unforced force of the better argument determines the 'yes' and 'no' responses of the participants."[249] IETF working groups decide which proposal is best by "rough consensus," not by voting.[250] The IESG and the IAB review IETF work products to ensure that all points of view received a fair hearing.[251] My observations suggest that the substantial majority of participants take these obligations seriously.

Within the IETF structure itself, the participants are diverse, widely separated in space, and often unknown to each other except as email correspondents. In particular, even though there are participants who have by dint of experience or through longevity acquired a reputation that may give them additional credibility in debates, there really

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[244] *See supra* note 226.

[245] JUSTIFICATION, *supra* note 7, at 164; *see also* HABERMAS, *Discourse Ethics, supra* note 51, at 89; *supra* p. 771.

[246] *See* C. Ellison, SPKI Requirements (Network Working Group, Request for Comments No. 2692) (Sept. 1999), *available at* http://www.ietf.org/rfc/rfc2692.txt; C. Ellison et al., SPKI Certificate Theory (Network Working Group, Request for Comments No. 2693) (Sept. 1999), *available at* http://www.ietf.org/rfc/rfc2693.txt.

[247] *See supra* note 226.

[248] Raven was the discussion of the IETF position on developing protocols that "support mechanisms whose primary purpose is to support wiretapping or other law enforcement activities." Posting of the Internet Engineering Steering Group, iesg-secretary@ietf.org, to raven@ietf.org, The IETF's position on technology to support legal intercept (Oct. 11, 1999), *at* http://www.ietf.org/mail-archive/working-groups/raven/current/msg00000.html.

[249] JUSTIFICATION, *supra* note 7, at 163; *see also* HABERMAS, *Discouse Ethics, supra* note 51, at 89.

[250] *See supra* p. 794.

[251] *See id.*

is very little that anyone can do to pull rank. Other than the working group chair, whose role is primarily facilitative,[252] there is no formal rank to pull, and informal rank, based on experience, only counts for as much as the listener wishes to afford it. As a result, participants have few options other than to seek to persuade by force of argument.[253] It seems reasonable, therefore, to suggest that the Internet Standards discourse sometimes achieves the best discourse practicable given the diversity of its participants, and does so in a context in which the opportunities for strategic behavior are very low.[254]

As noted in Part I, a critical theory claims to be a special kind of knowledge. A critical theory of rulemaking requires not only that the participants engage in the best practical discourse, but also that they bring to the discourse a self-reflective perspective. This perspective is essential if participants are to avoid excessive selfishness or ideological error, for understanding the historically contingent nature of their personal circumstances allows participants to navigate between dogmatism and relativism. Furthermore, the rulemaking enterprise itself must include an account of how it came to be and of why its rules are entitled to respect.[255]

As demonstrated in Part II, from the earliest days of the Request for Comments issued timorously by worried graduate students to the more routinized procedures today, the participants in the Internet Standards process have repeatedly engaged in introspection about the entire enterprise. The absence of a formal legal basis for the IETF, which remains an unincorporated association, and the very fluid membership have helped prevent the growth of any complacency regarding the fundamentals. Working groups such as POISSON have reexamined and redefined the internal workings of the IETF, including the IETF's relationship with the IAB, the ISOC, and, most recently, with the newly formed ICANN. The result has been the steady rein-

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[252] *See* S. Bradner, IETF Working Group Guidelines and Procedures, at § 6.1 (Network Working Group, Request for Comments No. 2418) (Sept. 1998), *available at* http://www.ietf.org /rfc/rfc2418.txt (describing the role of the Working Group chair).

[253] One reader of an earlier draft of this Article noted that the inability to pull rank does not necessarily imply that the winning argument was in fact the best. For example, all of the participants might have been incapable of understanding the better argument. This objection misses the point. In a practical discourse one necessarily takes the cognitive capacities of the participants as one finds them. In assessing the quality of a discourse it would be unfair to demand that what *in hindsight* proved to be the best argument should always win. The assessment must respect the limits of what could reasonably be known and understood by the participants. My impression is that the participants in the IETF debates that I have watched are in fact quite intelligent, and that the arguments that win tend to seem plausible. However, it cannot be denied that I may not have recognized the better argument.

[254] Some opportunities for strategic behavior do of course exist, as individuals can always try verbal or written intimidation.

[255] *See generally* GEUSS, *supra* note 35.

vention and evolution of the IETF's internal procedures and the crea-
tion of formal mechanisms for challenge and review of the products of
IETF working groups. Checks and balances are now part of the sys-
tem; where once the issue of appointment of IAB members occupied
but a single paragraph in RFC 1602,[256] there is now an entire proce-
dure dedicated to appointment and removal of IAB members detailed
in RFC 2727.[257]

Although attendance at physical IETF meetings is undoubtedly the
way to maximize one's participation in Internet Standards-setting
process, participants remain aware that many people are unable to at-
tend the meetings. To ensure that rough consensus is never judged
solely on the basis of a physical meeting, all decisions of the IETF first
require that the issue be aired online via a mailing list.

Reliance on computer-aided communication empowers those un-
able to afford the time or cost of physical attendance at meetings.
What other effects this reliance produces is an interesting and debat-
able question. Many have noted that the use of electronic communica-
tion may lead to flaming. It is also arguable, however, that reducing
participation in a discourse to computer-mediated communications re-
moves opportunities for the exercise of certain types of prejudice.[258]
Words on a computer screen do not necessarily come signed, and even
when they do, there is often nothing in the email that indicates the
gender, age, race, or national origin of the author.[259]

The Internet Standards process also fits Habermas's basic rules of
discourse, as reformulated by Robert Alexy. In this version, everyone
in the discourse must agree that:

(1) Everyone who can speak may take part in the discourse. The second
     rule covers freedom of discussion . . . . :

(2) (a) Everyone may problematize any assertion.

    (b) Everyone may introduce any assertion into the disucussion.

    (c) Everyone may express his or her attitudes, wishes, and needs.

. . . .

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[256] RFC 1602, *supra* note 168, at 7.

[257] J. Galvin, IAB and IESG Selection, Confirmation, and Recall Process: Operation of the
Nominating and Recall Committees (Network Working Group, Request for Comments No. 2727)
(Feb. 2000), *available at* http://www.ietf.org/rfc/rfc2727.txt.

[258] For an argument that some computer-mediated communications that mask characteristics of
the speaker might actually foster sex, race, or gender bias, see Jerry Kang, *Cyber-Race*, 113 HARV.
L. REV. 1130, 1183–84 (2000), *available at* http://www1.law.ucla.edu/~kang/Kang_Cyberrace.pdf.

[259] For example, my email address is froomkin@law.tm but I do not live in Turkmenistan.

(3) No speaker may be prevented from exercising the rights laid down in
(1) and (2) by any kind of coercion internal or external to the dis-
course.[260]

These conditions describe the rules of an IETF working group.
Indeed, these rules of discourse accurately describe the conditions for
participation in the IETF in general. As Harald Tveit Alvestrand,
chair of the IETF, stated in a presentation to INET 2002, the
"[r]equirements for being effective in the IETF" include "[w]illingness
to listen, [w]illingness to learn, [w]illingness to be convinced."[261]

Of course, lacking omniscience, participants in a discourse can
never be certain that these three conditions have been sufficiently ful-
filled. The conditions are at once aspirations, regulative ideals, and
shared assumptions.[262] Yet, in the context of the Internet Standards
process, Rehg's "puzzling conclusion," that in discourse ethics "the in-
dividual's practical insight is inseparably bound up with the insight of
every other individual affected by the issue at hand,"[263] is anything but
a puzzle. Rather, it is a design feature. Standards discourse requires
not only free debate in a public space, but also accommodation of
many points of view and "the testing of the deliberating community of
all those affected."[264]

One fear of Rehg's is that even in its current form, discourse ethics
presupposes the good of rational cooperation and thus verges on a
transcendental, or at least pure-reason, foundation. This allegation is
potentially a great problem for a theory that, in its current form, lays
claim to a sociological foundation. Rehg resolves this problem by con-
cluding, apparently heuristically, that "in today's world such a good
admits less and less of stable alternatives for persons who consider
themselves rational."[265] In the case of the IETF, however, it seems
reasonable to claim that practice alone has demonstrated an actual
commitment to rational discourse on the part of almost all partici-

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[260] ALEXY, *supra* note 85, at 130; *see also* REHG, *supra* note 10, at 62–65 (building on Alexy's
foundation). Habermas's own version may be somewhat less inclusive, since he includes a rele-
vancy criterion: "the practice of deliberation is extended to an inclusive community that does not
in principle exclude any subject capable of speech and action *who can make relevant contribu-
tions.*" JÜRGEN HABERMAS, THE INCLUSION OF THE OTHER: STUDIES IN POLITICAL
THEORY STUDIES 41 (Ciaran Cronin & Pablo De Greiff eds., 1998) [hereinafter THE
INCLUSION OF THE OTHER] (emphasis added).

[261] Harald Tveit Alvestrand slides presented at INET 2002, Washington, D.C. (on file with the
Harvard Law School Library). More worryingly, he also included "Thick skin" and "Loud voice,"
suggesting that while everyone may be allowed to express his or her attitudes, desires, and needs,
it can be hard to be heard. *Id; cf. supra* pp. 799–801 (discussing the possibility of communications
being ignored, out of dysfunctional communication).

[262] *See* REHG, *supra* note 10, at 64–65.

[263] *Id.* at 245.

[264] *Id.*

[265] *Id.* at 246.

pants. The relationship is not perfect, though. Some IETF mailing lists have degenerated into angry argumentation, at least for a time, and a number of lists have had to deal with off-topic rants or spam. Nevertheless, systems exist for guarding against such strategic behavior by those who are, by their own actions, effectively non-participants.[266] Neither discourse ethics nor the IETF rules require participants in a discussion to allow the discussion to be held hostage by those who would destroy it.

B. Counter: The IETF Standards Process Is Too Male and Monolingual To Be the "Best" Practical Discourse

Although women may make up about half of all Internet users,[267] a great majority of the active and vocal participants in the Internet Standards discourse are male. Thus, it is fair to ask of this process, as indeed many have asked of Habermas's work before *Between Facts and Norms*,[268] "Where are the Women?"[269] Similarly, the vast majority of both the formal and informal Internet standards discussion occurs in English. It seems fair to ask, therefore, whether these processes are too male, or too monolingual, to be the best practical discourse at the international level.

The gender imbalance in IETF participation uncomfortably evokes aspects of Habermas's writings before *Between Facts and Norms* that evoked feminist criticism. One strand of this criticism suggested that he failed to understand the social importance of traditionally female

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[266] *See supra* note 240 and accompanying text (describing a privately hosted IETF list that filters out problematic contributors).

[267] If one measures only access rather than intensity of use, the online gender gap may be disappearing: "Internet audiences in most countries have slight male majorities — with the exception of the U.S., where the audience is 52% female." Nielsen/NetRatings, *23 of the Top 25 Global Web Properties Attract Majority Male Audiences in August* (Oct. 1, 2002), *available at* http://www.nielsen-netratings.com/pr/pr_021001.pdf (quoting Richard Goosey, International Chief of Measurement Science, NetRatings) (internal quotation marks omitted); *see also* Pew Internet Project, Table IV: Internet & Specific Population Groups, *at* http://www.pewinternet.org /reports/reports.asp?Report=11&Section=ReportLevel2&Field=Level2ID&ID=8 (summarizing poll showing that women comprised forty-six percent of U.S. Internet users in 2000).

    Even usage figures are more similar than one might suspect according to one sample: "[M]en went online 20 times, spent 10 hours and 24 minutes online in total, and viewed 760 pages. The comparative figures for women were 18 sessions, 8 hours and 56 minutes online, and 580 pages." Computer Professionals for Social Responsibility, *Women and Computing*, http://www.cpsr.org/program/gender/index.html (last modified Jan. 18, 2002).

[268] In *Between Facts and Norms*, Habermas "corrects for his earlier 'gender blindness.'" Jean L. Cohen, *Critical Social Theory and Feminist Critiques: The Debate with Jürgen Habermas, in* FEMINISTS READ HABERMAS 57, 81 n.1 (Johanna Meehan ed., 1995). Habermas himself finds feminist approaches congruent with his theory of rights, law, and communicative power. *See* Jürgen Habermas, *Paradigms of Law*, 17 CARDOZO L. REV. 771, 780–84 (1996).

[269] Joan B. Landes, *The Public and the Private Sphere: A Feminist Reconsideration, in* FEMINISTS READ HABERMAS, *supra* note 268, at 91, 97.

roles.[270]　　Several writers also have criticized Habermas for equating the male viewpoint with the universal and thus failing to note a "conceptual dissonance between femininity and the dialogical capacities central to [his] conception of citizenship,"[271] a dissonance arising from the silencing of women and the systematic denigration of their viewpoints.[272]　Assuming the correctness of this critique, its application to Internet-based discourse may be blunted by the medium. Computer-mediated communications need not reveal the gender of the speaker; indeed, communications can be anonymous or pseudonymous, and authors have a choice whether they maintain consistent identities or experiment with different personae.[273]　Still, some research suggests that men and women use recognizably different writing styles in computer-mediated environments[274] and that the adversarial male style dominates the female style and deters women from participating.[275]　Flame wars are relatively rare in the IETF working groups I follow, but they are not unheard of in the IETF.

Opinions differ on the likely effect of advances in technology on the problems of sex- or race-based bias and bigotry. The optimistic view is that when participants in a discourse are able to mask their personal characteristics — with anonymous messages, pseudonymous email addresses, or someday, even "avatars" by which they can choose any image to represent themselves to the outside world — both speakers and listeners will be liberated from their conscious and unconscious assumptions about each other. A person "speaking" online to fellow participants whose representations are respectively Humphrey Bogart, a large marsupial, and a featureless blob is likely to be on notice that he or she really does not know much about the gender, age, nationality, or race of his or her interlocutors. In this optimistic view, a world in which every speaker can seem to be anything is a world in which everyone is forced to concentrate on the content of the communications,

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[270] *See* Nancy Fraser, *What's Critical About Critical Theory, in* FEMINISTS READ HABERMAS, *supra* note 268, at 21, 24.

[271] *Id.* at 35.

[272] *See* Landes, *supra* note 269, at 97–98. The classic example is the "reasonable man" standard. *See, e.g.,* Fraser, *supra* note 270, at 35. *But see* Susan Haack, *After My Own Heart: Dorothy Sayers's Feminism*, NEW CRITERION, May 2001, at 10, 13 (arguing that gender-based distinctions are not a useful way to think about reasoning or styles of thought).

[273] For a different view, perhaps dated, arguing that computer discourse "tends to be used by a technically sophisticated elite, and . . . there are both obvious and subtle controls over the interaction that can have a substantial effect upon the quality of discourse," see Elizabeth Lane Lawley, *Discourse and Distortion in Computer-Mediated Communication* (Dec. 1992), *at* http://www.itcs.com/elawley/discourse.html.

[274] *See generally* Susan Herring, *Posting in a Different Voice: Gender and Ethics in Computer-Mediated Communication, in* PHILOSOPHICAL PERSPECTIVES ON COMPUTER-MEDIATED COMMUNICATION 115 (Charles Ess ed., 1996).

[275] *See id.* at 136–37.

since the technology masks many of the social cues that trigger sexism, racism, and similar prejudices. A somewhat gloomier view, however, sees in the technology a potential for the entrenchment of social stereotyping, as participants either adopt personae that they think will be strategically useful (for example, a scenario in which everyone pretends to be a white male, thus reinforcing racist and patriarchal presumptions), or somewhat incompetently pretend to be various types of people they are not, inadvertently reenacting and thus reinforcing stereotypes (based, for example, on mass media presentation of what gay men act like) because that is all they know.[276] The Habermasian approach to this difference of opinion would be that there is no way to know a priori what the effects of this sort of technology will be; instead, the answer lies in practice: we try it and see. The gender imbalance problem in the IETF, although serious, is at least improving. Although it appears that the IAB had no women at all until 1989, and has had few since,[277] the current chair of the IAB, the apex of what hierarchy there is in the IETF standards process, is Leslie Daigle, a woman.[278]

Dependence on English undoubtedly makes the IETF a less universal debating forum than it would otherwise be. Yet, as Habermas notes with some regularity, discourse is not possible unless the participants are able to communicate.[279] English is surely the least bad tool for this: approximately one and a half billion people, about one quarter of the world's population, speak English.[280] Although no hard data are available, the importance of English in the sciences and the increasing influence of English as the global business language suggest that, although the reliance on English is regrettable, until a more widely used international language (or superb automated translation software) is available, this reliance is intrinsic to a reliance on discourse.[281]

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[276] *See* Kang, *supra* note 258, at 1183–84.

[277] *See* Internet Architecture Board, *A Brief History of the Internet Advisory/Activities/Architecture Board, at* http://www.iab.org/iab-history.html (last modified Oct. 21, 2002).

[278] *See* Internet Architecture Board, *Full Members, at* http://www.iab.org/members.html (last modified Oct. 21, 2002).

[279] *See supra* p. 773.

[280] *See* ESL Help Centre, *at* http://helpcentre.englishclub.com/el_howmany.htm (last visited Dec. 7, 2002) (citing DAVID CRYSTAL, THE CAMBRIDGE ENCYCLOPEDIA OF LANGUAGE 360–61 (2d ed. 1997)). Of these English speakers, however, less than a third speak English as their first language. *See id.*

[281] *Cf.* 1 COMMUNICATIVE ACTION, *supra* note 43, at 115–16 (discussing the richness of communication required for mutual understanding).

C. Counter: It's Too Specialized To Matter

I have argued above that the IETF standards process, and perhaps some other more informal standards processes, constitute a proof that the best practical discourse can be actualized. It might fairly be asked, however, whether, even if my account of the standards processes is accurate, a debate carried out among a professionally homogenous group about primarily technical issues can fairly be cited as an example, much less any sort of model, for wider-ranging debates in the public sphere.[282] Do debates about IP packets have anything to teach us about the abortion debate? More fundamentally, is a debate about the certificate structure in a hypothesized public-key infrastructure a debate in the public sphere at all, or should it be relegated to some special ghetto for technical talk? Although it has a certain plausibility, the complaint that Internet Standards talk has relatively little to teach us because it is not about the lifeworld, but just about computers,[283] is not convincing.

1. The Claim that the IETF Is "Technical" and Thus Outside the "Public Sphere." — Although in his early writings Habermas specifically discussed the role of technology, he has had very little to say on the subject in the past twenty years. Habermas's (relatively few) early writings on technology tended to concentrate on two topics. First, Habermas flirted with the idea, popular in earlier writing by other members of the Frankfurt School, that technology was somehow suspect, that humankind's use of technology was an example of an urge to control and dominate. Second, Habermas attacked the idea that there was anything value-neutral about technological inquiry, but he rejected suggestions that technology should be identified with a specific historical epoch or class. Instead, he preferred to categorize it as "a 'project' of the human species as a whole."[284] More recently, however, Habermas's near total silence on the subject has been read to suggest he believes that technology is somehow "non-social."[285]

If technology is part of a different system than the public sphere, if it is truly nonsocial, then a discourse focused on even those technological issues related to enabling communication cannot properly serve as

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[282] For an account stressing the technical aspects of the IETF's work, see Joseph P. Liu, *Legitimacy and Authority in Internet Coordination: A Domain Name Case Study*, 74 IND. L.J. 587, 598–99 (1999).

[283] It would be tempting to respond that, for some participants in the Internet Standards process, computers *are* the lifeworld.

[284] JÜRGEN HABERMAS, *Technology and Science as "Ideology"*, *in* TOWARD A RATIONAL SOCIETY 81, 87 (Jeremy J. Shapiro trans., 1970) [hereinafter HABERMAS, *Technology and Science*] (emphasis removed).

[285] Andrew Feenberg, *Marcuse or Habermas: Two Critiques of Technology*, 39 INQUIRY 45, 49 (1996), *available at* http://www-rohan.sdsu.edu/faculty/feenberg/marhab.html ("In Habermas, as in Weber, scientific-technical rationality is non-social, neutral, and formal.").

an example of the best practical discourse in the public sphere. There
are reasons, however, to doubt the force of this concern.

First, although the imprecision of Habermas's use of the term
makes it somewhat difficult to tell, it appears that by "technology"
Habermas often means physical science as opposed to social science.[286]
It is thus debatable whether the sort of matters canvassed in the Inter-
net Standards process are "technology" in his sense. IETF debates are
not about basic or even applied research, nor research strategy. Most
commonly, they are about defining common protocols, essentially defi-
nitions, to allow various products and projects to interoperate rela-
tively easily.

More significantly, a substantial number of IETF debates, though
by no means all or even most, concern matters that the participants
understand to have direct social consequences reaching far beyond the
structure of a conforming data packet. In these discussions, the social
consequences weigh at least as heavily as issues of technological op-
tima. One example is the debate about the structure of the IETF it-
self, discussed in Part II. Another notable example is the debate in the
Raven[287] list about the proper role of the IETF (and technologists in
general) when confronted with governments that seek the capability to
wiretap communications (including email, HTML, voice, and even
video) transported over the Internet. On one hand, the group consid-
ered the extent to which it is appropriate to write standards that are
wiretap-friendly, which risks encouraging government intrusions into
personal privacy. On the other hand, in a world in which many users
of any potential standard live in countries (the United States, for ex-
ample[288]) with laws that require some participants in the network to
comply with lawful wiretaps, issuing standards that ignore the issue,
or are designed to make wiretapping difficult, ensures that some im-
portant participants will be unable to adopt it for legal reasons. Thus,
any standard that is not designed to meet these legal needs may ulti-
mately become a "standard" in name only. Although there were a
small number of people whose participation was not constructive (and
whom others at times engaged and at times ignored), the group was
able to come to a conclusion, now memorialized in RFC 2804, *IETF
Policy on Wiretapping*, that the IETF "would not consider require-

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[286] *See, e.g.*, HABERMAS, *Technology and Science, supra* note 284.

[287] Raven was a mailing list devoted to a discussion of the IETF position on whether the body
should develop protocols "whose primary purpose is to support wiretapping or other law enforce-
ment activities." Posting of the Internet Engineering Steering Group, *supra* note 248.

[288] The Communications Assistance for Law Enforcement Act of 1994 (CALEA), Pub. L. No.
103-414, 108 Stat. 4279 (codified as amended at 18 U.S.C. § 2522; 47 U.S.C. §§ 229, 1001–1010
(2000)) requires telecommunications carriers to ensure that their equipment, facilities, and services
are able to comply with authorized electronic surveillance.

ments for wiretapping as part of the process for creating and maintaining IETF standards."[289] As the RFC explains, Raven did not achieve a moral consensus on the merits of wiretapping, but this did not prevent a consensus regarding the IETF's role: "The IETF, an international standards body, believes itself to be the wrong forum for designing protocol or equipment features that address needs arising from the laws of individual countries, because these laws vary widely across the areas that IETF standards are deployed in."[290] On the issue of wiretaps, RFC 2804 also states that making networks wiretap-friendly would be unnecessary and would add too many engineering complications, which tend to undermine the security of communications.[291] It does note that "if effective tools for wiretapping exist, it is likely that they will be used as designed, for purposes legal in their jurisdiction, and also in ways they were not intended for, in ways that are not legal in that jurisdiction. When weighing the development or deployment of such tools, this should be borne in mind."[292]

The Raven process thus provided the occasion for the restatement of a longstanding consensus. The IETF "restate[d] its strongly held belief, stated at greater length in [RFC 1984], that both commercial development of the Internet and adequate privacy for its users against illegal intrusion requires the wide availability of strong cryptographic technology."[293]

Indeed, basic and self-conscious guiding normative commitments to the value of communication and to the emancipatory potential of communication characterize the IETF. Participants understand the IETF's mission of enhancing communication via the Internet to be a good in itself, and to be of instrumental value in enhancing both democracy and commerce. The clearest statement of this commitment, labeled as an expression of ISOC's "ideology," appears in RFC 3271.[294]

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[289] Internet Architecture Board & Internet Engineering Steering Group, IETF Policy on Wiretapping (Network Working Group, Request for Comments No. 2804) (May 2000), *available at* http://www.ietf.org/rfc/rfc2804.txt [hereinafter RFC 2804].

[290] *Id.* This view is not universally shared outside the IETF. *See, e.g.,* Reidenberg, *supra* note 121 (arguing that technologies should be designed with legal needs in mind); Reidenberg, *Governing Networks, supra* note 122, at 929–30.

[291] RFC 2804, *supra* note 289.

[292] *Id.*

[293] *Id.* (referring to the aptly numbered IAB and IESG Statement on Cryptographic Technology and the Internet (Network Working Group, Request for Comments No. 1984) (Aug. 1996), *available at* http://www.ietf.org/rfc/rfc1984.txt (expressing IAB and IESG's opposition to governmental limits on the use or export of cryptographic tools)).

[294] V. Cerf, The Internet Is for Everyone (Network Working Group, Request for Comments No. 3271) (Apr. 2002), *available at* http://www.ietf.org/rfc/rfc3271.txt. Formally this document is only a personal statement, not a standard, but the fact that it is one of the relatively few personal statements that the IAB has approved for publication, and that its author is Vint Cerf, one of the original Internet pioneers and the founder of ISOC, gives it weight, at least as a reflection of shared normative commitments, if not necessarily as a consensus action plan.

Vint Cerf summarizes what seem to be core beliefs animating the IETF:

> The Internet is proving to be one of the most powerful amplifiers of speech ever invented. It offers a global megaphone for voices that might otherwise be heard only feebly, if at all. It invites and facilitates multiple points of view and dialog in ways unimplementable by the traditional, one-way, mass media.
>
> The Internet can facilitate democratic practices in unexpected ways. . . . Perhaps we can find additional ways in which to simplify and expand the voting franchise in other domains, including the political, as access to Internet increases.
>
> The Internet is becoming the repository of all we have accomplished as a society. It has become a kind of disorganized "Boswell" of the human spirit.
>
> . . . .
>
> Internet is for everyone — but it won't be if it isn't affordable by all that wish to partake of its services, so we must dedicate ourselves to making the Internet as affordable as other infrastructures so critical to our well-being. While we follow Moore's Law to reduce the cost of Internet-enabling equipment, let us also seek to stimulate regulatory policies that take advantage of the power of competition to reduce costs.
>
> Internet is for everyone — but it won't be if Governments restrict access to it, so we must dedicate ourselves to keeping the network unrestricted, unfettered and unregulated. We must have the freedom to speak and the freedom to hear.
>
> Internet is for everyone — but it won't be if it cannot keep up with the explosive demand for its services, so we must dedicate ourselves to continuing its technological evolution and development of the technical standards [that] lie at the heart of the Internet revolution.
>
> . . . .
>
> Internet is for everyone — but it won't be until in every home, in every business, in every school, in every library, in every hospital in every town and in every country on the Globe, the Internet can be accessed without limitation, at any time and in every language.[295]

In short, Cerf asserts a fundamental normative commitment to global, ubiquitous communication as a means of enhancing democracy. Communication tools need to become cheap enough that cost is not a barrier to access, and easy enough to use that neither knowledge nor language are bars to participation. Programmatically, governments need to stay out of the way and eschew censorship or access control to allow everyone the greatest freedom to participate in global discourse.

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[295] *Id.*

Perhaps it should not be surprising that people dedicated to the development of communicative technologies should, after a few years of participation in unfettered discourse, articulate an "ideology" of commitments that so closely resembles the normative commitments to openness and unfettered debate among equals that Habermas argues are the "basic rights that citizens must mutually grant one another if they want to legitimately regulate their life in common."[296] Nevertheless, the parallels are almost too perfect to be believed.

The IETF general mailing list's discussion of the spam problem also illustrates the connection participants see between their technical work and larger social issues. Spam is unsolicited, usually commercial, email. In August 2002, one IETF old-timer complained that the amount of spam he was receiving was increasing exponentially, and predicted that if it continued his email would no longer be usable within a year. Worse, he suggested that his acquaintances whose email addresses had not been publicized as much as his were also experiencing rapid increases in spam, from a lower base, putting them only a few months behind him on the curve. "If electronic mail is to continue as a viable communications medium," he concluded, "we have to stop this problem, and soon."[297] This posting set off a firestorm of commentary. Some participants proposed various spam-filtering programs; others dismissed them as inadequate. Others asked whether systemic solutions were possible. If only a relatively small number of people, or a relatively small number of Internet service providers, are responsible for a large fraction of the spam, then all that would be needed would be to reconfigure email transport mechanisms to prevent the forgery of addresses, and thus more reliably identify the sender and the sender's machine. But this would require making anonymous communication next to impossible, a change with social costs.[298] Within a few days, the discussion seemed to focus on the need to coordinate technical solutions with legal ones. Some contributors suggested that the IETF's role should be to educate legislators around the world regarding the nature of the problem and why legislation was needed.[299]

   2. The IETF Debates Whether an RFC Is "Law." — Starting in 1994, the IETF began a debate over whether an RFC is "law." This

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[296] BETWEEN FACTS AND NORMS *supra* note 1, at 118.

[297] Posting of Perry E. Metzger, perry@piermont.com, to ietf@ietf.org, Why spam is a problem (Aug. 13, 2002), *at* http://www1.ietf.org/mail-archive/ietf/Current/msg16986.html.

[298] *See* Posting of Caitlin Bestler, catilinb@rp.asomi.net, to ietf@ietf.org, Re: Why spam is a problem (Aug. 13, 2002), *at* http://www1.ietf.org/mail-archive/ietf/Current/msg17002.html (stating that a central registry of email users is not "desirable").

[299] *See* Posting of Eric A. Hall, ehall@ehsco.com, to ietf@ietf.org, Re: Why spam is a problem (Aug. 14, 2002), *at* http://www1.ietf.org/mail-archive/ietf/Current/msg17080.html. It is unclear if this proposal will be adopted — as of this writing, the discussion is in hiatus and may be moved to its own separate list.

debate illustrates that, to the participants in the IETF, the standards process is considerably more than a technical discussion over the best way to move bits around the Internet.

RFC 1602, issued in March 1994 (and revised in October 1996),[300] described the Internet Standards process. Unlike some of the RFCs produced in accordance with its dictates, RFC 1602 was not an "Internet Standard," but rather purported to be merely an "informational" document.[301] The IETF/IAB/ISOC standard-making structure had been designed with technical standards in mind; there was no agreed-upon procedure for defining social standards with the same formality as the technical ones. Nevertheless, RFC 1602 was a critical document. It did more than describe prior practices — it changed them.[302] Unlike most RFCs, which are authored by one or two people, RFC 1602 had institutional authors, the IAB and the IESG themselves. This fact was enormously significant, as it signaled to authors of future standards documents that any would-be standard not prepared in accordance with RFC 1602's dictates could expect to face difficulties winning the IAB and IESG approval that every Internet Standard requires.

RFC 1602 stated that proprietary specifications could only be incorporated into the Internet Standards process if the owner made the specification available online and granted the ISOC a no-cost license to use the technology in its standards work. The owner also had to promise that "upon adoption and during maintenance of an Internet Standard, any party will be able to obtain the right to implement and use the technology or works under specified, reasonable, non-discriminatory terms."[303] Worst of all from the point of view of a corporation considering the donation of technology, RFC 1602 required that the donor warrant to the ISOC that the donated technology "does not violate the rights of others."[304]

Understandably, even corporations willing to promise to give the required licenses were hesitant to provide warranties against all patent infringement claims, especially those that might be unknown at the time of the donation.[305] Unfortunately for them, RFC 1602 created no mechanisms for exceptions or alterations to its intellectual property

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[300] *See* RFC 2026, *supra* note 112.

[301] *See* RFC 1602, *supra* note 168, at 1.

[302] *See id.* (noting that it revises the earlier RFC).

[303] *Id.* at 25, 28–29.

[304] *Id.* at 28.

[305] *See* IAB Minutes (Apr. 4, 1995), *available at* ftp://ftp.ietf.cnri.reston.va.us/ietf-online-proceedings/95apr/area.and.wg.reports/gen/iab/iab-minutes-95apr.txt (reporting remarks of Raj Srinivisian, former chair of the ONCRPC Working Group, that "the 'problem word' in the IPR section of RFC 1602 is 'warrant'").

provisions.[306]   Indeed, it was unclear who, if anyone, would be author-
ized to negotiate with a potential donor regarding its representations.
The donation of the rights was to the ISOC, but it was the IETF that
did (and does) the work of defining the draft standard — a process
that, by the terms of RFC 1602, seemed unable to go forward before
the legalities were settled.

The intellectual property provisions of RFC 1602 caused contro-
versy. As a result, members of the IETF and the IAB reconsidered the
status of "informational" documents that, in practice, seemed to have
as much force as technical standards, and began a debate concerning
whether "informational" RFCs are "law."   Inability to decide these
questions paralyzed at least one IETF working group for months. The
group's inability to complete its work culminated in an appeal to the
IAB, which debated the issue in April 1995. The IAB's minutes sug-
gest that the IAB itself was divided over the legal and moral status of
RFC 1602. Some called it a rule, others a documentation of current
practice. One attendee argued that the IETF "is supreme and can
change things whenever it wants."[307] The IAB thus struggled with the
question "[w]hat is the status of RFC 1602 — is it the law?"[308] After
much debate, the IAB concluded that "[i]f RFC 1602 is the law, it is
broken."[309] The IAB also noted:

> Another cause for confusion is that RFC 1602 is "only" informational. (It
> is hard to imagine that RFC 1602 should appear on the standards track,
> since it describes processes, not protocols.) Perhaps we need a "Process"
> series of documents . . . . The series might also include a (standard) escape
> route for quickly changing the process when it is found to be broken.[310]

The IAB thus issued a public statement a few days later: "RFC 1602,
which defines how the IETF/IESG should operate, has a procedure
for adopting external technologies which is unimplementable. . . . The
IAB supports . . . revisions to RFC 1602 which would: (a) designate an
owner of the intellectual property rights process; (b) specify a proce-
dure to negotiate variations."[311]   Of course, the only body that could
initiate revisions to RFC 1602 was the IETF.

The IETF subsequently revised its policy on intellectual property
rights. On the vexing patents question, the new policy states that the

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[306] Such a mechanism was supplied by J. Postel, Addendum to RFC 1602 — Variance Proce-
dure (Network Working Group, Request for Comments No. 1871) (Nov. 1995), *available at*
http://www.ietf.org/rfc/rfc1871.txt.

[307] Abel Weinrib, Minutes for April 2 IAB Meeting (1995), *available at* http://ftp.u-
picadie.fr/mirror/ftp.nic.fr/documents/iab/IABmins/IABmins.950402.

[308] *Id.*

[309] *Id.*

[310] *Id.*

[311] Abel Weinrib, IAB Open Meeting (Apr. 4–5, 1995), *available at* http://free.vlsm.org/
v01/internet/ietf/oo/oo11.txt.

IETF Executive Director "shall attempt to obtain" an agreement that anyone will be able to implement, use, and distribute conforming products "under openly specified, reasonable, non-discriminatory terms" from a person known to claim intellectual property rights that would be required to implement a proposed Internet Standard.[312] This, so far, echoes the earlier rule. If, however, the rights holder fails to make this promise:

> The results of this procedure shall not affect advancement of a specification along the standards track, except that the IESG may defer approval where a delay may facilitate the obtaining of such assurances. The results will, however, be recorded by the IETF Executive Director, and made available. The IESG may also direct that a summary of the results be included in any RFC published containing the specification.[313]

Thus under the new regime, unlike under RFC 1602, a standard can go forward with proprietary specifications so long as there is no alternative. Furthermore, the revised rule makes clear that no one is expected to make warranties about patent infringement claims by third parties.

The IETF is currently re-examining the intellectual property provisions of RFCs 1602 and 2026;[314] the IPR working group that will either reconsider or at least restate the IETF view of these issues was formally chartered at the IETF's Yokohama meeting in July 2002.[315]

D. Can the IETF Example Be Generalized?

Since so much of political debate in modern times concerns economic issues, it bears repeating that economic or other material interests alone do not preclude the best practical discourse. IETF partici-

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[312] RFC 2026, *supra* note 112, § 10.32(C). The definition of "reasonable and non-discriminatory" is interesting:

> The IESG will not make any explicit determination that the assurance of reasonable and non-discriminatory terms for the use of a technology has been fulfilled in practice. It will instead use the normal requirements for the advancement of Internet Standards to verify that the terms for use are reasonable. If the two unrelated implementations of the specification that are required to advance from Proposed Standard to Draft Standard have been produced by different organizations or individuals or if the "significant implementation and successful operational experience" required to advance from Draft Standard to Standard has been achieved the assumption is that the terms must be reasonable and to some degree, non-discriminatory. This assumption may be challenged during the Last-Call period.

Id. § 10.3.3.

[313] *Id.* § 10.32(C).

[314] *See, e.g.,* Posting of Steve Bellovin, smb@research.att.com, to ipr-wg@ietf.org (June 13, 2002), *at* https://www1.ietf.org/mail-archive/working-groups/ipr-wg/current/msg00011.html.

[315] For a thorough discussion of the legal regulation of standard-setting organizations, see Mark A. Lemley, *Intellectual Property Rights and Standard Setting Organizations,* 90 CAL. L. REV. (forthcoming Dec. 2002), a draft of which is available at http://www.ftc.gov/opp/intellect /020418lemley.pdf.

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pants have worked predominantly for firms with an interest in the outcome of the standards process, but as noted earlier, the organization has developed various devices for dealing with resulting problems, such as the issue of proprietary standards. Having a material interest in no way prevents a person from engaging in a true Habermasian discourse; indeed, we all have material interests, and a Habermasian discourse happens in the here and now, not in an imaginary original position. The real question is whether one is able to create conditions in which participants can take a self-reflexive stance, acknowledge their own positions as well as those of the other participants, and still avoid manipulating each other (or the rules) for selfish advantage. The IETF example suggests that we can get tolerably close to this ideal.

Although somewhat restricted in the scope of its activities, the IETF seems to be a model of exactly the sort of small, spontaneous, citizen-organized forum that

> incorporates the republican idea of self-defining or public good-constituting discourses as one key aspect of politics. Given pluralism, different self-defining discourses must occur at both the societal and group level. This implicitly requires different "public spheres" — those in principle open to all and also those open to all who are members of, or who identify with, smaller, pluralistic groups.[316]

Nevertheless, the IETF model is likely to need modification before being transplanted to other environments. The Internet Standards debates probably do differ from most other discourses in ways that matter. The IETF's purpose is inherently communitarian. It exists to foster standards to use diverse devices to communicate over the Internet. Its products are available, free of charge, to anyone who has access to the appropriate computer equipment. The IETF also contains features that naturally discipline participants in ways that tend to enhance the quality of the discourse. For instance, anyone is free to run any type of communications protocol he or she wishes across the Internet. Using a nonstandard protocol, however, creates a risk of drastically reducing the number of people with whom one can communicate. Thus, persons interested in maximizing the potential reach of their tools, whether for communicative or commercial purposes, have a strong interest in participating in the discourse and in conforming to the norms of civil discourse; failure to do either of these makes it likely that one's ideas will have little influence. In other words, the role of "Exit" in the Internet Standards debate tends to promote "Loy-

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[316] C. Edwin Baker, *The Media That Citizens Need*, 147 U. PA. L. REV. 317, 340 (1998). Note that the Habermasian vision of the relationship of the citizens to each other and their relationship to the state differs from the republican (and communitarian) visions. *See, e.g.*, THE INCLUSION OF THE OTHER, *supra* note 260, at 246.

alty":[317] exit is trivially easy, but tends to be lonely. Furthermore, there is a strong incentive to reach some agreement, for a standard cannot advance without rough consensus.[318] Finally, in the very large majority of cases, standards are not exclusive. The TCP/IP protocol is very flexible, and in most cases competing standards can coexist side by side.[319]

Habermas argues that society[320] must collectively guarantee fundamental individual liberties, ranging from the freedom to speak to guarantees of the basic material conditions of life, so that participants in decisionmaking can make decisions in a relatively free, equal, and uncoerced fashion. Only when equipped with these fundamental freedoms is everyone potentially able to participate equally in a discourse; and only when everyone could at least participate if they chose to do so is the discourse capable of generating legitimate rules. The Internet Standards process may be unusually fertile soil for a best practical discourse because issues of access and exit are so easily resolved. In attempting to transplant this model to other more difficult and contentious circumstances in which exit is difficult and there is a long history of injustice and inequality, the IETF will not necessarily serve so much as a template but as an inspiration, an indication that the best practical discourse is a concept with content, a very high — but still attainable — goal.[321]

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[317] See ALBERT O. HIRSCHMAN, EXIT, VOICE, AND LOYALTY: RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES 76–105 (1970).

[318] On the other hand, the downside of a failure to agree is bounded — no one dies.

[319] Thus, for example, there needs to be a standard for JPEG encoding so that different programs that adhere to the .jpeg standard can exchange and view photographs; the existence of such a standard would not, however, prevent other standardized encoding systems, such as .gif, from being used in different applications.

[320] In practice, this means the state.

[321] Thus, I (and I think Habermas) would tend to agree with the general thrust of Neil Netanel's argument that cyberanarchism as such, or even what he calls cybersyndicalism, is unlikely to form a basis for creating a just society. Enforceable guarantees of civil liberties, due process, indeed the full panoply of rights, serve a key role in preserving democracy. See Neil Weinstock Netanel, Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory, 88 CAL. L. REV. 395 (1999). The challenge set by the IETF example is to improve that democracy.

Note that one seeks only the best practical discourse, and that this will often mean something less than consensus:

> [I]t is important to emphasize that the deliberative theory of democracy does not paint a utopian picture of the engaged citizen possessed of perfect critical acumen or virtue. . . . The deliberative model does not have exaggerated expectations in the virtue or moral purity of its political subjects. The model also expresses reservations about the capacity of the public sphere for resolving conflicts; and these are quite reasonable given the social diversity, sometimes hostile attitudes, the forms of life and the heterogeneous political, ethnic and religious groups that compose Western-style democracies.

Antje Gimmler, Deliberative Democracy, the Public Sphere and the Internet, PHIL. & SOC. CRITICISM, July 2001, at 21, 28.

IV. APPLICATIONS: CRITIQUES OF INTERNET STANDARDS FORMED OUTSIDE THE IETF

Habermas's discourse theory purports to explain how to design and recognize discourses that are capable of generating legitimate rules.[322] In Habermas's view, the failure of most rulemaking institutions to measure up to the discourse principle causes people to question them, resulting in a gradual, then not-so-gradual, loss of legitimacy. In the absence of external, traditional, transcendent sources of legitimation on which they might rely, these suspect institutions lose respect, and they find it increasingly difficult to maintain their power.[323] Although primarily concerned with suggesting a way to make legitimate rules, Habermas's writings provide a point of reference to enable the critique of existing rulemaking institutions and processes. The identification of a best practical discourse may make it easier to engage in this critique, both because the example provides a model of legitimate rulemaking and because it serves as a benchmark against which other systems that legitimate norms or rules can be measured.

I have argued above that the IETF standards process fits Habermas's conditions for the best practical discourse extraordinarily well. If the IETF is an example of the discourse principle in action, then critical theory suggests that it sets a standard against which other rulemaking processes should be compared. Although in principle there is no reason why the comparison would not be apt for any rulemaking process, it seems particularly appropriate to begin by focusing on the rulemaking processes that are most similar to the IETF itself, that is, other Internet-based standards processes concerned with making rules that govern how the Internet itself functions. Although the IETF is the leading standards body for the Internet, many formal and informal Internet standards do originate elsewhere. These variegated procedures span a gamut that includes the creation of Frequently Asked Question (FAQ) files, the creation of Usenet groups, market-based standards creation, spontaneous mailbombing, and self-help responses to spam.

One of the most important of the non-IETF rule creation processes, and surely the most controversial, is the Internet Corporation for Assigned Names and Numbers (ICANN), which since late 1998 has en-

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[322] *See supra* Part I. The legitimacy of a rule is not dependent on whether compliance is voluntary once it has been adopted: a rule may include some form of compulsion — as many legal rules do — and still be legitimate. People might comply with a standard because it is useful, without any concern for its legitimacy. It does not ordinarily make much sense to ask whether a hammer is a legitimate means of driving in a nail.

[323] LEGITIMATION CRISIS, *supra* note 45, at 36–37. For a particularly clear exposition of Habermas's views on the role of the legitimation deficit, at least from his earlier works, see MCCARTHY, *supra* note 7, at 348–86 (1978).

joyed primary responsibility for domain name policy.[324] Like the
IETF, ICANN claims to be a consensus-based technical coordination
and standards body. But in fact, ICANN differs from the IETF in
significant ways, ways that may have something to teach us about the
value of the IETF model, and perhaps also about the extent to which
one might hope to generalize or expand it.

A. Noninstitutional Standard-Making

Habermas recognized that social order — governing norms and
rules — need not come only from formalized institutions:

> Every social interaction that comes about without the exercise of manifest
> violence can be understood as a solution to the problem of how the action
> plans of several actors can be coordinated with each other in such a way
> that one party's actions "link up" with those of others. An ongoing con-
> nection of this sort reduces the possibilities of clashes among the doubly
> contingent decisions of participants to the point where intentions and ac-
> tions can form more or less conflict-free networks, thus allowing behavior
> patterns and social order in general to emerge.[325]

As many observers have noted, the Internet is home to a great deal
of informal standard-setting.[326] In this Part, I suggest that many of
these other Internet standards processes compare poorly to the best
practical discourse.

Many informal Internet standards arise and evolve without any in-
stitutional structure. Some, however, rely on new institutions of vary-
ing degrees of formality. Others rely on independent action difficult to
distinguish from vigilantism, or use coercion in a way that suggests
they rely not on real discourse aimed at rational persuasion, but rather

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[324] Where this shift in responsibilities came from is itself controversial. The IETF had issued
some "informational" RFCs on domain name policy. The actual transfer of authority to ICANN,
however, came from the United States Department of Commerce. *See* Froomkin, *Wrong Turn,*
supra note 21, at 70–93.

[325] BETWEEN FACTS AND NORMS, *supra* note 1, at 17–18.

[326] *See, e.g.,* David R. Johnson & David Post, *Law and Borders — The Rise of Law in Cyber-
space,* 48 STAN. L. REV. 1367, 1387–91 (1996); Lawrence Lessig, *The Limits in Open Code: Regu-
latory Standards and the Future of the Net,* 14 BERKELEY TECH. L.J. 759, 762 (1999) ("Every-
one now gets how the architecture of cyberspace is, in effect, a regulator. Everyone now
understands that the freedom or control that one knows in cyberspace is a function of its code.");
Joseph P. Liu, *Legitimacy and Authority in Internet Coordination: A Domain Name Case Study,*
74 IND. L.J. 587, 595–604 (1999); Tim May, *Crypto-Anarchy and Virtual Communities* (1995), *at*
http://www.idiom.com/~arkuat/consent/Anarchy.html; Reidenberg, *Lex Informatica, supra* note
122, at 568–76; Joseph Reagle, Why the Internet Is Good: Community Governance That Works
Well (Berkman Ctr. for Internet and Soc'y, working draft, 1998), *at* http://cyber.law.harvard.edu/
people/reagle/regulation-19990326.html. For contrary views, see Netanel, *supra* note 321; Henry
H. Perritt, Jr., *Cyberspace Self-Government: Town Hall Democracy or Rediscovered Royalism?,* 12
BERKELEY TECH. L.J. 414, 437–517 (1997).

on what Habermas calls "strategic" behavior.[327] All of these activities take place in the shadow of national regulation. National regulation has only limited effect on Internet discourse today, because — at least as regards the exchange of information — the Internet has become a transnational phenomenon, currently not subject to the control of any single nation.[328]

B. Socialization and the Reproduction of Non-Hierarchy

Socialization, or education, in the Internet traditions, is an important part of keeping informal standards alive. The pressure on IETF procedures from the influx of new members is nothing compared to the strain on Internet norms caused by the massive influx of new users unschooled in the informal Internet norms:

> In the past, the population of people using the Internet had "grown up" with the Internet, were technically minded, and understood the nature of the transport and the protocols. Today, the community of Internet users includes people who are new to the environment. These "Newbies" are unfamiliar with the culture and don't need to know about transport and protocols.[329]

The Internet community is aware of the problem — almost hysterical about it at times.[330] The community is responding to the influx with a massive education effort, producing FAQs, books, web pages, and of course, flaming away at violators of netiquette. Whether these efforts will suffice to preserve the Internet's norms remains unclear.

Some de facto Internet standards are set by a combination of peer pressure and socialization. The main channels by which this is communicated, other than one-to-one education, is through "FAQs." These documents, prepared by self-selected volunteers, attempt to distill some Internet wisdom, or Internet norms, for newcomers.

Two types of FAQs deserve mention. While most FAQs are identified with a particular topic, newsgroup, or mailing list (for example, the alt.fan.dan-quayle FAQ, or the net.loons FAQ), there are also meta-FAQs about how to behave on the Internet. Many of these attempt to set out the basic rules of Internet conduct, or "netiquette." Basic rules of netiquette include asking permission before forwarding a private message, respecting copyrights, reading the FAQ before asking silly

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[327] Recall that "strategic" behavior consists of attempting to persuade others to do as one wishes by the use of trickery, force, or threat, rather than attempting to persuade others of the rational merits of one's cause. *See* 1 COMMUNICATIVE ACTION, *supra* note 43, at 286–337.

[328] *See* Froomkin, *supra* note 121, at 142.

[329] RFC 1855, *supra* note 20, § 1.1.

[330] The fear seems to center on the "invasion" of AOL users, who are considered particularly clueless.

questions, and remembering not to send messages in all capital letters except for emphasis.

A FAQ is typically the work of one person, or a small, self-selected committee. More recently, however, there have been attempts to codify and propagate basic ideas of netiquette in a more organized way, either through the RFC process or under the auspices of the ISOC and other bodies. For example, an IETF working group produced an RFC describing "a minimum set of guidelines for Network Etiquette (Netiquette)."[331] The RFC contains guidelines for email, Internet talk,[332] mailing lists, Usenet, and other Internet applications. The basic suggestions are not controversial. For instance, the email section directs that one should "[n]ever send chain letters" via email, the Internet-talk section cautions "that talk is an interruption to the other person," and the mailing list and Usenet sections note that "a large audience will see your posts[, which] may include your present or your next boss."[333]

While these documents are sometimes influential and may contribute to norm formation, it is hard to see them as creating actual rules, and thus it is difficult to see how questions of legitimacy apply any more than they do to a book of table manners.

C. Delegation: The Usenet Example

Usenet, known to many of its users as "news" or "netnews," is a distributed bulletin board system. A bulletin board system is a means of communication by which users leave messages for others to read. Subsequent readers can reply, leading to dialogue, discourse, or cacophony, as the case may be. To understand Usenet, imagine an infinitely long chalkboard, nearly indelible chalk, a prominent location, and a sign that says, "any comments?"

Of the noninstitutional standards-setting processes, the Usenet group creation process comes closest to meeting Habermas's conditions for the best practical discourse, and it does so in an atmosphere that is surprisingly polarized. One might think that creating a new group would be uncontroversial, as the only cost is storage space. But the level of controversy in the Usenet wars exceeds that of even the tensest IETF debate.[334] Like the IETF procedure for developing Internet

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[331] RFC 1855, *supra* note 20.

[332] Internet talk is a utility that allows direct, real-time, terminal-to-terminal communication.

[333] RFC 1855, *supra* note 20, §§ 2.1.1–2.1.2, 3.1.1.

[334] *See* Henry Edward Hardy, The History of the Net (1993) (unpublished Master's thesis, Grand Valley State University), *available at* http://www.ocean.ic.net/ftp/doc/nethist.html (discussing some of the Usenet fights). Henry Hardy describes an early and fierce Usenet battle:

> The most significant flame war of Usenet history was over the "Great Renaming" when the seven main hierarchies {comp,misc,news,rec,sci,soc,talk} were created and the old groups {net,fa,mod} were all moved around. There was great gnashing of teeth as groups were sorted and tossed around and relegated to their polities.

Standards, the Usenet group creation procedure allows for full discussion by all interested parties. From what I observed, as Usenet grew, the participants in debates about Usenet quickly became heterogeneous, at least compared to the participants in the IETF. They did not share a common professional socialization, and they had a propensity to engage in flame wars.

Usenet is divided into thousands of "newsgroups," each effectively its own specialized bulletin board. Newsgroups are organized in a topical and alphabetical hierarchy, each with an independent name, such as misc.legal, rec.pets.cats, or comp.risks.[335] There is a newsgroup for practically every software and hardware product in widespread use, and a newsgroup exists for almost every social, sexual, political, and recreational practice. Before the growth of the World Wide Web, Usenet was "probably the largest decentralised information utility in existence,"[336] although a measure of centralization may have set in now that Google archives newsgroups.[337]

Usenet operates on a very different technical principle from the Web. On the Web, information resides on one host computer, and users instruct their clients to retrieve a copy when they wish to view it. On Usenet, messages posted by a user are directed to an existing newsgroup. Copies of the message are then gradually copied to every participating machine that carries that newsgroup,[338] where they are held for the convenience of local users. Since a full basic Usenet feed now runs around 500 gigabytes a day[339] and can reach 1000 gigabytes if one carries everything,[340] carrying Usenet imposes significant storage costs on host machines, particularly since it is common practice to ar-

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Id. at 10 (quoting Posting of G. Wolfe Woodbury, wolfe@wolves.Durham.NC.US, to alt.folklore.computers, Re: Famous flame wars, examples please? (Nov. 29, 1992), *at* http://groups.google.com/groups?q=g:thl2766687832d&dq=&hl=en&lr=&ie=UTF8&selm=1992No v30.040947.18262%40wolves.Durham.NC.US).

[335] *See* Gary C. Kessler & Steven D. Shepard, A Primer On Internet and TCP/IP Tools 33 (Network Working Group, Request for Comments No. 1739) (Dec. 1994), *available at* http://www.ietf.org/rfc/rfc1739.txt.

[336] FREE ON-LINE DICTIONARY OF COMPUTING (FOLDOC), *at* http://wombat.doc.ic.ac.uk /?USENET (last visited Dec. 7, 2002). "Network News Transfer Protocol is a protocol used to transfer news articles between a news server and a news reader. The uucp protocol was sometimes used to transfer articles between servers, though this is probably rare now that most [backbone] sites are on the Internet." *Id.*

[337] *See* Google Groups, 20 Year Usenet Archive Now Available (Dec. 11, 2001), *at* http://www.google.com/googlegroups/archive_announce_20.html.

[338] The technical details appear in M. Horton & R. Adams, Standard for Interchange of USENET Messages (Network Working Group, Request for Comments No. 1036) (Dec. 1987), *available at* http://www.ietf.org/rfc/rfc1036.txt.

[339] *See* Daily Usenet report — archives, *at* http://sunsite.dk/statistics/inn/ (last visited Dec. 7, 2002).

[340] *See* Wirehub Internet, DIABLO statistics for newsfeed.wirehub.nl (all feeders) (Alt Freenix #36), *at* http://informatie.wirehub.net/news/allfeeders/ (last visited Dec. 7, 2002).

chive groups for a week to a month in order to accommodate users
who do not check news every day. Many sites therefore do not carry
every group.

The administrator of each site (computer or LAN) that participates
in Usenet is free to carry as few or as many groups as he or she wishes.
Because a newsgroup concerned with any but the most parochial topic
needs wide propagation to function effectively, the smooth functioning
of Usenet depends on the ability of the operators to come to some
agreement about which groups to carry and how to label those groups.
This coordination problem is particularly acute because the various
system administrators have very little contact with each other and usu-
ally feel that they have better things to do than to worry about
whether economics qualifies to be under the "sci" hierarchy or should
be relegated to "misc" or "soc.religion." Sites that have unlimited disk
space can solve the problem by carrying everything; ordinary sites
must choose, yet their administrators often lack both the knowledge
that might allow them to select the groups that their users would find
most valuable and the time or motivation to learn.

Usenet propagation used to rely heavily on the good offices of the
"backbone," known to its detractors as the "backbone cabal."[341] Be-
fore communications costs dropped and before it became easy to
transmit Usenet news through an Internet link, the large majority of
Usenet traffic propagated widely due to the efforts of a small number
of backbone sites that were willing and able to pay the long-distance
telephone charges required to ensure swift transmission of Usenet traf-
fic across the country and the globe. With propagation came power,
and these sites, notably UUNet, were able to shape Usenet policies.[342]
Although UUNet no longer enjoys nearly as much control over Usenet
propagation, its policies — and the reliance they engendered in most
site administrators — live on.

Like the Internet Standards that they resemble, Usenet newsgroup
creation procedures have become formalized in a set of Guidelines.[343]

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[341] See, e.g., Posting of Eldarion ap Aragorn, benn@sphinx.Uchicago.UCCP, to Newsgroups:
net.news, This is Summary #3: The future of the USENET community (Nov. 20, 1985), at
http://groups.google.com/groups?selm=1365%40sphinx.UChicago.UUCP&oe=UTF8&output=gpla
in. But see Richard Sexton, The Cabal, at http://www.vrx.net/richard/cabal.html (last visited Dec.
7, 2002).

[342] See Edward Vielmetti, What is Usenet? A second opinion (Dec. 28, 1999), at
www.faqs.org/faqs/usenet/what-is/part2.

[343] For a full description of the procedures, see David C. Lawrence, How To Create a New Use-
net Newsgroup (July 3, 2000), at http://www.faqs.org/faqs/usenet/creating-newsgroups/part1/ [here-
inafter Guidelines]. This document was last updated by Lawrence in 1997, and a revision is now
in progress. See Russ Allbery, The Big Eight Newsgroup Creation Process, at
http://www.eyrie.org/~eagle/faqs/big-eight.html (last modified Nov. 13, 2002) ("This document is
intended as a replacement for the current 'Guidelines for Usenet Newsgroup Creation' and is be-
lieved by its author to already more accurately reflect the current process than that document.").

The Guidelines require that the proponent of a new group in the major hierarchies draft a proposed charter, submit it for discussion in news.announce.newgroups and any other appropriate newsgroups, and amend it in accordance with the comments received. When consensus has been achieved that the charter is ready, a Call for Votes is issued.[344] Voting has three aims: first, to demonstrate that there are enough interested persons to justify creating the group; second, to ensure that the group does not duplicate other existing groups (if it did, the participants in those groups would presumably vote against the new group so as not to dilute their existing ones); third, to ensure that the proposed name for the newsgroup fairly represents its contents and is properly located within the hierarchy.[345]

Votes are collected and counted by a neutral party, drawn from the "Usenet Volunteer Votetakers."[346] The voting period varies from twenty-one to thirty-one days, and anyone with Usenet access may vote either for or against the proposed newsgroup. Any newsgroup that gets 100 more yes votes than no votes and also receives at least a two-thirds majority in favor of creation is passed.[347]

New Usenet groups are created by sending out a "control" message, which is an ordinary message with a predetermined form; groups are deleted in the same fashion, although legitimate decisions to delete a group are rare. Many users of Usenet have the technical capacity to send a "control" message; the technical obstacles that might prevent them from sending control messages are usually easy to evade. As a result, spurious messages are not uncommon, and most sites that carry Usenet do not act immediately on control messages. Instead, they send them to the system administrator who must then decide whether to

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For a discussion of pre-Guideline Usenet group creation, see Posting of Jim Riley, jim-rtex@pipeline.com, to Newsgroups: news.groups (May 13, 2002), *at* http://groups.google.com/groups?selm=abou1e%24m3s%241%40oslb2.atl.mindspring.net&output=gplain.

[344] *See Guidelines, supra* note 343. The alt. newsgroups work differently. *See, e.g.,* Mark Kelly, *How To Create an ALT Newsgroup, at* http://nylon.net/alt/newgroup.htm (last modified Dec. 7, 2002).

[345] There are numerous naming conventions designed to make it easier to find a group on a given topic. For example, discussions of religious issues are found under soc.religion.{name of religion}, not as top-level entries under soc. Thus, for example, discussions of scientology would be found under soc.religion.scientology, not soc.scientology or misc.scientology.

Usenet denizens became surprisingly passionate about naming. In some cases, they were convinced that the creation of a new group could steal readers from their favorite group. In another prominent case, they argued violently that sci.aquaria should not be created, because aquarium-keeping is not a science. *See* Usenet, net.legends FAQ, Richard Sexton, http://www.vrx.net/usenet/legends/legends-faq-Richard_Sexton.html (last visited Nov. 14, 2002).

[346] *Guidelines, supra* note 343. Prior to the institutionalization of the "Usenet Volunteer Votetakers," the task of finding neutral votetakers belonged to the proponents of the new group, until convincing accusations of vote fraud were leveled at a person who apparently served as his own votetaker under a pseudonym.

[347] *Id.*

honor them.   As noted above, however, system administrators fre-
quently do not want to take the time to figure out what is a legitimate
group that other systems around the world are likely to carry, and
what is a practical joke.   In practice, therefore, for many years most
system operators programmed their systems to accept control messages
only from one source: tale@uunet.uu.net, which is the Usenet control
address for David C. Lawrence,[348] a Usenet pioneer.[349]

Usenet administrators relied on "Tale" to administer the newsgroup
creation process and to send out control messages only for those
groups that complied with the Guidelines.   While there remained other
ways of creating a group, notably the "alt." hierarchy, those alterna-
tives propagated less widely than groups in the major Usenet hierar-
chies that Tale administered.   As a result, a large number, perhaps a
majority, of sites had effectively delegated administration of the news-
group creation process to one person.[350]

The phenomenon of delegation to a trusted person, such as Tale,
has sometimes been called reliance on "elders"[351] or even "grey-
beards,"[352] because so many of the Internet engineers who found them-
selves in such roles tended to sport them.   In Habermasian terms, this
can be seen as reliance on a "maxim,"[353] or even what Habermas calls
"rationally motivated trust."[354]

*1. Mass Revenge/Vigilante Justice: The Usenet Spam Problem and
Its (Partial) Solution.* — In Internet parlance, to "spam" is to email or
post the same message over and over in different fora, and spams are
the email or Usenet[355] posts that result from spamming.[356]   Spamming

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[348] Before Lawrence took on this role, Gene Spafford ("spaf") published a listing that played a
similar role.   *See* Gene Spafford, That's all, folks (Apr. 29, 1993), *at* http://www.vic.com/~
dbd/minifaqs/spaf.farewell.

[349] Lawrence has been active in Usenet since its founding, and is an employee of UUNet, which
remains a major Usenet news disseminator.   He also created and guides the "Usenet Volunteer
Votetakers."

[350] The rise of the Web changes the picture slightly.   Since Web access to Net news tends to be
through centralized rather than distributed sites (first dejanews and now Google), the alt. hierar-
chy enjoys equal prominence and accessibility to the "majors."   *See, e.g.,* http://www.google.com
/grphp?hl=en&ie=UTF8&oe=UTF8&q= (last visited Dec. 7, 2002) (listing the alt. hierarchy at the
top of its alphabetical list of forums).

[351] Reagle, *supra* note 326 ("Elders are citizen engineers who built wonderful things.").

[352] Craig Simon, *The Technical Construction of Globalism: Internet Governance and the DNS
Crisis* (Oct. 1998), *at* http://www.rkey.com/dns/dnsdraft.html.

[353] *See* JUSTIFICATION, *supra* note 7, at 6–12, 64, 173; *supra* note 85.

[354] *See* 2 COMMUNICATIVE ACTION, *supra* note 66, at 181.

[355] For a discussion of how Usenet works, see *supra* pp. 821–23.

[356] The term comes from the Monty Python song in which the word "spam" is repeated over
and over and over and over and over.   *See* The Net Abuse FAQ, § 2.4, *at* http://www.
cybernothing.org/faqs/net-abuse-faq.html (last modified Dec. 23, 1998) [hereinafter Net.abuse
FAQ].   Spamming can be carried out in any number of ways.   A person can send mail to many
mailing lists, directly to users whose names have been culled from mailing lists or newsgroups, or
by individually posting the message to many (or even all) newsgroups.   Email spam, discussed in

can be carried out in any number of ways. The spam phenomenon began on Usenet, and Usenet users have had longer to develop their collective response.

Usenet-compatible software allows the user to indicate the group(s) to which a message (called a "post" or "posting") should be directed. Rather than being marked to show it is a copy,[357] a spam is individu-

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the next section, now probably dwarfs Usenet spam, but the issues are similar. Spam can also be created by a computer program programmed to respond to incoming Usenet messages.

Perhaps the most famous spam program was the "zuma-bot": "Serdar Argic" was the name attached to innumerable Usenet posts claiming that the Armenians committed genocide against the Turks. (Most historians believe it was the other way around. *See, e.g.,* 1 ENCYCLOPEDIA OF GENOCIDE 61–102 (Israel W. Charny ed., 1999)). Some Usenet detective work linked the Serdar name with two different people, first Hasan B. Mutlu, an employee of AT&T Bell Laboratories, and then Ahmet Cosar, a former student at the University of Minnesota. *See* FAQ for alt.fan.serdar-argic, §§ 2.2, 2.4, *at* http://www.vic.com/~dbd/minifaqs/alt.fan.serdar-argic.faq (last modified Mar. 6, 1994). Serdar Argic's posts were concentrated in a small number of newsgroups, such as soc.culture.turkish, soc.culture.russia, *see id.* § 3, but were so numerous at times as to drown out almost everything else. In addition to large numbers of semicoherent rants on the subject of Armenian genocide that were appended as replies to Usenet posts on matters pertaining vaguely to Armenia, Turkey, and other nearby states, Serdar Argic appears to have used a computer program that searched all articles in certain groups for the word "Turkey" and appended anti-Armenian replies. Thus, the signature line "On the first day after Christmas my truelove served to me . . . Leftover Turkey!" received a long, rambling reply about Turkish suffering at the hands of the Armenians. *See id.* § 2.6. This incident earned Serdar Argic the sobriquet the "zuma-bot" as the postings appeared to originate at a computer with the (probably forged) address of "zuma."

In contrast to relatively successful vigilante justice meted out to other early mass spammers, attempts to stop the zuma-bot usually failed for three reasons. First, the zuma-bot posted to only a limited number of groups. Second, the posts, while repetitive, were not carbon copies of each other. Perhaps because the zuma-bot's activities were confined to fewer than twenty newsgroups, no one set up an automated canceling device to respond to its posts. Third, zuma got its Usenet feed from anatolia.org, which was registered to Ahmet Cosar, *see id.* § 2.2, and anatolia.org got its Usenet feed from UUNet, which considers itself a common carrier bound to serve all customers. At the time, there seemed to be relatively little that could be done to stop the zuma-bot, or anyone else with similar Internet access, although some people from time to time sent out messages canceling posts by Serdar Argic in certain newsgroups. *See id.* § 7. Cancellation usually requires a forged posting purporting to be from the original sender. Since Serdar Argic appeared to control its own Internet host, it was less vulnerable to targeted anti-spam tactics.

[357] A non-spam message can easily be "cross-posted" to more than one group. Cross-posting in itself is not spamming. Often, cross-posting is appropriate because a topic may legitimately be of interest to more than one group. A legal question about the Clipper Chip, for example, legitimately belonged in talk.politics.crypto, misc.legal, alt.privacy.clipper, and perhaps misc.legal.moderated as well. Cross-posting a message ensures that responses to a message will be cross-posted as well, allowing cross-fertilization among different newsgroups on topics of mutual interest.

Cross-posting has another crucial property: it ensures that the recipient need only download and read the message once. The host machine stores only one copy of a cross-posted message. The message's headers identify it as one that belongs in multiple newsgroups. Most newsreading software allows users to track which messages they have read across newsgroups. If the user reads a cross-posted message and then encounters it again in another group, the software will automatically mark the message as previously read, saving the user the annoyance of viewing it many times.

ally posted to every newsgroup with no consideration of the message's relevance to that group's purposes. This has several disagreeable effects. First, each host computer is tricked into storing multiple copies of the same message instead of one message with a header identifying the cross-post. If the message is long, and storage space is tight, this redundant storage burdens the system. Second, users have no way of automatically flagging the message as read after their first encounter with it. Depending on the nature of the user's Internet access, repeated spams may require the user to delete the message manually every time it appears on the screen. Third, users who pay for Internet access by the byte or the minute will be forced to pay for every incidence of the message; similarly, users who download their news from a remote computer will have to wait longer while each of the multiple copies is downloaded. If users access their news by telephone, this may cost them additional telephone charges. Whether spamming involves a financial cost or not, many people find it very annoying — the electronic equivalent of mass junk mail.[358]

The response from the Usenet community has been vitriolic. Pioneering spammers Canter & Siegel,[359] for example, received 20,000 emails complaining about their original spam, and "reams" of junk faxes.[360] The traffic, including "mailbombs" (long, irrelevant messages designed to clog the recipient's mailbox), became so great that the computer system providing Canter & Siegel's Internet access crashed more than fifteen times, leading the company that owned the system to terminate Canter & Siegel's account as an act of self-preservation.

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[358] Most newsreading software allows the user to define a "killfile" instructing the software to ignore all messages from a particular source. It is possible to killfile the author of a spam, thus ignoring multiple posts. However, by the time one is aware that one has encountered a spam, it is too late to avoid any costs of downloading, and the damage is already done. In addition, technically unsophisticated users are often unaware of this feature of their software.

[359] On April 12, 1994, attorney Laurence Canter ran a program from his computer in Arizona that individually posted copies of a message entitled "Green Card Lottery 1994 May be the Last One!! Sign up now!!" to approximately 6000 newsgroups. The message, the first large-scale commercial spam in the history of Usenet, advertised the Canter & Siegel law firm's services in helping would-be United States immigrants to complete the application forms for the "green card" lottery being held by the Immigration and Naturalization Service (INS). Charles Arthur, *A Spammer in the Networks*, NEW SCIENTIST, Nov. 19, 1994, at 16. (In fact, applicants could, if they wished, have obtained the forms directly from INS and applied for free, but the message did not explain this option. *See* U.S. Dept. of State, Bureau of Consular Affairs, Registration for the Diversity Immigrant (DV-1) Visa Program, 59 Fed. Reg. 15,303 (Mar. 31, 1994) (describing application procedures).) Confronted with widespread condemnation by other Usenet users, Canter and fellow attorney Martha Siegel not only were unrepentant but also wrote a book advocating spamming as the road to riches. *See* LAURENCE A. CANTER & MARTHA S. SIEGEL, HOW TO MAKE A FORTUNE ON THE INFORMATION SUPERHIGHWAY: EVERYONE'S GUERRILLA GUIDE TO MARKETING ON THE INTERNET AND OTHER ON-LINE SERVICES (1994). The book claims that their spam garnered them "slightly in excess of 1000 clients" and that they made $100,000. *Id.* at 32.

[360] Arthur, *supra* note 359, at 16.

Canter & Siegel then switched to a second company, Netcom, which closed their account as a precaution when Canter gave a television interview in which he promised to spam again.[361]

The striking thing about the email response to spammers such as Canter & Siegel was that the response appeared to be both widespread and spontaneous. So far as one can tell, spammers who found their mailboxes clogged were not the victims of one or two angry people who set up mailbombing programs; that came later. Rather, the spammers were victims of mass action: thousands of people who noticed the spam independently "replied" to the message either by quoting it in full (most news and mail software makes it very easy to reply to sender quoting the sender's text), or by attaching a long, irrelevant reply. There did not appear to be any overt coordination among the counter-spammers; they seemed to be using a feature of the software in mass petulance, which amounted to mass self-defense.[362]

The most significant anti-spam developments, however, were the creation of news.admin.net-abuse and the rise of the Internet vigilante. News.admin.net-abuse is a moderated newsgroup; that means a human being screens every post before it is forwarded to the group as a whole. This screening keeps down the volume of posts and keeps up the quality (sometimes called the "signal/noise ratio"). This newsgroup is the place where spam sightings are reported. Members debate whether a given set of messages is large enough to qualify as spam and discuss the ethics and mechanics of message cancellation. According to the news.admin.net-abuse FAQ, the group has reached a rough consensus that any Usenet message reposted (as opposed to cross-posted) more than twenty times qualifies as spam.[363]

News.admin.net-abuse is also a place where Internet vigilantes discuss their activities. Perhaps the most colorful of the anti-spam vigi-

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[361] *Id.*

[362] Another tactic with some effectiveness is for many offended recipients of spams to complain to the operator of the system that provides the spammers with Internet access. Being seen to endorse spam is bad for business; having to reply to dozens of angry letters is annoying; having users who get so much hate mail that they crash your system is disastrous. Email complaint campaigns have driven some service providers to suspend spammers' accounts or to require spammers to apologize and promise never to spam again as a condition of keeping their accounts. *See* Madeleine Acey, *Action Against Spam Heats Up in Europe* (Apr. 20, 1999), http://www.techweb.com/wire/story/TWB19990420S0017 (reporting that a British ISP required a spammer to sign a third party beneficiary agreement promising never to spam again via any ISP); Andrew Conry-Murray, *Spam Smackdown*, NETWORKMAGAZINE.COM (May 6, 2002), *at* http://www.networkmagazine.com/article/NMG20020429S0010 ("Casual spammers are easy to shut down because service providers are usually diligent in terminating e-mail accounts that generate bulk mail.").

[363] Net.abuse FAQ, *supra* note 356, § 3.1.

lantes started operating in 1994 under the alias "Cancelmoose [tm]."[364] "Cancelmoose [tm] quickly gained near unanimous support from the readership of" the three newsgroups devoted to usenet spam control and usenet administration: news.admin.policy, news.admin.misc, and alt.current-events.net-abuse.[365] Originally, the Cancelmoose monitored Usenet for spams and sent out cancellation messages to erase them.[366] A cancellation message instructs all the computers in Usenet to delete a message. Although in theory only the original sender of a message should be able to cancel a message (for example, a message sent in error), in practice cancellation messages can be forged. Because of this possibility, some Usenet hosts do not honor cancellation messages, but the majority do. After cancelling a spam, the 'Moose would post an anonymous message to news.admin.net-abuse announcing the action and inviting discussion of its reasonableness. The group appeared to approve of the 'Moose: he was lauded as "altogether admirabl[e] — fair, even-handed, and quick to respond to comments and criticism, all without self-aggrandizement or martyrdom."[367]

2. *The Usenet Death Penalty.* — In the early days of the Usenet, users, not system administrators, were the source of spam. Running a news site was complicated and often required expensive hardware. Over time, as the software became easier to use, Internet configuration became less arcane, and as the price of hardware continued to drop, it became increasingly common for spammers to become their own system administrators. Simultaneously, software designed to automate spamming became easily available; indeed, one of the most common spams marketed the software, or services based on it. Thanks to these new tools, would-be spammers no longer had to rely on Internet services provided by others. Professional system administrators tended to share the Usenet community's norms against spamming, and they frequently cut off an offending user. When spammers were able to dispense with the middlemen and become their own Internet Service Provider (ISP), they removed a key constraint on spam.

The combined effect of these developments was an enormous increase in the amount of spam. Entire newsgroups became unusable due to the quantity of irrelevant material. Storage costs increased, resulting in messages being kept for shorter periods. Spam crowded out

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[364] Cancelmoose[tm], *at* http://www.tuxedo.org/~esr/jargon/html/entry/Cancelmoosetm.html (last visited Dec. 7, 2002).

[365] Net.abuse FAQ, *supra* note 356, § 2.9.

[366] Cancelmoose[tm], *supra* note 364.

[367] Net.abuse FAQ, *supra* note 356, § 2.9. Part of the 'Moose's appeal may have been that the anti-spam campaign appeared completely selfless: "Nobody knows who Cancelmoose [tm] really is, and there aren't even any good rumors." *Id.*; *see also, e.g.*, Gnus 5.3 Manual, § 8.10, *at* http://sunland.gsfc.nasa.gov/info/gnus/NoCeM.html (last visited Dec. 7, 2002).

the real content, reducing the utility of Usenet for infrequent readers. Users who had metered Internet access or telephone service also suffered a financial cost.

Enter the Usenet Death Penalty (UDP).[368] A site subjected to a UDP has every single Usenet post originating from it immediately canceled or at least not forwarded. Thus, every person using that ISP loses the ability to post to Usenet regardless of his or her guilt or, in most cases, innocence.[369] NNTP, the basic Usenet news program, is set up to accept cancels by default. News administrators who do not take explicit steps to change this default effectively allow all articles originating from a site subject to the UDP to be automatically removed from their news spool, without any human intervention.

Anyone can initiate a debate over a UDP by posting a call in the appropriate newsgroup, news.admin.net-abuse.usenet. The proposal may be ignored, or it may prompt a discussion. If there is a consensus that the UDP is justified, a notice is (usually) posted to the newsgroup and mailed directly to all known addressees at the offending site. After a short period, currently five business days, the UDP goes into effect and volunteers start sending automated cancel notices unless the site demonstrates that it will change its policies.[370]

Usenet cancellations, and perhaps even the UDP, are decisions that arguably could be justified as resulting from a process of norm formation emanating from a Habermasian discourse. In most instances, decisions whether coercion is appropriate occur primarily after public debate in a newsgroup — news.admin.net-abuse.[371] Furthermore, this debate is typically characterized by widespread agreement among participants (other than the spammers themselves) regarding the seriousness of the problem and the validity of the solution. Nevertheless, the UDP compares unfavorably to the Usenet group creation process.

The UDP remains controversial because self-selected vigilantes administer it, and especially because it harms large numbers of innocent users. Angry reactions by outraged innocents caused some soul-searching among advocates and implementers of the UDP. A Usenet Death Penalty FAQ justifies the use of the UDP as follows:

> Historically, as any society has grown (and usenet is a society of a sorts), people have rules that they believe should be enforced. A consensus on those rules is achieved, and the technical means to enforce those rules are developed. People who are trusted by the majority are allowed (or requested) to enforce those rules. In this case, the rules were set down by

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[368] *See* Usenet Death Penalty FAQ, *at* http://www.stopspam.org/usenet/mmf/faqs/udp.html (last visited Dec. 7, 2002).

[369] *Id.* §§ 1, 11.

[370] *Id.* § 7.

[371] *See supra* p. 828.

those administrators who actually run usenet — and who own and operate the actual hardware it runs on and purchase and utilize the bandwidth that it is connected with. Those who have volunteered or been asked to perform the spam cancel functions or UDP enforcement do so under "license," so to speak, of the majority of those who made the rules. They do so under a very strict code of conduct — and are constantly monitored to see that they do not exceed that code of conduct. If they do, that "license" is revoked and they are considered rogue and are shut down just as quickly as any other abuser. Greater than 90% of the spam canceling that goes on is done entirely by volunteer effort by those few trusted enough to fulfill that role without being accused of being rogue.[372]

Whether, given the collateral damage, tacit consent of this sort suffices is controversial. As one FAQ explaining how and why people send Usenet cancel messages to battle spam admitted, "[t]he ethics and morals of active UDPs are, of course, still in debate."[373]

D. Responses to Email Spam

Although originally the term "spam" referred only to inappropriately cross-posted Usenet messages, the growth in unsolicited commercial email (UCE) soon led to the adoption of the word as a reference to "make money fast" email and other unwelcome UCE. Spam email requires more effort on the part of the sender than do spam Usenet postings. A Usenet post need be sent once per newsgroup, and then the ordinary propagation of the network does the rest. While the number of newsgroups is growing, there are still only a few thousand in the main hierarchies. In contrast, email spam requires both a means of harvesting or guessing email addresses and a means of sending individual messages to each recipient.

There is no email equivalent of a Usenet cancel for an email once it has been sent. Some unhappy recipients of UCEs responded by mailbombing the senders. Others attempted to persuade the spammers' ISPs to close their accounts. Spammers countered by posting from false addresses. When that proved insufficient to foil recipients who knew how to read IP packet traces in email message headers, the spammers turned to new tactics. Having learned that they risked being disconnected if they used their own accounts, or their own ISPs, to send spam, the spammers began to take advantage of the Internet's

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[372] *Id.* at § 14.

[373] Cancel Messages: Frequently Asked Questions, Part 3/4 (v1.75), § 8(D), *at* http://www.faqs.org/faqs/usenet/cancel-faq/part3/.

many "open relays" — mail servers configured to allow third parties to send mail to anyone — to send spam via other ISPs.[374]

Angered by what they considered a theft of service — using someone else's equipment to send email — Internet pioneer Paul Vixie and others[375] established the Mail Abuse Prevention System Realtime Blackhole List (MAPS RBL).[376] As they describe it, "[t]he MAPS RBL [sm] is a system for creating intentional network outages ("blackholes") for the purpose of limiting the transport of known-to-be-unwanted mass e-mail."[377] When the MAPS RBL maintainers decide — unilaterally — that they have identified an ISP that is "friendly, or at least neutral, to spammers" by hosting them or having an open relay, they add it to their blacklist and refuse all Internet traffic from that site until its administrator convinces the RBL maintainers that the ISP has changed its ways.[378]

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[374] *See* What Is an Open Relay?, *at* http://maps.vix.com/rbl/relay.html (last revised July 14, 1998). For a discussion of how open relays work, see Paul Vixie, MAPS RBL Rationale, *at* http://mail-abuse.org/rbl/rationale.html#RelaySpam (last revised July 19, 2000):

> Since professional spammers are widely blackholed, blockaded, and attacked, they tend not to try to reach millions of mailboxes directly from their own servers. Reasons vary from not wanting their connection to be shut down, to not having enough computational or bandwidth resources to actually send mail to every victim they want to spam. Their solution to this problem is called Relay Spam whereby they use third party mail relays owned by innocent and unknowing folks. Rather than opening 1,000,000 connections to 1,000,000 mail servers to pollute 1,000,000 mailboxes one at a time, they instead open 1,000 connections to 1,000 mail servers and pollute 1,000,000 mailboxes 1,000 at a time. This saves them horsepower and bandwidth, and also allows them to reach mailboxes on mail servers who would never accept a direct connection from a spammer's network.
>
> Who are these third parties? Unfortunately, almost all Sendmail sites (which means almost all e-mail relays on the Internet) permit unlimited mail relay from any source to any destination. This is a holdover from the good old days when one could trust most Internet users not to intentionally annoy others and all Internet host operators not to intentionally steal service from others. . . . [T]here are tens of thousands of mail relays on the Internet which will probably never be upgraded.

Id. (emphasis removed).

[375] The MAPS team has described itself as:

> [M]ade up of people who have been on the net since before it was called "internet." [W]e [MAPS] did NCP, we did UUCP, we owned and operated IMPs. [T]o us, the collection of people who use parts of the IPv4 address pool are still a collective entity and we believe that (a) "they" ought to respect "our" privacy and (b) "we" ought to help "them" learn what they need to know to play in "our" sandbox. [T]hus has it ever been, and thus we believe it must ever be — or at least, until senders are paying for their own traffic at which point the collective dynamic can shift toward the every-man-for-himself model that spammers are already following.

MAPS RBL versus ORBS — 21 September, 1998, *at* http://www.rts.com.au/spam/maps_versus_orbs_faq.html.

[376] The Mail Abuse Prevention System Realtime Blackhole List's website is located at http://mail-abuse.org/rbl/.

[377] *Id.*

[378] Vixie, *supra* note 374, *at* http://mail-abuse.org/rbl/rationale.html#Introduction.

Being listed on the MAPS RBL list can have a devastating effect on the target's Internet connectivity because many other sites copy the RBL[379] and then refuse all email originating from the blacklisted site. Users on a blacklisted machine find that they are unable to exchange email with any site that uses the RBL. Indeed, participants in the RBL project will not even forward mail originating from a banned site. The web traffic of blacklisted sites is unaffected, but email bounces back to the sender with a pointer to the RBL home page. "Being listed in the RBL [sm] is the equivalent of an Internet Death Penalty, because of the sheer numbers of RBL [sm] subscribers and the broad scope of the denial of service by those subscribers."[380]

The designers of the RBL justify this break with the assumption that all participants in the network will forward mail[381] by stressing their property rights in their equipment:

> No Internet user has any fundamental right to send you e-mail or any other kind of traffic. All information exchange on the Internet is consensual, and unless you opt into some advertising feed, the automatic presumption on the part of all Internet users is that you would be annoyed by e-mail which promotes a unilateral cause (such as making money for the sender). By creating and maintaining the MAPS RBL [sm] we are exercising our right to refuse traffic from anyone we choose. We choose not to accept any traffic at all from networks who are friendly in any way to spammers. This is our right as it would be within anyone's rights to make the same choice (or a different one, so long as only their own resources were affected by their choice).[382]

The MAPS RBL web pages stress that "[o]ur goals in doing this are to stop spam and educate relay operators. We almost always remove

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[379] *See* Paul Festa, *Hotmail Uses Controversial Filter To Fight Spam* (Nov. 9, 1999) (Microsoft's Hotmail started filtering emails from servers on MAPS's RBL list), *at* http://news.cnet.com/news /2100-1040-232706.html; James Glave, *Netcom Escapes Anti-Spam Blackhole*, WIRED NEWS (Feb. 4, 1998) ("80 anti-spam network administrators around the world currently blank out the 400-odd sites on the RBL at their routers . . . and thousands more use the list remotely. . . . "), *at* http://www.wired.com/news/news/technology/0,1282,10086,00.html; Debbie Scoblionkov & James Glave, *MSN Emerges from Black Hole*, WIRED NEWS (June 12, 1998) (MSN, with more than two million customers, cut off for three and a half days), *at* http://www.wired.com/news/technology /0,1282,12957,00.html.

[380] MAPS DUL FAQ, *at* http://mail-abuse.org/dul/faq.htm#b_8.

[381] As Vixie writes:

> Internet technology is notably lacking in the kind of harsh, prescriptive, contractual, authorization based access controls which have been found in virtually all pre-Internet proprietary protocol suites. One assumption is that any host on the network should be allowed to send mail to any other host on the network, since mail will only be sent if it is expected to be of direct and equal benefit to the sender and recipient. Another assumption built into Internet's protocols is that mail should always be relayed if it is not on its final host, since this condition is not supposed to occur without the permission of the relay's operator.

Vixie, *supra* note 374, *at* http://mail-abuse.org/rbl/rationale.html#Openness (emphasis removed).

[382] *Id. at* http://mail-abuse.org/rbl/rationale.html#Rights (emphasis removed).

relays from the MAPS RBL [sm] as soon as we are contacted by an apparently-cooperative relay operator, and we spend a lot of our volunteer effort helping people upgrade their mailers to get them to stop relaying indiscriminately."[383]   Nevertheless, MAPS has become quite controversial, attracting lawsuits[384] and criticism.[385]

For all of its noble motives, the RBL project seems to be a clear case of coercive, strategic behavior.[386]   The RBL is not really characterized by collaborative decisionmaking at all, but rather by successive independent actions: the originators blacklist a site, then others choose, voluntarily and independently, to refuse to forward email originating from the blacklisted site.   Anti-spam efforts such as the RBL and the spontaneous mailbombing of spammers have two troubling properties. First, both anti-spam self-help activities and the RBL cut off or greatly reduce the effective Internet access of the alleged spammer, and often of innocents who share an ISP with a spammer.   Although this outcome affects only one channel of communication, it nonetheless comes perilously close to censorship violating the fundamental discourse principle that discussions must be open to all.   Second, direct anti-spam action is unabashedly strategic behavior as it relies on force rather than reason: the objective is to intimidate ISPs into closing down the parts of their services that spammers use.   Rather than engaging the spammers or the ISPs in dialogue, the anti-spammers are retaliating. Retaliation might be effective, but it is not discourse.[387]

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[383] *Id. at* http://mail-abuse.org/rbl/rationale.html#RelaySpam (emphasis removed).

[384] *See* Media3 Techs., LLC v. Mail Abuse Prevention Sys., LLC, No. oo-CV-12524-MEL, 2001 WL 92389 (D. Mass. Jan. 2, 2001) (denying a preliminary injunction against MAPS). This decision suggests, however, that MAPS is safe from suit so long as its targets are in fact enabling spam. *Id.* at *7. *Cf.* Press Release, Mail Abuse Prevention System, Exactis Suit Against MAPS Dismised (Oct. 3, 2001), *at* http://mail-abuse.org/pressreleases/2001-10-03.html; Press Release, Mail Abuse Prevention System, Media3 Sues over RRL Listings; Primary TRO Request Is Denied (Dec. 13, 2000), *at* http://mail-abuse.org/pressreleases/2000-12-13.html.

[385] *See, e.g.,* Lawrence Lessig, *The Spam Wars,* THE INDUSTRY STANDARD, (Dec. 31, 1998), *at* http://www.thestandard.com/article/display/o,1151,3006,oo.html ("The self-righteous spam police may or may not be right about the solution to spam; that's not the point. The problem is that policy is being made by people who threaten that if you complain or challenge their boycotts through the legal system, then you will suffer their boycott all the more forcibly."); Stop the MAPS Conspiracy!, *at* http://www.dotcomeon.com/ (a site criticizing MAPS and run by an ISP that was put on the blackhole list). *But see, e.g.,* David G. Post, *What Larry Doesn't Get: Code, Law, and Liberty in Cyberspace,* 52 STAN. L. REV. 1439 (2000), *available at* http://eon.law.harvard. edu/ilaw/Contract/Post_Full.html.

[386] *See supra* pp. 767–68.

[387] It might be argued there is as little point in reasoning with spammers as in trying to convert Hobbesian predators to ordinary conceptions of humanity.   It might even be argued that antispam activities such as the RBL are the consequence of a consensus rather than the formation of a plan.   The problem with this argument is that the facts do not support it.   Both CancelMoose and the RBL were coded and deployed first, and gained their support later.   The number of Cancel notices issued by the CancelMoose, and the growing number of sites using the RBL, both sug-

E. Market-Induced Standardization

Market pressures create de facto standards.[388]   The computer industry in general, and the Internet in particular, is a ruthlessly competitive market.   Information propagates quickly on the Internet; if someone learns of a superior product, or of a defect in a new product, this information can quickly be shared with interested parties.   Furthermore, if the product is freeware[389] or shareware[390] the Internet itself can be used to distribute it. Products judged to be superior can quickly establish themselves as a standard.[391]   Once a product be-

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gest a substantial body of agreement, although it is unlikely that this agreement rises to the level of consensus.

An argument that anti-spam activities are nevertheless legitimate (albeit not exemplars of the best practical discourse) might start with Habermas's claim that legal norms can have assent based on strategic behavior. In *Between Facts and Norms,* Habermas suggests that certain types of coercion, especially the type we call law, can be justified by reference to an underlying moral consensus, even if the individual parts of the actions of the legal system might not be. *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 459–60. As one might expect, this assertion is controversial, if only because the sanctioning of strategic behavior on the basis of some claimed "moral consensus" runs the risk of favoring some perspectives over others, even if those favored are not the ones that would be selected after the best practical discourse. Worse, at least from the point of view of theory that claims to transcend the fact-value distinction in a new and interesting way, this assertion sounds suspiciously like a social contract formulation. In any event, the argument is difficult to apply to anti-spam activities because these activities are merely vigilantism by self-appointed actors, and — so far, at least — it is hard to characterize them as the product of some underlying social consensus that vigilantism is appropriate.

[388] This is not only an Internet phenomenon, as anyone who owned a BetaMax can testify. For an economic analysis of the costs and benefits of standards, see Stanley M. Besen & Joseph Farrell, *Choosing How To Compete: Strategies and Tactics in Standardization,* J. ECON. PERSP., Spring 1994, at 117, 117–18 (asserting that firms manipulate standards for competitive advantage); Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects,* J. ECON. PERSP., Spring 1994, at 93, 93–95 (warning that pervasive standards lead to inefficient market outcomes in "systems markets," that is, markets where given products require other conforming products to function). *But see* S.J. Liebowitz & Stephen E. Margolis, *Network Externality: An Uncommon Tragedy,* J. ECON. PERSP., Spring 1994, at 133, 133–35 (arguing that the negative effects of standards identified by Katz and Shapiro are infrequent, if they exist at all).

[389] Freeware is distributed by the author on a no-cost basis.

[390] Shareware is distributed by the author on a try-before-you-buy basis. Anyone possessing an unregistered copy is encouraged to copy it and share it with other potential users. Users who like the product are asked to "register" it by sending in a small fee. Shareware works entirely on the honor system.

[391] Netscape Navigator, a product of the Netscape Communications Corporation, provides a particularly good example because it caught on so quickly. Netscape Navigator is a graphical browser for the World Wide Web, that is, a program that lets users read web pages created by others and stored on their computers. The company gave away millions of copies of version 1.0. *See* Steve Alexander, *The Great Netscape,* STAR TRIBUNE (Minneapolis), May 3, 1995, at D1 (stating that six million copies were given away); Peter H. Lewis, *Netscape Knows Fame and Aspires to Fortune,* N.Y. TIMES, Mar. 1, 1995, at D3 (stating that three million copies had been distributed since December 1994). Innumerable additional copies may have been made from those copies. The response by the Microsoft Corporation to the specter of a standard being dictated by a commercial rival is already legendary. *See* United States v. Microsoft, 84 F. Supp. 2d 9, 30–34,

comes a de facto standard, it is tremendously difficult to dislodge.[392]

Yet market-based standards are a clear example of an informal standard-setting process that cannot be seen as the result of *any* Habermasian discourse. The reason is primarily definitional. A proponent (or victim) of a system-theoretical sociology, Habermas divides life into three somewhat interdependent systems: the administrative, the economic, and the public spheres. The individual's "lifeworld" is made up of his or her contacts with everyone and everything else; it thus intersects all three spheres. Discourse theory aims to explain the creation of legitimate rules in the public sphere. These rules may then regulate conduct in the other spheres. The market is part of the economic sphere. The economic sphere is somewhat independent of the public sphere, and (in Habermas's view) it is not legitimate for exigencies of the market sphere to dictate rules directly to the public sphere. In contrast, it *is* legitimate for participants in a discourse to consider the effects of their choices on the economy. Indeed, one of Habermas's major complaints is that the "lifeworld" is being "colonized" by alien systems such as the market and the power-regulative systems of administration — that is, the market is dominating the arena in which public policy is set rather than being shaped itself by collective decisions. It follows that, within the Habermasian definitional construct, market-based choices cannot be considered legitimate without some prior, discourse-based decision to delegate those choices to the marketplace.[393] While free-marketers may say this demonstrates a deficiency in Habermas's theory, for present purposes it suffices to say that market-based, de facto Internet standards evolve without much political or philosophical discourse, much less practical discourse.[394]

44–46, 48–53 (D.D.C. 1999) (findings of fact) (finding that Microsoft withheld crucial technical information from Netscape, gave away its Internet Explorer browser for free, and manipulated its operating system to favor Internet Explorer), *aff'd in part and rev'd in part*, 253 F.2d 34 (D.C. Cir. 2001), *cert. denied*, 122 S. Ct. 350 (2001). Internet Explorer's market share now dwarfs Netscape's, although the release of Mozilla, a free, open source successor to Netscape, might cut IE's market share. *See* Evan Hansen, *Mozilla Nibbles at Microsoft Browser Lead*, ZDNet UK News, *at* http://news.zdnet.co.uk/story/o,,t269-s2117861,00.html (June 25, 2002) (noting that "Microsoft's iron grip on the Web browser market has slipped ever so slightly" due in part to Mozilla).

[392] *See, e.g.*, Lewis, *supra* note 391 (quoting the president of a website development company as saying, "[o]nce someone starts writing code for one platform, it's hard to leave it . . . . If we write a 2,000-page Web site for Netscape this spring, and Microsoft comes out with a superior system in October, we'd have to redo all our work to take advantage of it. Believe me, that's a lot of work.").

[393] Note that this theory does not demand a highly regulatory state, although it certainly has some tendency toward it. Participants in a best practical discourse might choose to have a very free market, so long as they could do so in a way that did not result in the market coercing participants in the discourse to such an extent that they were no longer able to meet the rather high conditions required for them to take part in the discourse.

[394] There is of course technical commentary in the trade press, on relevant mailing lists, and even in debates on the Internet and elsewhere about the comparative merits of various products.

There is no question that some Internet Standards, primarily those with network effects, are coercive. But it also seems clear that outputs of the IETF process command assent because they are perceived to be open and legitimate. In this respect they contrast with notorious proprietary standards. Indeed, the existence of the IETF's open standards process has given technologists a standpoint from which to criticize proprietary standards. The case of Kerberos, an IETF-approved standard for network security using encryption, illustrates this dynamic. In 1999, Microsoft attached proprietary extensions to the Kerberos security standard and shipped the altered version with its Windows 2000 operating system. As a result of Microsoft's modification of the standard, computers using the standard Kerberos software were not able to communicate securely with the Windows 2000 computers. Microsoft thus created a situation in which any networks that installed Windows 2000 on their desktops (where Microsoft was dominant) also would have to install Windows 2000 on their servers (where Microsoft was not dominant) in order to give the Windows users network security.[395]

Technologists were livid, and attacked the company for its attempt to supplant, or "hijack," an open standard:[396]

> Microsoft didn't just embrace Kerberos, it has extended it in the classic manner. Microsoft's implementation of Kerberos includes unpublished changes to the ticket, a security token that allows a client to identify itself to other resources on the network. By taking a public standard private, Microsoft appears to be making another effort to force the adoption of its flagship product with the weight of its market power.[397]

Unlike IETF standards debates, however, debates about the comparative merits of hardware or software lack any self-reflexivity. They represent pure means-end rationality.

[395] *See* Declaration of Rebecca M. Henderson at 17–18, United States v. Microsoft Corp., 97 F. Supp. 2d 59 (D.D.C. 2000) (No. 98-1232), *available at* http:www.usdoj.gov/atr/cases/f4600/4644. pdf; *see also* Joe Barr, *The Gates of Hades: Microsoft Attempts To Co-Opt Kerberos, at* http://www.linuxworld.com/linuxworld/lw-2000-04/lw-04-vcontrol_3.html (referring to Microsoft actions as a "dark cloud" on IETF standard) (last visited Dec. 7, 2002).

[396] *See, e.g.,* Slashdot, Proprietary Extension to Kerberos in W2K, *at* http://slashdot.org /article.pl?sid=00/03/02/0958226&mode=nested&tid=109; Mary Foley, *Microsoft in the Hot Seat in New Net Flap,* 2DNET.COM, May 11, 2000, *at* http://zdnet.com.com/2100-11-520685.html?legacy= zdnn.

[397] Barr, *supra* note 395. "Embrace, extend, and extinguish" is a phrase commonly used to describe Microsoft Corporation's behavior toward Internet and other standards. Microsoft's strategy, which is based on the network effect, works like this:

     1. Embrace: Microsoft publicly announces that they are going to support a standard. They assign employees to work with the standards bodies, including the W3C and the IETF.

     2. Extend: Microsoft supports the standard, at least partially, but starts adding Microsoft-only extensions of the standard to their products. Microsoft argues that it is only trying to add value for its customers, who want Microsoft to provide these features.

     3. Extinguish: Through various means, such as driving use of their extended standard through their server products and developer tools, Microsoft increases use of the

Microsoft then further enraged its critics by offering to release details of its implementation of Kerberos (which it claimed complied with the standard) but saying it would release the details only to those who signed nondisclosure agreements.[398] When someone published the full Microsoft specification online, the company demanded its removal and threatened to sue.[399]

F. *ICANN: The Creation of a New Governance Institution*

The IETF is not the only formalized institution that sets Internet standards.[400] (Indeed, of the formal bodies, the IETF may be the least

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proprietary extensions to the point that competitors who do not follow the Microsoft version of the standard cannot compete. Unfortunately, the Microsoft version uses proprietary technologies such as ActiveX that place competitors at a distinct disadvantage. The Microsoft standard then becomes the only standard that matters in practical terms, because it allows the company to control the industry by controlling the standard.

Embrace, Extend and Extinguish, *at* Wikipedia, http://www.wikipedia.com/wiki/Embrace%2C_extend_and_extinguish (last visited Nov. 14, 2002).

[398] *See* Posting of user to Slashdot.org (May 2, 2000), Kerberos, PACs and Microsoft's Dirty Tricks, *at* http://slashdot.org/article.pl?sid=00/05/02/158204&mode=nested&tid=109 ("This [of] course is a very clever way to pretend to distribute the spec, whilst making it completely impossible to implement in [competing] implementations which implement[] their [proprietary] protocol extensions — extensions to a protocol which was originally published by the Kerberos team as an Open Standard in the IETF. This completely defeats the IETF's interoperability goals, and helps Microsoft leverge [sic] their desktop monopoly into the server market.").

[399] Julie E. Cohen, *Call It the Digital Millennium Censorship Act: Unfair Use*, THE NEW REPUBLIC ONLINE, May 23, 2000, *at* http://www.tnr.com/cyberspace/cohen052300. html (condemning Microsoft's attempt to use DMCA notice and takedown provisions to silence critics of its implementation of Kerberos).

[400] For example, another important standard-setting body is the World Wide Web Consortium (W3C), which since 1994 has controlled the development of HTML and other key Web standards. Tim Berners-Lee, the inventor of the Web, created the W3C to carry on his work. Perhaps for this reason, W3C's original structure was relatively top-down, but this engendered criticism. *See, e.g.,* Simpson L. Garfinkel, *The Web's Unelected Government*, MIT TECHNOLOGY REVIEW 38, 46 (Nov./Dec. 1998), *available at* http://www.technologyreview.com/articles/garfinkel1198.asp. Today, W3C coordinates closely with the IETF. *See* Dan Connolly, announcing creation of mailing list public-ietf-w3c@w3.org (June 5, 2002), *at* http://lists.w3.org/Archives/Public/public-ietf-w3c/2002Jun/0001.html (announcing the creation of a mailing list to coordinate many areas of overlapping work); *see also* Posting of Rob Lanphier, robla@real.com, to ietf@ietf.org, announcing public-ietf-w3c@w3.org (fwd) (June 6, 2002), *at* http://www1.ietf.org/mail-archive/ietf/Current/msg16043.html (informing IETF members of the list and suggesting they monitor it if working in areas that overlap with W3C). W3C has revised its rules in an effort to be more open and democratic. *See* W3C Process Document (July 19, 2001), *at* http://www.w3.org/Consortium/Process-20010719/organization.html. The fate of W3C's recent proposal to allow proprietary, patented products to become W3C standards demonstrates its responsiveness. Faced with an avalanche of criticism, the W3C backed down and reaffirmed its commitment to royalty-free standards. *See W3C Says "No" to Standards Royalties*, *at* http://www.geek.com/news/geeknews/2002feb/gee20020227010456.htm (last visited Dec. 7, 2002).

Like the IETF, the W3C is a consensus-based transnational organization. The W3C's general policy on consensus is:

Consensus is one of the most important principles by which W3C operates. When resolving issues and making decisions, W3C strives to achieve unanimity of opinion. Where unanimity is not possible, W3C reaches decisions by considering the ideas and

formalized.) From the point of view of an analysis of the Internet and practical discourse, the most interesting of the other Internet standards bodies is surely the Internet Corporation for Assigned Names and Numbers (ICANN).

ICANN is a nonprofit California corporation formed at the behest of the United States government to control domain name policy[401] — a function that had fallen into the government's hands almost accidentally. Control over domain name policy rests on the power to determine the content of the data file containing the list of the machines that have the master lists of registrations in each TLD. This is the "root.zone," "root," or sometimes, the "legacy root." Control over the legacy root allows one to determine which top-level domains (such as .com, .us, or .info) are visible to the large majority of Internet users. For many years the actual work of managing the legacy root was performed by a body called IANA — the Internet Assigned Numbers Authority — with funding from the federal government.[402]

When the Internet was small, decisions about the content of this root file — which top level domains would exist in the root, and who would be responsible for controlling the registration of domain names within them — were of relatively little salience. Starting about

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viewpoints of all participants, whether W3C Members, invited experts, or the general public.

W3C, *About the World Wide Web Consortium (W3C)*, at http://www.w3.org/Consortium/ (last updated Nov. 13, 2002).

The W3C's policy on consensus in working groups is:

Where unanimity is not possible, the group should strive to make decisions where there is at least consensus with substantial support (i.e., few abstentions) from all participants. To avoid decisions that are made despite nearly universal apathy (i.e., with little support and substantial abstention), groups are encouraged to set minimum thresholds of active support before a decision can actually be recorded. . . .

In some cases, even after careful consideration of all points of view, a group may find itself unable to reach consensus. When this happens . . . the Chair may announce a decision to which there is dissent. . . . When a decision must be reached despite dissent, groups should favor proposals that create the least strong objections. This is preferred over proposals that are supported by a large majority of the group but that cause strong objections from a few participants.

W3C, W3C Process Document § 4.1.2 (July 19, 2001), at http://www.w3.org/Consortium/Process-20010719/groups.html#WGVotes; *see also* W3C Process Document, at http://www.w3.org/consortium/process/process-19991111/background.html#consensus; *cf.* Reagle, *supra* note 326, at sec. 4 (discussing W3C's consensus policy). Full membership, however, remains limited to organizations. *See* Frequently Asked Questions About W3C Membership: Can I Join W3C as an Individual?, at http://www.w3.org/Consortium/Prospectus/FAQ.html#individual (last visited Dec. 7, 2002).

[401] On the formation and flaws of ICANN, see generally Froomkin, *Wrong Turn, supra* note 21 (critiquing formation and use of ICANN as a means to avoid public rulemaking); Jonathan Weinberg, *ICANN and the Problem of Legitimacy,* 50 DUKE L.J. 187 (2000), *available at* http://www.law.duke.edu/shell/cite.pl?50+Duke+L.+J.+187 (examining structures and techniques employed by ICANN to assert its legitimacy as a rulemaking body).

[402] *See* MILTON L. MUELLER, RULING THE ROOT: INTERNET GOVERNANCE AND THE TAMING OF CYBERSPACE, 47–48, 52, 93, 98 (2002).

1977,[403] the day-to-day responsibility for coordinating changes in standards and policy fell to a UCLA graduate student, Jon Postel, whose work was funded by a U.S. Department of Defense grant.[404] Postel, who had started coordinating other Internet protocols as early as 1972,[405] took on the task of assigning IP numbers and (at some point) protocol values for domain names. Thus, Postel, working through the evolving consensus procedures for setting Internet Standards (which would later become the IETF), decided which global top-level domains (gTLDs) and country-code top-level domains (ccTLDs) would be created, and personally selected the people who would be empowered to register names in ccTLDs. After receiving his Ph.D., Postel moved to the University of Southern California's Information Sciences Institute and took these functions with him.[406] Over time, Postel and his associates, who apparently worked hard to ensure that their actions were acceptable to the Internet community and who documented their actions in a series of RFCs,[407] became the trusted decisionmakers for basic questions of domain name assignment policy. Indeed, their role was more central than that of "Tale" for Usenet[408] because every Usenet administrator had the option of ignoring Tale's recommendations. As a practical matter, that option did not exist for most users of the DNS: although it is possible to use a domain name that is part of an "alternate" root other than the main "legacy" root, only other users of the same alternate root will be able to translate that nonstandard name into the Internet Protocol number needed to route data properly. And in a classic network effect, if too few people use the alternative root, it remains unable to grow.[409]

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[403] *See* A.M. Rutkowski, History of Supporting Internet Names and Numbers, World Internetworking Alliance, *at* http://www.wia.org/pub/identifiers/identifier_management.gif (last visited Dec. 7, 2002).

[404] *See* Management of Internet Names and Addresses, 63 Fed. Reg. 31,741, 31,741 (June 10, 1998) (statement of policy by National Telecommunications and Information Administration, Department of Commerce) [hereinafter White Paper], *available at* http://www.ntia.doc.gov /ntiahome/domainname/6_5_98dns.htm.

[405] *See* Jon Postel, Proposed Standard Socket Numbers (Network Working Group, Request for Comments No. 349) (May 1972) (proposing the assignment of official socket numbers for use by standard protocols), *available at* http://www.ietf.org/rfc/rfc349.txt.

[406] *See* News Release, University of Southern California, Internet Pioneer Jon Postel Dies at 55 (Oct. 19, 1998) (describing Postel's work and accomplishments while at USC), *at* http://www.usc. edu/dept/News_Service/releases/stories/35680.html.

[407] *See generally* RFCs 1700, 1340, 1060, 1010, 990, 960, 943, 923, 900, 870, 820, 790, 776, 770, 762, 758, 755, 750, 739, 604, 503, 433, and 349, available by number, title, author or other identifier *at* RFC Editor, RFC Database, http://www.rfc-editor.org/rfc.html (last visited Dec. 7, 2002).

[408] *See supra* Section IV.A, *supra* pp. 819–20.

[409] *See generally* Besen & Farrell, *supra* note 388; Katz & Shapiro, *supra* note 388; Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479 (1998); Liebowitz & Margolis, *supra* note 388.

Over time, in part because Postel's work was funded under a series of U.S. government contracts and in part because of the threat of litigation by people unhappy with the slow pace of consensus-based decisionmaking under this arrangement, de facto control over the root passed to the Department of Commerce.[410] This change provoked complaints from many Internet users. Libertarians argued that governments were not a legitimate source of rules for the DNS, which lies at the heart of the Internet. Foreign governments and others argued that the United States government was not a legitimate source of rules for the DNS because its decisions would have worldwide effects. The United States government accepted the force of these criticisms and sought a means to "privatize" DNS regulation while "preserv[ing], as much as possible, the tradition of bottom-up governance of the Internet," with decisionmakers "elected from membership or other associations open to all or through other mechanisms that ensure broad representation and participation in the election process."[411]

In June 1998, the Commerce Department issued a "White Paper" calling for the creation of a private body to take over the legacy root in a "transparent" process.[412] Meanwhile, behind closed doors, an internationally diverse group of Internet worthies (selected in a manner that was anything but transparent) incorporated ICANN, the Internet Corporation for Assigned Names and Numbers, and set to work making "interim" decisions and creating a new and still evolving governance structure.[413]

Thus, although the United States government sought a rulemaking method that would be perceived as legitimate,[414] these efforts were partially successful at best. Aware from its early days that it faced a legitimation problem, ICANN explicitly sought to clothe itself and its decisions in the legitimacy of the IETF.[415] This legitimacy claim demands scrutiny.

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[410] *See* Froomkin, *Wrong Turn*, supra note 21, at 50–70.

[411] White Paper, *supra* note 404, at 31,750.

[412] *Id.* The new corporation was also given responsibility for assigning Internet Protocol numbers.

[413] *See* MUELLER, *supra* note 402, at 185–202. The unofficial ICANN organizational chart, *at* http://www.wia.org/icann/after_icann-gac.htm (last visited Dec. 7, 2002), displays the organization's complexity in all its Byzantine glory.

[414] For further discussion of the United States government's push for legitimate Internet rules, see White Paper, *supra* note 404, which states:

> The U.S. Government believes that the Internet is a global medium and that its technical management should fully reflect the global diversity of Internet users. We recognize the need for and fully support mechanisms that would ensure international input into the management of the domain name system. . . . [A] key U.S. Government objective has been to ensure that the increasingly global Internet user community has a voice in decisions affecting the Internet's technical management.

Id. at 31,748.

[415] *See* Weinberg, *supra* note 401, at 250–51.

1. Why ICANN Matters. — ICANN is an important development in Internet policymaking for a number of reasons. First, ICANN is touted in some quarters as a model for modern decisionmaking, especially regarding e-commerce and Internet-related issues.[416] Second, ICANN, which controls a critical Internet chokepoint,[417] has been

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[416] *See* Froomkin, *Wrong Turn, supra* note 21, at 29.

[417] ICANN has de facto control over the domain name system (DNS). The DNS is defined in Internet Standards. The most important is RFC 1591. *See* J. Postel, Domain Name System Structure and Delegation (Network Working Group, Request for Comments No. 1591) (Mar. 1994), *available at* http://www.ietf.org/rfc/rfc1591.txt; *see also* Internet Assigned Numbers Authority: Internet Domain Name System Structure and Delegations (May 1999), *at* http://www.iana.org/tld-deleg-prac.html (last visited Dec. 7, 2002). At the heart of the Internet addressing system used by most people lies a single data file. Although it is only a tiny data file, this "root" file is the cornerstone of a complex name-to-number resolution system that enables people to register for domain names (e.g., "amazon.com") and helps translate catchy names into numerical addresses so computers can find each other. This single root file also holds the data that authoritatively identify the machines that hold the legitimate master copies of much larger data files. These larger files in turn hold the data ensuring that my email address is global, yet unique. As a result of this system, email addressed to my Turkmenistan address, froomkin@law.tm, finds me in Miami.

The current domain name system requires that each domain name be unique, and DNS registrations are arranged hierarchically to ensure uniqueness. Note that the system does not require that a domain name be associated with a single or consistent Internet Protocol (IP) number. Rather, it requires only that it map to an IP number that will produce the result desired by the registrant. For example, a busy website might have several servers, each with its own IP number, that take turns serving requests directed to a single domain name.

In a different Internet, rather than have each name point to a unique resource, many computers controlled by different people might respond to requests for the resource located at http://www.law.tm. In that world, World Wide Web users who enter that URL, or click on a link to it, would either be playing a roulette game with unpredictable results, or would have to pass through some sort of gateway or query system so their requests could be routed to the right place. (One can spin more complex stories involving intelligent agents and artificial intelligences that seek to predict user preferences, but this only changes the odds in the roulette game.) Such a system would probably be time consuming and frustrating, especially as the number of users sharing popular names grew. In any case, it would not be compatible with today's email and other noninteractive communications mechanisms.

A master file of the registrations in each top-level domain (TLD) is held by a single registry. Domain naming conventions treat a domain name as having three parts. In the address www.miami.edu, for example, ".edu," the rightmost part, is the "top-level domain" (TLD), while "miami" is the second-level domain (SLD) and any other parts are lumped together as third-or-higher-level domains. *See generally* Domain Name Handbook, *at* http://www.domainhandbook.com/registrars.html (last visited Dec. 7, 2002); Berkman Center for Internet and Society, *Experimental Cross-Registrar Whois, at* http://cyber.law.harvard.edu/icann/whois/ (last visited Dec. 7, 2002).

In theory, having a single registry ensures that once a name is allocated to one person it cannot simultaneously be assigned to a different person. End-users seeking to obtain a unique domain name must obtain one from a registrar. A registrar can be the registry or it can be a separate entity that has an agreement with the registry for the TLD in which the domain name will appear. Before issuing a registration, the registrar queries the registry's database to make certain the name is available. If it is, the registry marks the name as taken, and associates contact details provided by the registrant.

Once a registry enters a name and corresponding IP number into its database, the IP number is ready to be served up whenever users use a domain name in an Internet address. Most

making poor decisions.[418] Third, by behaving increasingly like an or-
dinary nonprofit corporation with an energetic staff and a somewhat
complacent board, and particularly by becoming increasingly impa-
tient with input from the public,[419] ICANN has squandered an oppor-
tunity to achieve consensus-based decisionmaking among a very great
range of worldwide participants discussing a relatively small range of
topics.
    ICANN is also important in a fourth way, which is directly rele-
vant to questions of legitimation and critique. From its inception,
ICANN has sought to gain a legitimacy similar to that of the IETF by
copying the IETF's forms while avoiding true public participation.[420]
The creation, procedures, and early history of ICANN pose a striking
contrast to the creation, procedures, and early history of the IETF.[421]
Yet ICANN purports to be modeled on the IETF and to be a "a tech-
nical coordination body for the Internet" engaged, like the IETF, in

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people, however, access only the data held by registries in the legacy root. There is no technical
obstacle to registries, and thus TLDs, not listed in the legacy root, but these "alternate" TLDs can
only be resolved by programs, either on the user's machine or at his or her ISP, that know how to
find the non-ICANN-approved registries. A combination of consensus, lack of knowledge, and
inertia among the people running the machines that administer domain name lookups means that
the large majority of people who use the Internet cannot, without tinkering with obscure parts of
their browser settings, access domain names in TLDs outside the legacy root. In addition to the
"legacy root." TLDs discussed in this article, there are a large number of "alternate" TLDs that are
not acknowledged by the majority of domain name servers. There is no technical bar to their ex-
istence and anyone who knows how to tell his software to use an alternate domain name server
can access both the "legacy root" and whatever alternate TLDs that name server supports. Thus,
for example, pointing your DNS at 205.189.73.102 and 24.226.37.241 makes it possible to resolve
http://lighting.faq, where a legacy DNS would only return an error message. *See generally* OSRC
Root Zone, Open Root-Server Confederation, How To Use Alternative Roots (and why you
should), *at* http://support.open-rsc.org/How_To/ (last visited Dec. 7, 2002).

[418] *See generally* Weinberg, *supra* note 401; *see also* ICANNWatch, *at* http://www.icannwatch
.org (last visited Dec. 7, 2002) (providing additional examples). Although somewhat dependent on
user inertia, ICANN's control over the legacy root allows it to decide whether competitors to .com
(imagine .web, .news, or .smut) have a meaningful existence. This control can be leveraged to do
good things, like ensure that there is competition among domain name providers, or, in theory,
could be used to do very bad things, such as forcing other participants in the system to facilitate,
or even to enforce, content controls.

[419] *See* MUELLER, *supra* note 402, at 198–201, 267; Hans Klein, Cyber-Federalist No. 15, *The
User Voice in Internet Governance — ICANNatlarge.org* (Oct. 25, 2002), *at* http://www.cpsr.org/
internetdemocracy/cyber-fed/Number_15.html; Hans Klein, Cyber-Federalist No. 10, *The Origins
of ICANNS's At Large Membership* (Mar. 27, 2001), *at* http://www.cpsr.org/internetdemocracy/
cyber-fed/Number_10.html.

[420] *See* Weinberg, *supra* note 401, at 250 ("ICANN typically characterizes its own work as
Internet 'technical management' or 'technical coordination'; it thus evokes a long, and wildly
successful, Internet engineering tradition. Internet technical standards historically have been set
by the Internet Engineering Task Force (IETF) and other bodies in a voluntary, decentralized,
consensus-based manner.").

[421] *See generally* MUELLER, *supra* note 402; Weinberg, *supra* note 401.

"developing policy through private-sector, bottom-up, consensus-based means."[422]

If Habermas's claims about discourse theory are accurate, and if my argument about the IETF is correct, then ICANN chose a very smart rhetorical strategy because the IETF's decisions enjoy a special legitimacy. As one of the purposes of discourse theory is to provide a standpoint from which to critique social institutions, it is especially appropriate to scrutinize ICANN's claims to produce rules that are as legitimate as those produced by the IETF. It turns out that ICANN's deliberations and procedures differ substantially from those based on discourse, much less the best practical discourse.

2. ICANN's Legitimation Crisis. — The IETF has a close, but un-easy, relationship with ICANN. The IETF is one of the four protocol standards bodies represented in ICANN's Protocol Supporting Or-ganization, a group that collectively chooses three of ICANN's direc-tors.[423] IETF "elders" serve on the ICANN Board; indeed, Dr. Vinton Cerf, one of the original RFC authors, currently serves as the Chair of the ICANN Board. This, plus the strong belief of other IETF leaders that centralized coordination of the DNS is a technical necessity, has tended to suppress dissatisfaction with the fact that ICANN now oc-cupies a small slice of the technical policy space that used to belong to the IETF. The slice is small because one of ICANN's first actions was to conclude an agreement with the IETF in which ICANN promised to follow the RFCs, or in "doubt or in case of a technical dispute," to "seek and follow technical guidance" from a management committee of the IETF.[424] Under this agreement, however, ICANN retains its role on policy matters relating to the assignment of domain names and to the assignment of IP address blocks. While these arrangements pre-sent technical issues, they also had become highly contentious social issues involving the financial interests of large numbers of firms and people outside of the IETF culture.[425] Because IETF members often are extraordinarily suspicious of government intervention, and control of the DNS had passed into the hands of the U.S. Department of

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[422] ICANN, Home Page, *at* http://www.icann.org (page updated Nov. 13, 2002).

[423] *See* ICANN Organizational Chart, *available at* http://www.icann.org/general/icann-org-chart_frame.htm (last visited Dec. 7, 2002).

[424] IETF-ICANN Memorandum of Understanding Concerning the Technical Work of the Internet Assigned Numbers Authority, § 41 (Mar. 10, 2000) [hereinafter Memorandum of Under-standing], *available at* http://www.icann.org/general/ietf-icann-mou-01mar00.htm. The Memoran-dum refers here to the IANA, now little more than a legal fiction for a subsidiary of ICANN. The agreement defines "IANA" as the "Internet Assigned Numbers Authority (a traditional name, used here to refer to the technical team making and publishing the assignments of Internet protocol technical parameters). The IANA technical team is now part of ICANN." *Id.* § 3.

[425] *See generally* Froomkin, *Wrong Turn, supra* note 21; Simon, *supra* note 352; Craig Simon, Overview of the DNS Controversy, *at* http://www.rkey.com/dns/overview.html (last visited Dec. 7, 2002).

Commerce, ICANN seemed to many IETF members to be the lesser of two evils.

Gradually, however, IETF members (and others) began to worry. ICANN claimed fidelity to the virtues of open discussion, "bottom up" decisionmaking, and so-called consensus policies.[426] But ICANN's attempt to implement these norms involved creating a complex structure of "supporting organizations" designed to funnel to the Board the views of various identified groups of "stakeholders." Ostensibly, these supporting organizations were supposed to propose policies and then gauge whether the policies commanded sufficient support from affected parties. Within a year, this produced an acronym soup of a Names Council (NC), the Domain Name Supporting Organization (DNSO) and its seven (or so) constituency groups, the Protocol Supporting Organization (PSO), the Address Supporting Organization (ASO), the DNSO General Assembly (GA), the Membership Advisory Committee (MAC), the Governmental Advisory Committee (GAC), plus the Advisory Committee on Independent Review and the Committee on Reconsideration, not to mention a profusion of working groups, ad hoc committees, and even a "small drafting committee." While perhaps motivated by a genuine desire to be inclusive, the result has made it impossible for anyone other than lobbyists and the occasional fanatic to participate consistently in ICANN policy discussion. Thus, whether by accident or design, the result is that many affected by ICANN's decisions do not participate in formulating them.[427] ICANN did have an account of itself, but that account was more corporatist than democratic, and relied more heavily on the values of representing economic stakeholders than those of the public.[428]

Currently, the Internet Architecture Board (IAB), the IETF leadership, seems to be having second thoughts about its relationship with ICANN. As ICANN considered how to reform itself, the IAB sent in a formal comment suggesting that it wished to disentangle itself from ICANN as much as possible. The IAB proposed eliminating the PSO, on which it sits, and all standing technical committees. This would end the IETF's formal role in ICANN governance, including its input into the membership of the ICANN Board. Furthermore, the IAB noted that it was "deeply concerned"[429] that IETF's protocol parame-

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[426] *See* Weinberg, *supra* note 401, at 83.

[427] *See* Civil Society Democracy Project (CivSoc), Computer Professionals for Social Responsibility (CPSR) & The Internet Democracy Project, Cyber-Federalist 14, *Creating the Illusion of Legitimacy* (Aug. 8, 2002), *at* http://www.cpsr.org/internetdemocracy/cyber-fed/Number_14.html.

[428] *See* Milton Mueller, *ICANN and Internet Governance: Sorting Through the Debris of "Self-Regulation"*, 1 INFO 497 (1999), *available at* http://www.icannwatch.org/archive/mueller_icann_and_internet_governance.pdf.

[429] International Architecture Board, IAB Response to ICANN Evolution and Reform § 4 (2002), *available at* http://www.iab.org/DOCUMENTS/icann-response.html.

ter coordination role had become entangled with ICANN,[430] and stated that "[t]his situation is not acceptable to the IAB. The IAB is evaluating the best path forward to maintain the IETF's protocol parameter coordination."[431] Even Fred Baker, the newly elected head of the Internet Society (ISOC), recently stated that "[t]he question is whether ICANN can really recover its position as a clear-headed organization that can guide and enact policy. If not, it has to be replaced."[432]

Criticism of ICANN prompted congressional hearings[433] and a diplomatically damning report from the General Accounting Office. The GAO concluded that ICANN had failed to achieve some of its objectives, not the least of which was to create structures for user representation, and that "ICANN's legitimacy and effectiveness as the private sector manager of the domain name system remain[s] in question."[434]

Indeed, many of ICANN's critics have lamented its lack of legitimacy.[435] Jonathan Weinberg, for instance, has demonstrated that ICANN lacks both administrative and democratic legitimacy.[436] ICANN sought instead to claim for itself the consensus-based legitimacy of the IETF:

> ICANN has sought to situate itself firmly within that Internet tradition of consensus-based standards development. . . . ICANN's [first] chairman offered reassurance that no legitimacy problem existed, or could exist, because "ICANN is nothing more than a vehicle or forum for the develop-

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[430] For evidence of the IETF's relationship with ICANN, see Memorandum of Understanding, *supra* note 424, § 4.

[431] Internet Architecture Board, *supra* note 429, § 4.

[432] *Chairman Discusses Internet's Progression*, SAN JOSE MERCURY NEWS, Aug. 26, 2002, *available at* http://www.bayarea.com/mld/bayarea/business/3939631.htm.

[433] Earlier hearings also questioned ICANN's legitimacy and organization. *See generally Domain Name System Privatization: Is ICANN Out of Control?: Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Commerce*, 106th Cong. (1999); *Electronic Commerce, Part 3: Hearing Before the Subcomm. on Telecomms., Trade, and Consumer Protection of the House Comm. on Commerce*, 105th Cong. (1998) (June 10, 1998 — The Future of the Domain Name System); *The Domain Name System, Parts I–II: Joint Hearing Before the Subcomms. on Basic Research and Tech. of the House Comm. on Sci.*, 105th Cong. (1998); *Internet Domain Names, Parts I and II: Hearings Before the Subcomm. on Basic Research of the House Comm. on Sci.*, 105th Cong. (1997).

[434] *Internet Management: Limited Progress on Privatization Project Makes Outcome Uncertain: Testimony Before the Subcomm. on Sci., Tech., and Space of the Senate Comm. on Commerce, Sci., and Transp.*, 107th Cong. 15 (2002) (testimony of Peter Guerrero, Director, Physical Infrastructure Issues, United States General Accounting Office), *available at* http://www.gao.gov/new.items/d02805t.pdf.

[435] *E.g.*, Reagle, *supra* note 326, at app. 3 (evaluating ICANN in light of traditional Internet policymaking principles in an appendix entitled "Case Study: Why ICANN is Frightening"); Weinberg, *supra* note 401; Jonathan Weinberg, *Geeks and Greeks*, 3 INFO 313 (2001), *available at* http://www.law.wayne.edu/weinberg/p313_s.pdf.

[436] *See generally* Weinberg, *supra* note 401.

ment and implementation of global consensus on various policy issues related to the DNS."[437]

Yet while ICANN claimed to make decisions by consensus, it actually made them by fiat:

> It is uncontroversial that true consensus-based procedures must be open to participation by members of the relevant community. Yet according to ICANN's CEO, it is "obvious[]" that ICANN can only reconcile its "effective private-sector technical coordination" with the provision of "the maximum access to ICANN consensus processes for the maximum number of people" by means of "difficult tradeoffs." It appears that the circles within which ICANN seeks consensus are sharply more limited than the set of Internet actors interested in and affected by its policies. [438]

The founders of ICANN made a number of choices that undermined ICANN's ability to generate genuine consensus. First, they incorporated in secret, causing great suspicion.[439] Second, the incorporators sought a structure for the entity that provided for corporatist representation of various technical and business groups, but did not represent end-users well. This structure enabled factions with economic interests in ICANN's decisions to capture the organization,[440] which in turn produced entrenchment.[441] As originally designed, ICANN was to be run by a Board of Directors, half of whom would be selected for their expertise by corporatist-style elections among defined groups of designers and users of the DNS. The Department of

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[437] *Id.* at 250–51 (citation omitted).

[438] *Id.* at 254.
 ICANN does not have procedures that would enable it to recognize consensus (or the lack of consensus) surrounding any given issue.... The only supporting organization that has sought to develop policy has been the DNSO, and it is doubtful that that body is capable of generating consensus in any meaningful way. The bulk of ICANN's decisions have been made with little supporting organization input. As to those, "[h]ow ICANN interprets 'consensus,' and how it thinks such a consensus is uncovered, is deeply mysterious."
Id. at 252–53 (quoting David Post, Michael Froomkin & David Farber, *Elusive Consensus* (July 21, 1999), *at* http://www.icannwatch.org/archive/elusive_consensus.htm).

[439] *See* Mueller, *supra* note 428, at 506–07.

[440] *See* David Dana & Susan P. Koniak, *Bargaining in the Shadow of Democracy*, 148 U. PA. L. REV. 473, 497 (1999) (discussing the phenomenon of capture).

[441] *See* Mueller, *supra* note 428, at 506–07; *see also* MUELLER, *supra* note 402, at 180–81; Weinberg, *supra* note 401, at 257 (noting that "ICANN has incentives to favor more powerful over less powerful actors"); *id.* at 259 (noting that "we can expect those who are well-represented by the current board structure to oppose adjustments that dilute their influence"); Jonathan Weinberg, *Review of the Domain Name Supporting Organization, at* http://www.icannwatch.org /archive/dnso_review.htm (last visited Dec. 7, 2002) ("The list of constituencies included in the Names Council reflects the political strength of the various actors at the time the institution was established. That constituency formation process ... advantaged groups for whom the costs and benefits of domain name policies were concentrated at the expense of those for whom the costs and benefits were widely distributed.").

Commerce insisted, over the great resistance of the initial staff,[442] that half of the Board be elected by the broad user community.[443] For a variety of reasons, ICANN delayed implementing the general elections, then allowed the election of only five of the promised nine directors,[444] and now intends to abolish at-large elections of directors at its Annual Meeting scheduled for December 2002.[445]

Indeed, from its early days, ICANN took a number of actions designed to establish and protect itself, without great attention to whether anyone else agreed. For example, the corporation proposed to charge a $1 fee for every registration (only backing down when members of the U.S. Congress objected);[446] it borrowed money from corporations with a vested interest in ICANN's decisions;[447] and it held closed board meetings despite a commitment to "open and transparent processes."[448] Then it decided that, contrary to the original structure, individuals would not be statutory members of the corporation.[449]

Increasingly, the ICANN staff acted independently of the Board (and the public). Documents went before the ICANN Board for votes

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[442] *See, e.g.,* Posting of Joe Sims, Joe_Sims@jonesday.com, to comment-bylaws@icann.org, Response to Froomkin (Oct. 23, 1999), *at* http://www.icann.org/comments-mail/comment-bylaws/msg00025.html ("the objective of the policy that the ICANN Board adopted" is "to exclude . . . individuals that have no other connection to the DNS than as an individual user of the Internet"). Joe Sims is ICANN's chief counsel, and was the main drafter of ICANN's articles of incorporation and by-laws.

[443] *See* White Paper, *supra* note 404, at 31,743, 31,750; MUELLER, *supra* note 402, at 184; ICANN Adopted Bylaws, Art. V § 9 (c), *at* http://www.icann.org/general/archive-bylaws/bylaws-23nov98.htm (last visited Dec. 7, 2002) (providing for elections of "At Large" directors (half of the Board)).

[444] *See* MUELLER, *supra* note 402, at 200; Weinberg, *supra* note 401, at 237.

[445] *See* ICANN, Preliminary Meeting Report (Nov. 1, 2002), *at* http://www.icann.org/minutes/prelim-report-31octo2.htm (resolving to change bylaws and approving text subject to further amendment); ICANN, Appendix A to Minutes of Board Meeting 31 October 2002 (Nov. 1, 2002), *at* http://www.icann.org/minutes/minutes-appa-31octo2.htm (text of new bylaws other than transitional provisions); ICANN, ICANN 2002 Annual Meeting in Amsterdam, *at* http://www.icann.org/amsterdam/ (last updated Nov. 18, 2002) (announcing the date and location of 2002 Annual Meeting).

[446] *See* Froomkin, *Wrong Turn, supra* note 21, at 87.

[447] MUELLER, *supra* note 402, at 189; Froomkin, *supra* note 21, at 87.

[448] ICANN Articles of Incorporation ¶ 4, *at* http://www.icann.org/general/articles.htm (revised Nov. 21, 1998).

[449] The ostensible reason for this decision was that making individuals statutory members would give them a legal right to initiate costly shareholder derivative actions. *See* ICANN, Analysis: Statutory Members Versus Nonstatutory Members for the ICANN At Large Membership § 4 (Aug. 11, 1999), *at* http://www.icann.org/santiago/membership-analysis.htm. The actual Board resolution, http://www.icann.org/santiago/santiago-resolutions.htm, does not give much in the way of reasons. However, ICANN counsel Joe Sims stated his personal opinion that individual members would be destabilizing. Sims, *supra* note 442; E-mail from Joe Sims to Jonathan Zittrain (Oct. 25, 1999, 19:08), *at* http://www.law.miami.edu/~amf/sims2.htm.

with two days public notice, or sometimes with no notice at all.[450] Other decisions were simply announced by the staff and rationalized as restatements of preexisting policy, so as to make public discussion and consideration by the various ICANN subsidiary bodies unnecessary.[451] The staff also made decisions in reliance on supposedly 'advisory' documents that had never been subjected to the admittedly torturous and slow consensus decisionmaking machinery.[452] Even when ICANN sought to buttress its decisions with outside technical expertise, the advice was riddled with errors and became the subject of withering criticism,[453] which ICANN ignored.[454]

ICANN's difficulties in legitimating its decisions are exemplified by its relationship with the managers of the country-code domains (ccTLDs) such as .uk and .fr. ICANN sought to have the ccTLDs enter into contracts in which they would acknowledge ICANN's authority and would agree to pay ICANN annual fees based on how many second-level domains they registered. Many ccTLD managers balked, denying ICANN's authority and questioning the process by which ICANN purported to charge them fees or make policy affecting them.[455]

Meaningful discourse requires information. If participants act strategically to nudge standards in a direction that gives their companies advantages of which only they are aware, they potentially distort IETF discussions.[456] Having at their core an incorporated entity,

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[450] See, e.g., A. Michael Froomkin, Snookered Again (Mar. 12, 2001), at http://www.icannwatch.org/article.php?sid=34.

[451] For example, ICANN issued its policy statement regarding alternate roots, ICP-3, without public discussion. See Jonathan Weinberg, How ICANN Policy Is Made, at http://www.icannwatch.org/article.php?sid=241 (July 10, 2001).

[452] ICANN's pronouncements about trademark policy illustrate this point well. See fnord, Afilias Abomination III, The New Class, at http://www.icannwatch.org/article.php?sid=360 &mode=thread&order=0 (Sept. 10, 2002) (discussing ICANN's unexpected decision to prevent registration of certain geographic terms in new TLDs).

[453] Two examples stand out: the process used to pick seven new registries, see MUELLER, supra note 402, at 201–05, and the process used to choose a registry to take over the .org domain, see ICANNWatch.org Archive, at http://www.icannwatch.org/search.php?query=&topic=25 (last visited Dec. 7, 2002).

[454] See, e.g., ICANN Reconsideration Committee, Reconsideration Request 00-10 (Mar. 5, 2001), at http://www.icann.org/committees/reconsideration/rc00-10.htm (stating that "[e]ven if, for the purposes of argument, there were factual errors made, or there was confusion about various elements of a proposal, or each member of the Board did not fully understand all the details of some of the proposals, this would still not provide a compelling basis for reconsideration of the Board's conclusion"); see also Jonathan Weinberg, ICANN to gTLD Applicants: Drop Dead, at http://www.icannwatch.org/article.php?sid=22 (Mar. 7, 2001).

[455] See, e.g., Richard Pamatatau, New Zealand Questioning the Value of ICANN, at http://web.archive.org/web/20010418074936/http://www.stuff.co.nz/inl/index/0,1008,705872a1898, FF.html (Mar. 19, 2001); Jonathan Weinberg, ICANN and CENTR at Odds, at http://www.icannwatch.org/article.php?sid=510 (Jan. 7, 2002).

[456] See supra pp. 772–73.

ICANN debates take on a different dynamic. There is a Board of Directors that is supposed to represent diverse interests and in principle has access to certain classes of information that may not be accessible to the public. In practice, however, the ICANN staff routinely withheld information from a Director of the corporation, Karl Auerbach,[457] despite his "absolute" right under California law to inspect and copy all books and papers.[458] The staff argued that, despite his acknowledgment of fiduciary duties to the corporation, and his offer to give seven days' notice before any disclosures, Auerbach could not be trusted to refrain from publishing confidential ICANN information on the Internet. ICANN's staff demanded that Auerbach sign a confidentiality agreement promising to get its agreement before disclosing to anyone any information it marked as confidential. Auerbach refused, and after months of delay by ICANN, he filed suit in California state court for access to ICANN's records, which the court granted.[459] ICANN's decision to defend the lawsuit damaged its credibility and legitimacy.[460]

Even before the California court ruled against it, ICANN's President, M. Stuart Lynn, engaged in a round of self-criticism, in which he described ICANN as mired in controversy, running out of money, and largely ineffectual without additional government aid.[461] His proposed solution was to increase ICANN's responsibilities, staff size, and budget, but to eliminate consensus procedures and direct election of end-user representatives. In their place, he invited world governments to subsidize ICANN and enforce its decisions in exchange for one-third of the seats on a reconstructed Board, the other two-thirds of

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[457] *See, e.g.,* Froomkin, *supra* note 450; *see also* Tamar Frankel, *The Managing Lawmaker in Cyberspace: A Power Model,* 27 BROOK. J. INT'L L. 859, 863 (2002) (noting ICANN's lack of accountability); *see generally* MUELLER, *supra* note 402; Weinberg, *supra* note 401.

[458] *See* Auerbach v. Internet Corp. for Assigned Names and Numbers, No. BS074771, at 4 (Cal. Super. Ct. July 29, 2002) (Eff.org, Legal Cases Archive), *available at* http://www.eff.org/Cases/Auerbach_v_ICANN/20020807_auerbach_judgment.pdf; Hearing Transcript, *Auerbach, available at* http://www.eff.org/Cases/Auerbach_v_ICANN/20020729_auerbach_court_transcript.html.

[459] *See Auerbach,* at 4 (Eff.org, Legal Cases Archive). *See also* Saline v. Superior Court, No. G029761, 2002 WL 1752820, at *911 (Cal. App. 4th July 30, 2002 (as modified Aug. 7, 2002)) (making similar holding on broad sweep of Cal. Corp. Code § 1602).

[460] *See, e.g.,* Posting of Donald Eastlake, III, dee3@torque.pothole.com, to ietf@ietf.org, Re: delegation mechanism, Re: Trees have one root (Aug. 11, 2002), *at* http://www1.ietf.org/mail-archive/ietf/Current/msg16976.html ("Morally and in the eyes of public opinion, ICANN has stabbed itself and the longer it refuses to admit it was wrong, the deader ICANN becomes.").

[461] *See* M. Stuart Lynn, President's Report: ICANN — The Case for Reform (Feb. 24, 2002), *available at* http://www.icann.org/general/lynn-reform-proposal-24feb02.htm (arguing "ICANN has gone about as far as it can go without significant additional participation and backing from national governments" and stating that he has "come to the conclusion that the original concept of a purely private sector body, based on consensus and consent, has been shown to be impractical").

which the Board itself would in effect select.[462]   The ICANN Board
then charged five of its members to come up with a reform plan.[463]
Governments responded that they were unable to imagine how they
collectively would choose five representatives, that they were not in-
terested in funding ICANN or enforcing its dictates, and in any case
could not organize to do any of those things in the short time period
envisioned by the ICANN Board.[464] As a result, ICANN's reform of
its bylaws substantially follows Lynn's proposal except that rather
than have governments select Board members directly, it strengthened
the policy role of the so-called Government Advisory Committee
(made up of one representative of every interested government).[465]

At its October 2002 meeting in Shanghai, ICANN adopted a re-
form plan that is in decided contrast with IETF's response to the IAB
legitimation crisis in 1992.[466] The IETF responded to complaints that
the IAB was attempting to take too much control by trying a radical
experiment in participatory democracy.[467] In contrast, ICANN's pro-
posed reform imagines the current, largely unelected, Board choosing a
NomCom — a name no doubt chosen to resonate with the IETF's

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[462] *See id.* § A (proposing that five of fifteen "Trustees" be "nominated by governments and
confirmed by Board of Trustees").

[463] *See* ICANN, Preliminary Report, Third Annual Meeting of the ICANN Board in Marina
del Rey, Resolutions 01.132–.134 (Nov. 15, 2001), *at* http://www.icann.org/minutes/prelim-report-
15nov01.htm#01.132; *see also* ICANN, Committee on ICANN Evolution and Reform, *at*
http://www.icann.org/committees/evol-reform/ (containing links to documents detailing activities
of committee).

[464] *See* Posting of Andy Mueller-Maguhn, Director, ICANN, andy@ccc.de, to icann-
europe@lists.fitug.de (May 27, 2002), *at* http://www.icannwatch.org/article.php?sid=767 (stating
that "the empowering/selection of board members by governments is not an [sic] realistic ap-
proach (at least for now)").

[465] The revised bylaws strengthen the role of the Government Advisory Committee (GAC) in
several ways, making the title a misnomer. For example, the GAC can make nearly binding rec-
ommendations directly to the ICANN Board, bypassing all the other policy formation mecha-
nisms. *See* ICANN, Appendix A to Minutes of Board Meeting 31 October 2002, *supra* note 445,
art. XI(2)(1)(i) (text of new bylaws other than transitional provisions). On "public policy matters"
relating to "the formulation and adoption of policies," ICANN must either adopt the GAC's "ad-
vice" or inform the GAC of its contrary decision and then "try, in good faith and in a timely and
efficient manner, to find a mutually acceptable solution." *Id.* art. XI(2)(1)(j).

Under the reform plan adopted in Shanghai, government representatives do get to influence
the selection of Board members via their participation in the NomCom. *See id.* Initially five of
the eighteen voting members of the NomCom either will be picked by a transition mechanism as
yet not announced, or by the other NomCom members. *See id.* arts. VI, VII(2)(5), XI(2)(4), XX.
Of the remaining thirteen seats on the NomCom, six represent various business groups, three rep-
resent technical groups, and one seat represents each of consumer, governments, ccTLDs, and
academic and noncommercial interests. *See id.* art. VII(2); *see also* ICANN, Final Implementa-
tion Report and Recommendations of the Committee on ICANN Evolution and Reform §§ 2.B,
3.E (Oct. 2, 2002) (giving reasons for the proposed structure of the Board and NomCom), *at*
http://www.icann.org/committees/evol-reform/final-implementation-report-02octo2.htm.

[466] *See supra* pp. 787–92.

[467] *See supra* pp. 791–92.

NomCom — that would select a majority of the new Board.[468] The IETF's process created a serious risk of change by the organization's members if the active rank and file were unhappy with its actions. ICANN's plan appears likely to create no such risk, a choice ICANN justifies on the grounds that it has no "rank and file."[469] And indeed, ICANN today has no end-user members because it amended its by-laws to abolish them.[470] The IETF's reform created institutional va-lidity by establishing a body capable of making legitimate rules; ICANN's reform shows little sign of doing much beyond ensuring that the few dissidents currently inside the tent are excluded, as the five currently elected members will have their seats abolished.[471] The ab-sence of proposed accountability mechanisms has not gone unno-ticed,[472] and it too undermines ICANN's ability to persuade people that its activities are justified.

3. *Learning from ICANN.* — The contrast between ICANN and the IETF teaches several things. The first is that people understand that claiming kinship with the IETF model is a way of claiming legitimacy, but that not everyone who makes this claim is entitled to do so.

ICANN started out claiming that it would make decisions by con-sensus. It described the various structures under the Board as a means of forging or recognizing a consensus, and the Board was to be akin to IAB, a final check that things had been done properly. It quickly be-came clear, however, that there would not be consensus on the conten-tious issues facing ICANN, or at least that consensus would not form quickly enough for a body that felt pressure to report substantial pro-gress within a year or two.[473]

Almost immediately, ICANN abandoned consensus-based deci-sionmaking. It continued, however, to pay lip service to the concept and also to claim that its actions were based on consensus, including controversial decisions on matters as diverse as revising its bylaws, determining whether individuals (as opposed to corporations, nonprofits, governments, and NGOs) would have any voting power

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[468] *See supra* note 465.

[469] *See, e.g.*, Lynn, *supra* note 461 ("While virtually everyone seems to agree that ICANN should have Board-level representation of the broad public interest of the global Internet commu-nity, there has been no consensus around the best method of achieving that representa-tion. . . . [T]he notion of a special-purpose, no-cost, self-selected "membership" arising from thin air has quite reasonably generated strong fears of capture, fraud and abuse.").

[470] *See supra* note 449 and accompanying text.

[471] *See supra* note 413.

[472] *See generally, e.g.*, Tamar Frankel, *Accountability and Oversight of the Internet Corporation for Assigned Names and Numbers, at* http://www.markle.org/news/ICANN_fin1_9.pdf (July 12, 2002).

[473] ICANN signed an agreement with the U.S. Department of Commerce in which it agreed to accomplish certain tasks within two years. That proved impossible, and the agreement was modi-fied and renewed. *See* Froomkin, *Wrong Turn, supra* note 21, at 36 n.47.

and a formal place in the organization, and crafting new dispute policies aimed at cybersquatters.[474]   Critics noted that ICANN manipulated the term "consensus" to suit its needs,[475] but the Board and staff were unmoved.

ICANN's processes do not — and given the history of their creation, could not — conform to Habermas's stringent requirements for the formation of morally compelling norms.   Employing a rhetoric reminiscent of discourse ethics, ICANN is using complex and often rushed procedures to make decisions about key Internet standards and defining "consensus" in a way materially different from the IETF's procedures, and indeed different from what "consensus" seems to mean in ordinary contexts.[476]   As a result, ICANN's procedures lack the moral high ground occupied by the Internet Standardmaking procedures that they displace.   It should be noted, however, that the key participants in the system ICANN replaced had come to feel that the old system was breaking down under pressure from parties who were imperfectly represented in it, and that something had to change.

ICANN's inability to find true consensus has several sources.   One is the genuinely contentious nature of the subject matter.   People involved in the ICANN process have sharply conflicting economic and

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[474] In ICANN's first two years, some matters never went to working groups or other constituency groups. In other cases, ICANN gave working groups arbitrary deadlines. After documents left a working group, ICANN commonly provided a two-week comment period for the rest of the world to digest the result before calling on the Names Council to determine whether there was consensus for the recommendations. A combination of lack of clear procedures, failure to follow its own rules, *see* A. Michael Froomkin, *A Catalog of Critical Process Failures; Progress on Substance; More Work Needed* (Oct. 13, 1999), *at* http://personal.law.miami.edu/~amf/icann-udp.htm, and short times for comment, produced a series of controversial decisions that ICANN stubbornly insisted were the products of consensus. *See, e.g.,* Letter from Jere W. Glover & Eric E. Mange, Chief Counsel for Advocacy & Assistant Chief Counsel for Telecommunications, Small Business Administration, to Esther Dyson, Internet Corporation for Assigned Names and Numbers (Oct. 27, 1999), *at* http://www.sba.gov/advo/laws/comments/icann99_1027.html (requesting that ICANN "adopt and publish a policy statement on major issues that affect domain name holders"); *see also* David Post, Michael Froomkin & David Farber, *Elusive Consensus, supra* note 438 ("[T]his notion that ICANN 'is nothing more than the reflection of community consensus' continues to defy common sense. How ICANN interprets 'consensus,' and how it thinks such a consensus is uncovered, is deeply mysterious."). *See generally* ICANNWatch.org, http://www.icannwatch.org (last visited Dec. 7, 2002).

[475] *See, e.g.,* MUELLER, *supra* note 402; David R. Johnson & Susan P. Crawford, *What an ICANN Consensus Report Should Look Like* (Sept. 5, 2000), *available at* http://www.icannwatch.org/archive/what_icann_consensus_should_look_like.htm; David R. Johnson and Susan P. Crawford, *Why Consensus Matters: The Theory Underlying ICANN's Mandate To Set Policy for the Domain Name System* (Aug. 23, 2000), *available at* http://www.icannwatch.org/archive/why_consensus_matters.htm; David Post, *ICANN and the Consensus of the Internet Community* (Aug. 20, 1999), *at* http://www.icannwatch.org/archive/icann_and_the_consensus_of_the_community.htm; Post, Froomkin & Farber, *supra* note 474.

[476] *See, e.g.,* Post, *supra* note 475 (stating "I don't believe that ICANN, at this point, can lay claim to being a true consensus-based institution," despite ICANN's assertions to the contrary); Post, Froomkin & Farber, *supra* note 474.

political goals. These divisions are more difficult to bridge than the average question regarding the definition of a software protocol: some people want a lot of new top-level domain names created; others want none. Many people want the lucrative assignment of rights to manage the most attractive names. Trademark interests were able to get ICANN to adopt rules favoring them in disputes with registrants of coveted domain names; registrants' representatives objected, but with very little success.[477] Given the nature of the subject matter, it is not at all evident that consensus was achievable. It is also clear, however, that ICANN's commitment to consensus was substantially constrained by other imperatives, notably the intervention of newcomers to the debate, motivated by strategic concerns such as profit maximization for their firms. To them, the DNS debate was not primarily political or social, not part of the public sphere, but part of the economic sphere.[478] When some parties feel a duty to act strategically in the interests of their clients, it is not, and in Habermasian terms it cannot be, a best practical discourse between autonomous moral and political agents engaged in a political, much less philosophical, discourse.

The short and not completely happy history of ICANN might be read as evidence that the IETF model cannot be generalized, or is indeed headed for a period of jurisdictional shrinkage as bodies like ICANN move in on its turf. In this view, when large sums of money are at issue, and the affected stakeholders are not only diverse, but their interests are also at loggerheads, then consensus cannot be achieved and discourse ethics loses its relevance. I think this is the wrong conclusion. Discourse ethics is a fundamentally proceduralist theory. It requires actual or reasonably hypothesized consensus as to the procedure for making decisions, not the decisions themselves.

The ICANN experience emphasizes the importance of being willing to listen. The IETF did not get its internal procedures right from the start. But when the membership protested in 1992 that the IAB was oligarchic and out of touch with the rank and file, the IETF changed its procedures to accommodate its concerns. In contrast, when ICANN's membership elected a candidate to the Board that the majority distrusted, ICANN's reaction was to change its bylaws to em-

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[477] For a description and analysis of the ICANN-mandated domain name dispute policies see generally A. Michael Froomkin, *ICANN's "Uniform Dispute Resolution Policy" — Causes and (Partial) Cures*, 67 BROOK. L. REV. 605 (2002), *available at* http://personal.law.miami.edu/~froomkin/articles/udrp.pdf.

[478] And indeed, ICANN participants are more properly regulated by the rules we commonly use to shape the economic sphere. *See* A. Michael Froomkin & Mark A. Lemley, *ICANN and Antitrust*, 2003 U. ILL. L. REV. 1 (forthcoming) (arguing that if ICANN is truly the private body it claims to be, then it — and those who lobby it — may violate antitrust laws when they act to restrain competition).

phasize that "members" were not legally members[479] and then to eliminate the at-large electoral mechanism entirely.[480]

ICANN also serves as a reminder of the special value of the IETF as a model of procedural consensus, if not necessarily as a rigid template. ICANN's chief failures have been in institutional design.[481] It is particularly striking how little ICANN, unlike the IETF, uses the Internet as a tool for making decisions. Of course, just because something relates to or uses the Internet does not tell us much about its ability to generate legitimacy. ICANN's decisions are made at quarterly Board meetings held on four different continents.[482] Decisions of the Board and of many of the ICANN-supporting organizations occur at the physical meetings. Very few members of the Board, and even fewer of the staff, participate either in the public online fora hosted by ICANN or in the unofficial ICANN fora. In contrast, the IETF recognizes that participants cannot attend its equally far-flung meetings, and subjects everything discussed in person to ratification in an online discussion. In this, at least, ICANN's failures were not inevitable.

V. TECHNOLOGIES FOR DEMOCRACY

This Article began by documenting the existence of a real-life, transnational discourse that substantially meets the demanding conditions of Habermas's best practical discourse. It then used this example as a standpoint from which to examine and critique other Internet discourses. This Part, however, is devoted to speculation about how emerging Internet technologies might enable new types of Internet-based discourses with the "communicative power" Habermas proposes and, in time, educate and mobilize citizens to demand that their governments make better and more legitimate decisions.[483]

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[479] *See supra* p. 848.

[480] *See id.; see also* ICANN, Proposed New Bylaws, *supra* note 445, at art. XVII ("ICANN shall not have members, as defined in the California Nonprofit Public Benefit Corporation Law ('CNPBCL'), notwithstanding the use of the term 'Member' in these Bylaws, in any ICANN document, or in any action of the ICANN Board or staff.").

[481] Even ICANN's current President accepts this diagnosis. *See* Lynn, *supra* note 461.

[482] The meetings are supplemented with occasional telephone conferences. Unlike the quarterly meetings, the public is not allowed to listen to these meetings, although the Board later publishes summary minutes. *See* ICANN, Notes & Minutes, *at* http://www.icann.org/minutes/notes-minutes.htm (last visited Dec. 7, 2002).

[483] This view should not be confused with technological determinism. A technological determinist argues technologies are in some important way autonomous of the society in which they are discovered or deployed, and are therefore best understood as a (or even, sometimes, the) cause of social changes. *See, e.g.,* DOES TECHNOLOGY DRIVE HISTORY? THE DILEMMA OF TECHNOLOGICAL DETERMINISM (Merritt Roe Smith & Leo Marx eds., 1994); LANGDON WINNER, AUTONOMOUS TECHNOLOGY (1977); Daniel Chandler, *Technological or Media Determinism, at* http://www.aber.ac.uk/media/Documents/tecdet/tecdet.html (last visited Dec. 7, 2002). The view that technologies may make some things possible that were previously either im-

It is too early to predict, but not too early to hope,[484] that the
Internet supplies at least a partial answer to the powerful challenge
raised against the possibility of ever applying discourse theory to broad
ranges of public life:

> For Habermas, not only lawmaking but also governance in its ongoing,
> administrative aspect must draw its energy and authority from the citi-
> zenry's generation of communicative power. This bold vision would seem
> to call for a vast increase in the amount of "communicative power" pres-
> ently flowing through this or any other contemporary democracy. As
> Habermas points out, communicative power is generated only "from be-
> low," from mobilized citizenries. Thus, his vision seems to demand a sub-
> stantial renovation of our existing public spheres, and the creation of
> many new spaces and institutional forms for citizenly engagement in the
> processes of lawmaking and governance.[485]

This is a tall order, but it is a fair description of what the wide-
spread actualization of discourse ethics would require. The "creation
of many new spaces and institutional forms for citizenly engagement in
the processes of lawmaking and governance" may seem beyond our
capabilities. And perhaps it is. But, as currently configured, the
Internet radically empowers the individual. The Internet also creates
new tools that make possible the construction of new communities of
shared interest. In Habermasian terms, the Internet draws power
back into the public sphere, away from other systems.[486] It also makes
it possible, as never before, to create as many "new spaces and new
institutional forms" as one desires.[487]

Were it to happen, this development would both resemble and in-
vert a progression hypothesized by Manuel Castells in his magisterial
study of the sociology of the information age:

> It is possible that from such communes, new subjects — that is collective
> agents of social transformation — may emerge, thus constructing new
> meaning around *project identity*. ... [G]iven the structural crisis of civil

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possible or impractical does not amount to claiming that people will necessarily take advantage of
these new possibilities.

[484] *But see* Philip E. Agre, *Information Technology in the Political Process* (Oct. 28, 1998), *at*
http://dlis.gseis.ucla.edu/people/pagre/political.html ("[M]y complaint is not with the utopian vi-
sion ... but with notion that the technology ... is even capable of bringing it about.").

[485] William E. Forbath, *Short-Circuit: A Critique of Habermas's Understanding of Law, Poli-
tics, and Economic Life*, 17 CARDOZO L. REV. 1441, 1445 (1996).

[486] There are, it must be said, powerful forces in what Habermas would call the systems of the
economy and administration that seek to leash the Internet in various forms. For a discussion of
some reactionary activity, see A. Michael Froomkin, *The Empire Strikes Back*, 73 CHI.-KENT L.
REV. 1101, 1114–15 (1998), *available at* http://www.law.miami.edu/~froomkin/articles/empire.htm;
Michael Froomkin, *Winners and Losers: The Internet Changes Everything — or Nothing?* (Aug. 9,
2001), *at* http://www.law.monash.edu.au/clide/papers/froomkin.pdf.

[487] For a contrary view, that the Internet fragments communities and kills discourse, see
SUNSTEIN, *supra* note 13.

society and the nation-state, this may be the main potential source of so-
cial change in the network society.[488]

Castells saw these communities as primarily cultural and defensive,
composed of traditional ethnic, religious, and geographical groups re-
acting to globalization.   These groups might, in his view, circle the
wagons to re-forge their communal identity as a "resistance identit[ies]"
opposed to the "pluralistic, differentiated civil societies."[489]   In con-
trast, Habermasian new spaces begin with individuals in "pluralistic,
differentiated civil societies" who gradually unite in communities of
shared interests and understanding.   Using democratized access to a
new form of mass media — the Internet — these individuals engage
first in self-expression, then engage each other in debate.   In so doing,
they begin to form new communities of discourse.   Whether these new
communities of discourse can grow into forces capable of influencing
the public sphere is only speculation — but it suddenly seems more
plausible in light of the IETF phenomenon.[490]

As the Internet user base increases, and as the network is harnessed
to serve an increasingly wide range of purposes,[491] it becomes easier to
believe that some combination of the IETF model with other tech-
niques might allow best practical discourses, or at least something
close, to arise in other contexts; these might even make a larger-scale
global discourse possible.   Discourse-enabling tools are currently being
developed at a rapid pace, and some combination of them may suffice
someday to overcome the daunting problem of replicating the suc-
cesses of a discourse among the relatively small number of IETF par-
ticipants to much larger groups.   This Part briefly sketches four fami-
lies of software initiatives and one family of hardware initiatives, with
each illustrating a different way in which Internet tools enable sub-
stantially improved discourses.

Blogs represent one of the latest examples of the Internet's democ-
ratization of publishing.   They illustrate how ease of publishing can
stimulate debate: bloggers often read and react to each other's work,
creating a new commons of public, if not necessarily always deeply de-

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[488] MANUEL CASTELLS, THE POWER OF IDENTITY 67 (1997).

[489] *Id.* at 66–67 (emphasis removed).

[490] I focus on parts of the "private sphere" rather than the public.   Habermas seems to think
that the legal system has particular internal virtues that allow it to resist harmful tendencies in
the political system at large. *See* BETWEEN FACTS AND NORMS, *supra* note 1, at 327–28.   This
Article does not delve into the complex systems theory of Habermas in which he divides the world
into interacting systems (lifeworld, public sphere, administrative sphere, economic sphere), but
this Article is consistent with Habermas's suggestions that reformation of the public sphere must
start with self-organization of the private sphere.

[491] *See, e.g.*, L. Masinter, Hyper Text Coffee Pot Control Protocol (HTCPCP/1.0) (Network
Working Group, Request for Comments No. 2324) (Apr. 1998), *available at* http://www.ietf.org
/rfc/rfc2324.html (discussing the Internet Toaster).

liberated, debate. *Wiki webs* illustrate collaborative document creation tools. The process of creating these documents is a form of discourse, and the finished, or continually evolving, products are themselves contributions to larger discourses. *Slashdot* is a leading example of a community-based (and community-creating) discussion forum with collaborative filtering. Finally, *Open Government* and *Community Filtering Initiatives* provide examples of proposed and actual instances of governments using Internet resources to improve communication and, in some cases, influence or even control decisionmaking based on community input.

First, however, comes the hardware that makes the other things possible.

A. Hardware for Democracy

Most of this Part discusses Internet software. Internet software, however, does not exist in a vacuum. It requires hardware to run on, and connectivity to run over. Although computers are falling in price, they are not free, and neither is Internet connectivity to the home. The cost of connectivity has led many commentators to bemoan the "digital divide" between and within countries.[492] Any Internet-based discourse threatens to exclude those who cannot afford access;[493] any decision that affects people whose material circumstances make them unable to participate in it is deeply suspect and thus lacks legitimacy. In wealthier countries, such as the U.S. and some Western European countries, publicly provided free Internet access (as is found in many U.S. public libraries) combined with the rise of web cafés that sell Internet access by the hour means that many people without computers have at least some access to the Internet. Still, the legitimacy of

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[492] Bridges.org, a leading public interest group dedicated to overcoming the digital divide, defines the problem as follows:

> [T]he "digital divide" means that between countries and between different groups of people within countries, there is a wide division between those who have real access to information and communications technology and are using it effectively, and those who don't.
>
> Since information and communications technologies (ICTs) are increasingly becoming a foundation of our societies and economies, the digital divide means that the "information have-nots" are denied the option to participate in new ICT jobs, in e-government, in ICT[] improved healthcare, and in ICT enhanced education.
>
> More often than not, the "information have-nots" are in developing countries, and in disadvantaged groups within countries. To bridges.org, the digital divide is thus a lost opportunity — the opportunity for the information "have-nots" to use ICTs to improve their lives.

Bridges.org, *What Is The Digital Divide?*, *at* http://www.bridges.org/digitaldivide/index.html (last visited Dec. 7, 2002).

[493] Another problem is that, in the absence of widely deployed seamless voice recognition and reading software, Internet-based discourse also requires literacy.

any rule-formation that affects these people requires that this access be sufficient to allow them to participate meaningfully.

Because content and software tend to be visible worldwide, they are the most noticeable signs of the Internet's growth. Less visible, in part because they are more local, are an impressive number of community-based projects to provide a hardware infrastructure for Internet access. Some are FreeNets — free Internet Service Providers[494] — while others are ambitious projects to provide free wireless Internet connections to neighborhoods and even cities.[495] Using advanced tools such as empty Pringles cans for antennas,[496] community networks are extending the range of wireless access and providing free high-speed access to their neighbors.[497] Even with free bandwidth, one still needs a device that can access the Internet, but as personal digital assistants become increasingly Internet-aware, people have more, cheaper options for Internet access.

B. Weblogs and Blogs

The Internet has been democratizing publishing since before the Web was invented. At first, web page creation required a knowledge of HTML, the formatting language that underlies web pages, or access to unfamiliar scripting tools. Today, however, new user-friendly tools make it possible to create elegant web pages without any knowledge of HTML. Specialized hosting also removes technical barriers to entry and provides centralized locations at which readers can find web-based user journals known as Blogs, and Bloggers can find each other.[498] This development not only expands the number of speakers,

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[494] For sample lists, see Community Computer Networks, Free-Nets and City-Regional Guides, *at* http://victoria.tc.ca/Resources/freenets.html (last updated Apr. 2002); Freenets & Community Networks, *at* http://www.lights.com/freenet/ (last visited Dec. 7, 2002); PersonalTelco, Wireless Communities, http://www.personaltelco.net/index.cgi/WirelessCommunities (last visited Dec. 7, 2002); *see also* PersonalTelco, Mission Statement, *at* http://www.personaltelco.net/index.cgi /MissionStatement (last visited Dec. 7, 2002) (a Wiki site containing multiple proposals for a possible mission statement, including: "Personal Telco is a grassroots effort which helps communities build alternative communication networks. By creating, packaging and disseminating Open Source tools, documentation and community support, we are building city wide networks which are open to, and maintained by, the public.").

[495] *See generally* ROB FLICKENGER, BUILDING WIRELESS COMMUNITY NETWORKS (2002).

[496] *See* Rob Flickenger, *Antenna on the Cheap (er, Chip)*, O'REILLY NETWORKS (July 5, 2001), *at* http://www.oreillynet.com/lpt/wlg/448.

[497] Some people, however, seem more intent on helping themselves to other people's spillover bandwidth. *See, e.g.,* Warchalking, *at* http://www.warchalking.org (last visited Dec. 7, 2002).

[498] *See, e.g.,* Blogger.com, *at* http://www.blogger.com (last visited Dec. 7, 2002); Weblogs.com, *at* http://www.weblogs.com (last visited Dec. 7, 2002). "A blog is a web page made up of usually short, frequently updated posts that are arranged chronologically — like a what's new page or a journal." Blogger, About, *at* http://www.blogger.com/about.pyra (last visited Dec. 7, 2002).

but by making updating so easy, it also changes the nature of online conversations.

While web pages are naturally one-to-many media,[499] political Bloggers often read and link to each other's sites, invite feedback from readers, and comment on what other bloggers are saying.[500] A medium that is architecturally one-to-many is thus effectively a hybrid, a peer-to-peer conversation with many eavesdroppers. Although the stream-of-consciousness form of some Blogs may not necessarily lend itself to reflection, some Blogs are at least self-conscious about the nature of the "Blogosphere," if not yet engaged in thorough Habermasian self-reflection.

The Blogosphere is young, but it shows some signs of potentially evolving into a miniature public sphere of its own, a sphere of shared interests rather than shared geography. Conceivably, the rise of a Blog culture, even one composed primarily of nonpolitical, wholly personal diaries, may enrich the public sphere. The impulse to read some Blogs may not be that different from the impulse that brings viewers to soap operas, but the experience of regularly encountering another person's diary, of following along in a stranger's life, might have value. If it encourages readers to identify with someone different from themselves, it encourages them to attempt "the intellectual exercise of viewing life from the perspective of others — to try to walk in each others' shoes, to respect each other enough to engage in honest discourse, and to recognize in each other basic rights so as to create sufficient autonomy to make the discourse possible."[501] That encouragement is only part of what is needed for discourse ethics to flourish, but it is a start.

C. Wiki Webs and Other Collaborative Drafting Tools

Collaborative drafting systems allow many people to work together on a shared document or set of documents. The collaborators need not be online at the same time; the system allows for asynchronous communications across a network. Wiki Wiki (which means "quick" in Hawaiian[502]) is an example of collaborative drafting software.[503]

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[499] *Cf.* Eugene Volokh, *Cheap Speech and What It Will Do*, 104 YALE L.J. 1805 (1995) (speculating regarding consequences of low-cost, widely available one-to-many media).

[500] *See, e.g.*, Jon Udell, *Blogspace Under the Microscope*, O'REILLY NETWORKS (May 3, 2002), *at* http://www.oreillynet.com/pub/a/webservices/2002/05/03/udell.html (examining the "feedback loop" connecting Blogspace through a series of backlinks).

[501] *Supra* p. 765 (footnote omitted).

[502] Wiki Wiki Web Faq, *at* http://www.c2.com/cgi/wiki?WikiWikiWebFaq (last modified Nov. 14, 2002).

[503] The original Wiki collaborative web site started by Ward Cunningham is used "primarily for discussing software engineering, programming, and related issues." One Minute Wiki, *at* http://c2.com/cgi/wiki?OneMinuteWiki (last edited Nov. 14, 2002); *see also* Wiki Wiki Web Faq,

Wiki users create general categories and then classify their contributions. Singular category names refer to specific objects of discussion, while plural ones refer to broader discussions or topics.[504] Today the original Wiki contains more than twenty-thousand titles or pages,[505] organized into sixteen categories.[506] The main categories fall into three broad areas: technology (primarily computer-related), general intellectual pursuits, and Wiki. Within the general intellectual category, topics include book discussions, language skills, entertainment, stories, and film reviews.[507] Wiki Wiki describes itself as a "composition system; it's a discussion medium; it's a repository; it's a mail system; it's a tool for collaboration. . . . [I]t's a fun way of communicating."[508] Indeed, the original Wiki gave rise to a large, highly unorganized, collaborative community that has produced a very large set of texts.[509]

Web browsers access Wiki webs in the ordinary way. Any visitor to a Wiki site can update or delete any existing content on any page, which illustrates a potentially serious security problem in a basic Wiki Wiki installation. In addition, any visitor can create new pages or add content to the Wiki. Unlike ordinary web pages, Wiki sites display all the internal links that lead to a given page, in addition to all the links that start from it and point to other pages. There is also a special category that tracks recent changes to the Wiki.[510]

Unlike some Wiki clones, the original Wiki web is wide open. Although users may identify themselves and create homepages in the sys-

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supra note 502. As of June 20, 2002, there were over twenty-thousand titles, or pages, on the original Wiki site, which is available at http://c2.com/cgi/wiki.

[504] *See* Faq for Categories, *at* http://www.c2.com/cgi/wiki?FaqForCategories (last modified Dec. 5, 2001).

[505] *See* http://c2.com/cgi/wiki?WikiWikiWeb (last edited Nov. 8, 2002).

[506] *See* Category Category, *at* http://www.c2.com/cgi/wiki?CategoryCategory (last edited Nov. 15, 2002). Categories include: Computing, general; Entertainment; Language; Miscellaneous Intellectual Stuff; Miscellaneous Other Stuff; Patterns, the topic; Patterns, specific ones; People; Professional stuff; Software Development & programming, general; Software Development, distributed computing; Software Development, computer languages; Technical stuff; WikiWiki, general; WikiWiki, indexes, etc.; Metadiscussion of Categories.

[507] *See id.*

[508] Front Page, *at* http://c2.com/cgi/wiki (last modified Oct. 14, 2002).

[509] Some members of the Wiki community deem certain categories "off-topic." For instance, Category Society, a subcategory of Miscellaneous Intellectual Stuff, lists pages focusing on "how best to organize and live within HumanSocieties," but some Wiki users have labeled these pages "off-topic." *See* Category Society, *at* http://www.c2.com/cgi/wiki?CategorySociety (last modified June 18, 2001).

[510] When a user edits or adds a page, she may then edit the Recent Edits or Recent Changes pages to notify the Wiki community of the changes. Recent Edits contains a log of minor edits relating to punctuation, grammar, and the like, while Recent Changes contains a log of more substantive changes. Users add the new information to these log pages and identify themselves with either an IP address or a username. Both methods of identification are used on Wiki, but neither is required for participation.

tem, they are not required to do so. Any user of a Wiki can add or change content anywhere in the system. The system also encourages hyperlinking, using the convention that any words that runtogether-likethis should be a hyperlink. If any of the run-together words are already in the database, the Wiki creates a hyperlink to the master URL for that phrase. If the link is a new one, the Wiki system adds a question mark with a hyperlink next to the run-together text. Subsequent readers are invited to click the question mark to create a new page with their own content.

TWiki, another example of drafting software, is different from Wiki in many ways.[511] Most notably, TWiki is more secure and allows for tighter content management and edit tracking than the original Wiki.[512] Given the extreme openness of the original Wiki and its resulting vulnerability to electronic vandalism, its persistence as a viable collaborative tool suggests that the authors may have found a way for the community to police itself. Of course, part of the explanation for Wiki's flourishing might be the basic clunkyness of the content editing process; vandals just might not have the patience it takes to change many pages.[513] Wiki's users think that the time it takes to create content, plus the relative ease with which it can be replaced, actually welcomes and encourages deliberation — and discourages name-calling and tantrums, since these comments get deleted quickly.[514]

Similarly, the Openlaw project at the Berkman Center for Internet & Society at Harvard Law School uses the Annotation Engine, "a set of Perl scripts and a database that allows readers anywhere to add comments to web pages anywhere else."[515] The Center describes Openlaw as:

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[511] TWiki, a Wiki Wiki clone authored by Peter Thoeny, is a collaborative platform designed to "run a project development space, a document management system, a knowledge base, or any other groupware tool, on an intranet or on the internet." TWiki — A Web Based Collaboration Platform, *at* http://twiki.org (last revised Nov. 15, 2002). Information technology departments of many large corporations, including Motorola and SAP, use TWiki as a component of their collaboration efforts.

[512] Twiki Clone, *at* http://c2.com/cgi/wiki?TwikiClone (last edited Nov. 8, 2002) ("It is targeting the corporate intranet world to create dynamic intranet sites and knowledge base systems.").

[513] "It's an intelligence test of sorts to be able to edit a wiki page. It's not rocket science, but it doesn't appeal to the VideoAddicts. If it doesn't appeal, they don't participate, which leaves those of us who read and write to get on with rational discourse." Why Wiki Works, *at* http://c2.com/cgi/wiki?WhyWikiWorks (last modified Oct. 19, 2002).

[514] Wiki users argue: "Wiki evolves in place. Folks have time to think, often days or weeks, before they follow up some wiki page. So what people write is well-considered." *Id.* Additionally, they contend, Wiki participants "are by nature a pedantic, ornery, and unreasonable bunch. . . . [Wiki is] insecure, indiscriminate, user-hostile, slow, and stocked with difficult, nit-picking people. Any other online community would count each of these as a terrible flaw. Perhaps wiki works because the other online communities do not." *Id.*

[515] Annotation Engine, *at* http://cyber.law.harvard.edu/projects/annotate.html (last updated Aug. 21, 2001).

an experiment in crafting legal argument in an open forum . . . [to] de-
velop arguments, draft pleadings, and edit briefs in public, online. Non-
lawyers and lawyers alike are invited to join the process by adding
thoughts to the "brainstorm" outlines, drafting and commenting on drafts
in progress, and suggesting reference sources. . . . Building on the model of
open source software, [Openlaw is] working from the hypothesis that an
open development process best harnesses the distributed resources of the
Internet community. By using the Internet, [Openlaw] hope[s] to enable
the public interest to speak as loudly as the interests of corporations.
Openlaw is therefore a large project built through the coordinated effort of
many small (and not so small) contributions.[516]

The Supreme Court recently granted certiorari on Openlaw's first
case.[517]

D. Slash and Other Collaborative Filtering Tools

Although still some substantial distance from being a best practical
discourse in a box, Slash, the software behind the popular website
Slashdot,[518] is a leading example of how software[519] can facilitate dis-
course without relying on the strategic behavior of actually deleting
unhelpful participation. Slashdot is a community discussion tool that
allows largely unfettered and almost unlimited discussion that none-
theless permits participants to organize and manage their reading —
for example, by limiting themselves to contributions that other mem-
bers of the community have deemed as worth reading. The Slashdot
site itself is proudly devoted to "news for nerds" and "stuff that mat-
ters," with these terms referring to a wealth of technical talk amidst
discussions of social issues such as the Columbine massacre or gov-
ernmental censorship policies.[520] Reflecting the programmers' com-
mitment to fostering community-based discourse, the software is open

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[516] Openlaw, at http://eon.law.harvard.edu/openlaw (last visited Dec. 7, 2002).

[517] See Eldred v. Ashcroft, 255 F.3d 849 (D.C. Cir. 2001), cert. granted, 122 S. Ct. 1062 (2002).

[518] See Slashdot: News for Nerds, Stuff That Matters, at http://www.slashdot.org (last visited
Dec. 7, 2002). The leading sources for information about Slash are Slashdot.org, Slashcode.com,
and CHROMATIC, BRIAN AKER & DAVE KRIEGER, RUNNING WEBLOGS WITH SLASH (2002)
[hereinafter THE CROW BOOK].

[519] Other programs with similar functions and features include PHP-Nuke, Scoop, Squishdot,
and Zope.

[520] See Jon Katz, A Post-Columbine Halloween Horror Story (Nov. 4, 1999), at
http://slashdot.org/features/99/11/03/1117256.shtml (discussing actions, including prosecutions,
taken against students elsewhere); Jon Katz, Voices from the Hellmouth (Apr. 26, 1999), at
http://slashdot.org/articles/99/04/25/1438249.shtml (discussing reactions to the massacre at the
Littleton, Colorado high school); Jon Katz, Voices from the Hellmouth Revisited: Part Nine (Jan.
16, 2001), at http://features.slashdot.org/article.pl?sid=01/01/16/2353253; see also Slashdot, Censor-
ship, at http://slashdot.org/search.pl?topic=153 (last visited Dec. 7, 2002) (listing links to discus-
sions about censorship).

source and freely available. Indeed, a wide variety of online communities use it to organize their conversations.[521]

Anyone visiting the Slashdot website can suggest a topic of discussion, but in principle the "article" appears on the front page of the site only if one of the several "editors," the people running the software, approves it.[522] Editors can also initiate their own articles. Once an article is posted for discussion, anyone can append comments to it. Posted remarks may be signed, pseudonymous, or anonymous.[523] What makes Slashdot effective is that the user community is then recruited to assist in rating the comments.

Every comment posted to Slashdot carries a rating designed to reflect the community's decision regarding whether the comment contributes to the discussion. Anonymous comments enter the system rated at zero points.[524] Comments signed with a new, and thus untrusted, user's name or pseudonym enter the system rated at one point. Veterans who have a demonstrated track record of making useful contributions find that their comments enter the system with two points.

Once a user enters a comment into the system, other users are recruited to decide whether the comment's rating should be raised or lowered. The Slash software selects a random and constantly changing group of users who have visited the site a sufficient number of times to serve as temporary moderators and gives each user five "moderation points" to apply to the comments of others.[525] Moderators can use each of their moderation points to raise or lower the status of someone else's comment by a point, but cannot moderate posts on a topic about which they have chosen to comment. If a user later joins in the discussion on a topic he or she chooses to moderate, the user's moderation points vanish. Moderation points cannot be hoarded; they must be used within three days or they expire. Failure to expend one's points can delay one's next opportunity to moderate. No comment can

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[521] For a partial list of sites using Slash, see Slashcode Sites, *at* http://slashcode.com/sites.pl (last visited Dec. 7, 2002).

[522] Newer versions of Slashdot contain an optional feature permitting the site owners to allow users to start topics without an editor's approval. These topics, however, do not appear on the front of the site and are visible only to other users who know where to look for them. *See* THE CROW BOOK, *supra* note 518, at 236 (describing the discussion_create_seclev variable, which turns on this function). For an example of this feature in action, scroll to the bottom of http://slashdot.org/comments.pl (last visted Nov. 21, 2002).

[523] Slashdot whimsically labels these as from "Anonymous Coward." *See* THE CROW BOOK, *supra* note 518, at 237.

[524] Site owners can adjust each of these numbers. The text describes the default values recommended by the program's authors. *See id.* at 89–91.

[525] The Slashdot implementation tends to run ahead of the documentation, but a partial description is offered in Slashdot Moderation, *at* http://slashdot.org/moderation.shtml (last modified Sept. 9, 1999). In my experience, moderation opportunities come every other month or so, or faster if one of my comments is rated up to the maximum level.

be lowered to a score of below −1, or be raised to a score above 5, but it is possible for a comment to oscillate between those boundaries. Moderators must select from a small menu of reasons for their decisions, choosing among comments such as "offtopic," "flamebait," and "redundant" for negative votes and "insightful," "informative," "funny," and "interesting" for positive votes.[526]

Meanwhile, every visitor to the Slashdot web site can set her user preferences so that the site displays only those comments that have acquired a minimum number of points.[527] No comment is deleted for low status, so there is no actual censorship, only collaborative filtering. Furthermore, the system builds in feedback.[528] A poster gains one point of "karma" every time a moderator gives one of her comments a point. Conversely, having her comment downgraded by a point reduces a poster's karma by one. High karma allows one to post a comment with a higher initial status of two points instead of one. Thus, for example, I can read the Slashdot site with my viewing threshold set at two, knowing that what I read either will come from people whom the community has found tend to make valuable contributions, or will be comments to which someone else gave a point. While I may sometimes miss a small part of the gold, I also ensure that I wade through relatively little of what I and like-minded readers consider dross.

"Meta-moderation" reduces the incidence of abuse by moderators. Meta-moderators, certain habitual users of the site,[529] are given a daily set of ten randomly chosen moderation decisions made by others and are asked if each is correct or abusive. Users whose moderation decisions are consistently marked as abusive by meta-moderators will find that their karma shrinks, as do their odds of being asked to moderate in the future.

While Slashdot is a very useful tool for enabling an interesting and useful community discussion, there are important ways in which it is not, and standing alone cannot be, the sort of best practical discourse that produces decisions entitled to our respect. Slashdot is not really a decisionmaking tool at all; it is a discussion tool. The openness of the discussion means that anyone can join or leave at will and that individuals can assume multiple identities within the system. (After all, if

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[526] Again, these are the default values. Both the reasons and the number of reasons can be configured by the site owners. See THE CROW BOOK, supra note 518, at 83–91.

[527] Id. It is also possible to configure the site to display only articles on certain topics or only articles chosen by certain people.

[528] Censorship would consist of deleting content. In the case of the Slash engine, content is never deleted; it is always available to readers who adjust their reading threshold to include the content with the lowest score produced by the combination moderation decisions of community members.

[529] Exactly which type of user gets to be a meta-moderator is also configurable. See id. at 91.

each identity is interesting, each will be "modded up"; if the identities are all irrelevant bores, they will all be "modded down." Who cares about the actual identity of the author?) Although it is possible that a consensus might be reached, most discussions do not last long enough to achieve a consensus, if only because the site is news-oriented, and new material rapidly sends the old to the archive. In the absence of consensus, there is no obvious way to make a decision; voting on the current site is not possible because one does not know who the electorate should be or how many of the posters are multiple identities of the same person.

Because the editors choose which topics make the Slashdot front page, they have an agenda-setting role that permits them to skew the discourse. One could easily imagine practices that would blunt the impact of the editors, such as a rotating editorial board chosen from high karma users. In fact, some Slashdot-like systems avoid the danger of editorial domination by placing control of the front page in the hands of the community. (At Kuro5hin.org, for example, every article submitted for publication goes into a special "moderation queue," where members each get one vote to determine the fate of the article.[530]) Because the Slash software is free, one also could envision a set of complementary or competing fora run by different groups of editors.

In addition, recent versions of the Slash software include a "journaling" feature that allows every user of the software to set up a private web page that functions much like a blog — except that, if the author chooses, she can invite other members of the community to comment on her journal entries.[531] If Alice has a journal, Bob has the option of setting his reading preferences so that he will be notified every time Alice posts something. Bob can also choose to view a column on the front page of his customized slashcode homepage that lists the most recently modified journals.[532] This feature substantially democratizes the community's ability to raise topics independent of a site's editors, thereby enhancing the variety of discourse, albeit at the risk of slight fragmentation.

It would be foolhardy to predict that some hypothetical version five of Slashdot will someday include tools that encourage communities to self-generate morally valid community decisions. But it is not too soon

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[530] The members get four choices: "Post it to the Front Page!", "Post it to the Section Page Only", "I Don't Care" (which means no opinion), and "Dump It!" It takes a certain percentage of the membership to post or dump a story, and only stories that receive a majority of "Front Page" votes appear there. *See* FAQ — Article Moderation and Reading, *at* http://www.kuro5hin.org /?op=special;page=moderation (last visited Dec. 7, 2002).

[531] *See* Slashdot FAQ, *at* http://slashdot.org/faq/friends.shtml (last modified Jan. 4, 2002).

[532] An example of a customized Slashcode homepage is visible at http://www.slashcode.com (last visited Dec. 7, 2002).

to speculate that a multiplicity of Slashdot-like sites could become the nuclei of pluralistic "public spheres" in which the participants self-organize, educate each other, and then bring that shared understanding to bear in more traditional social processes for decisionmaking — such as elections.[533] For several years, those fortunate enough to have access to a computer and a communications service provider have had access to an uncensored feed of first-person experience from many countries and alternative commentary sometimes quite different from what mass media provide.[534] Now, perhaps this same fortunate — and rapidly growing — population with access to new communications technology will have access to tools that make community-building and quality discourse easier. That is still a long way from generalizing the best practical discourse, but it seems a step in the right direction, a direction in which we might be more willing and likely to move if we were persuaded that the endpoint is achievable, however special the circumstances.

E. *From Open Government to Community Deliberation Tools*

Unlike weblogs, a tool that citizens can use to speak to each other, "open government" initiatives allow information to flow between government and citizen, although in its simplest form the flow is one-way. Having official government information available online does not constitute discourse, but it does improve it: "[I]n the deliberative process, information plays a central role along with achieving equality of access to it. Equality of access to information and an unrestricted means of access are fundamental to a more ambitious practice of discourse."[535] Easy access to information empowers citizens, enhances debates, and, in time, may change outcomes.[536]

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[533] An interesting offshoot of Slashdot is slashdot.meetup.com, which proposes to have Slashdot users "[j]oin other nerds near [them]" at actual physical meetings — specific locations to be decided by plebiscite of the interested users in each community. *See* Slashdot MEETUP, *at* http://slashdot.meetup.com (last visited Dec. 7, 2002).

[534] It has been striking to compare, for example, the discussion of WTO protests found in many newspapers with first-person accounts of demonstrators. The demonstrators who choose to make their views known online seem much less crazy when they speak for themselves. *See* Phil Agre, Red Rock Eater, [RRE]Seattle (Dec. 1999), *at* http://commons.somewhere.com/rre/1999/RRE. Seattle.html/.

[535] Gimmler, *supra* note 321, at 31.

[536] Many U.S. federal agencies now accept comments by email. For a description of the EPA's use of the Internet, see Thomas C. Beierle, *Democracy On-Line: An Evaluation of the National Dialogue on Public Involvement in EPA Decisions* (2002), *available at* http://www.rff.org /reports/PDF_files/democracyonline.pdf. Private-sector examples of the dissemination of government information include the Pollution Locator, *at* http://www.scorecard.org/ (last visited Dec. 7, 2002); the Farm Subsidy Database of the Environmental Working Group (1996–2000), *at* http://www.ewg.org/farm/ (last visited Dec. 7, 2002); and the Nuclear Waste Route Atlas, *at* http://www.mapscience.org/doe_eis_maps.php (last visited Dec. 7, 2002).

Once governments provide official information online, the next step involves creating facilities for citizens to send email or other feedback.[537] For example, Britain's UK Online[538] provides one-stop access to government consultation documents and invites readers to discuss draft bills and to comment on other parliamentary processes.[539] England and Scotland allow citizens to propose legislation via the Internet,[540] but the nature of the Parliamentary system — in which the government exercises tight control over the legislative agenda — makes it highly unlikely their proposals will become law. So long as e-government initiatives involve little more than moving traditional practices such as notice and comment rulemaking online, the most they can offer is to change the volume and quality, but not the nature, of citizen participation in government.[541] These are worthy goals, but they are a long way from a true Habermasian discourse.

Perhaps in the future "e-government shall be a balanced combination of electronic services and forms of electronic participation."[542] As yet, however, "not much progress has . . . been made in connection with the development of instruments, processes and principles . . . for the direct integration of the popular will into political decisionmaking processes."[543] The Habermasian goal is not direct democracy as such; simply transposing plebiscites to the Internet is unlikely to increase the level of deliberation given the number of decisions that need to be made. Rather, we need different structures that enhance democracy, supplement debate, and encourage citizen involvement in what ultimately will be more like, and feel more like, self-governance.

The idea that democracy would be well served by enhanced deliberation is not a new one and is not monopolized by students of Habermas.[544] It is interesting to note, however, that proponents of

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[537] In an interesting twist that deserves emulation, one U.S. bureaucrat has set up a personal and unofficial policy page in which he discusses his ideas for regulatory reform and invites reader comment. *See* Douglas Galbi, Think! — New Ideas, Institutions, and Examples in Telecommunications Policy, *at* http://www.galbithink.org/ (last visited Dec. 7, 2002).

[538] UK Online, *at* http://www.ukonline.gov.uk/ (last visited Dec. 7, 2002).

[539] Bertelsmann Foundation, *E-Government — Connecting Efficient Administration and Responsive Democracy* 11 (2002), *available at* http://www.begix.de/en/studie/studie.pdf.

[540] *Id.*

[541] For a transnational survey of efforts to expand traditional notice and comment rulemaking to include Internet provision of information and electronic comments, see Pauline Poland, Project Report, *Online Consultation in GOL Countries: Initiatives To Foster E-democracy* (2001), *available at* http://governments-online.org/documents/e-consultation.pdf.

[542] Bertelsmann Foundation, *supra* note 539, at 4.

[543] *Id.* at 10.

[544] *See, e.g.*, Robert C. Luskin, James S. Fishkin & Dennis L. Plane, *Deliberative Polling and Policy Outcomes: Electric Utility Issues in Texas, available at* http://www.la.utexas.edu /research/delpol/papers/utility_paper.pdf.
> Deliberative Polling brings a previously interviewed random sample together for a weekend of discussions with other participants and policy experts. At the end, they

plans to enhance democracy with deliberative structures tend to champion virtues that are Habermasian in nature. For example, one recent study stated that proper deliberation would require: (1) access to balanced information, (2) an open agenda, (3) time to consider issues expansively, (4) freedom from manipulation or coercion, (5) a rule-based framework for discussions, and (6) participation, (7) scope for free interaction among participants, and (8) the recognition of differences among participants, but rejection of status-based prejudice.[545]

Designing structures that tend to encourage these virtues without being unduly coercive is no easy task. It remains uncertain to what extent one can export the community-creation virtues of a Wiki or a Slash to wider spheres, just as it is unclear to what extent one can use Internet tools to enhance awareness, debate, and deliberation within existing, usually geographically based, institutions. Three things, however, are clear. First, there is room for improvement, both in the quality of most governance structures and in the underlying legitimacy — and felt legitimacy — they enjoy.[546] Second, Internet technologies that enable and structure discourse offer a hope for improvement, so long as it is understood that the most we can hope for from them is that they will enable and enhance, but not determine, discourse.[547] Third, the IETF example demonstrates that a high level of discourse and valid rule-creation is attainable, and thus worth striving for.

Software products such as Benjamin R. Barber and Beth Simone Noveck's "Unchat" program offer novel ways to structure small-group real-time online discussions by building in means for participants to choose (and un-choose) discussion leaders and moderators, to set many of their own ground rules, and to have private side-conversations about procedure that need not disrupt the discussion of substance.[548] To encourage decisionmaking, the software includes a module for straw polls of the group. To encourage good decisions, Unchat pro-

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complete the same questionnaire as before. This idea is to see what public opinion would be like if the public were better informed about and had devoted more thought to the issues. This paper presents the results of eight regional Deliberative Polls about electric utility issues. As in the other Deliberative Polls to date, the participants seem to have learned quite a lot, and their better informed opinions at the end were often markedly different from their more "top-of-the-head" responses at the beginning.
Id. at 2.

[545] *See* Stephen Coleman & John Gotze, *Bowling Together: Online Public Engagement in Policy Deliberation* (2001), *at* http://bowlingtogether.net/intro.html.

[546] *See generally* LEGITIMATION CRISIS, *supra* note 45.

[547] *Cf.* Phil Agre, *Real-Time Politics: The Internet and the Political Process*, 18 INFO. SOC'Y 311 (2002) (warning against the fallacy of technological determinism), *at* http://dlis.gseis.ucla.edu /people/pagre/real-time.html.

[548] *See* Beth Simone Noveck, *Designing Deliberative Democracy in Cyberspace: The Role of the Cyber-Lawyer*, 9 B.U. J. SCI. & TECH. L. (forthcoming 2003) (arguing for greater use of technology to enhance participatory democracy); Unchat, *at* http://www.unchat.com (last visited Dec. 7, 2002); Why Unchat, *at* http://mit.unchat.com/html/whyunchat.jsp (last visited Dec. 7, 2002).

vides for easy integrated linking to outside sources of information. Unchat's biggest limitation, however, is that it is designed for a relatively small group of people and does not seem likely to scale well.

Today's early experiments in the design of online discourse-reinforcing institutions may be portents of future designs for improved governance.[549] The next steps could include online systems in which neighborhoods are asked to prioritize public works projects — which pothole gets fixed first, for example. Then, governments could let citizens put items on bureaucrats' agendas. Every citizen might be given a small annual quota of opportunities to add an item to a government agency's agenda. The agency receiving a citizen's request for action would not be required to do what the citizen suggested, but if the agency did not take action it would have to publish a reasoned opinion on its website explaining its decision.

Other ambitious projects are already on the drawing board. At the MIT School of Architecture and Planning, students led by Dean William J. Mitchell and Professor Daniel Greenwood are developing an "Open Governance Environment"[550] that they hope will enhance the deliberativeness and effectiveness of New England Open Town Meetings.[551] The aim is to meld the most useful features of Community Filtering — collaborative filtering of contributed ideas and proposals — with a more structured and formal process by which ideas that receive the most support in the first phase are subjected to structured, sometimes time-limited, debate culminating in a decisional moment, usually a vote (Governance Filtering).[552] In the initial phase, members of the town meeting are encouraged to brainstorm and to comment on each other's suggestions. When a proposal reaches a certain critical mass of support, or when a proposal originates from the appropriate government official, people are appointed to make the case for and against it, and everyone is invited to comment on the proposal and to respond to other comments within a few weeks' time. The process culminates with either an agenda for the physical town meeting — one

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[549] *See* Bertelsmann Foundation; *supra* note 539, at 13 ("Even in the case of the best examples of e-government, the potential of participatory elements is nowhere near exhausted.").

[550] The MIT E-Commerce Architecture Project Graduate Seminar Series, 4.285 Designing Online Self-Governance: Digital & Physical Place, Process and Presence's home page is at http://www.contractsxml.org/ecap2002/spring/ (last visited Dec. 7, 2002). *See also* Jim Youll, ECitizen project page, *at* http://new.agentzero.com/~jim/ecitizen/tool-selection.html (last visited Dec. 7, 2002).

[551] For a description of the rules of procedure of the typical New England Town Meeting, see newrules.org, *The New England Town Meeting, at* http://www.newrules.org/gov/townmtg.html (last visited Dec. 7, 2002).

[552] *See* MIT E-Commerce Architecture Project Graduate Seminar Series, *Collaborative Filters for Community and Governance: Can We All Now Finally Talk at Once?, at* http://www.contracts xml.org/ecap2002/spring/Filters.htm (last visited Dec. 7, 2002).

backed up by considerably more discussion than would be possible in a single evening — or perhaps an online vote of the town's residents.

A town-meeting-sized group is small compared even to a small country, and very small compared to a big one. Slash systems work well with over half a million participants, but it is unclear how far they can scale. Regardless of their scalability, they do not structure decisions, just a series of conversations. Unchat and the Open Governance Environment may help structure decisions, but they offer no obvious method for dealing with large groups.[553] Inviting citizens to help set bureaucratic agendas might work in a small country or a large metropolitan area, but it is not clear how it would work with even larger populations. As one attempts to find discourse tools for groups the size of a large nation, one must either find cyber-federalist ways to subdivide them yet keep them in contact, invent new tools, or be prepared to argue that habits inculcated in small group settings spill over into larger discourses. My personal experience with the Internet, in which I seem to find myself among varied groups, inclines me toward a vision of many smaller groups with overlapping membership, each attempting to achieve a best practical discourse within its limited realm. It might be that a multitude of subspheres[554] of interlocking, cross-pollinating discourses would provide an environment in which an informed citizenry could revitalize the public sphere as a whole and engage in the creation of better, and perhaps yet more legitimate, rules at even a national level. At best, however, we are in the very early days of that experiment.

VI. CONCLUSION

The participants in the development of formal, and perhaps some informal, Internet standards engage in a high level of discourse, continually reflect on their actions, and self-consciously document them. It appears that in the IETF Internet Standard process, at least for the moment, the Internet harbors an environment capable of providing the "practical discourse" that Habermas suggests is a prerequisite to the creation of morally acceptable norms.

If this is correct, the Internet Standards process amounts to a critical theory workshop, and conditions in cyberspace are ripe for the construction of a critical theory of how decisions might be made in a globalized society. To the extent that formal and informal Internet norms contain within them assertions about how the Internet should be gov-

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[553] This is a familiar problem. *Cf.* THE FEDERALIST No. 10, at 83 (James Madison) (Clinton Rossiter ed., 1961) (discussing the problem of representing large populations).

[554] See John Keane, *Structural Transformations of the Public Sphere, in* DIGITAL DEMOCRACY 70, 77–78 (Kenneth L. Hacker & Jan van Dijk eds., 2000).

erned, the outlines of a critical theory implicitly challenging the governance of social interactions that do not involve computers may already be taking shape. That this should be happening online, amidst new and somewhat radically constructed institutions, comports well with discourse theory. The medium is geared toward communication. Moreover, "[t]he deciphering of the normative meaning of existing institutions within a discourse-centered theoretical approach . . . supplies a perspective on the introduction and testing of *novel* institutional arrangements that might counteract the trend toward the transmutation of citizens into clients."[555]

Critical theory seeks practice informed by theory. The existence of a living, functioning example of discourse theory in action, however limited its scope and however special its circumstances, should serve as a challenge to other practices of governance ranging from ICANN to local governments, and to even even larger structures. That said, it is important to avoid falling prey to what Benjamin Barber has called the "Pangloss Scenario":[556] the Internet as a whole is not some freestanding public sphere filled with transformed denizens who will magically drop the attitudes, practices, and objectives that shape our familiar institutions of government. Indeed, given their linguistic and other diversities, there seems no reason to claim that Internet users somehow form a public sphere of their own.[557]

One should, however, be equally wary of excessive pessimism. No one lives in cyberspace; the term is but shorthand, at most a metaphor. Cyberspace is a part of a greater reality and thus it should be no surprise if the critical theory of cyberspace has implications and applications that go beyond computers. Even if the IETF model cannot simply be replicated elsewhere, as a Habermasian best practical discourse used to make decisions that matter it should remind us that the "Jef-

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[555] Habermas, *Further Reflections, supra* note 59, at 450.

[556] Benjamin Barber, *Three Scenarios for the Future of Technology and Strong Democracy*, 113 POL. SCI. Q. 573, 576 (1989–99) (referring to the "pop futurist" idea that new technology will reinvigorate economy, democracy, and entertainment).

[557] *See, e.g.*, Sinikka Sassi, *The Controversies of the Internet and the Revitalization of Local Political Life*, in DIGITAL DEMOCRACY, *supra* note 554, at 90, 94. For a very thoughtful discussion of the closely related idea that cyberspace is a "place," see Dan Hunter, *Cyberspace as Place*, 90 CAL. L. REV. (forthcoming 2002), *available at* http://intel.si.umich.edu/tprc/papers/2002/50/CyberspaceAsPlaceTPRC.pdf; Mark Lemley, *Place and Cyberspace*, 90 CAL. L. REV. (forthcoming 2002), *available at* http://intel.si.umich.edu/tprc/papers/2002/41/place_and_cyberspace.pdf. The metaphor of cyberspace as a place was popularized by David Johnson & David Post, *And How Shall the Net Be Governed? A Meditation on the Relative Virtues of Decentralized, Emergent Law*, in COORDINATING THE INTERNET 62 (Brian Kahin & James Keller eds., 1997); and David R. Johnson & David Post, *Law and Borders: The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996). But, "Johnson and Post would doubtless be appalled by the use to which their 'cyberspace as place' metaphor is currently being put." Lemley, *supra*, at 1 n.3.

fersonian Scenario,"[558] in which we improve the quality and delibera-
tiveness of both geographic communities and communities of practice,
may be attainable and is certainly worth striving for.

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[558] Barber, *supra* note 556, at 582 (referring to the "least probable and ... unlikely to become
more probable" scenario in which technology lives up to its potential to improve information
available to citizens and quality of democratic participation).