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THE LAW AND ECONOMICS OF INTERNET NORMS

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INTRODUCTION

Private ordering is in vogue in legal scholarship. Nowhere is this clearer than on the Internet. Legal scholars who study the Internet talk freely about new forms of governance tailored to the specific needs of the Net. Only rarely are these "governance" models ones that involve a significant role for government as classically envisioned. Some scholars see international law, with its emphasis on

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political and moral suasion rather than legal authority, as the appropriate way to govern what is, after all, an international phenomenon.[1] Many others, though, look to contracts as the preferred model for governing cyberspace. Their visions of private ordering differ, ranging from the complex adaptive systems favored by David Johnson and David Post[2] to the rather more structured set

1. *See, e.g.*, Raymond T. Nimmer, *Licensing on the Global Information Infrastructure: Disharmony in Cyberspace*, 16 NW. J. INT'L L. & BUS. 224, 246-47 (1995); Sean Selin, *Governing Cyberspace: The Need for an International Solution*, 32 GONZ. L. REV. 365 (1997); Matthew R. Burnstein, Note, *Conflicts on the Net: Choice of Law in Transnational Cyberspace*, 29 VAND. J. TRANSNAT'L L. 75 (1996). David Post offers the Clinton Administration's NII White Paper and the WIPO Copyright Treaties as examples of this internationalization tendency. *See* David G. Post, *Governing Cyberspace*, 43 WAYNE L. REV. 155, 164 n.24 (1996). While international law is not really private ordering because it involves the interaction of governments, the *way* in which governments interact in international law (at least in peacetime) is generally through agreement and not coercive authority. *See* I. Trotter Hardy, *The Proper Legal Regime for "Cyberspace"*, 55 U. PITT. L. REV. 993, 1022-25 (1994) (treating customary international law as a form of quasi-private ordering). *Cf.* Robyn Forman Pollack, *Creating the Standards of a Global Community: Regulating Pornography on the Internet—An International Concern*, 10 TEMP. INT'L & COMP. L.J. 467 (1996) (suggesting international self-regulation).

Dan Burk makes the suggestion that international treaties harmonizing trademark law will help alleviate some of the problems associated with the Net's globalization of trademark disputes. *See* Dan L. Burk, *Trademark Doctrines for Global Electronic Commerce*, 49 S.C. L. REV. 695, 731-33 (1998) [hereinafter Burk, *Trademark Doctrines*]. This is not really an argument for internationalization as a replacement for sovereign law, since the treaty in question would simply facilitate the enforcement of national laws. *Cf.* Dan L. Burk, *The Market for Digital Piracy, in* BORDERS IN CYBERSPACE: INFORMATION POLICY AND THE GLOBAL INFORMATION INFRASTRUCTURE 205, 227-28 (Brian Kahin & Charles Nesson eds., 1997) (arguing that the Internet will facilitate international regulatory competition, though not necessarily with desirable results).

2. *See, e.g.*, David G. Post & David R. Johnson, *"Chaos Prevailing on Every Continent": Towards A New Theory of Decentralized Decision-Making in Complex Systems*, 73 CHI.-KENT L. REV. 1055 (1998) [hereinafter Johnson & Post, *Chaos*]; David R. Johnson & David G. 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 H. Keller eds., 1997) [hereinafter Johnson & Post, *And How Shall the Net Be Governed?*]; David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996) [hereinafter Johnson & Post, *Law and Borders*]; David R. Johnson & David G. Post, *The Rise of Law on the Global Network, in* BORDERS IN CYBERSPACE, *supra* note 1, at 3 [hereinafter Johnson & Post, *Rise of Law*]; Post, *supra* note 1; David G. Post, *Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace*, 1995 J. ONLINE L. art. 3 <http://www.wm.edu/law/publications/jol/post.html> [hereinafter Post, *Anarchy*]. For similar approaches, see, e.g., Kevin K. Ban, Note, *Does the Internet Warrant a Twenty-Seventh Amendment to the United States Constitution?*, 23 J. CORP. L. 521 (1998) (arguing that the Internet should be established as a separate jurisdiction); Jay Krasovec, Comment, *Cyberspace: The Final Frontier, for Regulation?*, 31 AKRON L. REV. 101 (1997); Aron Mefford, Note, *Lex Informatica: Foundations of Law on the Internet*, 5 IND. J. GLOBAL LEGAL STUD. 211 (1997); *cf.* Timothy S. Wu, Note, *Cyberspace Sovereignty?—The Internet and the International System*, 10 HARV. J.L. & TECH. 647 (1997).

Still other scholars are sympathetic to Johnson and Post's argument that the Internet makes governmental regulation more difficult, though they do not endorse the idea of the Internet as a separate jurisdiction. *See, e.g.*, A. Michael Froomkin, *The Internet as a Source of Regulatory Arbitrage, in* BORDERS IN CYBERSPACE, *supra* note 1, at 129, 152-54.

of form contracts suggested by Bob Dunne.[3]

These models generally rely in the final analysis on a supreme legal authority; someone must establish the initial property entitlements and enforce the contracts that govern the Net, after all.[4] The property-contract model is perhaps better thought of, then, as *quasi*-private ordering. But the common goal of these quasi-private ordering advocates is to decentralize governance and return control to the people—at least, the people who write the contracts.[5] This vision of the primacy of contract may be on its way to adoption in some areas of the law.[6] Both Terry Fisher's and Niva Elkin-Koren's papers in this symposium are reacting to the particular ascendancy of contract as a substitute for law, but in the end they are both about the rise of private ordering on the Net.[7]

3. *See* Robert L. Dunne, *Deterring Unauthorized Access to Computers: Controlling Behavior in Cyberspace Through a Contract Law Paradigm*, 35 JURIMETRICS J. 1 (1994).

4. Peggy Radin's article in this symposium nicely exposes the latent assumptions of the libertarian approach to "private ordering." *See* Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295, 1297 (1998). *Cf.* Richard A. Epstein, International News Service v. Associated Press: *Custom and Law as Sources of Property Rights in News*, 78 VA. L. REV. 85, 127 (1992) ("[D]ecentralized customs may be generated without legal interference and control, but legal force may be necessary to maintain them against systematic defection."). Niva Elkin-Koren's paper in this symposium also stresses this point. *See* Niva Elkin-Koren, *Copyrights in Cyberspace—Rights Without Laws?*, 73 CHI.-KENT L. REV. 1155, 1165 (1998).

Of course, the "legal authority" may not be any existing government. It might be a new government created by common consent, or by force. Kaushik Basu tells the story of being stopped on a road in India by brigands extorting a "road tax." This is, he says, the enforcement of a sort of local norm. The enforcement does not come with the threat of prison, as in a tax by a legitimate government, but it is an enforceable rule nonetheless. Kaushik Basu, *The Role of Norms and Law in Economics: An Essay on Political Economy* 1-2 (1998) (working paper, on file with author).

5. *See, e.g.*, Tom W. Bell, *Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine*, 76 N.C. L. REV. 557 (1998); Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. CHI. LEGAL F. 207; Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. CHI. LEGAL F. 217.

6. *See* Hill v. Gateway 2000, Inc., 105 F.3d 1147 (7th Cir. 1997) (finding that a term selected by vendor became part of the contract even though it was never agreed to by the buyer, so long as it was included somewhere in the box accompanying the product); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (holding that contracts may be enforceable even though they are at odds with copyright policy); Uniform Computer Information Transactions Act ("UCITA") § 208 (Feb. 1, 1999 Draft) (last modified Apr. 24, 1999) <http://www.law.upenn.edu/bll/ulc/ulc_frame.htm> (expanding freedom of contract in information transactions).

7. *See* Elkin-Koren, *supra* note 4; William W. Fisher III, *Property and Contract on the Internet*, 73 CHI.-KENT L. REV. 1203 (1998); *see also* Julie E. Cohen, Lochner *in Cyberspace: The New Economic Orthodoxy of "Rights Management"*, 97 MICH. L. REV. 462 (1998). Both Fisher and Elkin-Koren focus their attention on the trend towards legal deference to contract. Elkin-Koren's paper is explicit in linking two types of "private ordering" on the Net: the contractual freedom advocated by certain property rights theorists and the governance freedom advocated by the cyberlibertarians. *See* Elkin-Koren, *supra*, at 1159.

At the conference itself, Peggy Radin found it notable that on the panel on property

Contemporaneous with the rise of contracts as a mechanism for Internet governance, another group of legal scholars has explored the existence of what might be thought of as *true* private ordering: the social relationships that individuals and groups form that operate outside of the law.[8] Beginning with Robert Ellickson's pathbreaking empirical work,[9] a number of law and economics scholars have investigated these extra-legal relationships in a variety of social settings.[10] This work has unquestionably added significantly to our understanding of how legal rules actually influence (and in some cases, don't influence) behavior in practice.

In this article, I take a skeptical look at what appears to me to be a confluence of these trends: the idea that law should give deference to private norms on the Net. I suggest a number of reasons why one

theory, everyone was talking about contracts. *See also* Cohen, *supra* at II.B.2 (discussing the theoretical rationale for this convergence); *cf.* Robert P. Merges, *The End of Friction? Property Rights and Contract in the "Newtonian" World of On-line Commerce*, 12 BERKELEY TECH. L.J. 115 (1997) (evaluating the interplay between property and contract on the Net). If the blurring line between contract and tort causes of action is called "contorts," perhaps the property-contract amalgamation should be called "protract." Certainly the term is evocative of the likely effect.

8. Some refer to this as "cyberanarchy," because it does not depend on government enforcement of property and contract rules, as does the libertarian model. *See* Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199 (1998). But in fact it seems to me that most advocates of this position seek not so much anarchy as new governmental structures.

9. *See* ROBERT C. ELLICKSON, ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES (1991).

10. Prominent among these scholars are Lisa Bernstein and Robert Cooter. *See* Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. PA. L. REV. 1765 (1996) [hereinafter Bernstein, *Merchant Law*]; Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115 (1992) [hereinafter Bernstein, *Opting Out*]; Lisa Bernstein, *Social Norms and Default Rules Analysis*, 3 S. CAL. INTERDISC. L.J. 59 (1993); Robert D. Cooter, *Against Legal Centrism*, 81 CAL. L. REV. 417 (1993) (reviewing ELLICKSON, *supra* note 9) [hereinafter Cooter, *Legal Centrism*]; Robert D. Cooter, *Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant*, 144 U. PA. L. REV. 1643 (1996) [hereinafter Cooter, *Law Merchant*]; Robert D. Cooter, *Structural Adjudication and the New Law Merchant: A Model of Decentralized Law*, 14 INT'L REV. L. & ECON. 215 (1994); Robert D. Cooter, *The Theory of Market Modernization of Law*, 16 INT'L REV. L. & ECON. 141 (1995) [hereinafter Cooter, *Market Modernization*]. For other examples of work on norms in a variety of contexts, see Avner Greif, *Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders*, 49 J. Econ. Hist. 857 (1989); Peter H. Huang & Ho-Mou Wu, *More Order Without More Law: A Theory of Social Norms and Organizational Cultures*, 10 J.L. ECON. & ORG. 390 (1994); Avery Katz, *Taking Private Ordering Seriously*, 144 U. PA. L. REV. 1745 (1996); Jody S. Kraus, *Legal Design and the Evolution of Commercial Norms*, 26 J. LEGAL STUD. 377 (1997); Richard H. McAdams, *Comment: Accounting for Norms*, 1997 WIS. L. REV. 625; Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338 (1997); Randal C. Picker, *Simple Games in a Complex World: A Generative Approach to the Adoption of Norms*, 64 U. CHI. L. REV. 1225 (1997). For more critical analyses, see David Charny, *Illusions of a Spontaneous Order: "Norms" in Contractual Relationships*, 144 U. PA. L. REV. 1841 (1996); Lawrence Lessig, *Social Meaning and Social Norms*, 144 U. PA. L. REV. 2181 (1996); Eric A. Posner, *Law, Economics, and Inefficient Norms*, 144 U. PA. L. REV. 1697 (1996).

might prefer public to private ordering on the Net. I want to emphasize at the outset two things about my goals in writing this Essay. First, I have no quarrel whatsoever with descriptive work on norms by law and economics scholars. Anything that advances our understanding of how people make decisions in the shadow of the law is to be applauded. Nor do I intend to take on the body of scholarship that identifies norms and suggests ways in which they affect optimal legal rules. The concerns I address in this article are only about that subset of norm theory which takes a particular prescriptive position in favor of deference to extralegal private ordering.[11]

Second, this Essay is intended as a polemic. There are good reasons the law might defer to private ordering in particular circumstances, or at least take it into account; I do not address all of those reasons. Further, the problem I address here is at base one about comparative institutional governance.[12] My analysis of that problem is inherently incomplete, because I do not even attempt to catalog the shortcomings of public law, or weigh the two in context to determine which approach is more efficient. Still, I think there are some fundamental problems that have gone unaddressed in the headlong academic rush to reconceive Internet governance. By emphasizing those problems, I hope to advance the discussion of how these institutions should be compared.

I. ARGUMENTS FOR NORMS IN INTERNET LAW

The recent explorations by law and economics scholars of norms of social behavior are well catalogued. Robert Ellickson investigated a number of social groups that resolve disputes outside (and sometimes in opposition to) the legal system, including cattle ranchers in rural California and professors at academic research institutions.[13] Lisa Bernstein has contributed analyses of the business practices of grain merchants[14] and diamond merchants.[15] Robert Cooter has gone

11. Stephen Carter makes a similar distinction in his review of Richard Epstein's work on norms in intellectual property law. *See* Stephen L. Carter, *Custom, Adjudication, and Petrushevsky's Watch: Some Notes From the Intellectual Property Front*, 78 VA. L. REV. 129, 130-31 (1992).

12. *See generally* THRÁINN EGGERTSSON, ECONOMIC BEHAVIOR AND INSTITUTIONS (1990) (discussing the role of new institutional economics in evaluating governance structures).

13. *See* ELLICKSON, *supra* note 9.

14. *See* Bernstein, *Merchant Law*, *supra* note 10.

15. *See* Bernstein, *Opting Out*, *supra* note 10.

further afield, to Papua New Guinea, for a broader study of how societies construct legal rules through private behavior in circumstances in which they are not imposed externally.[16] Still other work focuses on behavior in Silicon Valley[17] or in the financial markets.[18] This work can fairly be described as the anthropology of law—an attempt to understand how social structures and informal rules develop in the shadow of the law.[19]

This empirical work on norms is at base descriptive. Ellickson, Bernstein, and others endeavour to tell us how people behave when confronted with a set of legal rules and practical problems. Similar descriptive work exists on norms and the Net, though most of it is casual and not terribly rigorous. For example, various writers have talked about the social norms that characterize behavior of people on-line in different venues: the use of "emoticons" to convey a rough facsimile of what a face might; informal "rules" that govern both the ".sig" files that identify speakers and the editing of other people's words in a discussion group; the use of "flaming" as a method of social sanction against those who violate the norms of the Net; and even the diversity of social groups on the Net itself.[20] A number of the papers in this symposium acknowledge these informal rules of Net behavior, at least indirectly.[21]

16. *See* Robert D. Cooter, *Inventing Market Property: The Land Courts of Papua New Guinea*, 25 L. & SOC'Y REV. 759 (1991).

17. *See, e.g.*, Lisa Bernstein, *The Silicon Valley Lawyer as Transaction Cost Engineer*, 74 OR. L. REV. 239 (1995); Joseph Bankman & Ronald J. Gilson, *Why Start-Ups?*, 51 STAN. L. REV. 289 (1999).

18. *See, e.g.*, Claire A. Hill, Fool Me Twice, Shame on Me, or How Corporate Lawyers Learn from Experience (1998) (working paper, on file with author); Claire A. Hill, Order in the Shadow of the Law, or How Contracts Do Things with Words 3 (1998) (working paper, on file with author).

19. Indeed, Robert Merges was sufficiently impressed by the anthropological nature of this work that he titled his review of Ellickson's book "Among the Tribes of Shasta County." Robert P. Merges, *Among the Tribes of Shasta County*, 18 L. & SOC. INQUIRY 299 (1993) (reviewing ELLICKSON, *supra* note 9).

20. *See, e.g.*, Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 641-45 (1998) (evaluating the netiquette of linking and framing on the Internet); *cf.* Mark A. Lemley, *Shrinkwraps in Cyberspace*, 35 JURIMETRICS J. 311, 313 (1995) (identifying some of these Net norms and their informal enforcement mechanisms).

21. *See* Elkin-Koren, *supra* note 4, at 1160-62; Fisher, *supra* note 7, at 1219, 1226; Johnson & Post, *Chaos*, *supra* note 2, at 1086-88.

Hank Perritt's paper takes a different tack—he focuses on the Net not as a source of norms governing human behavior on-line, but as a *facilitative* mechanism for private ordering. Because the Net reduces transactions costs, it may make possible social groupings and agreements that otherwise would never have occurred. *See* Henry H. Perritt, Jr., *The Internet Is Changing International Law*, 73 CHI.-KENT L. REV. 997 (1998); *see also* Henry H. Perritt, Jr., *Cyberspace and State Sovereignty*, 3 J. INT'L LEGAL STUD. 155 (1997). I have no quarrel with this view of private ordering either. It seems likely that the Net will reduce transactions costs, as

Along with the empirical work, the law and economics of norms includes a strong theoretical component. For the most part, what one might loosely call the "proponents" of norms[22] are attracted by their decentralized, emergent character, which these proponents view as an advantage over public law systems. Thus, work by Robert Cooter (among others) has offered emergent norms as an alternative to legal rulemaking, particularly in developing countries that lack an established legal system.[23] By contrast, others suggest that norms may be inefficient in certain circumstances, and that the law can appropriately try to modify or restrict private behavior in these circumstances.[24]

Some proponents have gone further, suggesting *prescriptive* uses for these observations of norms in the law.[25] This group of proponents argues that the law should defer to, or at least take account of, informal norms in establishing its rules.[26] There are three distinct types of prescriptive arguments, listed here in roughly increasing order of strength.

The first prescriptive argument is that the law should defer to norms in isolated cases of factfinding. For example, one might construct a contract law whose rules regarding a transaction are informed by the "customs" or "course of dealing" in an industry, at

Merges and others have predicted, *see* Merges, *supra* note 7, at 116, though perhaps not as much as everyone seems to expect. *See id.* (noting that a number of transaction costs will still remain on the Net); A. Michael Froomkin & J. Bradford deLong, *The Next Economy, in* INTERNET PUBLISHING AND BEYOND: THE ECONOMICS OF DIGITAL INFORMATION AND INTELLECTUAL PROPERTY (Deborah Hurley et al. eds., 1998).

22. When H.L. Mencken was asked whether he believed in infant baptism, he is reputed to have replied "Believe in it?! Why, I've seen it done!" Similarly, it is perhaps a little odd to speak of proponents and opponents of norms. Norms exist, and it is hard to imagine a world in which they did not. Nonetheless, legal scholars differ significantly on the question of whether extralegal norms themselves are good or bad, and on the question of whether and how the law should take account of them. I speak of those who are enamoured with informal norms as an alternative to law as "proponents" of norms.

23. *See, e.g.*, Cooter, *Market Modernization*, *supra* note 10, at 141; Cooter, *Legal Centrism*, *supra* note 10, at 417. On the Internet front, see Johnson & Post, *Chaos*, *supra* note 2, at 1087-88.

24. *See* Lessig, *supra* note 10, at 2181; Posner, *supra* note 10, at 1728-36; Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996).

25. For reasons I hope are obvious, I will avoid calling these approaches "normative."

26. Not all the "proponents" of norms argue that the law should enforce or take account of them. A significant body of norm scholarship argues that norms are best dealt with by *refusing* to enforce them in a court. *See* Bernstein, *Merchant Law*, *supra* note 10; *see also* David Charny, *Nonlegal Sanctions in Commercial Relationships*, 104 HARV. L. REV. 373 (1990); Edward B. Rock & Michael L. Wachter, *The Enforceability of Norms and the Employment Relationship*, 144 U. PA. L. REV. 1913, 1917 (1996). In effect, these scholars endorse norms as self-interested gifts rather than obligations: a party is under no legal obligation to comply with a norm, though it will sometimes be in its self-interest to do so.

least where the terms of the contract are ambiguous.[27] The Uniform Commercial Code takes this approach to some extent.[28] To some extent, this first approach turns courts into anthropologists—the application of legal rules will depend on the court's ability to identify the custom in an industry accurately. And it raises the possibility that an industry can change the legal rule applied to it by changing its customs.[29] Nonetheless, this use of norms in law is relatively weak, because it uses norms only to inform the court about specific practices within a preestablished legal framework.

A second prescriptive use of norms in law is to carve out a set of behaviors in which courts will simply defer to private agreement in determining what rules will govern the transaction.[30] Note that enforcing contracts that alter the governing legal paradigm is more deferential to private ordering than merely enforcing the terms of a contract about, say, the price of goods. Legal deference to agreement involves the parties *changing the legal rules themselves* by contract, at least insofar as those rules apply to that particular transaction. This is the model of the law itself as a set of default rules provided for the convenience of private actors. There have always been circumstances in which the law has taken this approach: some rules in certain areas of law, notably contract law, can be changed by the agreement of the parties to a contract.[31] Alternatively, tort liability may depend on what is "customary" or normally done in an industry. The law of negligence generally follows this view: whether a doctor is negligent in performing a medical procedure depends in large measure on what

27. For a useful discussion of the role of custom in the law, with particular reference to intellectual property law, see Epstein, *supra* note 4, at 124-28.

28. *See, e.g.*, U.C.C. §§ 1-205, 2-202, 2-208 (1998); *see also* Charny, *supra* note 26, at 379 (arguing for judicial deference to the will of the parties rather than custom). For a discussion of the influence of merchant norms on Article 2 of the Uniform Commercial Code, see WILLIAM TWINING, KARL LLEWELLYN AND THE REALIST MOVEMENT 302-40 (1973); Richard Danzig, *A Comment on the Jurisprudence of the Uniform Commercial Code*, 27 STAN. L. REV. 621, 626 (1975).

29. On the problem with treating norms as exogenous, see Michael J. Madison, *"Legal-Ware": Contract and Copyright in the Digital Age*, 67 FORDHAM L. REV. 1025 (1998).

30. Judge Easterbrook endorses this approach, for example. *See* Easterbrook, *supra* note 5. Epstein suggests a variant of this approach that would enforce norms only where "there are repeat and reciprocal interactions between the same parties." Epstein, *supra* note 4, at 126. Epstein's wise limitation seems to have been lost in the current rush to endorse private ordering.

31. *See generally* ANTHONY T. KRONMAN & RICHARD A. POSNER, THE ECONOMICS OF CONTRACT LAW 6 (1979) ("[M]any rules of contract law are designed simply to supply contract terms where the parties have not done so expressly. If prospective contracting parties do not like the terms supplied by contract law, normally they are free to supplant them with their own express terms.").

the "reasonable and customary" thing to do is in the profession.[32] Even intellectual property law sometimes defines what is legal by reference to what is customary.[33] It is not hard to imagine similar rules on the Net. The "default rules" of copyright and contract law could be made dependent on what people actually do, so that whether caching or framing someone else's website was impliedly licensed would depend on what the typical practice was.[34]

The idea that private ordering should be able to alter or replace existing substantive law is clearly in the ascendancy.[35] It is the guiding philosophy behind the proposed Uniform Computer Information Transactions Act dealing with transactions in information.[36] It also shows up on the Net as a particular philosophy in which contractual freedom is primary—a philosophy Julie Cohen has accurately derided as "*Lochner* in Cyberspace."[37] This Lochnerian approach would extend private ordering beyond its traditional area of control, to permit virtually any legal rule to be altered at the will of individuals.[38]

Finally, a few scholars have gone even further, suggesting that the norms of the Net can serve as a full-scale *replacement* for public law.[39] Johnson and Post are the most notable advocates of this strong

32. On the other hand, the law sometimes leads rather than follows in setting tort liability standards, as it has done with strict products liability. For an argument that negligence should be determined by reference to custom, see Richard A. Epstein, *The Path to* The T.J. Hooper: *The Theory and History of Custom in the Law of Tort*, 21 J. LEGAL STUD. 3, 4 (1992).

33. *See* Lloyd L. Weinreb, *Fair's Fair: A Comment on the Fair Use Doctrine*, 103 HARV. L. REV. 1137, 1161 (1990).

34. For a discussion of the Internet norms related to framing and linking, see O'Rourke, *supra* note 20, at 641-45.

35. While the primary rationale for private ordering today is the presumed efficiency of the rules chosen, it is worth noting that this was not in fact the motivating force behind the deference seen in contract law. *See* Charny, *supra* note 10, at 1853-54.

36. *See* UCC Draft Article 2B (now UCITA), July 1998 draft, Preamble at 13 <http://www.lawlib.uh.edu/ucc2b/>. *See generally* Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CALIF. L. REV. 111 (1999) (criticizing this trend).

37. *See* Cohen, *supra* note 7, at 462.

38. Notably, though, this approach almost invariably falls back on the authority of the state to *enforce* these private rules as if they were public ones. Tom Bell's work is a good example of the application of *Lochner* to the Net. *See* Bell, *supra* note 5. For a somewhat more nuanced approach that still pushes strongly in the direction of deference to contractual terms, see Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479 (1995). For a trenchant criticism of the application of *Lochner* to the Net, one need look no further than Fisher's and Elkin-Koren's papers in this symposium. *See* Elkin-Koren, *supra* note 4, at 1179-99; Fisher, *supra* note 7, at 1219-31. If you want to look further, see also Cohen, *supra* note 7, at 462; Lemley, *supra* note 36 at 111; Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239 (1995).

39. This too is "private ordering," but it is of a different character from allowing parties to write their own contract terms. Private ordering can occur either within the legal system or outside it; it is the latter that is at issue here.

prescriptive approach. They have argued in a variety of fora that existing legal rules are not well suited to govern the Net, that governments are not well positioned to come up with new ones, and that by and large it may be unnecessary for territorial governments to impose any rules on the Net.[40] While the world they envision is not in fact one entirely free from law—they acknowledge the need for a variety of legal rules in cyberspace[41]—it is one that would take the law "in-house," creating virtual courts and virtual governments within cyberspace.[42] This approach is self-consciously based on the "law merchant" enforced in private merchant courts during the Middle Ages.[43]

All of these approaches are at base about permitting private ordering to take precedence over public law.[44] Sometimes the private ordering at issue is a traditional written contract. Other times it may not be, as where a customary but unwritten practice acquires the force of law, or where the law cedes control entirely to a group that has no official government.

II. PROBLEMS WITH ENFORCING INTERNET NORMS

In this section, I suggest a number of problems with judicial deference to Internet norms in any of these forms, but particularly deference that would allow those norms to displace the law in whole or in part. Some of these problems are general;[45] others are specific to the Internet. While they do not demonstrate that the law should

40. Johnson and Post's work is catalogued *supra* note 2. In particular, see Johnson & Post, *Rise of Law, supra* note 2, at 3 ("[A] new boundary, made up of the screens and passwords that separate the virtual world from the "real world" of atoms, emerges. This new boundary defines a distinct cyberspace that needs new law and legal institutions of its own.... [E]stablished territorial authorities may yet learn to defer to the self-regulatory efforts of cyberspace participants....").

41. *See* Johnson & Post, *And How Shall the Net Be Governed?*, *supra* note 2, at 66-67.

42. A variant on this approach is Bob Dunne's vision of a network of contracts, which would be enforced by existing courts but which would allow those who manage traffic on the Internet to establish the basic rules of behavior there. *See* Dunne, *supra* note 3, at 1.

43. *See* Hardy, *supra* note 1, at 1020-22; *cf.* Cooter, *Law Merchant*, *supra* note 10, at 1647-49 (discussing the English law merchant).

44. Indeed, in Cooter's model, law develops through informal customs and norms, and public law is justified only to the extent that it corrects "a failure in the incentive structure of social norms." *See* Cooter, *Law Merchant*, *supra* note 10, at 1643-44.

45. For example, Richard Craswell has questioned whether one can even talk meaningfully about identifiable social norms at all. *See* Richard Craswell, *Do Trade Customs Exist?*, *in* THE JURISPRUDENTIAL FOUNDATIONS OF CORPORATE AND COMMERCIAL LAW (Jody Krauss & Steven Walt eds., forthcoming 1999). Obviously, deference to norms presupposes an identifiable set of such norms.

never defer to extralegal ordering or take norms into account, taken together these problems should offer a strong cautionary note to those who would replace public rules with either publicly-enforced private ones or with self-enforcing norms.

A. Norms Change Over Time

It is no accident that virtually all of the empirical work on norms has taken place in small, close-knit communities with little change in membership over time: cattle ranchers in a rural area, or businesses (like diamond merchants) that have a closed, guild-like quality.[46] Norms develop most clearly and most easily in a *static community*.[47] Unwritten rules must be internalized by those who will be bound by them, and that takes time. Whenever people enter a new group, they must learn the rules, often by experience. *Enforcing* the rules is also easier in a static community, particularly if there is no legal force behind the social sanctions. The members of the community must act collectively to enforce most sanctions, requiring them to know each other and think alike—and perhaps therefore to share a history. They also must make the nature of the sanctions known to new members of the community, if the sanctions are to have the desired effect. More importantly, social sanctions like denial of reciprocal dealing, tit-for-tat, or ostracism have their greatest impact on people who value relations with other members of the community. It is hard to punish a loner or a transient effectively.

No one would call the Internet a static community. Indeed, what Internet norms have managed to develop have regularly been blown apart by entry. As the Internet "community" has increased from less than a million scientists to more than one hundred million people from all walks of life,[48] the rules have necessarily changed.[49] Two changes are particularly important for our purposes: the change in the character of Netizens, and their sheer numbers.

46. *See supra* notes 13-18 and accompanying text.

47. *See* DOUGLAS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 12 (1990); ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990); Robert C. Ellickson, *Property in Land*, 102 YALE L.J. 1315, 1320-21 (1993). Even in such a community, however, Eric Posner has argued that social norms may be inefficient. *See* Posner, *supra* note 10, at 1711-25.

48. On the dramatic growth of the Internet, sources are legion. *See, e.g.*, Katrin Schatz Byford, *Privacy in Cyberspace: Constructing a Model of Privacy for the Electronic Communications Environment*, 24 RUTGERS COMPUTER & TECH. L.J. 1, 38 (1998).

49. *See id.* at 63-64; Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1403, 1407 (1996).

First, the strongest advocates of informal norms on the Net are the old-timers, who remember a close-knit world of programmers and hackers. Their norms reflect a spirit of openness and sharing, and a hostility to intellectual property and exclusion; a concern with bandwidth that may now be obsolete; and a limited vision of what the Net is "for" that may include recreation, but generally does not include commercial activity, and certainly not unsolicited commercial activity.[50] There is no evidence that these values are shared by the overwhelming majority of those now on the Net.[51] Deference to these norms may be inappropriate because the norms themselves are simply outdated.

Second, it may simply be impossible to govern a community above a certain size without formal rules and processes.[52] The communities that law and economics scholars have studied have usually been small as well as closely tied together. As the size of a group increases, it becomes less likely that all its members share a commonality of interest. Members may begin to feel anonymous, and therefore to feel less social constraint on their actions. Someone may be ashamed to transgress a moral boundary in front of people they know, but willing to do it in front of strangers. Perhaps one might attempt to recreate informal norms by *dividing* the Net into small groups,[53] though it is not at all clear that creating such groups will

50. *See* Merges, *supra* note 7, at 128-29 (noting the early Net norms that promoted free exchange); Ira V. Heffan, *Copyleft: Licensing Collaborative Works in the Digital Age*, 49 STAN. L. REV. 1487 (1997). Examples of Internet norms that were once well-established but now seem quaint or irrelevant include:

- the idea that copyright has no role to play on the Internet, *see* John Perry Barlow, *The Economy of Ideas*, WIRED, Mar. 1994, at 84;
- the idea that the use of the Internet by commercial entities (the old form) or for commercial purposes (the slightly newer form) is unacceptable, *see* CLIFFORD STOLL, SILICON SNAKE-OIL: SECOND THOUGHTS ON THE INFORMATION HIGHWAY 17-19, 101-05 (1995) (noting this stricture); and
- the idea that bandwidth is scarce, and that even text-based communication must be narrowly circumscribed (for example, by limiting the size of your .sig file).

All of these ideas carry some currency in certain circles on the Net even today.

51. *See, e.g.*, Allan R. Stein, *The Unexceptional Problem of Jurisdiction in Cyberspace*, 32 INT'L LAW. 1167, 1174 (1998).

52. *See* Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & COM. 509, 516 (1996) ("It is often said that small close-knit groups have a much better chance than large disparate ones of governing a commons with cultural norms instead of state commands. This would imply that early cyberspace could govern itself as a commons but that later cyberspace probably cannot." (footnote omitted)).

53. Johnson and Post's "patching" model suggests this approach. The model in its most developed form is presented elsewhere in this symposium. *See* Johnson & Post, *Chaos*, *supra* note 2. For its early development, see Post, *Anarchy*, *supra* note 2.

restore a sense of community,[54] particularly when exit from the subgroup is so easy.[55] Or one might create special-purpose communities that share only a single norm. This may work: many Catholics with virtually nothing else in common nonetheless adhere to some of the norms of the Church. But unless the group has the history and cohesion—and hierarchical control—of the Catholic Church, it is a long way from a special-purpose community to effective self-governance.

The dynamic nature of the Internet "community" presents grave difficulties for courts that want to defer to Internet norms. To what norms shall they defer? The old "rule" that unsolicited commercial solicitations are disallowed? Or the newer rule that seems to permit or at least put up with them? I rather like the old rule myself, but then I was on the Net fifteen years (and countless Net generations) ago.[56] Should courts defer to the norm that information wants to be free, and limit the enforcement of intellectual property on the Net? And what shall be done about practices that have developed only recently: framing a competitor's site,[57] for example, or using a competitor's trademark in a metatag?[58] In these cases, there is probably no recognized norm because the practice is so new. It is not at all clear that we will find better answers to these questions by trying to determine the "culture" of the Net than by making informed public policy decisions.[59]

I don't want to make too much of this argument. Norms can indeed survive under changing conditions, and the law must also deal with changing conditions.[60] But in the context of the Internet, where

54. Jonathan Edelstein notes that the large and diverse nature of the Net community makes self-governance extremely unlikely, even in enclaves. *See* Jonathan I. Edelstein, *Anonymity and International Law Enforcement in Cyberspace*, 7 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 231, 284-86 (1996).

55. Strictly speaking, exit is *technically* extremely easy from such a group. Nonetheless, the longer one participates in a group, the more irreversible commitments she may make, and the harder it may be to leave. These commitments may be social, or they may be economic (such as widespread distribution of an e-mail address that the user will have to give up). On the role of exit in Internet governance generally, see Dan L. Burk, *Virtual Exit in the Global Information Economy*, 73 CHI.-KENT L. REV. 943 (1998).

56. This may also be a case in which a private norm is not problematic, but judicial enforcement of the norm is, because it runs afoul of the First Amendment.

57. *See* Washington Post Co. v. Total News, Inc., No. 97 Civ. 1190 PKL (S.D.N.Y. June 6, 1997); O'Rourke, *supra* note 20, at 637-39 (discussing the *Total News* framing case).

58. *See* Playboy Enter., Inc. v. Welles, 7 F. Supp. 2d 1098 (1998).

59. Eric Posner notes a related problem—the fact that norms enforced by "village gossips" are slow to change means that a norm that is economically efficient at one point in time may persist even after circumstances have changed. *See* Posner, *supra* note 10, at 1711-13.

60. Indeed, the same dynamic nature that makes it difficult for norms to form also counsels

change is constant and drastic, the fact that a strong set of norms never got a real chance to develop leaves law with a significant advantage. The law can draw on a long history, both as a system and in the case of particular doctrines, to give it legitimacy in the face of new challenges. Internet norms have no similar history, and they may lack sufficient legitimacy to be effective in a changing environment.[61]

B. Internet Norms Won't Be Understood or Followed

Norms assume *homogeneity*—or at least symmetry—of interest within the group.[62] A group with a cohesive set of interests can punish individual members who act contrary to those interests and still claim some legitimacy.[63] Without that consensus of interest, though, there is nothing to distinguish norms imposed by a social group from the rough "justice" of the vigilante (assuming the group has the means to enforce the norms).

Even a brief look at the Net should dispel any notion that Netizens are a homogenous group with a strong community of interest. White supremacists,[64] libertarians,[65] communitarians,[66] and communists[67] all coexist on the Net; so do rich[68] and poor,[69] black[70] and white,[71] nerds[72] and literati.[73] If we brought them all together in a room, virtual or real, it is doubtful they would reach even a rough consensus on virtually any subject. Norms that purport to emanate

against the hasty adoption of inflexible and possibly inappropriate new statutes. *See* Greg Y. Sato, *Should Congress Regulate Cyberspace?*, 20 HASTINGS COMM. & ENT. L.J. 699, 717 (1998).

61. *See* Madison, *supra* note 29, at 1084 (arguing that in "new or nontraditional markets," norms may not exist, or may conflict).

62. *See, e.g.*, ELLICKSON, *supra* note 9 ("Achievement of stability in a self-regulated commons is often thought to be dependent on the degree to which the cooperators are a close-knit, homogenous cultural group."); OSTROM, *supra* note 47, at 88-89, 146, 166.

63. There is a long-standing moral debate between individualists and communitarians about the appropriateness of group sanctions for individual behavior. I have no intention of entering that debate here. But even communitarians require some collective notion of community to legitimate social sanctions.

64. *See, e.g.*, http://www.kkk.com (KKK website).

65. *See, e.g.*, http://www.lp.org (Libertarian Party website).

66. *See, e.g.*, http://www.gwu.edu/~ccps/ (The Communitarian Network website).

67. *See, e.g.*, http://www.hartford-hwp.com/cp-usa/ (Communist Party USA website).

68. *See, e.g.*, http://www.pathfinder.com/fortune (Fortune Magazine website).

69. *See, e.g.*, http://foodforthepoor.com/ (Food for the Poor website).

70. *See, e.g.*, http://www.naacp.org (NAACP website).

71. *See, e.g.*, http://devon.qrp.com/vadir/cryptozoology/albinos/ (visited Feb. 10, 1999). Well, not really . . .

72. *See, e.g.*, http://www.pbs.org/nerds/ (Triumph of the Nerds website).

73. *See, e.g.*, http://www.promo.net/pg/ (Project Gutenberg website).

from the Net as a whole are necessarily suspect, and we should rightly ask who is behind them.[74] True, in an exceptional case a particular norm might be widely shared among a variety of Net communities, but the case is so exceptional that it's hard to think of a single Internet norm that is uncontested.

A related problem is that these hypothetical Netizens never *have* gotten together in a room—even conceptually—to sort out what they believe and what rules they will enforce. Indeed, most people who spend even a fair amount of time on the Net encounter only a small group of other people.[75] Social norms need not develop through deliberative democracy, but they do need to be internalized somehow by the community that will enforce them. This is true for norms much more than for law, because norms derive whatever legitimacy they possess from group endorsement. There is simply no evidence that the majority of Netizens have ever given much thought to the appropriate social sanction for off-topic postings, much less whether cancelbots are the best informal response to spam.[76] Some people do worry about such things, system administrators notable among them, but they are hardly a large or representative sample of the Net community.

One might get around this problem by enforcing the norms not of the Net as a whole, but of a small, close-knit community on the Net. This is a more promising approach. Many have argued that online groups such as the WELL do (or at least did) resemble the small-town, restricted-entry communities that Ellickson and Bernstein describe.[77] Johnson and Post advocate this sort of system—different communities within the Net will have and enforce their own sets of values.[78]

74. *Accord* Barbara Spillman Schweiger, Note, *The Path of E-Law: Liberty, Property and Democracy from the Colonies to the Republic of Cyberia*, 24 RUTGERS COMPUTER & TECH. L.J. 223, 291 (1998) (noting the heterogeneity on the Net today, and suggesting that it poses problems for the enforcement of Net norms); A.M. Rutkowski, *Factors Shaping Internet Self-Governance*, *in* COORDINATING THE INTERNET, *supra* note 2, at 92, 99.

75. Indeed, the Internet may actually make it easier to listen only to those who agree with you, and to tune out dissenting voices in the marketplace of ideas. *See* Cass R. Sunstein, *The First Amendment in Cyberspace*, 104 YALE L.J. 1757 (1995).

76. On the use of cancelbots to target "spam"—unsolicited or off-topic commercial messages posted to multiple locations—*see infra* note 129.

77. *See supra* notes 13-15. For discussions of the origins and development of the WELL community, see HOWARD RHEINGOLD, THE VIRTUAL COMMUNITY: HOMESTEADING ON THE ELECTRONIC FRONTIER 17-38 (1993); Katie Hafner, *The World's Most Influential Online Community (and It's Not AOL)*, WIRED, May 1997, at 98.

78. *See generally* Johnson & Post, *And How Shall the Net Be Governed?*, *supra* note 2.

But on-line mini-communities come with their own set of problems. First, while it may be easier to enforce informal social norms in a community of 100 participants on a listserv, it is much harder to convince courts that they can or should defer to the wishes of such communities. Courts would have to discern the customs not just of "the Net," but of different Net communities in each case. There are costs to doing this—not only in administrative time and resources, but in increased risk of strategic behavior and potential enforcement of extreme rules. Defining a community of forty million people will, if it produces any recognizable informal rules at all, produce rules that aren't too far removed from those endorsed by society at large. Courts may have more moral and political difficulty deferring to or enforcing the norms of the on-line white supremacist community.

Second, most mini-communities are generally easy to enter and exit—even more so than the Net itself.[79] While some may remain unchanged over time,[80] it seems at least as likely that most of these communities will have a host of new members to deal with, and a steady exodus of older members steeped in the traditions of the community. This makes norms harder to establish, but it creates another problem as well: The community must find an effective way to *communicate* the norms to new members before it can fairly enforce the norms against them.[81]

Further, it may be much harder for a community of 100 to effectively enforce its own norms, particularly against intrusion by outsiders. And without some means of effective enforcement, norms won't work at all to regulate behavior in most circumstances. To give just one example, websites have developed a cooperative norm governing access by Web "spiders"—bots that crawl around the Web searching for and cataloging particular types of content. The norm involves setting your spider to respect the wishes of the site you access, as identified in the site's "robots.txt" file.[82] The problem is

79. *See* Burk, *supra* note 55, at 945.

80. Internet communities in which people invest significant reputational capital, and which remain fairly static over time, are the most likely centers for norm creation.

81. To be sure, this last problem is far from intractable. FAQs, flaming, and other newbie sanctions may serve the goal of communicating norms to newcomers at the same time they reinforce the norms of the community. But if a court is to enforce the norm, it must have some criterion for deciding when the norm is in fact known by the party to be charged. And if courts are to defer entirely to private enforcement, we may have to forego notions of due process that are central to our legal system.

82. *See A Standard for Robot Exclusion* (visited Aug. 27, 1998) <http://

that what Michael Sims calls "bad" spiders—spiders that want to access your site for reasons you find objectionable—have no incentive to respect this norm.[83] The norm isn't technologically enforceable given the current structure of HTTP, and it probably isn't legally enforceable. It is "enforced" only to the extent people respect it, and the problem is that the only ones who respect it are the ones who aren't causing problems anyway.[84]

The problem of heterogeneity may be structurally embedded. Effective norms are usually reciprocal, at least in the intermediate run. A person is more likely to accept an informal rule (and its particular application to her detriment) if she knows that the rule is likely to benefit her in the not-too-distant future.[85] Thus, norms often operate among peers.[86] If the society is divided into different groups—say, one group that always sells and another group that always buys—their desires and expectations from interaction may be so different that informal agreement is unlikely.[87]

Indeed, these groups may develop a set of assumptions about the rules that directly contradict each other. This happens with some frequency in intellectual property law. For example, take "shrinkwrap licenses," standard forms placed inside a box of mass-market software that purport to govern the contract between the parties, which are "accepted" not by signature but by the conduct of opening the shrinkwrapped package containing the software.[88] Until

info.webcrawler.com/mak/projects/robots/norobots.html>.

83. *See* Michael Sims, *Spiders (was Re: Digimarc)*, e-mail to cyberia-l listserv, May 8, 1998.

84. *See id.*

85. This is why iterated prisoner's dilemma games generally have cooperative solutions, but single or last-period games do not. *See, e.g.*, ROBERT AXELROD, THE EVOLUTION OF COOPERATION 11-19 (1984).

86. For example, cattle ranchers may have rules regarding stray animals, because the problem of strays is likely to affect any of them in roughly equal probability. *See* ELLICKSON, *supra* note 9, at 52-64. Indeed, even Ellickson's example of academic photocopying is based on reciprocity. *See id.* at 260.

87. *See* Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089, 1123 (1998) ("Applied to the consumer mass market, however, the notion that commercial law should be premised on market norms or conventions is deeply problematic. Norms presuppose communities, and the above analysis of bargaining behavior in the consumer mass market suggests that the community that drives the evolution of mass-market norms is the community of providers."); Lewis A. Kornhauser, *Are There Cracks in the Foundations of Spontaneous Order?*, 67 N.Y.U. L. REV. 647, 652-55 (1992) (reviewing ELLICKSON, *supra* note 9); Kerry Lynn Macintosh, *Liberty, Trade, and the Uniform Commercial Code: When Should Default Rules Be Based on Business Practices?*, 38 WM. & MARY L. REV. 1465, 1534-40 (1997).

88. For background on the development and enforceability of shrinkwrap licenses, see Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239 (1995).

1996, no court had held that shrinkwrap licenses were enforceable contracts, and several courts had held to the contrary. Even today, the majority rule is that such licenses are unenforceable.[89] Yet a 1995 survey of software licensing lawyers (that is, lawyers who generally represent software vendors) found that roughly two-thirds of them believed the terms of their shrinkwrap license would govern any contract dispute.[90] Is this evidence of a norm of behavior at odds with the legal rule? Probably not, because *purchasers* of software overwhelmingly believe they are buying, not licensing, the software, and the terms of the shrinkwrap are simply not a part of the deal.[91] In short, there is no agreement between the groups on what the "norms" of the transaction are.[92] For similar examples on the Net, one might

89. For courts rejecting shrinkwrap licenses as unenforceable on various grounds, see Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91 (3d Cir. 1991); Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988); Novell, Inc. v. Network Trade Ctr., 25 F. Supp. 2d 1218 (D. Utah 1997); Morgan Labs., Inc. v. Micro Data Base Sys., Inc., 41 U.S.P.Q.2d 1850 (N.D. Cal. 1997); Arizona Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993); Foresight Resources Corp. v. Pfortmiller, 719 F. Supp. 1006, 1010 (D. Kan. 1989). *See also* L. RAY PATTERSON & STANLEY W. LINDBERG, THE NATURE OF COPYRIGHT: A LAW OF USERS' RIGHTS 220 (1991) (concluding that shrinkwrap licenses were almost certainly unenforceable); *cf.* Microstar v. Formgen, Inc., 942 F. Supp. 1312, 1317 (S.D. Cal. 1996) (noting but not resolving the issue), *aff'd in part, rev'd in part on other grounds*, 154 F.3d 1107 (9th Cir. 1998). These decisions were rendered on various grounds, but a typical conclusion is that the contract was formed when the software was exchanged for money, and that the terms of the contract do not include a shrinkwrap license that was brought to the attention of the buyer only after the exchange. *See Step-Saver*, 939 F.2d at 104-05.

The Seventh Circuit is the only circuit court to have enforced a shrinkwrap license. *See* ProCD, Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (Easterbrook, J.); *cf.* Hill v. Gateway 2000, Inc., 105 F.3d 1147 (7th Cir. 1997) (Easterbrook, J.) (extending *ProCD* in a non-shrinkwrap case), *cert. denied*, 118 S. Ct. 47 (1997); Hotmail Corp. v. Van$ Money Pie, Inc., 1998 WL 388389 (N.D. Cal. Apr. 16, 1998) (finding that a "clickwrap license" in which there was actually assent to terms before the information was supplied was likely to be enforceable). For further discussion, see Lemley, *supra* note 36, at 111.

90. *See* Michael Rustad & Lori E. Eisenschmidt, *The Commercial Law of Internet Security*, 10 HIGH TECH. L.J. 213, 318 (1995).

91. Unfortunately, the Rustad-Eisenschmidt survey did not evaluate user opinions. *See id.* However, the statement in the text is consistent with everything I have heard from buyers, large and small, and I am confident that it is accurate.

92. Lisa Bernstein suggests an alternate explanation: that onerous shrinkwrap license terms represent a deliberate choice of an extreme legal position that reduces the vendor's legal costs (by disclaiming all warranties and responsibilities on the part of the vendor), but that vendors do not commonly enforce in practice. *See* Bernstein, *Merchant Law*, *supra* note 10, at 1790-91. Bernstein clearly assumes that both sides to the transaction are aware not only of the terms of the shrinkwrap license, but of the legally-unenforceable, *sub rosa* bargain to ignore it:

> In the software market, the trade press makes it relatively easy for consumers to get information about manufacturers' reputations for repairing their products and granting licenses. As a consequence, both manufacturers and consumers may prefer lower-priced software with broad disclaimers and the manufacturer's extralegal, reputation-bond-backed promise to grant licenses and repair products in appropriate circumstances . . . .

Id. at 1791.

look to the practice by websites of placing "cookies" on the hard drives of users (probably a "custom" among websites, but not necessarily one to which users have freely consented), or the practice by search engines of selling both ranking placement and advertising linked to keywords (again, a recent "custom," but one that is not necessarily accepted by the people it affects).

Courts faced with such cognitive dissonance should not defer to "industry custom" because effectively there *is* no custom.[93] There is no reasonable yardstick for them to use to favor sellers' norms over buyers', or vice versa. By contrast, it may be perfectly legitimate for a formal legal rule to resolve this situation—either by saying that terms unilaterally introduced after the economically significant parts of the transaction are over do not become a part of the contract, or on the other hand by saying that parties will be bound to the terms by their subsequent conduct even though they could not have read them when first agreeing. The law can impose rules on unwilling and even unknowing parties. It is more problematic for informal norms to do so.

The Internet might be thought to alleviate this problem to some extent. After all, in some sense we are all publishers now, so perhaps we have some commonality of interest. But I suspect that cognitive dissonance remains alive and well on the Net. Maybe the groups are not publishers and buyers, but rather commercial and noncommercial users. However the lines are drawn, different groups certainly seem to have different assumptions about the legitimacy of framing,

As an initial matter, even if some businesses have such a de facto agreement, it stretches credulity to think that most *consumers* have entered into any such bargain. Indeed, many of them may not be aware of the shrinkwrap license at all—and certainly not of its more arcane terms. *See Hill*, 105 F.3d at 1150 (enforcing a mandatory arbitration clause contained in a piece of paper placed inside a computer box, where the clause was not even part of a shrinkwrap license and the consumer took no affirmative act to agree to the term). Second, to the extent people are aware of onerous license terms, it seems more likely that the terms will have an *in terrorem* effect on legally unsophisticated parties—convincing people that they have no right to return or repair—than that they will serve as the basis for a mutually-understood but unenforceable agreement that is directly contrary to the terms of the shrinkwrap license.

Importantly, Bernstein does not use her example as an argument for enforcing shrinkwrap licenses. *See* Bernstein, *Merchant Law*, *supra* note 10, at 1790-91. One could just as easily imagine a norm such as Bernstein describes in a world in which shrinkwrap licenses were not enforceable. Indeed, that is the world that existed when she wrote her article. *See* Lemley, *supra* note 88.

93. Glynn Lunney suggests that the appropriate way to evaluate customary trade practices is to look at the customs of both sides, and to reject a claimed trade practice which is in fact the practice of only one side, not the other. *See* Glynn Lunney, Protecting Digital Works: Copyright or Contract 14 (1998) (working paper, on file with author).

caching, and even linking to other people's websites.[94]

Heterogeneity of interest thus creates problems for norms, and for courts that would enforce or defer to those norms. These problems are not limited to the identification and legitimation of the norms. Another danger is that the norms selected may be inefficient.[95] This is particularly likely when incentives are asymmetrically distributed in the community, as when buyers and sellers have their own conflicting norms. The norm that results from this conflict may represent a variety of things besides consensus: superior bargaining power on the prevailing side, collective action problems on the other side, or the use of strategic behavior.

Examples of this sort of pathological norm development can be found on the Internet today. One of the few identifiable norms associated with the Internet—the propriety of linking to someone else's web page—is under sustained cultural attack. Large sites and some lawyers now speak regularly about the importance of a "license to link,"[96] and about the legal dangers of "unauthorized" links. From

94. There is unfortunately no clear judicial guidance on the propriety of framing and linking, though a number of cases are pending. The only reported decision to date on framing, *Futuredontics Inc. v. Applied Anagramics, Inc.*, 152 F.3d 925 (9th Cir. 1998) (unpublished) does not set out a clear precedent regarding the propriety of framing. There is one district court decision rejecting a copyright claim based on an unauthorized link. *See* Bernstein v. J.C. Penney Inc., 1998 WL 906644 (C.D. Cal. 1998). Most scholars who study the Net either conclude or assume that linking is an acceptable practice, either on an implied license or a fair use theory, and that framing is also acceptable in many circumstances. *See, e.g.*, O'Rourke, *supra* note 20, at 649-54, 684-86. And since the entire Internet is built on the concept of linking without prior agreement—search engines would be impossible without such a rule, for example—one might reasonably speak of an Internet norm that permits linking. For explorations of some more difficult issues related to framing and linking, see I. Trotter Hardy, *Computer RAM "Copies": Hit or Myth? Historical Perspectives on Caching As a Microcosm of Current Copyright Concerns*, 22 U. DAYTON L. REV. 423 (1997).

At the same time, some companies obviously consider any link to require authorization. Ticketmaster sued Microsoft for unauthorized linking past its front page to the interior of the site; the parties' recent settlement means that no court has yet had the opportunity to resolve the issue. *See* Bob Tedeschi, *Ticketmaster and Microsoft Settle Suit on Internet Linking*, N.Y. TIMES, Feb. 15, 1999, at C6; *cf.* Walter A. Effross, *Withdrawal of the Reference: Rights, Rules, and Remedies for Unwelcomed Web-Linking*, 49 S.C. L. REV. 651, 692-93 (1998) (seeming to accept the premise that companies ought to be entitled to prevent unauthorized links to their sites). These companies obviously don't subscribe to the norm identified above, at least not when it comes to incoming links to their own sites. *See* Madison, *supra* note 29, at 1084 (noting this divergence in assumptions about the norms regarding linking).

One can easily imagine circumstances in which a frame or link causes real or perceived injury to the linked party—many people might not appreciate a disparaging link from www.suck.com, for example, and Disney almost certainly doesn't want porn sites referring underage visitors to the Disney website. It does not follow from the fact of injury that one should have a cause of action to preclude the link, however, any more than I ought to have a cause of action to preclude disparaging but not defamatory references to this article.

95. For a generalized version of this argument, see Posner, *supra* note 10.

96. *See, e.g.*, Effross, *supra* note 94, at 692-93.

a legal perspective, this is nonsense. There is no legal right to prevent linking. Not only has no court ever established such a rule, it flies in the face of everything we know about copyright doctrine.[97] But, it may not matter. A combination of threats of suit against impecunious defendants, self-dealing (in which sites with an interest in establishing the necessity of a license to link enter into such licenses with each other), and disinformation campaigns seem to be changing the norm.

There is no reason to think this change is efficient, or that courts should defer to it. But copyright law currently seems enamored of the private ordering idea, and on some notable occasions it has deferred to a "norm" that was in fact merely a practice copyright owners hoped to establish.[98] More generally, whatever "norms" might arise from a heterogeneous community of this sort are properly suspect.

C. Norms Do Not Adequately Account for Externalities

The legal enforcement of norms creates *externalities*. To the extent that a community is not entirely closed, members of the community can do things that have positive or negative effects on others, and the norms of behavior will generally not account for those effects.[99] And the Net is by no means a closed community. No one lives in cyberspace.[100] People eat, sleep, work, play, pay taxes, and pollute in the real world, even if they spend most of their time "in" cyberspace. So it is clearly unrealistic to expect that the rules of cyberspace can somehow take over from existing laws that regulate

97. Making this point in detail is beyond the scope of this article. For good treatments, see Edward A. Cavazos & Coe F. Miles, *Copyright on the WWW: Linking and Liability*, 4 RICH. J.L. & TECH. 3 (Winter 1997) <http://www.richmond.edu/~jolt/v4i2/cavazos.html>; O'Rourke, *supra* note 20, at 609.

98. *See* Princeton Univ. Press v. Mich. Document Servs., Inc., 99 F.3d 1381 (6th Cir. 1996) (en banc); American Geophysical Union v. Texaco, Inc., 60 F.3d 913 (2d Cir. 1994). In both cases, the courts adopted circular arguments that because a use *could* be licensed, it was no longer a fair use and must be licensed.

99. This is a subset of the more general problem noted by Carter, that established norms may be inefficient. *See* Carter, *supra* note 11, at 131. Even if private ordering generally evolves towards efficiency within the system, imposing costs on others outside the system may be a very effective way for one party to maximize its value within the system. *See, e.g.*, Lloyd L. Weinreb, *Custom, Law, and Public Policy: The* INS *Case as an Example for Intellectual Property*, 78 VA. L. REV. 141, 143 (1992) (suggesting that sound *private* policy behind a norm will not always constitute sound *public* policy).

100. *See* Burk, *Trademark Doctrines*, *supra* note 1, at 733; Stein, *supra* note 51, at 1175 & n.33; *cf.* Lessig, *supra* note 49 (agreeing with Johnson and Post that cyberspace is a place, but arguing that it is not sufficiently independent of the real world to warrant its own legal rules).

those real-world activities.[101]

What Johnson and Post suggest is something a bit more nuanced, though: that people's dealings *on the Net* ought to be governed by Net norms rather than formal legal rules imposed from "outside" the Net.[102] Even here, though, the spillover effects are ubiquitous. Copyright is an example. Because copying is essential for the Net to function,[103] and many prominent Netizens have written about the importance of allowing copying on the Net,[104] one might postulate a norm of free copying and distribution of works in digital form on the Net. But there is no question that such a rule would adversely affect (and be opposed by) numerous copyright owners, both on the Net and off. Similarly, one can imagine Netizens injuring others by threatening bodily harm to them, defaming them, infringing their trademarks, or posting their trade secrets for the world to see. Other acts, like the posting of obscenity and child pornography, and even on-line gambling, may have less direct but still tangible effects on the world beyond the Net. A norm that involves imposing uncompensated costs on people outside the group who can't influence the norm has no more legitimacy than a "norm" among bank robbers permitting theft.[105]

One might try to solve this problem by limiting Net norms to those that do not affect people off the Net. This is a severe restriction; it means, among other things, that norms will not modify or replace any of the legal rules governing the conduct mentioned in the last paragraph. But, arguably, it is not severe enough to eliminate the negative externalities. Microsoft is on the Net, for example. Does its presence on the Net somehow mean it consents to having the Windows 98 source code copied and distributed freely on the Net? That seems unlikely. And if it were to happen—if a court were to

101. Johnson and Post acknowledge this problem. *See* Johnson & Post, *And How Shall the Net Be Governed?*, *supra* note 2, at 67.

102. *See* Johnson & Post, *Law and Borders, supra* note 2, at 1378-81; Johnson & Post, *And How Shall the Net Be Governed?*, *supra* note 2, at 73-81.

103. *See* Mark A. Lemley, *Dealing With Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547 (1997); Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29 (1994) (both noting that virtually every act on the Net involves the making of a copy).

104. *See, e.g.*, Barlow, *supra* note 50, at 85; Esther Dyson, *Intellectual Value*, WIRED, July 1995, at 136, 137.

105. *See* Cooter, *Law Merchant, supra* note 10, at 1684 ("The state cannot justify enforcing a norm that harms one community on the grounds that it arose from a consensual process in another community."); Posner, *supra* note 10, at 1722.

accept a norm or enforce an access contract[106] that required participants on the Net to waive their legal rights in this area—I suspect Microsoft and others like it would decide they didn't really need to be members of this "community" after all.

A related problem concerns Johnson and Post's idea of "patching."[107] The heterogeneity problem described above might be solved by dividing the Net into small, homogenous sub-communities and attempting to enforce the norms of those communities. But doing this only exacerbates the externality problem. If one person's actions on the Net have the potential to injure those off the Net, they surely have even greater potential to harm those outside the particular listservs one inhabits. Further, fragmenting the Net for the purpose of identifying norms is likely to produce at least some communities whose norms really *do* involve imposing costs on others. Imagine a sub-community that believes in free copying, for example, and how they would view Microsoft's claim to own the copyright in Windows 98. To let this group freely copy the program would be to give legal sanction to a private agreement to impose costs on others. To do otherwise would be to say that the welfare of the broader society must trump the norms of this particular community—which is exactly the argument for applying public law. I suspect that courts would (and should) choose the latter course without any hesitation.

One might mediate this tension by declaring a mandatory "meta-norm" that groups shall do no harm outside the community. It's not clear, though, how the enforcement of the anemic norms permitted under such a mandatory rule would differ from what is allowed under the current legal system. It is worth noting that the medieval "law merchant"—frequently cited as a model for cyberspace self-governance[108]—operated only in the interstices of formal law. Where the law merchant governed behavior, it was only because formal law had chosen not to. Certainly there will be some analogous rules that particular Internet communities can and will create, and that aren't problematic simply because they really don't affect anyone outside that community. But they will be few and far between. More important, they are a far cry from Internet self-governance or even judicial deference to Internet norms. As Allan Stein notes, "[n]o one claims the National Football League is a polity because it generates

106. *See* Dunne, *supra* note 3, at 1.
107. *See* Johnson & Post, *Chaos*, *supra* note 2, at 1076-78.
108. *See* Hardy, *supra* note 1, at 1020-22.

rules concerning pass interference."[109]

To demonstrate that Internet self-governance (or private contract)[110] imposes external costs on others doesn't necessarily resolve the question of the appropriate governance structure, however. Johnson and Post follow the institutional economics approach, reasoning that the right way to make this decision is to compare governance structures to see which will best minimize uncompensated negative externalities.[111] Their patching models are an attempt to argue by analogy that the Net will self-organize in a way that is more efficient than existing governments. Elkin-Koren's paper deconstructs this argument at a theoretic level;[112] Michael Froomkin offers a few practical challenges to the model.[113] I confess that I am skeptical that self-organization will minimize uncompensated negative externalities in society in general, given the fact that different groups are frequently trying to achieve different (indeed, incompatible) goals, and given the obvious incentives for strategic behavior. Even if I am wrong about this, though, the Internet may be uniquely *unsuited* to application of this private-ordering model. I

109. Stein, *supra* note 51, at 1176-77.

110. The fact that contracts between two parties over the use of intellectual property rights have significant effects on third parties is the central problem with the idea that private parties ought to be able to set their own legal rules. Several scholars, myself among them, have offered examples of these external effects in private contracts. *See, e.g.*, Cohen, *supra* note 7, at 462; Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93 (1997); Wendy J. Gordon, *On the Economics of Copyright, Restitution, and "Fair Use": Systemic Versus Case-by-Case Responses to Market Failure*, 8 J.L. & INFO. SCI. 7 (1997); Lemley, *supra* note 36, at 169-71; Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 1057-58 (1997); Lydia Pallas Loren, *Redefining the Market Failure Approach to Fair Use in an Era of Copyright Permission Systems*, 5 J. INTELL. PROP. L. 1 (1997); David McGowan, *Free Contracting, Fair Competition, and Draft Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality"*, 13 BERKELEY TECH. L.J. 1173 (1998); Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 BUFF. L. REV. 845 (1997).

111. *See* Elkin-Koren, *supra* note 4, at 1197-99; David G. Post & David R. Johnson, *The New Civic Virtue of the Net: Lessons from Models of Complex Systems for the Governance of Cyberspace*, STAN. TECH. L. REV. 1 ¶10 (visited Sept. 19, 1998) <http://stlr.stanford.edu/STLR/Working_Papers/97_Post_1/article.htm>; *see also* Avery Katz, *Taking Private Ordering Seriously*, 144 U. PA. L. REV. 1745, 1747 (1996) (noting and criticizing the focus of norms scholarship on comparative governance); Joel P. Trachtman, Cyberspace, Sovereignty, Jurisdiction, and Modernism 2 (1998) (working paper, on file with author) (arguing that the choice of sovereigns in cyberspace is "a problem of institutional competence.").

112. Elkin-Koren, *supra* note 4, at 1187-99.

113. A. Michael Froomkin, *The Empire Strikes Back*, 73 CHI.-KENT L. REV. 1101 (1998). By and large, however, Froomkin appears to conclude that the model itself is sound. *See id.* at 1112. By contrast, Goldsmith suggests that Johnson and Post bear the burden of persuading us to depart from a model that has worked well in the past, and that they "have not begun to try" to meet that burden. Goldsmith, *supra* note 8, at 1242.

explain why in the next section.

D. Network Effects and Standardization Make Exclusionary Norms Undesirable

There is a more structural problem with patching. The Internet is a prime example of a strong actual network market.[114] The principal value of the Internet is mostly a function of the number of people who are connected to the network, and therefore the number of people one can reach by e-mail and the Web. Just as the value of having a telephone increases from zero as more and more people are added to the telephone network, so the value of being on the Internet increases as more people get on the Net. The implication of network effects in both markets is the same: the optimal number of both Internets and telephone networks is one. The existence of strong network effects in this market has a number of implications for Internet norms.

One implication of strong network effects is that Internet enclaves are bad—at least if those enclaves are not interconnected. Society will not benefit from a number of separate, incompatible Internets. The history of the Net reflects this. In the early 1990s, being on-line meant belonging to one or more of 50,000 different bulletin board systems ("BBSs"), or one of several large "on-line service providers" ("OSPs") like Compuserve or America Online. This model failed, largely because the BBSs and OSPs were exclusive enclaves. Those, like America Online, that thrived in the 1990s did so because they became Internet service providers—because they joined the "winning" network in the standards competition.[115] This doesn't mean there is no room on the Net for private groups, but it does mean that there is value to everyone in a general regime of open access.

114. Clay Gillette argues that *all* norms are built on network effects, since they depend for their efficacy upon widespread adoption. Clayton P. Gillette, *Lock-In Effects in Law and Norms*, 78 B.U. L. REV. 813 (1998). Whether or not he is correct, this sort of network effect is not the one I am referring to. In this section, I focus on the role of strong actual network effects such as the Internet itself. On the nature and strength of network effects, and their application in the Internet context, see Mark A. Lemley, *Antitrust and the Internet Standardization Problem*, 28 CONN. L. REV. 1041 (1996); Mark A. Lemley & David McGowan, *Could Java Change Everything? The Competitive Propriety of a Proprietary Standard*, 43 ANTITRUST BULL. 715 (1998) [hereinafter Lemley & McGowan, *Java*]; Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479 (1998) [hereinafter Lemley & McGowan, *Network Effects*].

115. While some continue to provide their own private content as well, they appear to have subscribers primarily because they provide access to the Internet.

A related problem is that the most likely informal sanction for severe misconduct—expulsion from the group, or, as Dunne suggests, from the Net itself[116]—is likely to be socially counterproductive. Exclusion in a strong network market not only hurts the party being excluded; it hurts everyone else as well. This is especially true because the difficulty of reliably establishing individual identity on the Internet has caused the enforcers of exclusionary rules to cut off not just particular individuals but entire institutions from the Net. Refusing to accept data from a major Internet Service Provider ("ISP"), or even a minor university or corporation, has much greater consequences than simply banning one individual. Of more concern, exclusion from the Internet may be an effective threat precisely *because* it involves imposing a significant cost on others. Vigilantes may therefore use the threat of exclusion to coerce people into doing things they otherwise wouldn't. One might look at this conduct and say "Of course—this is just norms at work." But it creates significant opportunities for strategic behavior by those who control the means for exclusion. How desirable this result is depends in large part on who does the enforcing, an issue I discuss in the next section.[117]

A second implication of strong network effects for Internet norms is that constructing decentralized governance systems based on a patching model may have negative social consequences. If the optimal number of Internets is indeed one, governance of the system itself must in the final analysis be effective at a global level. This can be accomplished by a single body, by an international treaty, by national cooperation or cooption, or perhaps even by informal agreement. But the more governance structures have jurisdiction over the Internet, the higher the coordination costs will be, and the more likely it is that the different governing parties will fail to reach agreement on a crucial issue.[118]

A third implication is that we ought to be concerned not only about exclusion of individuals or groups from the network, but about the proprietary nature of the network itself. The Net today is built on

116. *See* Dunne, *supra* note 3, at 1. To be sure, expulsion is not a unitary remedy. A variety of punishments based around expulsion might be possible, ranging from warnings through the killing of particular messages to the elimination of a user from the Net or even the elimination of an entire IP domain from the Net.

117. *See infra* section II.E.

118. Ironically, this is an argument that will sound familiar to Johnson and Post, who say something similar in challenging the sovereignty of existing nations over cyberspace. *See* Johnson & Post, *Law and Borders, supra* note 2. If network effects are taken into account, though, creating a plurality of small new jurisdictions doesn't seem to be the answer.

an open, nonproprietary protocol called TCP/IP. Anyone who wants can use the protocol (and therefore be "on" the Net); and anyone who wants can write software that works with or incorporates the protocol. But it is not too hard to imagine a future in which the protocol—or the wires, or the implementing software—is proprietary.[119] A norm of "openness" *on* the Net may not turn out to mean very much if access *to* the Net is itself a function of whose software you buy.[120] Giving intellectual property ownership of the hardware or software necessary to run (or get access to) the Net to competing private companies won't necessarily split the Net; sufficiently strong network effects will simply cause people to gravitate towards a single standard over time anyway.[121] But it may affect the cost of access to the Net, and therefore how many people use it. It may also affect competition to improve the Net and the software that runs on it in the next generation.

The government has taken the position that open systems are to be preferred for electronic commerce, though it has yet to back that position up with any concrete suggestions for how we might get there.[122] Private ordering may help, in part; the market could certainly tip towards an open rather than a closed standard of its own accord. It is even possible to imagine that intellectual property itself, which lies at the root of the threat of closed standards, might itself give us the tools to open those standards.[123] But any efforts to guarantee open standards on the Net will have to contend with the established legal rules of intellectual property.

Finally, norms are built in part around existing technological structures and constraints. In a network market, at least some of

119. Indeed, it may be much harder to imagine all of these aspects remaining open and nonproprietary. For a detailed discussion of changes in this regard, see Lemley & McGowan, *Java*, *supra* note 114, at 715.

The strong form of judicial deference to norms might get around this problem by refusing to enforce intellectual property rights at all in such a case. But it is not clear that this will solve the problem. Technological protection measures and contract law may be alternate ways of keeping a standard proprietary.

120. *See* Radin, *supra* note 52, at 524-25.

121. *See* Lemley, *supra* note 114, at 1041.

122. *See* United States Department of Commerce, *A Framework for Global Electronic Commerce* (visited June 11, 1999) <http://www.iitf.nist.gov/eleccomm/ecomm.htm>; Mark A. Lemley, *Standardizing Government Standard-Setting Policy for Electronic Commerce*, 14 BERKELEY TECH. L.J. 745 (1999).

123. Sun Microsystems' current suit against Microsoft involves an interesting attempt to use intellectual property law to achieve just such a result. *See* Sun Microsystems, Inc. v. Microsoft Corp., 999 F. Supp. 1301 (N.D. Cal. 1998); Lemley & McGowan, *Java*, *supra* note 114, at 715 (discussing the suit).

those structures are likely to prove quite durable. We could create a new phone system—or a new Internet—that differs from the current one, but we probably won't, and for good reason. The social value of the Internet is a function of the number of people already on it; change the structure, and you risk losing the network benefits.[124] Norms that arise based on existing technological constraints may therefore persist even if they become inefficient. This problem of norm "lock-in" should give courts further pause in assuming that deference to Internet norms is efficient.

E. Who Will Enforce the Norms, and How?

1. Net Vigilantes

A variety of technologies exist that permit users or system administrators to block access from certain sites, or to cancel messages to Usenet that originate from certain sites. Two such technologies are worth further discussion. The first is the cancelbot, a "bot" (or automated software daemon) that will cancel a particular message posted to a Usenet newsgroup. The cancelbot works by pretending to be a message sent by the originator of the posting to be cancelled asking that the message be withdrawn. Usenet allows such cancellation by the author of the original message; the cancelbot deceives the system in order to cancel someone else's message.[125]

A more dramatic form of automated exclusion is the "Usenet Death Penalty" ("UDP"). Imposing the UDP on a service provider will block *all* Usenet messages from a particular source. The UDP does not work in automated fashion, but rather requires the compliance of the individual system administrators who host Usenet relays, and who comply with the UDP by agreeing not to relay messages from the targeted source.[126] UDPs were announced in 1997

124. *See* Lemley & McGowan, *Network Effects*, *supra* note 114, at 479.

125. For a description of the protocols by which Usenet messages are propagated and may be cancelled, see *RFC 1036* (visited Sept. 18, 1998) <http://www.landfield.com/rfcs/rfc1036.html>.

126. Strictly speaking, UDPs may be either active or passive. The sort of shunning described in the text is an example of a "passive" UDP, because it requires the compliance of individual sysadmins. Active UDP involves the affirmative cancellation of all messages originating from a certain site. *See generally Cancel Messages: Frequently Asked Questions Part 3/4 (v1.7)* (last modified Sept. 16, 1998) <http://www.landfield.com/faqs/usenet/cancel-faq/part3/>.

The UDP applies only to Usenet messages, not e-mail. For a similar approach to unsolicited bulk commercial e-mail, see *Mail Abuse Protection System Realtime Blackhole List* (last visited Sept. 16, 1998) <http://maps.vix.com/ rbl>.

and 1998 against two large ISPs: UUNet Technologies and Netcom. In both cases, the UDP was called because of the ISP's alleged indifference to Usenet spam being sent through its system.[127]

Because both cancelbots and the UDP are prototypical examples of the extralegal enforcement of Internet norms, it is worth considering how they work in some detail. A cancelbot is a message sent out by a private party. Anyone who knows how to write one can do so. In practice, most people don't cancel Usenet postings—their own, or other people's. Only a small group of sysadmins on the Net regularly employ cancelbots. But there is no technical barrier to their use by others, as we discovered when the Church of Scientology began canceling posts to alt.religion.scientology because it disagreed with their content.[128] Sysadmins regularly seek to cancel spam as well—to such an extent that some newsgroups have more traffic in the form of spam-canceling messages than they do topical posts.[129] All of these actions are individual—there is no authority (nor even an agreed set of rules) that decides when it is appropriate to cancel a message.

The UDP is also privately administered—in this case by a rather unconventional group that calls itself S.P.U.T.U.M. (SubGenius Police Usenet Tactical Unit Mobile).[130] While a UDP, unlike a cancelbot, requires individual administrators to "opt in," it seems clear that even the threat of a UDP has had significant consequences for companies like Netcom and UUNet.[131] And while both Netcom and UUNet complained vocally about the threatened imposition of

127. For a current discussion of the Netcom UDP by the people who called it, see *Netcom UDP Probation Lifted* (last visited Sept. 16, 1998) <http://www.sputum.com/cns/netcomudp.html> [hereinafter *Netcom UDP Probation Lifted*]; regarding the UUNet UDP, see *The UUNet UDP and S.P.U.T.U.M.* (last visited Sept. 16, 1998) <http://www.sputum.com/suitsite/uunetudp.html>.

128. Scientology officials in turn accused their opponents of canceling their messages. For a discussion of this battle, see David G. Post, *New World War*, REASON, April 1996, at 28, *reprinted as* David G. Post, *The First Internet War* (last visited Jan. 21, 1999) <http://www.cli.org/dpost/x0003_article4.html>.

129. *See* Hiawatha Bray, *Spam watchdogs to 'Net firms: You're on your own*, BOSTON GLOBE, April 4, 1998, at F1. The result has been that the effort to block spam has also ended up cluttering Usenet. In an effort to promote alternative solutions, S.P.U.T.U.M. recently called a moratorium on Usenet spam cancel messages. For a discussion of the moratorium and its effects, see *Usenet Spam Cancel Moratorium* (visited Sept. 16, 1998) <http://www.sputum.com/cns/moratorium.html>.

130. For more on the background of this group, see *Church of the SubGenius: Brain Toolkit and Surreality Reboot* (last modified May 20, 1999) <http://www.subgenius.com>.

131. *See Netcom UDP Probation lifted*, *supra* note 127 (suggesting that the UDP caused Netcom to alter its policies towards spam).

the UDP against their companies by a private, unelected group,[132] their only effective recourse was to convince S.P.U.T.U.M. to rescind the UDP. A similar problem bedevils other private efforts to prevent the spread of spam through e-mail, such as the Realtime Blackhole List ("RBL").[133]

Individual decisions to cancel messages or bar entire companies from propagating messages through Usenet may well be justified. Spam is a real problem on the Net, and both UDP and cancelbots are ways of dealing with that problem. But it should be clear that what is going on here is vigilantism and not consensus adoption of norms. A small group of individuals is armed with the technical "weapons" necessary to impose social sanctions on others. It is that group, not the average Netizen or a consensus among users, that will define and enforce the "norms" of behavior on the Internet. Indeed, it is not clear what constraints the Internet community can place on those who exercise their power to cancel messages in ways the community might dislike, as the Scientology case demonstrates.[134]

2. Judges

Judges might enforce Net norms in the context of litigation. Allowing judges to enforce Net norms might actually increase the accountability to the Net community, compared to enforcement by vigilante groups. Judges attempt to discern and apply norms of behavior in some other contexts, as when they look to general trade usage to help them interpret a contract or create a remedy. But on the Net, one may reasonably worry that judges who are not technologically sophisticated may simply not understand the norms they are to enforce.[135] Further, it is worth noting that judges have significantly less flexibility than other actors in the Net community. Judges can decide only the cases that are brought before them. In

132. *See, e.g.*, Rajiv Chandrasekaran, *Group Blocks Postings of UUNet Customers: Va. Firm Says Internet Ad Protest is Terrorism*, WASH. POST, Aug. 5, 1997, at C01 (quoting a UUNet executive who called the UDP "digital terrorism," and complained that "[t]hese people are not government agents or the police. They have absolutely no right to cancel service on someone else's infrastructure.").

133. The RBL is controlled by a single individual, Paul Vixie, and about 25% of the Internet domains subscribe to his list, refusing to accept messages from any domain listed in the "blackhole." Companies that have been blacklisted by RBL at various times include America Online, Microsoft, and Netcom. *See* Matt Richtel, *One Man Wields Power to Blacklist 'Spammers'*, AUSTIN AM.-STATESMAN, Dec. 28, 1998, at C3.

134. *See supra* note 128 and accompanying text.

135. Stephen Carter worries that judges may not be good at what he calls judicial anthropology. *See* Carter, *supra* note 11, at 132.

addition, judges may be unwilling to enforce norms at all if they aren't familiar with them. Worse, they may get it wrong, creating a new quasi-legal rule binding on the Net community. I have significantly more confidence in the ability of judges to discern and apply legal rules than in their ability to figure out what "the Net community" wants.[136]

Lisa Bernstein identifies another problem with judicial enforcement of norms. If, as her investigations suggest, many perceived "norms" in fact assume that there will be no judicial enforcement of the trade practice, the very act of enforcing the norm may frustrate its purpose.[137] More generally, to the extent that norms are formed against the background of legal rules, modifying legal rules to accommodate those norms may be self-defeating.

3. Embedding Enforcement in the Structure of the Internet

Code can also serve to enforce social norms. Rules of behavior can be designed into the architecture of the Net itself, or written into software that is used in particular cases. Indeed, a new body of Internet scholarship suggests that the architecture of a code-based system *inherently* constrains behavior.[138] If the code is written with Net norms in mind, it can reinforce those norms—whether they be the norms of decentralization and geographic insensitivity, as in the present Internet, or norms of constrained access to content and the abolition of privacy. As Larry Lessig points out, code in this sense is not neutral; it is political.[139]

136. This is not solely because judges may not be intimately familiar with the Net. For the reasons suggested above, it may be impossible for *anyone* to make such a determination with any confidence.

137. *See* Bernstein, *Merchant Law*, *supra* note 10, at 1794-95.

138. *See, e.g.*, Lessig, *supra* note 49, at 1408; Lawrence Lessig, *Constitution and Code*, 27 CUMB. L. REV. 1 (1996) [hereinafter Lessig, *Constitution and Code*]; Lawrence Lessig, *The Constitution of Code: Limitations on Choice-Based Critiques of Cyberspace Regulation*, 5 COMMLAW CONSPECTUS 181 (1997) [hereinafter Lessig, *Constitution of Code*]; Lawrence Lessig, *Intellectual Property and Code*, 11 ST. JOHN'S J. LEGAL COMMENT. 635 (1996) [hereinafter Lessig, *Intellectual Property and Code*]; Lawrence Lessig, *Reading the Constitution in Cyberspace*, 45 EMORY L.J. 869 (1996) [hereinafter Lessig, *Reading*]; Joel R. Reidenberg, *Governing Networks and Rule-Making in Cyberspace*, 45 EMORY L.J. 911 (1996); Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553 (1998) [hereinafter Reidenberg, *Lex Informatica*]; Joel R. Reidenberg, *Rules of the Road for Global Electronic Highways: Merging the Trade and Technical Paradigms*, 6 HARV. J.L. & TECH. 287, 301-04 (1993); David G. Post, Bargaining in the Shadow of the Code: File Caching, Copyright, and Contracts Evolving in Cyberspace (1997) (working paper, on file with author).

139. *See* Lessig, *Constitution and Code*, *supra* note 138, at 14; *see also* Reidenberg, *Lex Informatica*, *supra* note 138, at 555. For an important effort to evaluate the political

Once again, though, one ought to be concerned about a potential disconnect between the people who design the code and the social group that is presumed to create the norms. The government might mandate code choices, as it has done with the Digital Telephony Act,[140] or try to push them down a certain path, as it has done with its key escrow encryption proposals.[141] In either case, recent experience suggests Netizens might not like the results.

More subtle problems arise from private implementation of code that constrains behavior. First, the fact that code is part of a computer program rather than part of the structure of the Internet itself does not mean that the code plays no role in determining behavior. Indeed, code can directly affect market structure. Microsoft's power in the operating systems market is a direct function of the limited compatibility between the Windows OS and other operating systems, combined with the network effects that drive the operating systems market to standardization. And it is Microsoft's code, coupled with the background legal rules that give it control over that code, that determines the level of compatibility.[142] Similarly, a number of the "open systems" on the Net are open only because a unified set of code is made available to everyone. There is some reason to think that this may change in the future. For example, Microsoft might benefit from splitting a standard like HTML or Java into incompatible, competing programs, because Microsoft would likely win the ensuing competition.[143]

Even where network effects are absent, and different people can freely choose different sorts of code, it doesn't necessarily follow that the result of this competition will be code that embodies the norms of the community. Consider content filtering software, for example.

consequences of Internet architectural choices in a systematic way, see Lawrence Lessig & Paul Resnick, The Architectures of Mandated Access Controls (1998) (working paper, on file with author).

140. The Communications Assistance for Law Enforcement Act, Pub. L. No. 103-414, 108 Stat. 4279 (1994), commonly known as the "Digital Telephony Act," mandates a particular set of technological choices that telecommunications companies must make in order to make the digital telecommunications infrastructure open to government wiretapping. *See* Susan Freiwald, *Uncertain Privacy: Communication Attributes After the Digital Telephony Act*, 69 S. CAL. L. REV. 949 (1996).

141. For a discussion of the government's repeated efforts to cajole private industry into accepting key escrow or key recovery encryption—largely by banning export of non-escrow systems and requiring the use of escrow systems by government contractors—see A. Michael Froomkin, *The Metaphor is the Key: Cryptography, the Clipper Chip, and the Constitution*, 143 U. PA. L. REV. 709 (1995).

142. *See* Lemley & McGowan, *Network Effects*, *supra* note 114.

143. For more on this point, see Lemley & McGowan, *Java*, *supra* note 114.

There are a number of types of filtering systems available on the Net today: the Platform for Internet Content Selection ("PICS"), which allows people to rate their own sites by content, and allows them to rate third-party sites as well;[144] "opt-in" software, which allows for voluntary self-rating but allows access to unrated sites; "opt-out" software, which allows access only to self-rated sites; and a large number of commercial rating programs, which rate third party content for you in ways that may range from having a person read each site to having automated filters search for "dirty words."[145] These commercial rating programs may embody a wide range of different judgments about what is appropriate material on the Internet. Furthermore, they generally maintain their ratings list as a trade secret, which makes it impossible to get perfect information on how a particular program will operate or what sites it will block.[146]

Filtering software poses a number of challenges for the enforcement of Internet norms. First, there are a number of Netizens who are opposed to the concept of Internet filtering at all—for others as well as for themselves.[147] Second, the code in filtering software takes on a life of its own, even for those who choose to use it. Installing filtering software effectively delegates control over your access to information to a computer program. The computer program won't always tell you what it won't let you see, and may not tell you *why* a particular site is restricted. And because filtering software is decidedly imperfect, even software that *tries* to filter out only what you really don't want may be both over- and under-inclusive. Finally, and most important, the fact that a filter is imposed "privately" does not mean that it is imposed by the person whose access to material is restricted. Indeed, the major use of Internet content filters is not by individuals who wish to restrict their own

144. For criticism of the PICS standard, see Lawrence Lessig, *What Things Regulate Speech? CDA 2.0 vs. Filtering*, 38 JURIMETRICS J. 629 (1998). For a discussion of the constitutional implications of filtering software in general, see Kathleen M. Sullivan, *First Amendment Intermediaries in the Age of Cyberspace*, 45 UCLA L. REV. 1653, 1674-80 (1998).

145. Popular filtering programs include SurfWatch, NetNanny, and CyberSitter. For a valuable if somewhat outdated taxonomy of Internet filtering software, see Jonathan Weinberg, *Rating the Net*, 19 HASTINGS COMM/ENT L.J. 453 (1997).

146. *See, e.g.*, Mainstream Loudoun v. Board of Trustees of the Loudoun County Library, 24 F. Supp. 2d 552 (E.D. Va. 1998).

147. This is not necessarily as paternalistic as it sounds. To the extent that the norms of the Net involve a culture of openness, even privately-selected technological restrictions on access may threaten that culture. Further, free speech advocates might reasonably fear that widespread filtering software is an invitation to government regulation of Internet content. *Cf.* Lessig & Resnick, *supra* note 139 (evaluating the consequences of filtering technology for the facilitation of government censorship).

access to certain sites, but by parents making decisions for their children, or corporations, universities, schools, or libraries making decisions for their employees, students, or patrons. In these cases, social choices are at the very least limited and directed by the architecture of the technology we design and implement.

Finally, the architecture of code may conflict with the rules established by the legal system. This sort of conflict is most common when the law demands flexibility that the code does not allow.[148] One example involves domain name trademark disputes, where trademark law rules permitting two owners of a mark to coexist in different product or geographic space run into the constraints of a system that permits only one user of a name in each top-level domain.[149] We could change the law to give trademark owners absolute rights in a mark, but we probably shouldn't.[150] A more promising approach

148. As Joel Reidenberg notes, code can also work in reverse—offering flexibility that the law doesn't allow. *See* Reidenberg, *Lex Informatica, supra* note 138, at 579-80. I don't focus too much attention on this possibility, though, because in these circumstances law may still preclude behavior that the code would permit, at least to the extent the government can enforce its laws.

149. For example, a number of different companies may each have legitimate rights to use the terms "United," "Delta," "Budweiser," "Clue," or "Roadrunner" as trademarks, in different geographic locations or to sell different types of products. In the real world, these marks generally coexist peacefully. But on the Internet, only one company can own the united.com domain name.

This is not the only sort of trademark domain name dispute, of course. Far more attention has been paid to what might be called the opposite problem: the fact that the administrators of the domain name system have allowed people to register domain names in circumstances that violate trademark law. In these cases, trademark law generally prevails over the contrary dictates of the technological scheme. *See, e.g.*, Comp Examiner Agency, Inc. v. Juris, Inc., No. 96-0213, 1996 WL 376600 (C.D. Cal. Apr. 26, 1996) (granting injunction against direct competitor); Actmedia, Inc. v. Active Media Int'l, No. 96-C3448, 1996 WL 466527 (N.D. Ill. July 17, 1996) (same); Cardservice Int'l, Inc. v. McGee, 950 F. Supp. 737 (E.D. Va. 1997) (same); Planned Parenthood Federation of America, Inc. v. Bucci, 42 USPQ2d (BNA) 1430 (S.D.N.Y. Mar. 24, 1997) (enjoining anti-abortion activist from using Planned Parenthood name); Intermatic, Inc. v. Toeppen, 947 F. Supp. 1227 (N.D. Ill. 1996) (enjoining Toeppen's attempt to sell a domain name to the trademark owner as dilution, but not as trademark infringement; reselling domain name is "commercial use"); Panavision Int'l, L.P. v. Toeppen, 945 F. Supp. 1296 (C.D. Cal. 1996) (same dilution analysis); Hasbro, Inc. v. Internet Entertainment Group, Ltd. 40 USPQ2d (BNA) 1479 (W.D. Wash. 1996) (finding adult site dilutes famous name for children's game); Toys 'R' Us, Inc. v. Akkaoui, 40 USPQ2d (BNA) 1836 (N.D. Cal. 1996) (finding dilution of family of "R' Us" marks by defendant's "adultsrus" domain name); Inset Sys., Inc. v. Instruction Set, Inc., 937 F. Supp. 161, 163 (D. Conn. 1996) (stating in dictum that use of a trademark as a domain name may cause confusion in the marketplace); *see also* Dan L. Burk, *Trademarks Along the Infobahn: A First Look at the Emerging Law of Cybermarks*, 1 RICH. J.L. & TECH. 1 (Apr. 10, 1995) <http://www.urich.edu/~jolt/v1i1/burk.html> (discussing various types of domain name cases); *cf.* Digital Equipment Corp. v. Altavista Tech., Inc., 960 F. Supp. 456 (D. Mass. 1997) (granting injunction against ATI's use of "altavista" for services, even though ATI was licensed by Digital to use altavista.com). *But see* Giacalone v. Network Solutions, Inc., No. C-96 20434, 1996 WL 887734 (N.D. Cal. June 14, 1996) (enjoining Defendant Ty, Inc. from interfering with Plaintiff's right to use "ty.com" domain name).

150. For some objections to propertizing trademarks, see Mark A. Lemley, *Romantic*

might be to change the code, but in fact the technological solutions proposed so far are rather coarse and largely insensitive to the real problem. More to the point, technological architecture embedded this deeply in the Net takes on a life of its own.[151]

A second example of how technology might conflict with the law involves technological protection for copyrighted works. Technological protection systems are an effective way to prevent people from copying your works without permission.[152] From a legal perspective, though, the problem may be that they are *too* effective.[153] Copyright law has always permitted some copying without the authority of the copyright owner: under the fair use doctrine, by libraries, to archive a computer program, and so on.[154] There is no reason to expect that technological protection systems designed for

Authorship and the Rhetoric of Property, 75 TEX. L. REV. 873 (1997) (reviewing JAMES BOYLE, SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY (1996)); Kenneth L. Port, *The Illegitimacy of Trademark Incontestability*, 26 IND. L. REV. 519 (1993); Kenneth L. Port, *The "Unnatural" Expansion of Trademark Rights: Is a Federal Dilution Statute Necessary?*, 18 SETON HALL LEGIS. J. 433 (1994). The expansive interpretation given the new federal dilution statute, 15 U.S.C. § 1125(c) (Supp. II 1997), by some courts has increased the power that trademark owners have in the real world over others who use similar marks in different areas or on different goods. *See, e.g.*, Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 YALE L.J. 1687 (1999); J. Thomas McCarthy, TRADEMARKS AND UNFAIR COMPETITION § 24.16[2] (4th ed. 1986).

151. *See* Reidenberg, *Lex Informatica, supra* note 138, at 582 ("The power of Lex Informatica to embed nonderogable, public-order rules in network systems is not benign. Once a technical rule is established at the network level, the information policy rule is both costly and difficult to change."). For a general discussion of "path dependence"—how technological choices may lock users into a particular path—see Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 643-44 (1996).

152. Other types of technological systems may be less troubling. Digital watermarking, for example, merely makes it easier to *identify* those who are copying a given work. It requires reliance on legal rights to constitute an effective enforcement system. *See* Reidenberg, *Lex Informatica*, *supra* note 138, at 580-81 (discussing enforcement-enabling systems).

An intermediate technology between copy-prevention and copy-identification is some sort of metering device that is designed to collect an automated payment with each copy, use, or viewing of a work. *See* Radin, *supra* note 52, at 521 (describing such a system); *cf.* Robert P. Merges, *Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293 (1996) (examining the development of mass-transactions systems in the history of intellectual property). In theory, a metering technology might simply identify users, or it might block uses until it registered a payment by the user. In the former case, metering is like watermarking: it relies on a legal right for enforcement. In the latter case, though, metering is really operating as a copy-prevention system, with the attendant concerns described in the text.

153. For discussions of this problem, see Julie E. Cohen, *A Right to Read Anonymously: A Closer Look at "Copyright Management" in Cyberspace*, 28 CONN. L. REV. 981 (1996); Julie E. Cohen, *Some Reflections on Copyright Management Systems and Laws Designed to Protect Them*, 12 BERKELEY TECH. L.J. 161 (1997); Lessig, *Constitution and Code*, *supra* note 138, at 9-10. Cohen worries that anticopying technology may make infeasible the sort of free public copying sanctioned by copyright's fair use doctrine.

154. *See generally* 17 U.S.C. §§ 107-120 (1994).

the benefit of copyright owners will preserve these legal rights to copy—much less the ability to make copies sanctioned only by informal behavioral norms on the Net itself.[155]

This may be an instance of inefficiency being a virtue. When copyright enforcement was constrained by the available technology, copyright users had degrees of freedom that they did not need to rely on legal rules to give them. As the technology for detecting and preventing copying improves, those concerned with public policy need to open a dialogue about the importance of preserving those degrees of freedom. If we think some freedom to copy is important—and I do—we will need to find new sources for this freedom, in the law or elsewhere.

4. Conclusions Regarding the Enforcers of Norms

In short, there are three possible types of actors who might enforce Internet norms: self-appointed private individuals who determine the norms and enforce them, usually by excluding offenders from the Net altogether; judges deferring to norms in the particular cases in which the issues arise; or the architecture of the Internet itself, which might simply make certain types of conduct impossible. None of these choices is particularly palatable. Probably the best choice is to rely on judges. Even there, it is worth noting that by asking judges to identify and interpret Internet norms rather than legal rules, we have placed them at an inherent disadvantage.

CONCLUSIONS

Though they take place in the context of the Internet, these debates are not new. More than 150 years ago, Justice Story warned against deference to informal norms at the expense of public law:

155. *See* Radin & Wagner, *supra* note 4, at 1315 ("If trusted systems are the only way to 'contract,' there will be no such thing as 'fair use' or 'efficient breach.'").

Congress made this problem dramatically worse last year when it passed the Digital Millenium Copyright Act. The DMCA makes it a crime to make or use devices designed to circumvent technological protection systems. While there are limited defenses to the statute, fair use is not one of them. Thus, the fact that the copy a user would have made of the work would have been legal will not prevent them from going to jail for trying to get access to the work in the first place. This removes the conflict between law and technology, of course, but at a cost. Banning copy-circumvention technologies while allowing copy-protection technologies creates a sort of "mandatory unilateral disarmament" in the technological arms race. It exacerbates the problem of restrictions that are *too effective*, by ensuring that any restriction on the use of a work gets free reign, unencumbered by technology that would permit even legally-sanctioned copying. For discussion of a related problem, see Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089 (1998).

> I own myself no friend to the almost indiscriminate habit of late years, of setting up particular usages or customs in almost all kinds of business and trade, to control, vary, or annul the general liabilities of parties under the common law .... [T]here is no small danger in admitting such loose and inconclusive usages and customs, often unknown to particular parties, and always liable to great misunderstandings and misinterpretations and abuses, to outweigh the well-known and well-settled principles of law.[156]

Internet scholars would do well to consider Justice Story's words.

Modern legal scholarship about norms has much to recommend it. It represents an admirable trend in law and economics towards developing a richer understanding of the context in which legal and business rules operate. Understanding these norms will help the law develop in an efficient way. It may even be the case that the law ought to defer to established norms in certain circumstances. At the same time, however, courts and policy-makers ought to approach Internet norms with some caution. It is not at all clear that the exuberance shown by some scholars over the self-governance potential of the Net is warranted. At the very least, courts and legislatures (to say nothing of scholars) should think long and hard about how they will identify the norms of the Net, how widely those norms are understood and shared, and how durable they are likely to be. They should also give serious consideration to the policies reflected in existing legal doctrines, and how those policies will fare in a world governed (directly or indirectly) by norms.

This is not to say that norms will play no role in shaping the governance structures of the Net. As Larry Lessig has repeatedly explained, law and norms do not exist in a vacuum. Not only do they interact with each other, they both interact with the architecture of the space in which they reside.[157] Law, norms, and code will continue to coexist, because while the law might influence both norms and code, it cannot and should not eliminate them entirely.[158] Their interaction is complex, and yet to be fully explored. But the private ordering model to which I react in this article would effectively take public law out of the equation, leaving governance to a combination of norms and code. I think this is a bad idea.

156. The Reeside, 20 F. Cas. 458, 459 (C.C.D. Mass. 1837) (No. 11,657).

157. *See, e.g.*, Lessig, *supra* note 49, at 1408; Lessig, *Constitution of Code*, *supra* note 138; Lessig, *Intellectual Property and Code*, *supra* note 138; Lessig, *Reading*, *supra* note 138.

158. *See* Richard H. McAdams, *The Origin, Development, and Regulation of Norms*, 96 MICH. L. REV. 338, 347 & n.38 (1997) (noting the almost inevitable interaction of law and norms).

In 1995, essentially before there were any cases in the field, Lessig extolled the virtues of the slow, adaptive common law development process for the Net.[159] We now have hundreds of reported decisions in various aspects of "Internet law" ranging from jurisdiction to trademark law to the First Amendment. As I look at these cases, it seems to me that Lessig's intuition was right. Whether or not the common law naturally tends towards efficiency over time, as some have suggested,[160] it's arguably doing a pretty good job of adapting existing law to the new and uncertain circumstances of the Net. Perhaps before we proclaim the law to be a failure, we ought to give it a chance to work. And certainly before we abdicate responsibility for governance to informal social groups or to programmers, we ought to have a much better sense than we do of whether the world that would result is one we would want to live in.

159. Lawrence Lessig, *The Path of Cyberlaw*, 104 YALE L.J. 1743, 1745 (1995).

160. *See* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 23-27 (1st ed. 1979); George L. Priest, *The Common Law Process and the Selection of Efficient Rules*, 6 J. LEGAL STUD. 65 (1977); Paul H. Rubin, *Why is the Common Law Efficient?*, 6 J. LEGAL STUD. 51 (1977).