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Copyrights in Cyberspace - Rights without Laws

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COPYRIGHTS IN CYBERSPACE—RIGHTS WITHOUT LAWS?

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INTRODUCTION

What legal status should be accorded to rules governing the use of information that were drafted by the parties? Should norms generated by private ordering be enforced by the legal system? How should the legal system treat such norms that conflict with copyright policies? Private ordering advocates believe private ordering should be immune from any government intervention. The parties should be free to set any limit on access and use of information. This paper challenges this proposition.

Private ordering is becoming a prevalent manner for regulating access to information in cyberspace. Cyberspace facilitates such a regime by allowing information providers to distribute their works subject to contracts. The technical ability to make any access contingent upon accepting the terms of a license allows information providers to subject all users to standard terms of use. Such contracts are often automatically enforced by the code that facilitates access to the works so that only uses that are licensed by providers become technically available to users.

Until recently, control over access to copyrighted works was regulated primarily by copyright law.¹ Copyright law is a property rule defined by the legislative bodies of states and applied by their enforcement systems. It provides owners with the legal power to control access to their works by granting them a set of exclusive rights to use their copyrighted materials.² Copyright law further affects access to information by defining the privileges of users with respect to copyrighted works.³

1. Copyright law is a property rule that defines initial endowment in "works of authorship" such as novels, music compositions, or computer programs, which I refer to as "informational works."

2. Section 106 of the 1976 Copyright Act defines the set of exclusive rights granted to copyright owners under the law: the exclusive right to reproduce, prepare derivative works, distribute copies to the public, publicly perform, and publicly display the copyrighted work. *See* 17 U.S.C. § 106 (1976). The purpose of granting exclusive rights to authors is to guarantee a sufficient level of incentives to create. The economic approach to copyright law perceives information as a public good. Authors and information distributors cannot effectively control the use of information distributed to the public. Consequently, they lack sufficient incentives to create. Copyright law provides such incentives by granting copyright owners the legal rights to exclude others from using their materials. *See* William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. LEGAL STUD. 325, 326 (1989). The distribution methods available in cyberspace make information more excludable. Cyberspace facilitates the use of cost-effective, self-help, technical measures that allow information providers to exercise control over the use of their materials.

3. The perception of the fair use doctrine as defining users' privileges under copyright law is controversial. For the view that copyright law does not define "users' rights," see Jane C.

Cyberspace facilitates the propertization of information through “private ordering.”⁴ It allows information distributors to establish rights equivalent to those granted under the copyright-property rule. Such rights do not rely on any property legislation, instead they are constituted by self-help means. Behavior of users and the terms under which they gain access to any informational work may be regulated by the infrastructure that facilitates access.⁵ The same system that provides the service (such as the computer program that facilitates access to a website) also defines the terms of access and the terms of use by preventing some uses, such as copying, and allowing others, such as browsing. Thus, computer programs and network architecture that constitute cyberspace may define the type of uses available to users of on-line mate-

Ginsburg, *Authors and Users in Copyright*, 45 J. COPYRIGHT SOC'Y 1, 2-3 (1997). A narrow approach to fair use is also reflected in the view that the fair use doctrine is simply designed to overcome the problem of transaction costs. For the perception of fair use as a market failure, see generally Wendy J. Gordon, *Fair Use As Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors*, 82 COLUM. L. REV. 1600 (1982). Distribution in cyberspace may, however, overcome the problem of transaction costs. It facilitates bargaining between potential users and copyright owners and allows owners to practically license any use at very low transaction costs. See Niva Elkin-Koren, *Cyberlaw & Social Change: A Democratic Approach to Copyright Law in Cyberspace*, 14 CARDOZO ARTS & ENT. L.J. 215, 289-94 (1996). Consequently, it is argued that fair use in cyberspace should be narrowed. See Tom W. Bell, *Fair Use v. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine*, 76 N.C. L. REV. 557, 564 (1998). Others, however, perceive the limits set by fair use doctrine on property rights granted to owners as an integral part of the copyright paradigm. See Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 362 (1996); see also Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 994-95 (1997); Jerome H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 17 U. DAYTON L. REV. 797, 824 (1992).

4. For a discussion of the “propertization” of intellectual property law, see Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEX. L. REV. 873, 895-904 (1997) (arguing that the tendency to propertize information in recent years is influenced by the view of the Chicago School law-and-economics approach. This approach perceives private ownership as a remedy to the market failures created by the public good nature of information). See also Netanel, *supra* note 3, at 311-13.

5. The ability to regulate behavior in cyberspace by the code was addressed by several commentators. See Lawrence Lessig, *The Zones of Cyberspace*, 48 STAN. L. REV. 1407-08 (1996); Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 555 (1998).

There are, however, significant differences between rights established by the legal system and regulation by the code. Copyright laws define infringing behaviors (such as unauthorized copying), and subject violators to liability. Thus, the law shapes the behavior of users of information by providing negative incentives for inefficient behavior. By contrast, rules embodied in the code prevent the copyright infringement from occurring in the first place. Enforcement by the code is self-implemented and self-executed. The architecture simply prevents any undesirable behavior from occurring. It may allow access, for instance, only after payments are made, or may facilitate self-destruction of any unauthorized copies. Regulation by the code, then, arguably entails perfect performance. It does not provide users with any choice of whether to comply with or violate the rule. The absence of choice suggests that, jurisprudentially, it may not be justifiable to treat restrictions embodied in the code as regulation.

rials. The technical ability to prevent any unlicensed access to digitized works, and to make any access contingent on accepting a standardized license form, facilitates a regime that is equivalent to a property regime.⁶

The emerging "private ordering" regime is changing the terms of access to information. Rules governing the use of information which are the outcome of private ordering may differ substantially from those established by copyright laws. Information providers are using on-line contracts to alter the bargain struck by copyright law and to expand rights granted to owners under the law.⁷ For instance, although copyright law merely prevents the unlicensed reproduction of a work of authorship, a contract may restrict any unlicensed use of that work, such as reading. Reading is currently privileged under copyright law, and a user's rights to read does not require any license from the copyright owner.⁸ Contracts may prohibit the copying of any part of the work, even when copying is otherwise permitted under copyright fair use doctrine.⁹ Agreements between Internet Service Providers ("ISPs") and users regarding the use of information in an on-line space may provide copyright-type protection to information that is normally unprotected under copyright laws.

Therefore, we are witnessing the emergence of two competing models in cyberspace to regulate the use of information. One is the traditional property rule created by centralized institutions of the territorial state; the other is the emerging regime of rules generated via private ordering.

The coexistence of a public ordering (copyright) regime and a private ordering (contractual) regime for regulating access to information requires some thinking regarding the interface between them. What legal status should be accorded to norms established by "pri-

6. See Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295 (1998); Pamela Samuelson, *Foreword to the Digital Content Symposium*, 12 BERKELEY TECH. L.J. 1, 5 (1997).

7. See Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1241-42 (1995) [hereinafter Lemley, *Intellectual Property*]. See generally Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CAL. L. REV. 111 (1999) (describing other examples of contractual terms that conflict with copyright law; e.g., a license of a computer program that prohibits the making of any copies of the licensed work, which may conflict with section 117 of the Copyright Act, which gives the owner of a copy of a program the right to make both archival copies and copies necessary to run the program).

8. See Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 33 (1994).

9. For a discussion of such licenses, see generally Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93 (1997).

vate ordering” that are governing the use of information? Should the state defer to such norms? What should be the legal validity of norms that are inconsistent with copyright policies? Should the state enforce such norms? Under what circumstances should the state provide remedies for a breach of such contracts? This paper seeks to address these questions by looking at some of the arguments supporting the supremacy of private ordering over a copyright regime.

The potential shift to “private ordering” regimes in cyberspace is appealing. The idea that we may no longer need to rely on centralized regulatory institutions, and may individually make our own choices on the terms and conditions for using information, seems to be liberating. “Private ordering” is seen as a manifestation of central values such as autonomy and freedom.¹⁰ Whereas some perceived copyright law as a “necessary evil” of the pre-digitized age, the prospects of replacing such property rules with a free and diverse “market for norms” is welcomed most favorably.

Recent arguments advocating a private ordering regime for managing access to information should, therefore, come as no surprise. Advocates of private ordering argue that priority should be given to terms of access privately generated by the parties, even if they conflict with copyright policies. This view is based on two seemingly different types of arguments: one is an economic argument, and the other is based on political theory.

The economic approach holds that private ordering is superior to a centralized regulatory copyright regime in that it is more efficient. Under this view, contracts are presumed to be more efficient than copyright laws in generating rules that would induce creation and dissemination of informational works. Therefore, terms of a contract that conflict with copyright policies should nevertheless be effective.

The approach coming from political theory holds that a regime based on private ordering is more legitimate than other forms of governing cyberspace. Territorial states should defer to existing “private ordering” mechanisms instead of seeking to extend their jurisdiction and attempting to regulate the Internet. Such a political perspective holds that territorial states should abandon any attempt to apply their territorial copyright laws to on-line activities. Instead, states should facilitate the enforcement of rules on the use of information generated by

10. See generally MICHAEL J. TREBILCOCK, *THE LIMITS OF FREEDOM OF CONTRACT* 8 (1993).

the various on-line communities.

This paper challenges some of the arguments made in support of legal policies that replace copyright rules with private ordering arrangements. It highlights the social costs involved in regulating access to information by private ordering alone. Part I reviews recent arguments supporting private ordering and indicates their common grounds. Examining the ideas shared by both the economic and the political approaches focuses attention on the shortcomings of the attempt to privatize the rulemaking process regarding access to information. It stresses the role of "private ordering" rhetoric in defining what should be beyond the scope of legitimate government intervention. Part II challenges some of the premises shared by the two approaches. It examines whether market-based rule-making processes may optimally regulate access to information. The concluding Part suggests that copyright principles should apply to private ordering arrangements.

I. PRIVATE ORDERING IN CYBERSPACE

Private ordering has been the focus of recent studies examining how systems of norms voluntarily adopted by communities regulate the behavior of their members.¹¹ The notion of "private ordering" has quite a few meanings. It refers to the way in which norms are being enforced, namely, to extra-legal systems where rules are followed in the absence of any legal obligation to do so. Private ordering may also refer to the origin of norms, namely to decentralized processes by which norms are formulated. This paper focuses on the latter.¹² It examines attempts to regulate relations among people regarding the use of information by voluntarily shaping and committing to sets of norms.¹³

11. See generally ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (1991); see also Lisa Bernstein, *Opting Out of the Legal System: Extralegal Contractual Relations in the Diamond Industry*, 21 J. LEGAL STUD. 115, 117 (1992); Robert D. Cooter, *Inventing Market Property: The Land Courts of Papua New Guinea*, 25 LAW & SOC'Y REV. 759, 761-62 (1991).

12. The purpose of this paper is to examine the legal status that should be accorded to norms generated through decentralized processes that govern the use of information. The question is indeed how should the legal system treat norms drafted by the parties. For this purpose, I will be using the notion of "private ordering" to refer to the way in which norms that regulate behavior are generated.

13. Such a definition of private ordering entails several difficulties. Norms are rarely voluntary in the sense that they reflect the choice of all in any given time or that they were unani- mously accepted by all to which they apply. Furthermore, the notion of voluntariness is difficult to define and may apply to various degrees of constraints on freedom. Contracts, for instance, are usually considered to be voluntary. Yet given the constraints of scarcity, it is arguable that no contract, or indeed very few contracts, are truly voluntary. See TREBILCOCK, *supra* note 10,

“Private ordering” and “public ordering” both assume a form of social control in which behavior is governed by rules that define right and wrong.¹⁴ The distinction between “private ordering” and “public ordering” lies at the different processes of generating rules.¹⁵ “Public ordering” models are based on centralized institutions that formulate rules such as the legislature and the courts. These rules regulate behavior by defining a legal outcome (sanction or reward) that is attached to the factual conditions defined by the rule. Such rules apply to the subjects of the state’s authority “from the top down.” “Private ordering” models, by contrast, focus on norms created by decentralized processes. The power to create and shape these rules is not concentrated in the hands of any individual, group, or institution. It is spread among various social agents. “Private ordering,” thus, refers to a wide range of norms created “from the bottom up,” including norms defined by the parties to a contract, as well as standard form contracts, business practices, and norms created by communities. The shared feature of all such norms is that they are generated and undertaken by the individuals to whom they apply.¹⁶ For the purposes of the present discussion, “private ordering,” thus, refers to any decentralized rule-making process in which rules are not determined by the territorial state.

Cyberspace stimulates the interest in private ordering by creating new opportunities for voluntary normative regimes. It significantly reduces the costs of communicating and collecting information regarding individuals’ preferences. It also facilitates fast and cost-

at 20. *But see* Robert Cooter, *Normative Failure Theory of Law*, 82 CORNELL L. REV. 947, 950 (1997) (focusing on norms that reflect “effective consensus obligations”). Such a loose notion of voluntariness is however sufficient for the purpose of the current discussion. This paper focuses on the tension between public ordering rules (copyright laws) and private ordering norms. It is, therefore, sufficient for the purpose of this paper to rely on a notion of voluntariness that does not involve coercion of the legal system.

14. *See, e.g.*, Eric A. Posner, *Law, Economics, and Inefficient Norms*, 82 U. PA. L. REV. 1697, 1699 (1996). A norm can be understood as a rule that distinguishes desirable and undesirable behavior and gives a third party the authority to punish a person who engages in the undesirable behavior. In this paper, I take a broader view of norms to include norms created by contracts that do not necessarily fall under this definition (there is no punishment involved although contracts, unlike promises, will give the parties a right to claim legal remedies against a violator). A somewhat expansive approach perceives norms as intersubjective attitudes commonly shared and developed. *See generally* Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903, 907 (1996).

15. *See* Cooter, *supra* note 13, at 950-52 (commenting that norms may be imposed by the state from the top down, as in most regulatory law. Alternatively, norms law can grow from the bottom up.).

16. Thus, rules of private association may reflect the choice of all members who have joined it, or the majority of members as the case may be. Norms defined by contract reflect the agreement of the parties to a contract.

effective information processing that allows real-time feedback on public preferences and choices. Cyberspace, thus, opens up opportunities for affective participation of individuals in defining the rules. This is particularly the case in the market for informational works. In cyberspace, terms of access to information are increasingly defined by the parties involved rather than by regulators. Cyberspace has several characteristics that facilitate bargaining between information providers and users. Direct channels of communication facilitate interactive exchanges among the parties. The availability of information regarding alternative deals and markets enhances negotiation efficiency. Furthermore, in the case of informational works, cyberspace is not merely a marketing device. It also provides the platform for performing the transaction and delivering the good. In fact, transactions in informational works that take place in cyberspace are no more than information processing. Delivery is made when users are downloading the product to their home media. Consequently, providers are able to deliver informational works subject to terms of access. Furthermore, technological systems that prevent unlicensed use guarantee efficient enforcement of terms of access at lower costs. These new opportunities for employing self-help means to control the use of information makes private ordering in cyberspace a central issue.

Advocates of "private ordering" for regulating access to information perceive the transactions between providers and users of information simply as contracts. Therefore, the argument runs, there is no ground for government interference in such contracts under freedom-of-contracts principles. The "private-ordering" discourse serves to limit the scope of legitimate government intervention in such transactions. Advocates rely on a conventional, though controversial, distinction between public and private.¹⁷ The public/private distinction has been central to liberal political theory, perceiving the private sphere as immune from any governmental interference. Viewing the private sphere of contracts as a manifestation of individual autonomy renders it free from state intrusion. Furthermore, contracts are considered private in the sense that they affect only their parties. Such private arrangements in the marketplace raise no public interest, and therefore, any government intervention in such arrangements will be considered un-

17. For a critique of the traditional public/private dichotomy, see, e.g., CAROLE PATEMAN, *Feminist Critiques of the Public/Private Dichotomy*, in *PUBLIC AND PRIVATE IN SOCIAL LIFE* 281, 281-303 (Stanley J. Benn & Gerald F. Gaus eds., 1983).

justified. In other words, when transactions regarding terms of access are simply perceived as contracts, “freedom of contract” requires that in case of any conflict with government regulation, such terms should prevail.

There are several reasons to question the immunity of self-generated terms of access from legislative interference. One is the general scope of such norms. Contracts used by providers to distribute their informational works to the public are standard form contracts. The general scope of such contracts has the same generality as state legislation. Terms in such contracts are not tailored to any specific transaction or any particular party. They are standardized and universal. They uniformly govern all access to a work.¹⁸

Furthermore, when courts lower the level of assent necessary for contract formation, such terms of use prevail. The Court of Appeals in *ProCD, Inc. v. Zeidenberg*¹⁹ for instance, held that a contract is formed when the software is used.²⁰ In fact, a contract may be formed whenever the potential licensee acts in a way defined by the offeror as “acceptance.” If the method of acceptance is defined by information providers to be “any use of the materials,” then anyone who gains access to the materials and uses them inevitably becomes a party to a contract. If the standard of assent necessary to form contractual relationships is minimal, then no use can escape the terms of the license.²¹ When all access to works is controlled and contingent

18. For further discussion of the uniformity of terms, see *infra* notes 93-97 and accompanying text.

19. 86 F.3d 1447 (7th Cir. 1996).

20. See *id.* at 1455. In *ProCD*, the court addressed the enforceability of a shrinkwrap license. Plaintiff purchased a CD containing a database developed by the defendant. The license regarding the database was inside the box and also appeared on the user's screen each time the product was used. A contract is formed by offer and acceptance. The terms of the license offered by the vendor require acceptance by the user. The district court held that because the defendant did not have the opportunity to review the contract before the purchase and did not assent to the terms after the purchase, the contract was not binding. See *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 652-55 (W.D. Wis. 1996). The court of appeals overruled. See *ProCD*, 86 F.3d at 1455. The court found that a contract was formed when the defendant performed the acts the vendor proposed to treat as acceptance, namely use of the software. See *id.* at 1447.

21. See 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, 119 (1997). Merges argues that parties should be in privity with each other for a contract to be formed: “If C buys an asset from B (who contracted with A) and does something to harm A, A's cause of action normally is against B, not C.” *Id.* Yet, if a contract between a copyright owner and a user is formed whenever the user uses the work, then such privity is fictitious. The situation described by Merges is exactly the one that occurred in the *ProCD* case. *ProCD* (A) sought remedies against Zeidenberg (C) who bought software “off the shelf” from B. The court held the license established by the use of the software to be effective, thus giving A remedies against C. See *ProCD*,

on agreement to a standard form license, the terms of the license govern all relationships between the copyright owner and anyone who has gained access to the work.

Another reason that raises a public interest in contracts regarding terms of access is that private, like public, ordering may allow the proprietization of information. Indeed contracts establish rights and obligations only against a party to the contract. While property rights are rights against the world (rights *in rem*), duties established by a contract can only be imposed on the immediate parties to a contract.²² The new distribution methods available in cyberspace give rise to new "property rights," even though such rights are not codified. On-line distribution reduces the extent of unlicensed use substantially. Digital technology allows information distributors to codify the terms of use in the code itself. Such technology enforces restrictions on use and access automatically.²³ Thus, informational works may carry the terms of access, and will allow access only on these terms.²⁴ Click-on licenses make any access to informational works subject to a license. The effectiveness of such contracts depends on the ability to prevent any unlicensed access to the works. Since on-line providers exercise control over physical access to their works by technological fencing, they are able to prevent any access to their materials unless users accept the terms of their license. The use of self-help means that are available to information providers in cyberspace creates a regime that is very similar to a property regime.²⁵ Consequently, the same considerations that justify setting limits on proprietization of information by copyright law should apply to proprietization by "private ordering."

The uniformity of terms and the general scope of norms con-

86 F.3d at 1447.

22. Legal theory distinguishes between property rights and contract rights. Property rights are established by law. They define initial endowment and establish a right against third parties. Whereas contractual rights and obligations exist only against a party to the contract (rights *in persona*), property rights are rights against the world (rights *in rem*). See P.S. ATIYAH, AN INTRODUCTION TO THE LAW OF CONTRACTS 355-56 (1995). A property rule such as copyright law, for instance, defines initial endowment in "works of authorship." It provides the copyright owner with a bundle of rights against the world, such as the right to reproduce the work and to distribute it to the public.

23. See Julie E. Cohen, *Some Reflections on Copyright Management Systems and Laws Designed to Protect Them*, 12 BERKELEY TECH. L.J. 161, 165 (1997).

24. See *id.*

25. This technological development blurs the distinction between contractual rights (rights *in persona*) and property rights (rights *in rem*). See Elkin-Koren, *supra* note 9, at 97; Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 693 (1998).

tained in standard form contracts suggest that such norms amount to “private legislation.”²⁶ Private legislation regarding information should not enjoy the immunity that any negotiated two-party agreement enjoys under freedom-of-contract principles. As suggested by the following sections, such contracts share none of the assumptions regarding contracts that justify their supremacy over government regulations. Such “private legislation” in the information market should be subject to legal scrutiny.

Finally, private ordering does not persist in a legal vacuum. It does not provide a comprehensive solution to the problem of regulating access to information in cyberspace. The state plays a central role in administering contracts and enforcing contract law.²⁷ Proponents of private ordering for regulating access to information assume that the state will provide means for enforcing the privately generated norms. Post and Johnson hold that “the prospect of governing the Internet via decentralized, emergent decision-making does not imply that the use of force by governments would be irrelevant, but only that it would be deployed in the service of rules made predominantly by private actors.”²⁸ Similarly, the economic perspective suggests that contract law is necessary to enforce contract terms, while formulation of such terms should be immune from government intervention under the doctrine of freedom of contract. The territorial governments are called to function as enforcement agencies for rules that they, and their citizenry, had no say in adopting and that may contradict the public interest. What policy should be established regarding the enforceability of such norms? The following discussion further examines the views held by private ordering advocates.

26. Friedrich Kessler first coined the term “private legislation” in his 1943 article on contracts of adhesion. See Friedrich Kessler, *Contracts of Adhesion—Some Thoughts about Freedom of Contract*, 43 COLUM. L. REV. 629, 631 (1943); Robert P. Merges, *Intellectual Property and the Costs of Commercial Exchange: A Review Essay*, 93 MICH. L. REV. 1570, 1611 (1995) (arguing that standard form software licensing contracts, by virtue of their very uniformity and non-negotiability, have the same generality of scope as the state legislation. Yet, he advocates the preemption of such licenses only in cases where they have become totally pervasive.); Maureen A. O'Rourke, *Copyright Preemption After the ProCD Case: A Market-Based Approach*, 12 BERKELEY TECH. L.J. 53, 80 (1997) (arguing with respect to shrinkwrap licenses: “[b]ecause the forms are both standard in content and pervasive, they resemble private copyright law”).

27. See ATIYAH, *supra* note 22, at 35-36.

28. 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, 80 (Brian Kahin & James H. Keller eds., 1997).

II. JUSTIFICATIONS FOR THE SUPREMACY OF PRIVATE ORDERING

A. *The Economic Perspective (Efficiency)*

Neo-classical economists perceive private-ordering regimes as superior to centralized regulatory regimes. Rules generated by such decentralized processes are presumably more efficient for several reasons. A fundamental assumption of the economic approach is that if rational parties had voluntarily entered a private exchange, that exchange must make them both better off or they would not have entered it.²⁹ This proposition rests on the assumption that both parties enjoyed complete information regarding the transaction and acted voluntarily. It is also presumed that the parties are acting in the absence of any market failure, such as monopolies, externalities, or information failures.³⁰

The contracting parties entering a private exchange have an information advantage over legislators acting through collective decision-making processes. Each of the contracting parties knows what her preferences are, and reflects it through her choices in the market. The exchange process, thus, reduces the chances of mistakenly assessing public preferences and, therefore, setting the rule inaccurately.³¹ It further reduces transaction costs involved in collecting information about the public preferences. Under the economic model, the fact that contracting parties entered the transaction voluntarily guarantees that such a transaction indeed reflects the optimal bargain that benefits them both.

Centralized rule-making institutions lack the relevant information regarding the impact of rules on all parties affected and, therefore, are unlikely to generate efficient rules. Whereas a decentralized decision-making process guarantees that parties would internalize the impact of the norm on their utility, a centralized process cannot guarantee that all potential benefits and losses will be accurately observed

29. See TREBILCOCK, *supra* note 10, at 7.

30. The economic approach assumes that market transactions are superior to regulation as long as there is no market failure. The economic theory discusses five major market failures: monopolies, public goods, lack of information, externalities, and transaction costs. See MILTON FRIEDMAN, *CAPITALISM AND FREEDOM* 13 (1962) (arguing that “[t]he possibility of co-ordination through voluntary co-operation rests on the elementary—yet frequently denied—proposition that both parties to an economic transaction benefit from it, *provided the transaction is bi-laterally voluntary and informed*”); see also Cooter, *supra* note 13, at 952.

31. See Cooter, *supra* note 13, at 948 (arguing that decentralization of the law is necessary to loosen constraints on information and to respond to the changing needs of a complex and diversified society).

and reflected in the rule. This holds, of course, only in the absence of any market failure that would undermine the fundamental propositions of the economic model, for instance, the proposition that both parties acted voluntarily and that they were fully informed. In such circumstances, economic efficiency may more closely be approximated by limitations on the parties' abilities to freely engage in transactions.³²

Several scholars have argued for the supremacy of contracts over copyright law based on grounds of economic efficiency.³³ They maintain that as a general matter contracts are more efficient than copyright in promoting creative activity and the dissemination of works. This approach essentially makes the following arguments: first, the government is ill-equipped to determine the optimal terms of access to information, and second, the market in cyberspace may efficiently produce such terms.

The first argument emphasizes the deficiencies suffered by central governmental institutions. Copyright law, which is the outcome of a centralized rule-making process, is inefficient because governments are ill-equipped to address the needs of copyright owners and users. They lack reliable means for valuing intellectual property and for ascertaining the appropriate level of protection that should be assigned to informational works.³⁴ Therefore, legislators are likely to define restrictions on access to information either too narrowly, thus diminishing incentives to authors, or expensively, thus inefficiently restricting access to copyrighted works. The risk of error is arguably higher given the pace of technological change. Rapidly changing technologies require constant adaptation and changes of rules. Legislators, it is argued, simply lack the necessary flexibility to respond

32. Several writers have analyzed standard form contracts as market failures rather than deficiencies in the bargaining process. See Lewis A. Kornhauser, *Unconscionability in Standard Forms*, 64 CAL. L. REV. 1151, 1154 (1976); Arthur Allen Leff, *Contract as a Thing*, 19 AM. U. L. REV. 131, 135 (1970); Alan Schwartz, *Unconscionability and Imperfect Information: A Research Agenda*, 19 CAN. BUS. L.J. 437, 450 (1991).

33. See generally Bell, *supra* note 3; Kenneth W. Dam, *Self-Help in the Digital Jungle*, U. CHI. LAW & ECON. (John M. Olin & Econ. Working Paper No. 59, forthcoming 1999); 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; Merges, *supra* note 21; O'Rourke, *supra* note 26; Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 547 (1995). For a critical discussion of this approach, see generally Julie E. Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management"*, 97 MICH. L. REV. 462 (1998) (arguing that the arguments of the new breed of what she calls "cybereconomists" resemble the ideology of the Supreme Court's *Lochner*-era).

34. See Easterbrook, *supra* note 33, at 211-12; Merges, *supra* note 21, at 126.

promptly and efficiently to the changing needs created by technological developments.³⁵

Furthermore, the legislative process itself is inefficient. The processes of defining rights in informational works, or amending and refining such rights, involve high transaction costs.³⁶ Such processes involve costs of conducting hearings, preparing reports, processing comments and revisions, drafting, and lobbying.³⁷ Furthermore, the high cost induces the parties involved—Congress, industry, and interest groups—to avoid any revisions. Yet, rapid technological change requires such revisions to adapt the legal rules to the changing needs of the on-line environment.³⁸ Consequently, the legislative process is inefficient for regulating rights of use in informational works.

The second argument of the economic model focuses on the advantages of market processes in general, and cyber-markets in particular, for determining the appropriate terms of access to information. Copyright owners and consumers, it is argued, have several advantages over governments in this regard. In the absence of a market failure, such as the presence of a monopoly, the market will provide the appropriate rules of use for information.³⁹ The market perception perceives the contract as an object. Terms and conditions that govern the use of information are determined in the same way that the quality and price of products are determined, namely through competition.⁴⁰ Individuals are expressing their preferences for various license terms directly through market transactions. Therefore, the market reflects the preferences of the relevant parties more accurately. This lowers the chances of error in setting the optimal level of

35. See I. Trotter Hardy, *The Proper Legal Regime for "Cyberspace"*, 55 U. PITT. L. REV. 993, 995-96 (1994) (arguing that rapidly changing technologies require flexible regulation. Flexibility is made possible by decentralized rules rather than broadly applicable judicial or legislative resolution.).

36. See Hardy, *supra* note 33, at 254-55.

37. See *id.* (reviewing the legislative processes of the 1976 Copyright Act and the recent efforts to revise copyright law to accommodate the special needs of the digital age).

38. See *id.*

39. See O'Rourke, *supra* note 26, at 81-82 (arguing that freedom of contract should prevail as a general rule, unless certain market imperfections exist). Where market imperfections are shown to exist, the case should be decided under antitrust laws.

40. This approach was reflected in the opinion of the Court of Appeals in the *ProCD* case. Terms of the contract, the court held, should be determined by competition: "Terms of use are no less a part of 'the product' than are the size of the database and the speed with which the software compiles listings. Competition among vendors, not judicial revision of a package's contents, is how consumers are protected in a market economy." 86 F.3d 1447, 1449 (7th Cir. 1996); see also *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1151 (7th Cir. 1997).

use for informational works and reduces inefficiencies.⁴¹ Efficiency in transactions regarding the use of informational works will lower the price of accessing information and, thus, make access more available to the public.⁴²

The efficiency of private ordering for regulating access to informational works is enhanced by the availability of price discrimination.⁴³ Information providers relying on contracts may lower the price they charge for access.⁴⁴ Instead of distributing information subject to copyright restrictions alone, at a fixed price, distribution subject to contracts may allow providers to sell limited rights of use at a lower price. Users will pay exactly for the type of use they wish to exercise.⁴⁵ Users who place high value on receiving the information will be willing to pay a higher price for expanded rights. Users who make limited use of the information (creating a single copy, displaying the work once) will be charged a small fee for restricted licenses. By using price discrimination supported by contracts, competition will require information providers to reduce the cost of information and, thus, increase access to information by the general public.

A similar view was expressed by Judge Easterbrook in the *ProCD* case.⁴⁶ In *ProCD*, the court examined restrictions on the use

41. See Easterbrook, *supra* note 33, at 211.

42. See Bell, *supra* note 3, at 564-67. Bell argues that Automated Rights Management ("ARM") will provide net benefits to the public. Bell suggests several reasons for this: first, ARM will decrease uncertainty involved in applying fair use doctrine. It is unclear, though, why users pay a fee for resolving such uncertainty. It would be equally reasonable to come up with a clearer, better-defined set of fair use rules tailored to digitized uses. A second source of public benefit will be a decrease in the price of access, caused by overall transactional efficiency of the market. Access fees will be lower, and informational products will be better. As I further discuss below, one of the shortcomings of this approach is its focus solely on the fact that ARMs allow charging fees for uses previously presumed free. This approach fails to acknowledge the implications of establishing rights to veto uses of informational works that were so far privileged.

43. On the availability and operation of price discrimination in the cyber-market for informational works, see generally Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 *BUFF. L. REV.* 845 (1997).

44. See generally David R. Johnson & David G. Post, *The New "Civic Virtue" of the Internet*, in *THE EMERGING INTERNET* 23 (1998) (arguing that fared use, which would require consumers to pay for every access and use of informational works, is more efficient than existing fair use doctrine).

45. See O'Rourke, *supra* note 33, at 523-24 (arguing that "[g]iven the level of sophistication of the parties involved, it is reasonable to conclude that the rights that the licensee receives are closely connected to the price it pays. If the licensee were to bargain for a right to decompile, the price would likely increase. It makes sense to conclude that the knowledgeable licensee has decided that the right to decompile is not worth the corresponding price increase.").

46. 86 F.3d 1447 (7th Cir. 1996); see also *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir. 1997).

of a noncopyrighted database in a shrinkwrap license. Judge Easterbrook interpreted the restrictions in ProCD's license as an attempt to engage in price discrimination, namely selling its database for personal use to the general public at a low price while selling to commercial businesses at a higher price. If ProCD could not have charged commercial users a higher price, it would have been forced to raise the price to end-users. This would have harmed end-users and limited public access to the work. The court concluded that it is therefore necessary to give force to the contract in such cases, to provide a control arbitrage that would make price discrimination work.⁴⁷

The economic approach emphasizes the new opportunities for a proliferation of transactions in a Coasean world in which transaction costs decrease.⁴⁸ In a world with no transaction costs, contracts will drive the market to efficient allocation without central intervention of any sort. Cyberspace does not eliminate transaction costs, but it arguably lowers such costs.⁴⁹ The costs of searching for information, processing information, transmitting information, and exchanging information are presumptively lower.⁵⁰

Parties may efficiently find out what informational works are

47. See 86 F.3d at 1449. It is of course arguable that in the absence of a copyright monopoly and in the face of competition from others (putting out the directories), ProCD would have to lower its profit margin.

48. See Ronald Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 3 (1960).

49. See, e.g., Cass R. Sunstein, *The First Amendment in Cyberspace*, 104 YALE L.J. 1757, 1783 (1995) ("The economic point is obvious, for the costs of transacting—of obtaining information and entering into mutually beneficial deals—will decrease enormously, and hence it will be much easier for consumers to get what they want, whatever it is they want"); see also Easterbrook, *supra* note 33, at 207.

50. It is still unclear how cyberspace affects transaction costs. Indeed some costs are significantly lower in cyberspace. These include the costs of identifying the parties with whom one has to negotiate, information costs, the costs of getting together with the relevant party, and the costs involved in the bargaining process. Yet, other types of transaction costs may be higher. The human (cognitive) cost of engaging in a transaction, paying attention, learning the different options, and defining preferences or making choices, are less affected by the availability of technological means. If the volume of transactions increases due to the decrease of transaction costs of the first type, then transaction costs of this second type may increase. See Joel Trachtman, *Cyberspace, Sovereignty, Jurisdiction and Modernism* (visited Aug. 15, 1998) <<http://www.tufts.edu/~jtrachtm/cyber.html>>. That is something we all experience on a daily basis. The vast volume of information available at all levels requires devoting an increasing portion of our time to information processing. Emerging technologies may automatically perform some of these "cognitive" tasks—such as sorting information, comparing options by various measures, and reflecting preferences in choices. See generally Tom Allen & Robin Widdison, *Can Computers Make Contracts?*, 9 HARV. J.L. & TECH. 25 (1996) (discussing the legal implication of systems that perform human cognitive tasks that are associated with the exercise of free will, such as making choices, forming intentions, and manifesting consent). Nevertheless, users' attention will be necessary for defining preferences to automated agents, providing them with enough information, and monitoring their output.

available, at what price, and under what terms.⁵¹ If transaction costs in cyberspace are lower, optimal allocation may be reached by contracts. Lower transaction costs mean that more information will become available to the public.⁵² Consequently, copyright law should not impose any restrictions on the ability to contract or use self-help means since this would only increase transaction costs and reduce the accessibility of informational works.⁵³

Overall the economic approach to private ordering reflects a deep distrust of governmental rule-making processes. When information was non-excludable, copyright law was conceived as a necessary evil. It was designed to guarantee incentives to creators by granting them legal rights to exclude others from using their creations. The distribution methods available in cyberspace changed the “public good” nature of information. It made information excludable by allowing owners to technically and legally (via contracts) restrict access to information and control its use. Under such circumstances, copyright law should step back and allow free bargaining to take its place in managing rights of access to information. The economic approach assumes that market forces of supply and demand may guarantee the optimal level of use of information. Use restrictions will reflect the preferences of users to pay less for limited usage rights or pay more for expanded privileges. Consequently, in the case of conflict between the terms of contracts and copyright law, the contract should prevail, unless certain market imperfections exist.⁵⁴ The role of law is, therefore, limited to providing the two legal fundamentals of the market—assign property rights to owners and facilitate an efficient

51. This may refer to costs of negotiation. Yet, one should examine the effect of cyberspace on the broader notion of transaction cost, as developed by Calabresi and Melamed, to also include enforcement and adjudication costs. See generally Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972). The effect of cyberspace on such costs is more complex.

52. If transaction costs are low, then perfect competition over price will cut prices down. At least one study suggested, however, that prices on the Internet are generally higher than prices of identical products sold by retailers with physical stores and that price variance is higher for Internet retailers. See generally Joseph P. Bailey & Erik Brynjolfsson, In Search of “Friction-Free Markets”: An Exploratory Analysis of Prices for Books, CDs and Software Sold on the Internet (1997) (unpublished manuscript, on file with the *Chicago-Kent Law Review*). This study examined the on-line bookstore Amazon.com that has dominated on-line book sales since 1995. The researchers studied the on-line competition between Amazon and Barnes & Noble that launched Barnes & Noble’s first virtual bookstore in March 1997. The research found a price increase in Amazon’s prices after Barnes & Noble’s entry.

53. See Bell, *supra* note 3, at 586-90; Dam, *supra* note 33, at 18.

54. See O’Rourke, *supra* note 33, at 527-28. Merces, therefore, concludes that “unless serious third-party harm or constitutional rights are implicated, intellectual property holders should be free to craft contracts as they see fit.” Merces, *supra* note 21, at 126.

exchange system by contract law.⁵⁵

The economic approach to intellectual property law enjoyed a special status among commentators and courts. This approach seemed the most consistent with the constitutional purpose of intellectual property laws, namely to provide incentives to promote the social goal of progress in science and the useful arts.⁵⁶ In recent years, commentators began to challenge the argumentation of this approach, stating that it reflected an ideology regarding the nature of property, the legislative process, and the market.⁵⁷ The fundamental assumptions made by this analysis are further discussed below.

B. *The Political Perspective (Legitimacy)*

The supremacy of private ordering is also justified from the perspective of political theory. This examines the emerging legal institutions in cyberspace in terms of their legitimacy. From this perspective, private ordering in cyberspace is superior to copyright law since it expresses autonomous choices. Such a choice legitimizes the use of coercive power.

Liberal political theorists perceive private ordering as a superior alternative to centralized government models in that it is the most consistent with autonomy and freedom. These fundamental values require that any use of external forms of coercion be minimized. The democratic models of governance justify the use of coercive power by the territorial state, when all who are affected by the state's rule are allowed to participate in its creation.⁵⁸ The nature of participation as being required to constitute legitimacy is controversial and varies among different democratic theories. Under liberal models of de-

55. See Easterbrook, *supra* note 33, at 210-12.

56. See U.S. CONST. art. I, § 8, cl. 8. Under this interpretation of the constitutional purpose of intellectual property laws, the government should create limited rights for advancing progress.

57. See Cohen, *supra* note 23, at 183-87 (arguing that cybereconomist arguments reflect an ideology); see also Lemley, *supra* note 4, at 901-06 (arguing that the Chicago School of Economics' approach to intellectual property assumes that the law should centralize control over information at the hand of owners who will use it efficiently. This rationale leads to the conclusion that all valuable information should be owned by someone.). Lemley further criticizes the property rights approach for relying on a false assumption that transactions in intellectual property are costless, and on the premise that efficient licensing will always occur. See *id.* at 902; see also Lemley, *supra* note 3, at 992-96; Netanel, *supra* note 3, at 312-13.

58. See generally JOHN RAWLS, *POLITICAL LIBERALISM* (1993); Ronald Dworkin, *What is Equality? Part I: Equity of Welfare*, 10 PHIL. & PUB. AFF. 185 (1981); Ronald Dworkin, *What is Equality? Part II: Equality of Resources*, 10 PHIL. & PUB. AFF. 283 (1981); Ronald Dworkin, *What is Equality? Part III: The Place of Liberty*, 73 IOWA L. REV. 1 (1987).

mocracy, participation in representative democracy is defined in terms of voting. Legitimacy stems from the aggregated will of the constituents as reflected in election results, as long as voting rights are provided equally.⁵⁹ The deliberative model, by contrast, establishes legitimacy on the ability of the constituents to participate in a meaningful way in generating the rules affecting them. This approach suggests a more sophisticated understanding of the political process that acknowledges the presence of will formation processes in the collective decision-making processes themselves. Such an approach is, therefore, more susceptible to distortion by disparities of power.⁶⁰ To establish legitimacy, this approach requires more than equal rights to participate in collective decision-making processes.⁶¹

How is legitimacy established in cyberspace? Post and Johnson argue that the territorial state may no longer serve as a source of legitimate rules for conduct in cyberspace.⁶² A legitimate governance mechanism, they argue, should satisfy two principles. First, it must reflect the “consent of the governed,” namely that those who are subject to a particular rule (whose conduct is controlled by the exercise of a particular rule) will have some voice in determining the rule.⁶³ Second, it must reflect the “consent of the affected.” Legitimate rules should reflect the consent of those who are affected by the conduct that is the subject of particular rules.⁶⁴

59. See Jürgen Habermas, *Three Normative Models of Democracy*, in 1 CONSTITUTIONS 1, 3 (1994).

60. See Stephen M. Feldman, *The Persistence of Power and the Struggle for Dialogic Standards in Postmodern Constitutional Jurisprudence: Michelman, Habermas, and Civic Republicanism*, 81 GEO. L.J. 2243, 2245 (1993); Habermas, *supra* note 59, at 8; Bernard Manin, *On Legitimacy and Deliberation*, 15 POL. THEORY 338, 352 (Elly Stein & Jayne Mansbridge trans., 1987).

61. See generally Elkin-Koren, *supra* note 3, at notes 8-60 and accompanying text.

62. See Johnson & Post, *supra* note 44, at 24, 26-31; see also Johnson & Post, *supra* note 28, at 70 (suggesting that no existing sovereign possesses legitimate rule-making jurisdiction over cyberspace, and comparing the exercise of such extraterritorial power to a form of colonialism).

63. See Johnson & Post, *supra* note 44, at 26 (explaining that the purpose of “consent of the governed” is to establish legitimacy and “to limit the tyrannical exercise of coercive power, to keep it from becoming oppressive”).

64. See *id.* at 27 (arguing that “consent of the affected” requires that “[t]hose who feel the affects of conduct regulated by particular rules should, to a substantial degree, have a voice in determining the substantive content of the rules”). Johnson and Post treat this second principle as a principle of efficiency, the purpose of which is to enhance welfare by limiting the problem of “spillover,” namely negative and positive externalities that affect the welfare of outsiders (such as individuals in other jurisdictions). Such externalities are not internalized by decision-makers in the regulating community. This will often lead to inefficiencies. When cumulative welfare is examined (namely welfare of all communities), total utility will be lower. Consequently, Johnson and Post argue such spillovers “tend to diminish one’s confidence that rules adopted by individual sovereigns will be welfare-enhancing in the aggregate” *Id.* at 27.

Although territorial sovereigns may satisfy these two principles when they regulate within the territorial borders of the state, they cannot simultaneously satisfy them when they seek to regulate cyberspace.⁶⁵ This is because cyberspace eliminates the significance of geographical location. Individuals at various physical locations may feel the effects of conduct taking place at a particular geographical location.⁶⁶ The effect of conduct is no longer linked to the particular physical location in which the conduct occurred.⁶⁷ Consequently, there is no clustering of impacts in cyberspace, and the effects of actions and rules are randomly distributed within various geographic locations. In the absence of any physical clustering of impacts, geographically defined citizenship and rule-making power may no longer simultaneously serve the goals of legitimacy and efficiency.⁶⁸

Post and Johnson draw two major conclusions from this analysis regarding the adoption of norms in cyberspace. The first has to do with allocating rule-making power, and the second refers to the nature of the regime that should be adopted in cyberspace.

1. Rule-Making Power

What should the source of norms be in cyberspace? How should rule making power be allocated? Post and Johnson argue that rule-making power regarding on-line activities should be conferred to the on-line communities rather than to territorial sovereigns.⁶⁹ It is necessary, they argue, to “allocate decision-making regarding the rules applicable to particular areas of the online world to those people who are most affected by such activities—the system operator and the users who actually ‘inhabit’ the online spaces in question.”⁷⁰

Such an analysis, of course, raises a problem of defining the relevant community.

65. *See id.* at 28-31.

66. *See id.* at 30.

67. Therefore, “the effects of conduct extend beyond geographical boundaries . . . and participation in rule-making is decoupled from the effects of such rules.” *Id.* at 31. Networks and servers are equally accessible from everywhere. Therefore, “the effects of whatever information is available at a given site are felt simultaneously and equally in all jurisdictions, independent of their ‘distance’ from one another.” *Id.* at 30. This is a function of the speed at which information travels, and of the digital character of that information that does not decay over time and distance. *See id.* at 29.

68. *See id.* at 30.

69. This paper does not question this part of the argument, namely that it is necessary to allow the development of a Law of the Net, rather than impose territorial-originated rules (or laws of various territories). It does question, however, the normative superiority of the “market for rules” suggested by the authors.

70. Johnson & Post, *supra* note 44, at 40. *See generally* David R. Johnson & David G.

This conclusion rests on the assumption that people in on-line communities “are most affected” by on-line activities. The writers do acknowledge that “[a]ctions in this space may have some ‘spillover’ effects on other real or virtual places,” but they conclude, “with rare exceptions, such spillovers are less important than the impact of the rules on those who choose to participate directly in such online space(s).”⁷¹

This assumption, however, is questionable. Under various circumstances, on-line activities may have a significant impact on real-life events in physical communities.⁷² On-line communities overlap with real-world communities, and a clear distinction between them cannot be drawn. Individuals who use cyberspace necessarily reside in physical communities. People who send e-mail, use chat rooms, engage in e-commerce, or listen to on-line music also live in the real-world. Their on-line experiences may affect prices and markets, social relations, community standards, and politics in real-world communities.⁷³ Therefore, real-world communities may have a legitimate interest in restricting on-line activities that affect them.⁷⁴

Johnson and Post acknowledge that some on-line activities may carry a real-world impact. They argue, however, that “[t]he mere possibility of negative externalities cannot itself, in the abstract, answer the question of Internet governance.”⁷⁵ They conclude that both regulatory processes should be informed by one another.⁷⁶

The predominance of private ordering by on-line communities over alternative regulatory schemes depends on the interface between the on-line community and real-world communities in each

Post, *Law And Borders—The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996).

71. Johnson & Post, *supra* note 44, at 41.

72. For a pictorial description of this overlap, see Lessig, *supra* note 5, at 1403 (commenting that “[w]hile they are in that place, cyberspace, they are also here. They are at a terminal screen, eating chips, ignoring the phone. They are downstairs on the computer, late at night, while their husbands are asleep. They are at work, or at cyber cafes, or in a computer lab. They live this life there, while here. And then at some point in the day, they jack out, and are only here. They step up from the machine, in a bit of a daze; they turn around. They have returned.”); see also Hardy, *supra* note 35, at 1012-13.

73. A libelous message that is posted on-line may have a harmful effect on one’s career in the real world. Visits of users to pedophilic websites may affect their behavior with their neighbors. Users who read their governments’ actions over the Internet may change their views regarding their representatives.

74. Johnson and Post acknowledge that on-line communications may harm real-world communities in cases that involve conspiracies to commit violence in the real world or the creation of on-line tax havens. See Johnson & Post, *supra* note 28, at 67.

75. *Id.* at 82.

76. See *id.* at 84.

particular matter. While some activities may be more significant to the on-line community (such as the regulation of domain name system), interests regulated by copyright law present a different dilemma. The assumption that on-line constituents are the most affected by on-line activities is, therefore, particularly dubious in the context of copyright laws. A hypothetical case provided by Post and Johnson may demonstrate this point.⁷⁷ Who are affected by copyright laws that apply to a French website that publishes U.S. copyrighted materials (unprotected under the French copyright law)? Post and Johnson argue that in applying French law to the site we shall give priority to those who are subject to the law (namely the French people to whom the French law applies). However, applying the French territorial rule will contradict the principle that individuals should have a voice in rules that affect them (namely the American copyright owner). On the other hand, they argue, applying U.S. copyright law will give priority to those who are affected by the law but will contradict the principle that individuals should have a voice in generating the norms that apply to them.⁷⁸

This analysis reflects a limited view of copyright principles. It emphasizes the significance of copyright law for copyright owners, but at the same time it overlooks the role of copyright law in defining the terms of access to information. Copyright law affects not only the owners of information but also the public. By defining which information is to be excluded and protected under the owner's monopoly, copyright law also defines what constitutes the public domain. By strictly defining the bundle of exclusive rights granted to copyright owners, copyright law outlines the boundaries of legitimate use of information that is not restricted.⁷⁹ Consequently, it affects the rights of the public to access and use information that is not protected by copyright laws. Copyright law affects the public who seeks access to information. For this purpose, the people affected by copyright law are all who wish to use the information or may be affected by its exclusion. Restricting access to information is significant to the vitality of non-virtual communities no less than it effects the virtual community. Access to information is significant for scientific and technologi-

77. See Johnson & Post, *supra* note 44, at 30-31.

78. See *id.* Such a problem already exists with respect to the international dimension of copyright laws. International conventions give local treatment to foreign works of member countries. Such a rule gives priority to the community in which laws are enforced and works are being used and distributed.

79. For further discussion of this point, see *infra* notes 110-17 and accompanying text.

cal development and for democratic processes. These processes do not occur in the on-line world alone. Many of the relevant processes take place in real-world communities. Restrictions on information may, therefore, have a significant impact on those communities in which such processes take place.

2. Plurality of Norms

Post and Johnson's second conclusion refers to the nature of the regime that should be adopted in cyberspace. The nature of cyberspace, they argue, no longer requires adoption of a single set of rules. Unlike the central regulatory institutions in representative democracies, cyberspace facilitates a plurality of rules. It allows the development of a diversified regime made of rules developed "from the bottom up." The rules will be shaped indirectly by way of interaction between sysops defining the terms of use, and users making choices regarding their preferable system and services.⁸⁰ ISPs will have to adapt their rules to the desires of users, and users who disagree with such rules may leave and find an alternative regime that better serves their interests and values.⁸¹ The advantage of the Internet is, thus, in facilitating the coexistence of different regimes. Such regimes allow various users to join on-line areas that ultimately suit their preferences. Just like the economic market model, rules under this model are generated by the "invisible hand." The model Post and Johnson endorse is, therefore, a "market of rules."

In the context of copyright law, Post and Johnson expect the emergence of several regimes, referred to as different on-line areas. Such regimes would implement different rules: some would be more liberal while others may conduct a more restrictive regime. How would such a plurality of regimes develop? "What we could expect," they argue, "is a sorting out of authors and readers and works into online spaces with rules that fit the combined preferences of specific groups of participants."⁸² On-line regimes that provide little copy-

80. See Johnson & Post, *supra* note 28, at 78 (arguing that "[t]he interaction between rule-making by sysops and navigational decisions of users produces a very close fit between the overall desires of the on-line public and the actual experiences of these participants").

81. See generally David G. Post, *Governing Cyberspace*, 43 WAYNE L. REV. 155 (1996). Post demonstrates this argument by analyzing the circumstances in *Cyberpromotions v. America Online*, 948 F. Supp. 456 (E.D. Pa. 1996). Post argues that the rule by AOL (No Spam) represents the collective will of the subscribers. See Post, *supra*, at 168-71. When it does not, subscribers will "vote with their electrons" by switching to another provider. See *id.* at 169.

82. Johnson & Post, *supra* note 44, at 44.

right protection to copyrighted works (“liberal areas”) would attract those who wish to disseminate their works and use information relatively freely. Others who wish to limit the use of their works and subject them to royalties would develop a more conservative regime.

Post and Johnson, thus, envision a “decentralized, emergent law”⁸³ or a “market for laws” governing the use of information.⁸⁴ While the normative status of such a vision is discussed in Part III, its feasibility should first be examined. Feasibility depends on the ability to entirely block leakage of materials from one area to another. If materials distributed in a restrictive regime can freely travel to the liberal regime then division into regimes becomes meaningless. Authors who seek to distribute their works subject to restrictive terms must make sure they will not be disseminated in any liberal on-line area. Contractual means may be exercised to restrict such dissemination.⁸⁵ In other words, sysops will deny access to users who do not comply with the terms and conditions they define for the system. Sysops may also screen out messages originating from an IP address, domain name, or system that does not adhere with its rules.⁸⁶

Making users accountable for their on-line behavior, be it an infringement of a regulatory norm or a violation of contract terms and conditions, requires a mechanism of identification. That is because users’ on-line identities are represented by IP addresses or domain names. Such virtual identities may not be sanctioned since they may be multiple and unsteady. Users may escape responsibility for on-line harm by changing their IP address. Some may also use different ad-

83. *See id.* at 46-50.

84. Elsewhere, the writers advocate the emergence of a decentralized self-regulatory set of norms in cyberspace on other grounds. *See Post, supra* note 81, at 158 (advocating decentralized private ordering on the ground that cyberspace subverts “choice of law” rules by destroying the significance of physical locations that serve as a definition basis for law-making sovereignty); *see also Johnson & Post, supra* note 28, at 71 (examining alternative models of governance: extending regulatory power of the territorial sovereigns to on-line activities, international treaties, and special task international organizations). They reject these traditional centralized models of governance on the ground that they will become ineffective. *See id.* They argue that problems raised by these models are addressed by the decentralized self-regulatory model. *See id.* Thus, they claim that “[t]he bottleneck characteristics of any centralized lawmaking machinery, and the natural frailties of lawmaking processes based on writing authoritative texts—make centralized systems unsuitable for tackling a diverse, rapidly changing, large-scale set of problems—like that posed by the Internet.” *Id.*

85. Works have always been exposed to free riding after they leave the physical guardianship of the author and are distributed to the public. The need to impose restrictions on the use of works at that critical stage was the main reason behind the development of copyright laws in the first place.

86. *See Johnson & Post, supra* note 44, at 76.

dresses for different purposes, thus escaping any sanction against them, such as restricting their access to an on-line area, by using a different IP address to re-enter. Accountability of users, therefore, requires a technical ability to link the virtual representations of users and the live users. Post and Johnson suggest that such a problem will be solved by tying the issue of on-line identities to identifiable individuals. Such a central identification system may threaten users' privacy and allow service providers (registries, ISPs) a high degree of control over on-line activities. Such potential control may threaten the civil liberties of users. Furthermore, if such mechanisms of identification and control are available they may be used to tie users' on-line behavior to the jurisdiction of their local governments.

Another issue is reliance on contractual means. What is the legal validity of such contractual norms? If contractual norms are enforceable only within a particular regime, then enforcing such rules will not eliminate any leakage. To enforce such contracts across on-line regimes requires a higher level of norms that apply to all users regardless of the legal regime they choose. Who should exercise such a rule-making power? Moreover, if it is necessary to employ a higher set of norms to enforce "private ordering," why shouldn't we develop such norms for regulating the use of information as well? As suggested in Part III, there is no reason to believe that enacting contract laws is more legitimate than regulating the use of information.

III. CHALLENGING THE UNDERLYING ASSUMPTIONS

The proposition that private ordering is superior to a copyright regime (because it is more legitimate or because it is more efficient) rests on several key assumptions shared by the political and the economic models. One set of assumptions relates to the rule-making process. The belief that a market for norms will generate the optimal rules of use for information assumes that such a rule-making process is voluntary, reflects the bilateral assent of informed parties, and occurs in a competitive market. The first section of this Part examines the applicability of these assumptions to the information market in cyberspace.

This Part further looks at the outcome of a decentralized rule-making process. Both approaches define the optimal allocation of usage rights in information as the outcome of "private ordering." Seeking to avoid any moral judgment regarding social welfare, both approaches suggest a seemingly neutral view of what would be con-

sidered a “good rule” defined exclusively in terms of procedure. The second section challenges this line of argument.

A. Examining the Process: Is Private Ordering an Optimal Rule-Making Process?

Is there a reason to believe that the market alone can optimally regulate access to information? Is a market for norms likely to provide a legitimate set of rules? The propositions regarding the market for norms rest on several assumptions shared by the political and the economic model.

1. Assent and Information

Consent of all parties affected by the rule is necessary for the supremacy of private ordering under both models. Recall that a legitimate rule-making process must reflect the consent of those governed by the rule and the consent of those affected by the conduct that is the subject of a particular rule. From an economic perspective, a contract is considered efficient only if it reflects the will of consenting parties.

The private ordering regime advocated by the economic and the political models does not involve negotiated terms of use. Both approaches assume that terms of use will be generated by market processes. The economic perspective perceives standard form contracts as an indispensable component of the product (the informational work). Users who wish to purchase limited rights of use may do so for a small fee, whereas users who require more expensive usage rights will pay for an expanded license. In this sense, the consent of a licensee to purchase a restricting license at a lower price is no different from her consent to purchase a computer subject to a one-year (rather than a three-year) warranty at a lower price. Similarly, the political perspective envisions a market process in which sysops refine their terms of use in response to users' preferences reflected in their consumer choices.

Consent in market processes, however, is fictional. Users do not assent to the terms in any meaningful way. The terms of use do not reflect the outcome of any individual bargaining process, but instead are standardized. In the case of standard form contracts, the long-standing common law presumption regarding the “meeting of the minds” is inaccurate. Standard form contracts are rarely read by con-

sumers and are even less so understood by them. Nevertheless, the pervasiveness of standard form contracts, and their economic advantage in reducing transaction costs,⁸⁷ support their enforceability in many circumstances, even when meaningful assent may not be demonstrated. Consequently, various legal doctrines define circumstances under which terms in standard form contracts should be enforceable.⁸⁸ That terms in standard form contracts will be enforceable does not suggest, however, that the parties in fact have agreed to their terms. This line of argument, underlying both approaches, seems to suffer from circularity.⁸⁹

Furthermore, consent requires that parties will be adequately informed of the contract terms. Parties may not be presumed to agree to rules or terms they were not aware of or did not understand. If users inaccurately perceive the impact of the exchange on their utility, we can no longer be confident that the exchange will in fact render both parties better off. Also, from a political perspective, if users are not aware of the implications of their choices, their choices cannot reflect the exercise of an autonomous will.

It is unclear how much information is necessary to constitute consent that would manifest autonomous choice and would accurately indicate the preferences of users. It is possible, however, to observe fundamental information failures inherent in the market for informational works. Informational works may be used in many ways. One may wish to read an article at one's home, to distribute it to one's students, to criticize it on a television show, or to use it as part of a new writing project. It is usually difficult to predict *ex ante* what type of usage one would wish to make. It is even more difficult to attach a value to all uses of information in advance. Since information lacks physical boundaries, we may often be unaware of the type of usage that we are employing. The legal description of such acts may not be intuitive, so use restrictions may often be unintelligible. We use different types of informational works in many contexts and for various purposes. It is unlikely that consumers can make meaningful

87. See Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 HARV. L. REV. 1173, 1177 (1983).

88. See Michael I. Myerson, *The Reunification of Contract Law*, 47 U. MIAMI L. REV. 1263, 1265-66 (1993).

89. See Cohen, *supra* note 33, at 489 ("Use of the neoclassical/common law conception of contract to bootstrap voluntariness in this setting strains logic to the breaking point . . . '[C]ontract' means fully informed and voluntary as to every term even when the law stipulates that it need not mean either of those things *in fact* to be enforceable.").

choices for each and every informational work consumed. Information on the cost and benefit of each term of use is likely to be prohibitively high, while at least *ex ante* the expected benefit to users in the majority of cases is likely to be low.

Furthermore, the market for works is likely to present information asymmetries. Suppliers of information have a systematic advantage in distributing informational works. They can better assess the benefits and risks embodied in any of the contract's terms and in understanding the impact of any given term on the ability to use informational works. Since they execute a large number of similar transactions over time, they have an incentive to collect information about the implications and legal validity of the terms they draft. Users are unlikely to purchase licenses according to the specific terms of use, but are likely to treat the license as a general name for an authorization to use the information. Such information asymmetries suggest that some regulation of terms of use is necessary.

Finally, a market for information is unlikely to accurately reflect the value of information due to externalities. The special attributes of information will be discussed below.⁹⁰ Yet it is worth mentioning here that parties to a transaction may not internalize the public utility involved in the use of information. In other words, even if the terms of access offered by suppliers are accepted by users, such terms will reflect only the immediate value placed by users on any given transaction. The terms may not reflect the public utility and the benefits to society as a whole. Under such circumstances, it would, therefore, be inaccurate to assume that the aggregated will of users and information providers is reflected by the terms that govern the use of informational works.

2. Choice

Assent and choice are related concepts. We are unlikely to hold that a party has given her consent to the terms of a contract unless she had a choice not to do so. But "consent" requires not merely the ability to freely exercise one's will, but also the necessary knowledge required to act deliberately and not arbitrarily. The discussion in the previous section addressed the latter aspect, while this section addresses freedom of choice.

From an economic perspective, the requirement that parties en-

90. See *infra* Part III.B.2.(c).

ter the transaction voluntarily is necessary to guarantee that the bargain indeed reflects their preferences. Absent the voluntary consent of all parties, the private ordering regime merely reflects an exercise of power by information providers and enjoys no supremacy.

The ability to make a free choice is also essential from the political perspective. Rules are not considered legitimate unless chosen by, rather than forced on, the parties involved. Voluntariness requires the ability to choose among alternatives. In the context of a market for norms described by Post and Johnson, voluntariness requires the ability to opt out of an on-line area and its rules.⁹¹ Mobility, namely the “ability to move unhindered into and out of these individual networks with their distinct rule-sets,”⁹² is essential to the political model. Mobility depends on competition, namely on the emergence of alternative regimes that provide different sets of rules.

How much competition may be expected in the market for informational works? Several scholars have argued that cyberspace promotes choices by consumers.⁹³ By making information about products, terms, and price widely available, cyberspace arguably empowers consumers. It facilitates conducting market surveys at low cost. Cyber-consumers may collect, accumulate, store, and produce information more efficiently. Using advanced browsers, users may compare prices, quality, or contractual clauses. Thus, it is argued, consumers’ choices in cyberspace are likely to be more informed. Furthermore, cyberspace facilitates networking among consumers and, thus, allows them to get organized. On-line consumers may gain substantial market power. Collective action by users may require information suppliers to address users’ preferences and refine the terms of use accordingly.

Nevertheless, cyberspace does not present such competition over the terms and the price of informational works. The fact that the market for informational works is governed by standard form contracts is likely to produce a low level of competition over the terms. Terms of use regulated through standard form contracts tend to be uniform. This uniformity may reflect the low value users place on use privileges. It may also reflect, however, the inability of users to accu-

91. See Post, *supra* note 81, at 167 (“Mobility—our ability to move unhindered into and out of these individual networks with their distinct rule-sets—is a powerful guarantee that the resulting distribution of rules is a just one.”).

92. *Id.*

93. See Easterbrook, *supra* note 33, at 213; Merges, *supra* note 21, at 126-27.

rately assess their expected utility before they choose to use certain information.

Another explanation for such uniformity of terms has to do with network externalities. Avery Katz suggests that norms involve some level of network externalities. To the extent that they require some level of coordination, they become more valuable as more people use them. Some restrictions on the use of information in a market for norms may become valuable only if they apply to all users who gain access to the informational work. Standardized terms would reduce transaction costs (search and negotiation) of providers and users. Thus, network externalities provide inadequate incentives for innovative norms.⁹⁴ Katz argues that in such circumstances “even if a newly invented norm would be more efficient than the status quo, there may be no way for a decentralized community to coordinate its implementation.”⁹⁵

Furthermore, the fictitiously attributed assent to standard form contracts does not promote competition over the terms. When a valid transaction does not require informing users of the terms of the license prior to the completion of the transaction, owners have no incentives to reveal the license restrictions in advance. Under such circumstances, users are unlikely to develop a demand for particular usage rights.

The low level of competition is also due to the fact that users' choices in transactions regarding copyrightable materials is very limited. Information providers in cyberspace are able to prevent any unlicensed access to their works by using technical means. Licenses are often offered on a “take-it-or-leave-it” basis. Consequently, in many cases, users may exercise very little choice. This depends of course on the availability of perfect substitutes for informational works. The question of substitutes is controversial and may vary depending on the type of work and the type of user involved.⁹⁶ Although some informational works may have perfect substitutes (such as telephone listings), many works may not. To the extent that an informational work is indispensable, information suppliers will have the

94. See Avery Katz, *Taking Private Ordering Seriously*, 144 U. PA. L. REV. 1745, 1750 (1996).

95. *Id.* at 1750-51.

96. See, e.g., Landes & Posner, *supra* note 2, at 328; see also Cohen, *supra* note 33, at 60 (arguing there is insufficient information for determining either that the market exhibits a high degree of substitutability or that it does not).

power to dictate the terms of use.⁹⁷ Thus, uniformity of terms may reflect disparities in bargaining power. In many cases, individual users simply lack the necessary bargaining power to change industry standard contractual provisions. The low level of competition over the terms of use renders the assumptions regarding choice and mobility unsubstantiated.

3. The Neutrality of Market Processes

The privatization of rule-making processes, and the replacement of centralized processes (of legislatures and courts) by market processes, seem to raise no particular difficulties under both approaches. That is because both models assume that market processes are neutral. The market aggregates the sum of individual (sometimes conflicting) preferences by the “invisible hand,” without making any claims regarding the common good.

Such an assumption is subject, however, to several objections. A market for norms is likely to be affected by disparities of power. Consequently, rule-making processes are likely to be dominated by players who enjoy economic superiority, motivated exclusively by commercial interests.

Market processes reflect values and choices. They give priority to economic power over other types of power such as political power or intellectual superiority.⁹⁸ The effect of market forces may not be mitigated by other social institutions, such as the political process or processes in civil society. Consequently, rules of use that are the outcome of the market alone are likely to be dominated by the interests of those who enjoy superior economic power. Thus, the privatization of rule-making processes surrenders decision-making power to commercial players that dominate the market.

The economic and the political perspectives both overlook the effect of economic power and disparities of power. Disparities of power may affect the ability of all the parties involved to equally participate in determining the set of norms that govern their use of information.

Merges and O'Rourke acknowledge the potential effect of economic power on the rule-making process via the market.⁹⁹ Yet, they

97. See Cohen, *supra* note 33, at 526.

98. See generally MATTHEW P. MCALLISTER, *THE COMMERCIALIZATION OF AMERICAN CULTURE* (1996).

99. See Merges, *supra* note 21, at 126 (stating that “a dominant contractual form can oper-

both understand market power to be a monopoly power, occurring only in exceptional circumstances when demand for the informational work distributed by a monopolist is fixed, and users are unable to replace that work by any substitutes.

But distortion by power is not exclusively caused by economic power in the sense of antitrust law. It is the systematic disparities of power among participants in the rule-making process that is of concern. As suggested above, the technological ability to restrict access to information, and information asymmetries, provide information suppliers with an inherent advantage over users. Other systemic asymmetries of power relate to the fact that the market does not merely reflect the aggregated will of suppliers and users, but also defines and shapes preferences.¹⁰⁰ The type of information people wish to consume depends on the information available to them. Information suppliers set consumers' agendas by releasing particular informational works and withholding others. Information providers who are profit maximizers may act strategically to shape demand. Vulnerability to manipulation by power is particularly evident in a market for information because information is not an ordinary commodity. It is essential for the development of individual beliefs, values, identities, and desires.¹⁰¹ These in turn will determine the type of information one wishes to consume and how one wishes to use it. Economic power exercised in the market for information may invert the outcome of such markets.¹⁰² It is quite unlikely that market forces themselves will remedy such disparities of power. In fact, mergers and acquisitions in the information and the Internet industries in recent years indicate that a significant market power is likely to be concentrated in the hands of a few key commercial players.

From an economic perspective, disparities of power may undercut the efficiency of the bargain reached by market forces. Parties' agreements to terms of use in such circumstances may not reflect their utility, but rather their inequalities in bargaining power. Such

ate as a form of 'private legislation' that restricts federally conferred rights every bit as much as a state statute. However, the ubiquitous contract terms must appear in an industry where the licensors have at least some degree of market power and where licensees can credibly be shown to object to the term."); O'Rourke, *supra* note 33, at 486-88.

100. See Cohen, *supra* note 33, at 554 ("The distribution of power in a contested exchange also will affect preference formation and expression. To the extent that transactions produce or constitute people, those who wield power will be able to shape the wants and habits of those who do not.").

101. See Elkin-Koren, *supra* note 3, at 218-35; see also Netanel, *supra* note 3, at 362.

102. See Cohen, *supra* note 33, at 522-24.

terms may, therefore, represent the interest of the most powerful players in a way that does not necessarily correspond with public welfare.

From the political perspective, the disparities of power undermine legitimacy. This is because disparities of power may undermine the ability of users to have any say in the adoption of norms applied to them and potentially affecting them. The legitimacy of democratic institutions stems from the presumption that all have equal power to affect the democratic result.¹⁰³ Disparities of power may subvert equality among participants and may silence “voices” that are apparently participating in the decision-making process to insignificance. Disparities of power may subvert the legitimacy of the process for adapting and shaping norms in cyberspace, as described by Post and Johnson.

B. Examining the Outcome: A Threat to the Public Domain

Does private ordering produce a socially optimal level of use and production of information? Post and Johnson challenge the attempt to evaluate the outcomes produced by private ordering regimes. They ask, “[h]ow can we know whether a decentralized emergent form of lawmaking for the Internet will produce a definition of the public good with which we agree?”¹⁰⁴

The “market for norms” model assumes that there are no “objective criteria by which to measure whether any particular set of rules is optimal.”¹⁰⁵ The only standard for assessing the outcome of the collective decision-making process is the process by which a rule was generated. For Post and Johnson, a justifiable outcome would be a rule reached by a decentralized decision-making process that reflects the real preferences of participants on the Internet.¹⁰⁶ Similarly, the neo-classical economic model defines public welfare as the aggregated individual preferences expressed in the market. Market signals of price and demand curves are therefore perceived as the most reliable indications for public preferences.¹⁰⁷

103. The liberal view of democracy will therefore establish the legitimacy on the principle of “one person one vote.” This view has been criticized for denying the effect of economic power and disparities of power on the ability to equally affect the democratic result.

104. Johnson & Post, *supra* note 28, at 77.

105. *Id.* at 77-78.

106. *See id.* at 78.

107. *See* PAUL GOLDSTEIN, COPYRIGHT HIGHWAY 217 (1994).

Nevertheless, private ordering regimes will not necessarily reflect the preferences of all parties involved for several reasons. As the preceding analysis suggests, market processes may sometimes fail to reflect the preferences of users due to disparities of power and information asymmetries. Consequently, even under the assumptions of the neo-classical economic model, market processes may produce a suboptimal level of use for information. Private ordering is likely to produce a suboptimal level of use of information also owing to externalities. This aspect of information is further discussed below.

From a political perspective, a rule-making process that is vulnerable to economic power cannot establish legitimacy as it does not guarantee the ability of all to equally participate in generating the rules. Furthermore, the "market for norms" approach neglects the essential role of fundamental values to any legitimate form of governance. Such values are not sufficiently guaranteed by merely decentralizing the rule-making process.¹⁰⁸

Evaluating the outcome of any decision-making process requires adopting a set of normative assumptions regarding what is "good," what should be considered "good public policy," and how to mitigate conflicting values. But such a discussion is beyond the scope of the present analysis. If we take on-line private ordering seriously, however, there is no need to reach a consensus over the definition of "the good." As Post and Johnson suggest, "[t]he great virtue of the Internet is that it allows multiple, incompatible resolutions of such policy questions by giving those who disagree with the resolution of any particular question the means to avoid contract with one another."¹⁰⁹

Nevertheless, private ordering should not be examined in the abstract, but rather in comparison to its alternatives. In deciding whether to give priority to private ordering over copyright principles, we must examine what we are giving up by doing so. I believe that the most significant change caused by the shift from copyright law to the private ordering regime is the inevitable process of shrinking the public domain.

Both models neglect the significance of the public domain. Copyright law is understood by both models to aim at facilitating

108. This approach is consistent with a liberal school of thought that upholds liberalism as a decision-making process (rule-based democracy). But there is more to democracy than procedure. Rule-making processes should also adhere to fundamental values. See generally DAVID HELD, *MODELS OF DEMOCRACY* (1996).

109. Johnson & Post, *supra* note 28, at 78.

profit maximization by information providers. Yet, copyright law also affects the public. By defining which information is to be excluded and protected under the owner's monopoly, copyright law also defines what constitutes the public domain. Consequently, it affects the rights of the public to access and use information that is outside the scope of copyright laws.

The two models fail to acknowledge the potential impact of public ordering on access to information. Therefore, both models overlook the threat that stems from private ordering regimes to the public domain. Terms of access regulated by private ordering are likely to shrink the public domain.¹¹⁰

1. Privatizing the Commons

Private ordering facilitates the propertization of information in the public domain. The public domain consists of "those aspects of copyrighted works which copyright does not protect."¹¹¹ The public domain is thus a commons. It is a property regime in which "multiple owners are each endowed with the privilege to use a given resource, and no one has the right to exclude another."¹¹² Informational works that are not protected under copyright law, or any usage of such works that is not restricted by copyright law, is privileged.¹¹³ Such a description of the public domain is not free of doubt. Some works that are unprotected by copyright law may be protected by other laws.¹¹⁴ Yet, as suggested by many commentators, the public domain (however defined) is an integral and necessary component of the copyright paradigm.¹¹⁵ To the extent that contractual arrangements expand rights of control over informational works provided by copyright law, such contracts are shrinking the public domain.¹¹⁶

110. Other commentators have taken a similar position. See, e.g., Lemley, *supra* note 4, at 901-06.

111. Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 968 (1990).

112. Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 623-24 (1998).

113. Such a definition draws on Hohfeld's terminology: property rights are defined in terms of "rights of exclusion" and the "common" is defined in terms of privileges. See generally WESLEY NEWCOMB HOHFELD, *FUNDAMENTAL LEGAL CONCEPTION AS APPLIED IN JUDICIAL REASONING AND OTHER LEGAL ESSAYS* (Walter Wheeler Cook ed., 1923).

114. See, e.g., Uniform Trade Secrets Act § 1 (1990). Furthermore, some works are simply beyond the reach of copyright law. Therefore, such works or uses cannot be said to be unprotected by copyright law and therefore in the public domain.

115. See, e.g., Lemley, *supra* note 3, at 990-93; Lawrence Lessig, *Intellectual Property and Code*, 11 ST. JOHN'S J. LEGAL COMMENT. 635, 638 (1996); Litman, *supra* note 8, at 29-37.

116. See Lemley, *Intellectual Property*, *supra* note 7, at 1291.

Private ordering allows private parties to obtain exclusive rights in information that is currently held in the public domain. It allows information providers to protect works that are currently unprotected under copyright law (such as data in databases). It further facilitates the creation of new exclusive rights, namely rights to veto any unlicensed use.¹¹⁷ Information producers armed with such exclusive rights may exercise extensive control over the use of their informational works. Such proprietization facilitated by private ordering privatizes the commons. How would such privatization of the public domain affect the way information is being used and the level of use?

2. Is Privatizing the Public Domain a Good Thing?

There are good reasons to believe that the shrinking public domain will lead to suboptimal outcomes. For several reasons, it is predicted that proprietization facilitated by private ordering may lead to an underuse of information. One reason has to do with the nonrival nature of information. Another has to do with the notion of anti-commons. Finally, the use of information involves certain externalities that are unlikely to be reflected in arrangements reached by the parties in a private ordering regime.

(a) *The Public Domain Does Not Lead to the Tragedy of the Commons*

Economic literature perceives the "tragedy of the commons" as the predominant justification for privatizing a commons.¹¹⁸ When too many individuals are legally privileged to use a resource, such as a lake, they will tend to overuse it. This is because each individual shall bear only the benefits of consuming the resource (such as maximizing fishing), but will not bear the full cost of such a use (namely exhausting the fishery). In other words, individuals do not internalize the negative consequences their consumption has on the resource and, therefore, each individual acting separately may collectively overconsume the resource.¹¹⁹

117. Copyright law gives the holder of the copyright in a computer program the right to veto any copying of the program. It does not give the copyright holder any right to veto the use of her program.

118. See Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243, 1244 (1968).

119. See Heller, *supra* note 112, at 677 ("The tragedy is that rational individuals, acting separately, may collectively overconsume scarce resources. Each individual finds that she benefits by consumption, even though she imposes larger costs on the community.").

While the tragedy of the commons may occur in the case of fisheries or overgrazed fields,¹²⁰ it need not occur in the case of information. Information does not involve the tragedy of the commons since it cannot be overused.¹²¹ Information is nonrival in that its use by one person does not deprive others from using it. Information can never be used up.¹²² On the other hand, some level of free access to information is essential for further innovation. Information is developed incrementally. Existing information stimulates the creation of more information and, therefore, extensive use of information may increase the likelihood of further development.

It is arguable that propertization may still play a role in facilitating the efficient use of works by allowing their commercialization. Scarce resources should be put at their highest valued use. In the absence of transaction costs, bargains in the free market will guarantee such allocation since the user with the highest valued use will also be able to offer the highest bid. Yet, information does not raise the same allocation problems typical to tangibles. That is because information cannot be used up and can be used by many simultaneously.¹²³

Furthermore, financial resources of users would not guarantee the best allocation choice because some innovative developments may depend on some level of intellectual capability, circumstances, level of cooperation, and luck.¹²⁴ These are not necessarily tied to any market power. The chances of coming up with an innovative breakthrough in computer technology, or creating an exceptional artistic expression, are not higher for powerful economic players. They may depend, however, on wide exposure to existing works or recent technologies. This suggests that widespread information will increase the chances of further innovation. Furthermore, the value of some informational works may

120. *See id.* at 624.

121. This public good characteristic of information was acknowledged by the economic literature that applies property theory to intellectual property. Yet, propertization is perceived as essential to guarantee the efficient use of works by allowing their commercialization. *See* Easterbrook, *supra* note 33, at 212 (advocating the assignment and refinement of property rights in cyberspace); *see also* Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 271-75 (1977) (arguing that property rights granted by the patent system will encourage commercialization and efficient use of ideas).

122. *See* Landes & Posner, *supra* note 2, at 335; Lemley, *supra* note 4, at 902.

123. Furthermore, it is not certain that bargains will provide optimal allocation of rights because (1) it is impossible to accurately determine the value of information prior to its use and (2) some information becomes valuable at a later stage. Some information will become valuable, for instance, only when combined with other sorts of information.

124. *See* Litman, *supra* note 8, at 48-52 and accompanying text (arguing that authorship processes may be inadvertent).

increase as it becomes used more intensively. This point is further considered below.

If information cannot be used up, the use of informational works should be maximized. Maximizing access to copyrighted works is a fundamental principle of copyright policy. Nevertheless, copyright law itself limits the use of information by granting copyright owners the legal power to restrict the use of their informational works. This is necessary to guarantee appropriate incentives for information producers. However, copyright law defines such property rights alongside a commons regime. By strictly defining the bundle of exclusive rights granted to copyright owners, copyright law further defines privileged use. Some informational works are not protected under copyright law at all, while others receive only limited protection. The bundle of exclusive rights under copyright law lasts only for a limited period of time and is restricted under the statutory provisions.¹²⁵ Limits on use imposed by copyright law leave room for a pool of information that is publicly accessible. It is not necessarily free in the sense that the use of information involves no cost to users.¹²⁶ Some information under a copyright regime is accessible, however, in the sense that its use is privileged to all.

The effectiveness of copyright law for enhancing authorship rests on the public domain.¹²⁷ Therefore, usage outside the scope of copyright law is privileged. For reasons discussed in the previous sections, it is unlikely that a private ordering regime will preserve such a level of privileged usage.

(b) Propertization of the Commons and the Anticommons

While informational works cannot be overused, they can be underused. The notion of “anticommons” as developed by Michael Heller may clarify this point. Heller distinguishes three types of property regimes: private property,¹²⁸ commons,¹²⁹ and anticommons.

125. See 17 U.S.C. §§ 107-20 (1976).

126. See Bell, *supra* note 3, at 580-81 (arguing that even uses that are considered fair use under copyright law involve some transaction costs).

127. See Litman, *supra* note 111, at 968 (“The public domain should be understood not as the realm of material that is undeserving of protection, but as a device that permits the rest of the system to work by leaving the raw material of authorship available for authors to use.”).

128. Under a private property regime, each owner is controlling a core bundle of rights in a single object. See Heller, *supra* note 112, at 670.

129. In a commons property regime, each owner would have privileges to use the object without seeking permission from the others. See *supra* notes 111-16 and accompanying text.

The dichotomy between the first two types of property regimes, private property and common-property, is fundamental to the neo-classical economic approach to property.¹³⁰ A resource may be either privately owned, so that rights of exclusion are vested in private parties, or may be such that control over its use may not be efficiently divided among private owners.¹³¹ It is in the later case that a common property regime will emerge in which the use of the resource is open to the public and is not subject to exclusive rights of any particular party. Thus, the private/commons distinction focuses on the level of control exercised over a resource: from the strongest right of exclusion in a private-property regime to the total absence of exclusion rights in a commons.

Heller's theory of anticommons property adds another dimension to the analysis of propertization by requiring consideration of the organization of property rights.¹³² An anticommons regime is defined as "a property regime in which multiple owners hold effective rights of exclusion in a scarce resource."¹³³ An anticommons regime emerges whenever several owners have rights of exclusion in a resource that each wants to use.¹³⁴ Such a regime creates "horizontal" relations among competing owners of overlapping rights.¹³⁵ An anticommons regime may lead to what is described by Heller as the "tragedy of the anticommons": A tragedy of the anticommons can occur when too many individuals have rights of exclusion in a scarce resource. The tragedy is that rational individuals, acting separately, may collectively waste the resource by underconsuming it compared with a social optimum.¹³⁶

The anticommons analysis is of great importance to intellectual property discourse.¹³⁷ For decades, the literature on intellectual

130. See CAROL M. ROSE, *PROPERTY AND PERSUASION: ESSAYS ON THE HISTORY, THEORY, AND RHETORIC OF OWNERSHIP* 110 (1994).

131. See generally H. Scott Gordon, *The Economic Theory of a Common-Property Resource: The Fishery*, 62 J. POL. ECON. 124 (1954).

132. The notion of the anticommons property was applied by Heller to privatization processes in post-socialist Russia. See Heller, *supra* note 112, at 622-24.

133. *Id.* at 668.

134. See *id.* at 669.

135. See *id.* at 670 ("An object is held as anticommons property if one owner holds one of Honore's core rights in an object, and a second owner holds the same or another core right in the object, and so on, with no hierarchy among these owners' rights or clear rules for conflict resolution.").

136. See *id.* at 677.

137. This analysis was recently applied by Michael Heller and Rebecca Eisenberg to intellectual property rights in biomedical research. See Michael A. Heller & Rebecca S. Eisenberg,

property has focused on the appropriate level of control that should be accorded to intellectual property owners.¹³⁸ It sought to define the appropriate scope of rights that would stimulate creation and at the same time would not stifle future innovation. The anticommons analysis expands the current debate over the appropriate scope of intellectual property rights to consider not merely the level of protection, but also the organization of rights, namely the way rights are designed and held. This analysis, thus, focuses on the effect of the organization of rights on the efficient use of information.

Propertization of the public domain by private ordering may result in an anticommons regime because private ordering may facilitate the proliferation of rights of exclusion. Recent reform initiatives also advocate strengthening the rights of copyright owners to control the use of their works.¹³⁹ Yet, propertization by contracts not only affects the strength of rights, but may also transform the division and allocation of rights. There are several features of propertization by contracts that deserve special attention. A property regime constituted by copyright law is very different from a web of exclusion rights (*quasi*-property regime) constituted by contracts. Copyright law defines the sort of informational works that are entitled for protection. It further defines the limited scope of rights that are accorded to copyright owners with respect to such works. Propertization by private ordering is not subject to any such limits. Exclusive rights are established by contracts that as a practical matter become enforceable against all users of any particular work to which the contract applies.¹⁴⁰ Either users positively agree to the terms of the license or

Can Patents Deter Innovation? The Anticommons in Biomedical Research, 280 SCIENCE 698 (1998). Heller and Eisenberg demonstrated how patents granted on upstream technology may impede downstream product development. They argue that the proliferation of patent rights in biomedical research may create an anticommons by fragmenting intellectual property rights in potential future products or by allowing too many upstream patent owners to stack licenses on top of the future discoveries of downstream users.

138. The uncertainty regarding the optimal level of protection that should be accorded to copyrighted works has long been noted by the literature on intellectual property. See Easterbrook, *supra* note 33, at 208; Landes & Posner, *supra* note 2, at 399. See generally Glynn S. Lunney, Jr., *Reexamining Copyright's Incentives-Access Paradigm*, 49 VAND. L. REV. 483 (1996) (criticizing the dominant incentives-access paradigm for defining the scope of copyright and suggesting an alternative standard of allocative efficiency).

139. See Digital Millennium Copyright Act of 1998, H.R. 2281, 105th Cong. This was also reflected in the international arena. See generally Pamela Samuelson, *The U.S. Digital Agenda at WIPO*, 37 VA. J. INT'L L. 369 (1997) (describing the high-protectionist agenda of the U.S. delegation during the 1996 diplomatic conference in Geneva that revised international treaties on intellectual property to address the challenges posed by global digital networks).

140. See *supra* notes 18-26 and accompanying text.

they become subject to such terms by virtue of using the work. In both cases, the restrictions over the use of the work are unilaterally drafted by information providers.

Restrictions established by contracts may apply to subject matters that are currently unprotected under copyright law (such as data).¹⁴¹ Such restrictions are more likely to be excessive. Information providers are profit maximizers and would, therefore, seek to exclude any use that they can possibly license for a profit. Providers may use contracts to establish new exclusive rights. For instance, a contract may license a user to make copies of the work provided that she will not use such copies in competition with the provider's business. A license may further provide that the use of the work is only permitted together with work B and that use is prohibited in connection with works produced by C. Private ordering may, thus, facilitate the proliferation of new exclusion rights.

Consequently, the use of works by licensees under a private ordering regime is likely to be subject to a large number of restrictions. A greater number of informational works and more aspects of the use of information may require a license. The overall effect of the proliferation of rights is to increase transaction costs.¹⁴² The multiplicity of rights and owners may require potential users to acquire a license for each and every use from a large number of parties. Furthermore, the freedom to design rights of exclusion may reduce the availability of some informational works or of some usage. Some informational works or some uses may not be licensed even for a fee.¹⁴³ Owners may have incentives to prevent some uses altogether. For instance,

141. For instance, a database may include information that is not proprietary. The right to use the database may be contingent on accepting the following terms: no copying, automated browsing or downloading, distribution, redistribution, publication, or any exploitation of material available on the database is permitted, except as explicitly provided under this license. If such a license is held enforceable, any exploitation of data that is available on the database is subject to the terms of the license.

142. See generally Heller & Eisenberg, *supra* note 137 (noting that downstream researchers required to acquire a large number of licenses from upstream research patent owners would shift their efforts to less promising line of research with fewer licensing obstacles).

143. Providers may choose to make a work unavailable altogether. There is of course no general duty to make informational works available to the public. Yet, the law may affect the decision of providers to distribute works to the public and the terms under which such information is being released. Copyright laws provide incentives for such distribution by securing the ability of owners to exercise limited control over their works after they were distributed to the public. Such exclusive rights, however, are limited. When contractual restrictions are made enforceable under the law, then again the law provides incentives for sharing informational works with the public. Yet, distributing information under such circumstances, when restrictions on the use are designed entirely by providers, may not necessarily serve the public interest.

standard form contracts may permit access to a computer program. An owner may prevent reverse engineering under all circumstances to prevent the development of compatible programs that may compete with its own products.¹⁴⁴

Another feature of private ordering is the multiplicity of horizontal rights with no clear hierarchy between them. Rights created by private ordering may tend to conflict and overlap. Consider for instance the following situation: program X is distributed subject to a license which provides that everything created by the use of program X becomes the property of A. The license defines the exclusive right of A to veto the use of the output for certain purposes, and to require royalties and attribution. B uses program X, together with other programs that are subject to similar provisions granting rights to C and D. Consequently, parties A-D will have claims regarding the output. Under such circumstances, it would be difficult to determine which right prevails. How should ownership in the output be settled? What would be the terms of use applied to such an output?

In a copyright regime, the law not only constitutes the rights, but also defines the scope of rights.¹⁴⁵ Copyright law defines who is the owner of the work, how rights are being assigned, and under what circumstances ownership is transferred. It provides a framework for ascertaining ownership and for resolving conflicts among different right holders.¹⁴⁶ The statute itself defines the rights and provides the hierarchy among the different right holders. Rights established by contracts do not enjoy such a level of certainty. In a decentralized system of norms, there is no clear hierarchy among rights, and there are no criteria for resolving disputes among conflicting or overlapping rights. Dispute resolution, under such circumstances, becomes costly. This

144. Bell argues that a fared use regime in which information procedures are able to charge for each and every use of the work will benefit the public better than the existing copyright regime. See Bell, *supra* note 3, at 564-67, 585-90. This approach fails to acknowledge, however, that a private ordering regime may not only allow producers to charge for a use; it may also allow producers to veto any use that may conflict with their interests.

145. Copyright law distinguishes, for instance, between the owner of an original work and the owner of a derivative work, and defines the circumstances under which derivative rights may be established.

146. Let us assume that a license permits the free integration of a program into other informational products, provided that such informational products will be distributed free and subject to no restrictions on their use. The licensor seeks to prevent others down the line of creation from acquiring property rights. Does such a license prevent a developer of a third generation program from restricting the use of the program she developed? Consider the GPL license terms. Note that the Freedom of Software Foundation must claim copyright in their software to preserve the legal power to enforce such license terms.

may increase the level of uncertainty and may in turn further increase transaction costs involved in licensing the use of any informational work.

The use of informational works in cyberspace is particularly susceptible to conflicting rights. As demonstrated by Mark Lemley, copyright law as applied to cyberspace creates a whole set of overlapping rights: "A single act of transmission or browsing on the Net can potentially violate all of the exclusive rights listed in the Copyright Act . . .".¹⁴⁷ Licensing one type of use (such as transmission) may require not only public performance rights but also licenses of other rights (such as copying). Such rights, as a practical matter, may not always be completely specified. The risk of potential liability to other right holders, even when a license was purchased from one right holder, is likely to have a chilling effect on the level of use of informational works.¹⁴⁸

Diversified ownership and overlapping rights will further increase transaction costs.¹⁴⁹ It may require potential users to deal with multiple parties, with no guarantee that claims from new conflicting right owners may emerge. Users may have to spend more resources on learning a large variety of rights and licensing schemes. Propertization by private ordering may, thus, cause an underuse of informational works. Acquiring licenses to use any particular information may involve prohibitively high transaction costs and may prevent licensing from occurring in the first place. The high transaction costs may increase the cost of information, and may, therefore, reduce the accessibility of informational works.

(c) Externalities

Another factor in predicting the behavior of players in the information market is the effect of externalities. The terms of use for information, defined by any particular parties, may impose positive or negative externalities on others. Such costs and benefits are not in-

147. Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 549 (1997).

148. See *id.* (noting that overlapping rights may provide low incentives to acquire a license to use informational works, since paying a fee for a license to one licensor, in such circumstances, will not guarantee that a use does not violate someone else's license).

149. Under a copyright regime, any unlicensed use that falls under the owner's bundle of rights will constitute an infringement. In a "market for norms" regime, the question of whether any given use is prohibited depends on specific license terms. Users should therefore become familiar with such terms and sufficiently understand their implications.

ternalized by the parties to any specific transaction.

The assumption of both models is that market forces of supply and demand may guarantee the optimal level of use of information. Use restrictions will reflect the preferences of users to pay less for limited usage rights or pay more for expanded privileges if they are indeed valuable to the user. If users are unwilling to pay for a certain type of use privilege, it had better not be granted.

A market for information, however, is unlikely to accurately reflect the value of information. The social value involved in the use of information is not necessarily reflected in the choices individuals make in market exchanges. Informational works such as books, data, or TV shows are commodities sold by the entertainment and publishing industries, but they also constitute our culture and are, therefore, essential to our social cohesion and self-determination. Information has social and political significance. It affects the shaping of preferences and identities. Access to information may, therefore, be crucial to the ability of individuals to participate in political deliberation. Restricting such access may affect power relations, economic power, and political stands.

Therefore, the use of information by each individual carries public utilities. We have seen that some level of information that is publicly available is essential for innovation. The special nature of information allows it to be shared at minimal cost and makes existing information essential for future creation. The use of information may further involve network externalities. The value of some informational works is enhanced as more people use them. This is true for computer operating systems, as well as for academic papers. Scientific innovation relies on networking, pooling, and cooperative investigation. The development of computer networks relies on common standards and public domain languages. In fact, the value of information often depends on exchange and coordination with others. Therefore, additional users of information may impose positive externalities on all that use it.

Some level of free access to information is also essential for democracy. Access to information is significant for the ability of people to play an active role in society and to take part in the political process. From a democratic perspective, it is necessary to guarantee not merely access to information, but also some level of freedom to transform it, namely the ability to shape informational works so that they reflect one's political agenda, sets of beliefs, and identity. Some information, and some uses of information, should be kept free from

subjection to any veto power. Some level of use of information should be kept immune from the legal power of any particular party to control its meaning.¹⁵⁰ This public interest is currently secured under fair use exemptions for criticism and parodies. A private ordering regime is unlikely to preserve this. Furthermore, democracy has to guarantee that the power to shape and transform information is distributed equally. Disparities of power among social agents, in their ability to shape the form and content of informational works, may be detrimental to the ability to equally participate in democratic processes.

Users acting in the market are unlikely to reflect such public utilities in their choices. In the best scenario, users will be able to reflect their own interests and preferences in any given transaction. Restrictions on our privileges to use information may not threaten any of our immediate interests so only rarely would we take action to change the terms of licenses. But when such restrictions become the rule, and are enforced across the board, they affect the long-term interests of society at large. This means that even when users agree to restrict their use privileges in return for access, such restrictions may involve a cost to society as a whole. The parties to any specific transaction may not internalize such a cost, but the implementation of use restrictions across the board may affect the public at large. A private ordering regime may, therefore, facilitate use restrictions to an extent that is socially undesirable.

Information is a public good that is put under private control for limited times and subject to various restrictions. Propertization by private ordering will diminish the public utilities created by public control of this resource.

CONCLUSION

The enforceability of terms of access in standard form contracts comes down to the question of how, and by whom, should the terms of access to information in our society be determined. The alterna-

150. See Elkin-Koren, *supra* note 3, at 232-35; Netanel, *supra* note 3, at 362. See generally Rosemary J. Coombe, *Objects of Property and Subjects of Politics: Intellectual Property Laws and Democratic Dialogue*, 69 TEX. L. REV. 1853 (1991) (arguing that intellectual property laws may stifle dialogic practices that are essential for political action); Dorean M. Koenigfn, *Joe Camel and the First Amendment: The Dark Side of Copyright and Trademark-Protected Icons*, 11 COOLEY L. REV. 803 (1994) (arguing that intellectual property laws may have a chilling effect on freedom of speech).

tive to a copyright regime is mistakenly conceived as a legal regime that is based on choice and tailors terms of use to each and every consumer's taste. In fact, the choice faced by lawmakers is between two ways of regulating access to information: one is carried on by governments using the legislative process, and the other is conducted by information providers via market processes. Such a policy choice is significant for the future of the information society.

The preceding analysis suggests that regulating access to information by private ordering alone would be inadequate. We have seen that private ordering should not be immune from government regulation under freedom of contract doctrine because, as a general matter, such arrangements do not satisfy the doctrine's underlying assumptions. Therefore, there is sufficient justification for setting limits on the abilities of information providers to propertize information in the public domain.

This does not suggest, however, that the law should entirely prevent any contracts regarding copyrights. The legal power of information providers and consumers to tailor a bargain that accommodates their particular interests may be socially beneficial. Contracts that manifest a meaningful assent allow particular consumers and providers to adjust the rights of access to their specific needs. They facilitate flexibility that may not be achieved under a generally applicable copyright rule. Yet, terms of access that were privately generated by the parties should be subject to public regulation to the extent they affect public interest. That is particularly evident in the case of "private regulation" by standard form contracts.

This paper further suggests that private ordering alone cannot adequately guarantee the public interest in preserving a commons of information, namely the public domain. Such privatization of the public domain may carry negative externalities and may, therefore, be socially undesirable. Therefore, private ordering should be subject to scrutiny under the copyright framework. Does that mean that copyright law reflects the optimal allocation of rights of access to information? Not necessarily. Copyright law is a type of regulation that may suffer from many of the illnesses of a legislative process.¹⁵¹ Yet, copyright law intends, and indeed is interpreted, to reflect a social bargain. It provides a legal framework for balancing rights of exclusions

151. See Bell, *supra* note 3, at 582-83 (arguing that the legislative process is vulnerable to political interests); Hardy, *supra* note 33, at 255 (rejecting the traditional copyright model formulated through the legislative process, due to high transaction costs such a process involves).

granted to owners and access privileges assigned to the public. Subjecting contracts to copyright principles may, therefore, allow the incorporation of public policy into the emerging private ordering regime.

