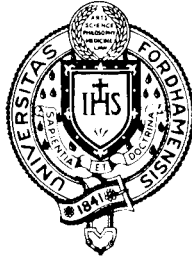


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LEGAL-WARE: CONTRACT AND COPYRIGHT IN THE DIGITAL AGE

Michael J. Madison

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INTRODUCTION

*ProCD, Inc. v. Zeidenberg*¹ has proved as intractable as the weather. Three years after the case was decided, everyone is still talking about it, but no one has done anything about it.² *ProCD* is the first published opinion to squarely hold that a “shrinkwrap” license, with its allegedly contracted-for restrictions on re-use of copyrighted information, is enforceable.³ As a result, it has stimulated a sizable

1. 86 F.3d 1447 (7th Cir. 1996). For the facts and procedural history of the case, see *infra* notes 82-101 and accompanying text. Stated bluntly, the holding of *ProCD* is that “shrinkwrap” licenses that accompany most computer software are enforceable. See *ProCD*, 86 F.3d at 1452-53. The actual holding of the court is probably more refined. This Article, however, argues that *ProCD* has had an effect on information and copyright practice that vastly exceeds the proposition for which the case actually stands.

2. Early commentary on *ProCD* urged congressional intervention to define conditions under which shrinkwrap licenses would be unenforceable. See, e.g., Brandon L. Grusd, Note, *Contracting Beyond Copyright: ProCD, Inc. v. Zeidenberg*, 10 Harv. J.L. & Tech. 353, 366-67 (1997) (arguing that Congress should decide what contract rights should be preempted by the Copyright Act). Other scholars have urged more aggressive judicial application of the doctrine of federal preemption. See, e.g., Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. Dayton L. Rev. 512, 525-41 (1997) [hereinafter Karjala, *Federal Preemption*] (arguing that state contract law should be preempted by federal copyright law in most circumstances). The rightness and wrongness of the court’s reasoning and result continue to be debated. See, e.g., Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 Cal. L. Rev. (forthcoming Jan. 1999) (manuscript at 7 n.20, on file with author) [hereinafter Lemley, *Beyond Preemption*] (collecting authorities); Brett L. Tolman, Note, *ProCD, Inc. v. Zeidenberg: The End Does Not Justify the Means in Federal Copyright Analysis*, 1998 BYU L. Rev. 303, 328-31 (arguing that *ProCD* reached the correct result, but incorrectly found that the database at issue was not copyrightable). In late 1997, legislation was introduced in Congress that would limit the enforceability of shrinkwrap licenses and at the same time assure legislative protection for technological “copyright management” systems that implement shrinkwrap-style licenses automatically and electronically. “Copyright management” legislation moved ahead in Congress; provisions addressing shrinkwrap did not. See *infra* note 438. Proposed legislation that would, among other things, validate most shrinkwrap licenses under state contract law, the project to draft an Article 2B of the Uniform Commercial Code (“UCC”), is moving forward. See *infra* notes 405-06 and accompanying text.

3. “Shrinkwrap” licenses for computer software, also once known as “box-top” and “tear-me-open” licenses and more recently as “End User License Agreements,” consist of form summaries or “offers” of “license” terms that an acquirer of the software purportedly “accepts” by opening the cellophane wrapper that encases the package containing the computer media. See 5 Melville B. Nimmer & David Nimmer, *Nimmer on Copyright* § 27.02[B], at 27-14 (1998). In most of this Article, the term “shrinkwrap” broadly encompasses all manner of nonnegotiated, unsigned forms that purport to regulate the behavior of the readers, users, and consumers of the works of information that such forms accompany. See *infra* Part I.C. Previous cases concerning shrinkwrap licenses called shrinkwrap practice into question but stopped short of invalidating shrinkwrap altogether. See, e.g., *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91, 105-06 (3d Cir. 1991) (finding that a software “box-top” license contained “additional terms” under section 2-207 of the UCC that did not become part of the parties’ original contract, formed when orders for the software were placed and accepted by telephone); *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 269-70 (5th Cir. 1988) (holding that a Louisiana statute that purported to validate shrinkwrap

amount of criticism⁴ and some applause,⁵ but no significant number of similar cases.⁶ That fact, coupled with the fact that *ProCD* itself dealt with the law of one state,⁷ means that doctrinal tension between the limits of contract as a means to exploit intellectual property rights, on the one hand, and mandates of public intellectual property policy, on

licenses was preempted by the Copyright Act); *Arizona Retail Sys., Inc. v. Software Link, Inc.*, 831 F. Supp. 759, 764-66 (D. Ariz. 1993) (holding open the possibility, even under section 2-207 of the UCC, that if the software developer's "offer" consisted of delivery of shrink-wrapped software to the user, opening the shrink-wrapped package could amount to "acceptance" of the license within).

4. See Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 Berkeley Tech. L.J. 93 (1997); Karjala, *Federal Preemption*, *supra* note 2, at 537-41; Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 Tex. L. Rev. 873 (1997) [hereinafter Lemley, *Romantic Authorship*] (reviewing James Boyle, Shammans, Software, and Spleens: Law and the Construction of the Information Society (1996)); Apik Minassian, Comment, *The Death of Copyright: Enforceability of Shrinkwrap Licensing Agreements*, 45 UCLA L. Rev. 569 (1997).

5. See, e.g., Maureen A. O'Rourke, *Copyright Preemption After the ProCD Case: A Market-Based Approach*, 12 Berkeley Tech. L.J. 53, 56 (1997) [hereinafter O'Rourke, *Market-Based Approach*] (arguing that the Seventh Circuit's approach in *ProCD* was "fully appropriate given the relative novelty of the technology and congressional silence regarding preemption").

6. As of this writing, only a handful of subsequent opinions have considered the validity of shrinkwrap licenses or analogous forms under state contract law. See *Hotmail Corp. v. Van\$ Money Pie Inc.*, 47 U.S.P.Q.2d (BNA) 1020, 1025 (N.D. Cal. 1998) (holding, on the plaintiff's motion for preliminary injunction in a trademark and contract dispute, that the plaintiff was likely to prevail on its breach of contract claim because the defendants, by accessing the plaintiff's Internet services, agreed to abide by the terms of service that prohibited sending spam or pornography via those services); *infra* Part III.B.2. The apparent absence of disputes between publishers and consumers is consistent with an efficient market regarding intellectual property rights in software. See Frank H. Easterbrook, *Cyberspace and the Law of the Horse*, 1996 U. Chi. Legal F. 207, 210-13 (arguing that in rapidly changing markets for new technology, rules should be clear, and property rules rather than liability rules should predominate to facilitate bargaining); see also Henry H. Perritt, Jr., *Property and Innovation in the Global Information Infrastructure*, 1996 U. Chi. Legal F. 261, 285 [hereinafter Perritt, *Property and Innovation*] ("The absence of much case law on license or copyright violations by subscribers to host-based services is consistent with an acceptable level of compliance with copyright and license terms."). Because shrinkwrap licenses are characterized by user acquiescence, but not by genuine bargaining, it is difficult to separate out the lack of litigation because of efficient bargaining from the lack of litigation because of other factors, such as the transaction costs faced by publishers in identifying and prosecuting copyright offenders, publishers' choices not to enforce such licenses, costs, and other incentives discouraging challenges to shrinkwrap licenses, and the possibility, which this Article explores, that software developers have so appropriated the rhetoric of acceptable use that users do not test the limits of what is legitimate, but unauthorized, use to a degree that producers find troublesome, or that tempts a response. See, e.g., *Green Book Int'l Corp. v. Inunity Corp.*, 2 F. Supp. 2d 112, 115 (D. Mass. 1998) (noting that the enforceability of shrinkwrap licenses is generally not contested). One cannot argue that the current system "works" without knowing whether, if software were distributed without "license"-based restrictions on re-use, the volume of litigation over nonconsensual re-use would increase.

7. *ProCD* concerned Wisconsin commercial law. See *infra* note 93 and accompanying text.

the other hand, continues.⁸ May a private supplier of information that lies in the public domain impose use-restricting conditions on access to that information? May material that is copyrightable be subject to restrictions that proscribe even "fair use," whether bargained for or not?

Despite the doctrinal uncertainty, *ProCD*'s acceptance of shrink-wrap informs the development of the tension between fair use and private restrictions. The decision is shaping intellectual property practice in ways that are, in turn, altering how questions of fair use and the public domain are addressed. First, *ProCD* is encouraging the development of legal practices and technological systems that implement use-defining "contracts" between readers, listeners, viewers, and users and authors, publishers, and information developers. It is increasingly common for shrinkwrap licenses and other widely used forms to impose such conditions and restrictions. Digitization of the information economy⁹ reinforces that trend. We are approaching, if we have not already achieved, a point where books, magazines, and commercial television programs can be regularly accessed only after acknowledging some form of "user" agreement.¹⁰ The blunt reality of *ProCD*

8. The tension stems from the widely-accepted belief that authors and publishers should be able to secure some greater protection from copying through bilateral contract than the Copyright Act explicitly provides. See generally Karjala, *Federal Preemption*, *supra* note 2, at 531 (arguing that the ability to contract privately for protection should be limited to genuine bilateral negotiations); J.H. Reichman & Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 Vand. L. Rev. 51, 70 (1997) (characterizing copyright law as reflecting a "state-imposed" cultural bargain). Without enough additional protection, it is suspected that too few works will be produced; with too much protection, the Copyright Act itself will be undermined as a statement of public policy.

9. This phrase deliberately conflates two phenomena: the convergence of different species of expressive works into generic "information," see Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & Com. 509, 509-12 (1996), and the conversion of all works of "information" into digital form, see John Perry Barlow, *The Economy of Ideas*, *Wired*, March 1994, at 84, 88. The phrase "information economy," of recent coinage, may itself be out of date. Some commentators now refer to the "bandwidth economy" to note how access to digital information depends on the capabilities of computer networks, see, e.g., Bob Quillin, *Viewpoint: Strike up the Bandwidth*, S.F. Examiner, Sept. 14, 1997, at B5 (observing the tension between the need for higher bandwidth and the substantial economic investment hurdles to providing it), and the "trust economy" to note the extent to which computer-mediated transactions suppose or demand a degree of trust between human transactors, see, e.g., Peter G.W. Keen, *Are You Ready For the "Trust" Economy?*, *Computerworld*, April 21, 1997, at 80, 80 (discussing the need to instill trust among Internet consumers to promote greater electronic commerce).

10. The examples are not as extreme as they might appear at first glance. They include technological copyright management systems or trusted systems; web-wrap agreements, which state terms and conditions that purport to bind visitors to sites on the World Wide Web; and copyright notices affixed to hard-copy media, such as books and videotapes, that restrict users' conduct. See *infra* notes 124-68 and accompanying text. But see David A. Rice, *Digital Information as Property & Product: U.C.C. Article 2B*, 22 U. Dayton L. Rev. 621, 646 (1997) [hereinafter Rice, *Digital Information*] (suggesting that § 301(a) of the Copyright Act may preempt enforcement of certain

says, in effect, that regardless of what the Copyright Act may provide as a matter of public policy,¹¹ such practices are at least acceptable, and perhaps encouraged.

Second, by affirming and proclaiming the validity of shrinkwrap practice,¹² *ProCD* encourages norms of information use¹³ that depress the development of a coherent understanding of what I call "open space." Open space is shorthand for the combination of material and information that lies in the public domain and the fair use of copyrighted works.¹⁴ *ProCD* does more than enable intellectual property

contract terms that restrict users' uses if the contract term was part of a contract of adhesion used on a market-wide basis).

11. For works of expression, copyright law appears to define what is potentially protectable "expression" and what is unprotectable "fact." See *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344-45 (1991). Only those elements of a work within the subject matter of copyright, see 17 U.S.C. §§ 102-103 (1994), that are "original," that is, are "independently created by the author (as opposed to copied from other works), and that possess[] at least some minimal degree of creativity," are protected by copyright. *Feist*, 499 U.S. at 345 (citation omitted). Not surprisingly, this standard may be difficult to apply in practice. Compare *American Dental Ass'n v. Delta Dental Plans Ass'n*, 126 F.3d 977, 979 (7th Cir. 1997) (holding that a taxonomy of dental procedures is a copyrightable original work of authorship), with *Warren Publ'g, Inc. v. Microdos Data Corp.*, 115 F.3d 1509, 1517-20 (11th Cir. 1997) (holding that the selection of communities in a fact book about cable television systems was not sufficiently original to warrant copyright protection), *cert. denied*, 118 S. Ct. 397 (1998). The Copyright Act grants owners of copyright a schedule of rights to enable exploitation of their works, see, e.g., 17 U.S.C. § 106 (listing exclusive rights in copyrighted works), and grants readers, users, and consumers of those works certain privileges to access those works without restriction, see, e.g., *id.* § 102(b) (uncopyrightable works); *id.* § 107 (fair use). Through contracts, particularly through form contracts, and other form language accompanying the distribution of works of information, producers attempt to protect material that copyright law appears to declare unprotectable, that is, they attempt to expand their schedule of rights and to restrict their readers' privileges. This was the situation presented by *ProCD*, in which the plaintiff sought by contract to impose use restrictions on acquirers of its un-copyrightable database of telephone numbers. Arguably, it attempted to restrict the re-use of material that lies in the public domain. Doctrinally, therefore, *ProCD* concerns contract law, not copyright law.

12. This is what I refer to as "legal-ware." See *infra* note 16 and accompanying text. Such legal-ware existed, and created similar (though far less pronounced) tensions between public policy and private control, in pre-digital contexts. See Karjala, *Federal Preemption*, *supra* note 2, at 520 n.27 (noting the presence of a resale restriction in the copyright notice of a turn of the century book).

13. For an analysis of the relationship between norms and law, see Cass R. Sunstein, *Social Norms and Social Roles*, 96 Colum. L. Rev. 903, 947-65 (1996) [hereinafter Sunstein, *Social Norms*] (arguing that behavior is largely a function of norms and that government has a significant role in shaping those norms).

14. This metaphor extends a suggestion by James Boyle.

[A] lot could be learned from the history of the environmental movement. That movement not only alerted the public that the political process was failing to take account of an important set of values that in the long run would affect everyone, but offered a set of conceptual tools that helped us both to understand those issues and to build coalitions around them.

James Boyle, *Intellectual Property Policy Online: A Young Person's Guide*, 10 Harv. J.L. & Tech. 47, 56 (1996); see also *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 579 (1994) (stating that the purpose of the fair use doctrine is to guarantee "breathing

owners to use contract norms to create a formal private property right that exceeds the public rights provided by the Copyright Act.¹⁵ That argument assumes that the Copyright Act accurately reflects an existing social and political consensus concerning the protection and exploitation of works of information. Beyond the doctrine, shrinkwrap licenses and similar form restrictions, or what I call “legal-ware,”¹⁶

space” within copyright); James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 Duke L.J. 87, 113 (1997) (analyzing the controversy over copyright on the Internet and the history of the environmental movement to argue for the creation of a politics of intellectual property); David Lange, *Recognizing the Public Domain*, Law & Contemp. Probs., Autumn 1981, at 147, 176 (analogizing the public domain to “the public grazing lands on the Western plains of a century ago”). The phrase refers not to the argument that the Internet can be, is, or should be “zoned” as real property is zoned. See Lawrence Lessig, *Reading the Constitution in Cyberspace*, 45 Emory L.J. 869, 883-95 (1996) (observing that the Internet is capable of and is in fact being “zoned”); see also *Reno v. ACLU*, 117 S. Ct. 2329, 2353-54 (1997) (O’Connor, J., concurring in part and dissenting in part) (relying on Professor Lessig’s work to suggest that zoning of the Internet is desirable and, by extending principles guiding zoning of real property, possible). It is intended to evoke physical open space, and the social and political consensus that some amount of open space, preserved from private ownership or development, is necessary and valuable in urban and rural settings for reasons or values derived independently of the market. This consensus includes the proposition that open space is quintessentially public in its institutional creation, sustenance, and protection, in its character as a resource for consumption on roughly equal terms by all citizens, and in its contributions to private and to other public activities. Cf. Daniel A. Farber, *Saving Overton Park: A Comment on Environmental Values*, 146 U. Pa. L. Rev. 1671, 1683 (1998) (noting the importance of parks as expressions of community identity). Professor Keith Aoki has observed the shifting boundaries in intellectual property law between “public” and “private” realms of information. See Keith Aoki, *Authors, Inventors and Trademark Owners: Private Intellectual Property and the Public Domain* (pt. 1), 18 Colum.-VLA J.L. & Arts 1, 2 (1993) (arguing that trends to increase the number of exclusive rights for authors are converting the public domain into private intellectual property, and constraining other types of socially valuable uses of expressive works that do not fit the “authorship” model underlying American copyright traditions). For the consideration of different possible constructions of intellectual open space, see *infra* Part III.

15. See Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 Harv. L. Rev. 621, 660 n.173 (1998) (noting that exchange through contract can give rise over time to new property rights).

16. The court in *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147 (7th Cir.), *cert. denied*, 118 S. Ct. 47 (1997) which affirmed and extended the contractual analysis of *ProCD* (though not in an intellectual property context), used the term legal-ware to describe the form terms and conditions supplied to and purportedly binding on the acquirer of computer-related technology. See *id.* at 1150. This term made its initial appearance in federal cases in 1988 as the name of a plaintiff in *Ramsey v. Glassie Pewett Dudley Beebe & Shanks*, No. 87-2629, 1988 WL 86617 (4th Cir. Aug. 18, 1988) (unpublished per curiam opinion) and has served as the name of a website for a firm that markets client and case management software to lawyers. See ACS/Legal Software, Inc., *Legal Software Development, Inc.* (last modified Jan. 31, 1998) <<http://www.legalware.com/>>. The growth of the computer industry has spawned an increasing variety of applications of the “-ware” suffix as segments of the industry have been perceived as less specialized and more generic. For example, computer “hardware” begat “software” and the differentiation of software begat “shareware,” “freeware,” and “middleware,” among others. See *United States v. Microsoft Corp.*, 56 F.3d 1448, 1453 (D.C. Cir. 1995) (noting characteristics by some of Microsoft’s marketing practices as “vaporware”). Affixing a label to a practice reflects some common understanding of

generally approved by *ProCD*,¹⁷ are shaping our conventional understandings regarding copyright and information rights. Those conventions increasingly mean that no open space exists save that which information producers choose explicitly to provide.

There is little doubt that open space should exist.¹⁸ There is, however, a great deal of doubt as to why. Congress could explain why, but it has declined to do so.¹⁹ The normative question, then, is left to scholars and judges. Scholars disagree.²⁰ Judges decide cases, which present issues framed in part by precedent and in part by the parties' expectations concerning what they believe they are entitled to. Legal-ware is changing those expectations. As a practical matter, then, it casts a pall over our ability to determine whether and why open space is valuable. If open space is a function of social and political consensus,²¹ then developing such a consensus is made far more difficult by doctrine and resulting practices that encourage the public to accept a

its nature, see Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. Chi. L. Rev. 943, 958-61 (1995) [hereinafter Lessig, *Social Meaning*] (observing [that social meanings draw greater power from uncontested, or "invisible," expectations), and anticipates or hopes to shape the prevailing characterization of the practice. See *id.* at 956-58 (providing examples of social meanings used as tools); see also George Orwell, *Politics and the English Language*, in *A Collection of Essays* 162, 172-73, 177 (Doubleday Anchor Books 1954) (1946) (discussing language as an instrument for concealment rather than expression). Using the label "legal-ware" in place of the legal term of art "contract" suggests that the specific terms and conditions in question are less significant than the idea that the instrument governing the use of information is itself a private, manufactured product, uninformed by public interests. Cf. William Safire, *On Language: There's No Wearware*, N.Y. Times, July 7, 1991, § 6 (Magazine), at 6 ("Let the speaker beware: The combining form -ware is everywhere."). Software producers may characterize the license itself as a product. See Pamela Samuelson, *Does Information Really Have To Be Licensed?*, Comm. ACM, Sept. 1998, at 15, 18 [hereinafter Samuelson, *Information*].

17. Technological manifestations or implementation of legal-ware present a closely related concern. The implications of such "copyright management" systems are taken up at *infra* Part I.C.2.

18. See Julie E. Cohen, Lochner in Cyberspace: *The New Economic Orthodoxy of "Rights Management"*, 97 Mich. L. Rev. (forthcoming 1998) [hereinafter Cohen, *Lochner in Cyberspace*] (manuscript at 10-14, on file with author).

19. See *infra* note 438.

20. See *infra* Part III.A.

21. See Henry H. Perritt, Jr., *Dispute Resolution in Electronic Network Communities*, 38 Vill. L. Rev. 349, 369-71 (1993) [hereinafter Perritt, *Dispute Resolution*] (arguing that social norms of fairness should determine the acceptability of contract terms); cf. Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. Chi. L. Rev. 711, 777 (1986) [hereinafter Rose, *Comedy*] (reasoning that evolving standards of what constitutes "inherently public property" expressed through environmental caselaw respond to evolving norms of "commerce" and socializing behavior). The scope of fair use might be a function of the market for copyrightable expression, but that conclusion should not itself necessarily be market-driven. *ProCD* sets up the market as premise, argument, and conclusion. It asserts that the market should define the scope of fair use and the public domain, sanctions licensing practices that are limited only by market forces, and, because the market has produced licenses that provide for a narrow fair use privilege (if they provide for fair use at all), concludes that the market has behaved efficiently. See *infra* Part IV.A.

norm that prohibits the unlicensed use of information.²² Legal-ware undercuts the already diminishing degree to which formal public law expresses the importance of public uses of information while also acknowledging the merits of private arrangements concerning information.²³

The need for a consensus concerning open space can be overstated. The point is not that we lack a black-letter boundary between information that is protectable and information that is not. We lack, instead, a means of identifying what uses or behaviors test the limits of the public system of copyright that is not itself entirely a creature of private ordering.²⁴ Conventions of use or non-use encouraged by legal-ware are interfering with the process of establishing such a means. This Article, then, argues that shrinkwrap practice, as manifested in shrinkwrap forms and in cases dealing with limitations on the use of and access to information, is an appropriate starting point, along with technological²⁵ and economic²⁶ analyses, for framing conflicts²⁷ between contract law and copyright policy.²⁸

22. Cf. Phil Agre, *The Internet and Public Discourse* (visited Nov. 15, 1998) <http://www.firstmonday.dk/issues/issue3_3/agre> (observing that technological standards shape political discourse, which in turn shapes the nature of social relationships). In addition to affecting the shape of public discourse, such standards may impose social costs that lie entirely outside the domain of formal legal decision-making if they discourage the beneficial re-use of works of information that a consensus understanding of "open space" would allow or encourage.

23. Licensing practice is "private" in the sense that private actors define the scope of the "rights" that readers and users of the material are offered. As such, private arrangements are judicially enforced, they acquire public sanction. Thus "private" definitions become "public" and threaten to displace other "public" expressions of value concerning intellectual goods. Cf. Duncan Kennedy & Frank Michelman, *Are Property and Contract Efficient?*, 8 Hofstra L. Rev. 711, 739-42 (1980) (noting the importance of the "public" enforcement of traditional "private" rights).

24. One cannot eliminate self-referential features from the market entirely, see Cass R. Sunstein, *Endogenous Preferences, Environmental Law*, 22 J. Legal Stud. 217, 219 (1993) (arguing that market preferences are endogenous to existing legal policy, including the setting of legal entitlements), but we can recognize those features at work and consider whether and how the legal system should deal with them.

25. See, e.g., Perritt, *Property and Innovation*, *supra* note 6, at 262 (discussing the need to appreciate the technology of networks to analyze the role of legal protection against piracy).

26. See, e.g., Easterbrook, *supra* note 6, at 210-16 (arguing that changes in cost structures for information production and delivery do not necessarily require changes in legal structures); Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 Cal. L. Rev. 1293, 1298 (1996) [hereinafter Merges, *Contracting into Liability Rules*] (stating that as cost structures change, intellectual property rights should be structured to encourage formation of private licensing collectives in repeat-bargaining markets).

27. Recent scholarship concerning copyright and contract has acknowledged the need to reconcile form licenses for copyrighted works, and for digital works in particular, with formal copyright law, as part of the pursuit of the elusive "correct" balance between incentives to produce creative works and other works of information, on the one hand, and interests in marketing public access to such works for creative re-use on the other hand. See Tom W. Bell, *Fair Use vs. Fared Use: The Impact of Automated Rights Management on Copyright's Fair Use Doctrine*, 76 N.C. L. Rev. 557, 581-82

Part I reviews and discusses *ProCD* and the changing social, economic, and technological landscapes that influence, and are being influenced, by the changing conventions concerning the use of copyrighted works, and how those conventions shape the concept of open space. Part II reviews the elements of the present scheme for

(1998); Cohen, Lochner in *Cyberspace*, *supra* note 18 (manuscript at 23-62); Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. Cal. L. Rev. 1239 (1995) [hereinafter Lemley, *Shrinkwrap Licenses*]; Robert P. Merges, *Intellectual Property and the Costs of Commercial Exchange: A Review Essay*, 93 Mich. L. Rev. 1570, 1609-13 (1995) [hereinafter Merges, *Review Essay*]. Within the rogue's gallery of metaphors that afflicts this Article, the "balance" paradigm is well-established. *See, e.g.*, Stewart v. Abend, 495 U.S. 207, 228 (1990) (noting that the Copyright Act "creates a balance between the artist's right to control the work during the term of copyright protection and the public's need for access to creative works. The copyright term is limited so that the public will not be permanently deprived of the fruits of an artist's labors" (citing Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (stating that the Copyright Act was "intended to motivate the creative activity of authors and inventors . . . and to allow the public access to the products of their genius after the limited period of exclusive control has expired"))).

28. For the most part, academic commentary concerning shrinkwrap has assumed that issues posed by these forms arise along the incentive and access axis provided by intellectual property policy. Scholars have analyzed either problems of contract formation and interpretation in the shrinkwrap context, *see, e.g.*, David A. Einhorn, *Box-Top Licenses and the Battle-of-the-Forms*, 5 Software L.J. 401, 418 (1992) (discussing the need for enforceable confidentiality agreements); Robert W. Gomulkiewicz & Mary L. Williamson, *A Brief Defense of Mass Market Software License Agreements*, 22 Rutgers Computer & Tech. L.J. 335, 341-61 (1996) (discussing the importance and main advantages of end user license agreements); Karjala, *Federal Preemption*, *supra* note 2, at 523 (arguing that bilateral contracts for copyrighted works should be enforced if they are freely negotiated); Michael G. Ryan, Note, *Offers Users Can't Refuse: Shrink-Wrap License Agreements as Enforceable Adhesion Contracts*, 10 Cardozo L. Rev. 2105, 2135 (1989) (analyzing shrinkwrap in the context of the unconscionability doctrine); *see also* Lisa Bernstein, *Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms*, 144 U. Pa. L. Rev. 1765, 1790-91 (1996) (analyzing the legal costs and benefits of shrinkwrap warranty disclaimers); Charles J. Goetz & Robert E. Scott, *The Limits of Expanded Choice: An Analysis of the Interactions Between Express and Implied Contract Terms*, 73 Cal. L. Rev. 261, 293-98 (1985) (reasoning that non-enforcement of shrinkwrap under existing contract rules discourages innovation in contract language), or possible changes to positive copyright law, *see, e.g.*, Julie E. Cohen, *A Right to Read Anonymously: A Closer Look at "Copyright Management" in Cyberspace*, 28 Conn. L. Rev. 981, 1007-09 (1996) [hereinafter Cohen, *A Right to Read Anonymously*] (arguing that an individual's right to read copyrighted material anonymously should be protected because of its intimate correlation with speech); 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, 118-30 (1997) [hereinafter Merges, *End of Friction*] (describing the problems of applying traditional contract law to cyberspace commerce); David A. Rice, *Public Goods, Private Contract and Public Policy: Federal Preemption of Software License Prohibitions Against Reverse Engineering*, 53 U. Pitt. L. Rev. 543, 577-621 (1992) [hereinafter Rice, *Public Goods*] (discussing whether patent or copyright law preempts the enforcement of a prohibition against reverse engineering of computer object code under state contract law). The fundamental question, "whether and how intellectual property and contract can coexist," remains open. *See* Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1292. While legislators, scholars, and judges debate the merits of different legal structures, however, shrinkwrap practice evolves and grows. As it evolves, it changes the nature of the issue at hand.

owners and developers of works of information and discusses those aspects of the scheme that call attention to conventions of copyright practice and usage. Part III sets forth the terms of the broader debate—the proper scope of the interests of the reader, user, or consumer, in the context of an individual work, or of the “public,” in the context of works taken in the aggregate—implicit in the agreement that shrinkwrap may improperly foreclose consideration of open space. Part IV discusses contract and copyright law paradigms that *ProCD* either explicitly or implicitly sets up as candidates for analyzing shrinkwrap practice: the efficiency of private markets; the law of adhesive contracts and unconscionability; trade usage as a guide to contract interpretation; and federal preemption doctrine, which is currently used to distinguish questions of copyright law from issues of contract law. Part V suggests a mechanism to address the growing conflict between the enforcement of evolving copyright norms and the public interest.

The analysis below is suggestive, not conclusive. Waiting for conclusive proof of the argument may foreclose implementation of any effective remedy. The suggestion, however, is that we must maintain an institutional environment that is not only receptive to copyright but, more importantly, affirms a concept of the public interest in copyright. The recommendation—that Congress should make explicit in the Copyright Act the idea of common law elaboration of fair use and the public domain—may not solve the problem. Some other strategy or combination of strategies may prove more effective. If modern copyright and information law is in large part a battle of metaphors,²⁹ then we need to develop and implement a process that prevents legal-ware in the information landscape from eliminating our intellectual open space.

I. THE CHALLENGES OF DIGITAL TECHNOLOGY, *PROCD*, AND THE NEW WORLD OF SHRINKWRAP

This part summarizes changes in social, technological, and economic antecedents of what I call conventions of information use³⁰ processed through, and encouraged by, the doctrinal framework of *ProCD* that is expressed in shrinkwrap. It argues that formerly established copyright conventions are being challenged, and new economic and technological conditions are setting the stage for the development of new

29. Cf. Clay Calvert, *Regulating Cyberspace: Metaphor, Rhetoric, Reality, and the Framing of Legal Options*, 20 *Hastings Comm. & Ent. L.J.* 541, 543 & n.13 (1998) (discussing the power of metaphor in framing, developing, and adopting rules and regulations regarding new technologies and services) (citing Steven L. Winter, *The Metaphor of Standing and the Problem of Self-Governance*, 40 *Stan. L. Rev.* 1371, 1383 (1988)); Robert Reilly, *Mapping Legal Metaphors in Cyberspace: Evolving the Underlying Paradigm*, 16 *J. Marshall J. Computer & Info. L.* 575, 579 & n.2 (1998) (discussing the effect of metaphor on the structure of logic and experience).

30. For a discussion of these conventions in a theoretical context, see *infra* Part II.

conventions. The part then describes how that development fits into the contract-oriented analysis of *ProCD* and how the result of this strange brew is manifested in copyright practice.

A. *Digitization and Its Effects*

With a book, I think I know, or at least I used to know, what I may do with the physical book itself and with the text I find inside, without asking for permission from the author, the publisher, or the bookseller. I may browse the aisles of my local bookstore and read sections of books without buying copies or intending to buy copies. If I do bring a copy home, whether by buying it myself or receiving it as a gift, I may give or loan the book to a friend. I may cut whole chapters out of a book that I own and give those chapters piecemeal to different people. I may write notes in the margins. I may read the book aloud to my spouse or to a classroom of children. I may read it to myself over and over again. I may cite and even quote excerpts from the book in letters, academic papers, newspapers, and magazine articles, which I may write using a pen, a typewriter, or a computer program. I may use facts and ideas expressed by the author in my own work and, under some circumstances, I should credit the author for the use of the material. I may create a parody of the book in private correspondence and may distribute copies of my parody to a limited audience. I may not, however, take the book to my neighborhood photocopy center and have the entire thing reproduced. I may not re-copy all or a substantial portion of the text in print, audio, or video form and distribute those copies under either my own name or under that of the original authors. I may not charge or collect money in exchange for any of the above except for a literal resale of the book itself, assuming that I own that copy.

These “rules” are not written down, and I do not recall anyone formally teaching me that they are so. I grew up reading and using books, magazines, and newspapers and, over time, before I entered law school, I acquired an internal sense of what was “fair” and legal and, to a degree, what I could get away with. These rules do not exhaust a possible list of do’s and don’t’s for books, they do not track the precise contours of copyright, trademark, or unfair competition law, and for any particular soul, and especially for certain well-defined communities,³¹ they may differ a little, or even a lot. I doubt very much, however, that anyone with at least a high school education in the United States lacks some related conventional sense of what “rights” come with a book.³²

31. Such as scientific researchers.

32. Cf. Jessica Litman, *Copyright as Myth*, 53 U. Pitt. L. Rev. 235, 237-40 (1991) [hereinafter Litman, *Myth*] (describing the conventional “myth” of how copyrights are created and enforced).

My conventional sense of books rests on a series of implicit assumptions about the nature of books, how they and the information they contain are created and distributed, how enough profit is recovered on account of their sale to warrant writing and publishing them, and how authors and publishers prevent others from capitalizing on their investments. Digital technology is changing all of those assumptions. Any work of information that can be created today can also be (and increasingly is) inexpensively converted, translated, or adapted to digital form. Then it may be stored, reproduced, and transmitted virtually costlessly as easily to an audience of millions as to a single reader. Conventions like the ones sketched above that may have historically attached to particular media (for example, books, magazines, or record albums) or types of works (for example, literary fiction, encyclopedias, or photographs) have had a settled, if somewhat narrow, regulatory influence. These conventions are in danger of losing their power. What are the conventional limits on what I may do with a book if, among other things, it is within my power to cheaply scan the entire text of the book onto a computer storage medium and thereafter reproduce perfect copies of the entirety or any part of it? Others have noted the possible broad implications of phenomena labeled technological "convergence."³³ Let me note five phenomena associated with the digitization of our information culture and economy that require us to appreciate how conventions concerning all information use may be becoming more relevant than prior conventions divided by product, market, or type of work.

First are the changes in the conditions that support the economic rationale for copyright law, which generally holds that copyright law is a response to a market failure associated with the public goods nature of information works. Without some form of government subsidy, creators will be unable to capture a sufficient portion of the value created by their works to justify the investment of resources necessary to create them. Traditional accounts of the economics of copyright locate this market failure in two features of the intangible nature of intellectual property. First, the creator is not able to physically exclude those who possess copies of the work from the copyrightable elements

33. See, e.g., Henry H. Perritt, Jr., *Law and the Information Superhighway* §§ 1.4–1.11, at 12–25 (1996) [hereinafter Perritt, *Information Superhighway*] (discussing technological convergence through the National Information Infrastructure); Fred H. Cate, *Telephone Companies, The First Amendment, and Technological Convergence*, 45 DePaul L. Rev. 1035, 1064–65 (1996) (suggesting that technological convergence leads to the breakdown in distinctions in constitutional law between traditional publishers and telephone companies). Professor Perritt argues that we are seeing the collapse of a gap between the right to read and the right to reproduce, where reading digital works requires reproducing them. See Perritt, *Information Superhighway supra*, § 1.9, at 21. The right to read has always encompassed at least some right to reproduce, however, even if reproduction was not required. I do not think that the gap is closing, but rather that the dimensions of the link between reading and reproduction are being re-defined.

of the work that the creator owns, as the producer of a tangible thing could do. This phenomenon makes anyone who acquires a copy of the work a potential rival publisher.³⁴ Second, distributing one copy of a copyrightable work does not deplete the creator's supply of the copyright interest itself. In theory, this limits the price that the creator can charge for any single copy.³⁵ The creator, in short, needs to locate the means of preventing piracy (the cost of the first problem) and free-riding (the cost of the second problem).³⁶ The effectiveness of public copyright law in responding to market failure arguments depends, among other things, on the quantity and types of transaction costs involved in matching producer and consumer behavior, in practice, to the statutory scheme.³⁷

With digital storage and transmission technologies, transaction costs in the digital world are different than in a traditional publishing and reading, viewing, or listening marketplace.³⁸ For digital works and for works capable of being digitized, those costs may grow as the cost of free-riding and piracy decrease.³⁹ Publishers may have an increasingly difficult time using existing copyright law to prevent piracy because

34. See William M. Landes & Richard A. Posner, *An Economic Analysis of Copyright Law*, 18 J. Legal Stud. 325, 332-33 (1989).

35. See Mark A. Lemley & David W. O'Brien, *Encouraging Software Reuse*, 49 Stan. L. Rev. 255, 268 (1997) [hereinafter Lemley & O'Brien, *Software Reuse*].

36. What appear to creators as the costs of free-riding may be, from a public standpoint, a net social benefit. *But see infra* Part IV.A (describing problems of achieving "open space" via market mechanisms).

37. The market failure account of copyright law applies equally to works of information that as a matter of public policy are excluded from copyright. See 17 U.S.C. § 102(b) (1994) (listing works excluded from copyright protection). Additionally, it explains ongoing efforts to locate formal legal protection for the fruit of creators' "sweat of the brow" or time and resources invested in collecting and publishing (primarily factual) works, despite the rejection of "sweat of the brow" theories under copyright doctrine in *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1991). See Reichman & Samuelson, *supra* note 8, at 56 (proposing "either the use of unfair competition principles to protect database contents, or the adoption of an intellectual property regime based on more refined liability principles, rather than on exclusive property rights"). Protection of factual compilations under corresponding "misappropriation" theories was included in legislation that passed the House of Representatives in August 1998. See *infra* note 158. The final Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998), signed by President Clinton in October 1998, omitted a section on misappropriation. See *infra* note 158.

38. Thus, the so-called "frictionless" world of digital publishing. See Merges, *End of Friction*, *supra* note 28, at 116 (describing varieties of transaction costs that remain in the digital, on-line environment).

39. A different way to express the same phenomenon is to note that the public good aspect of intellectual property (its non-rivalrous, non-excludable character) is acute with respect to computer software and works available on open computer networks. See Paul Goldstein, *Comments on a Manifesto Concerning the Legal Protection of Computer Programs*, 94 Colum. L. Rev. 2573, 2574 (1994) [hereinafter Goldstein, *Comments on a Manifesto*] (arguing that market failure arguments for intellectual property law must balance cures for market failure on account of producers' inability to recover costs with cures for market failure on account of the indivisibility of intellectual works); Perritt, *Property and Innovation*, *supra* note 6, at 275.

the costs of detecting, identifying, and enforcing limits on unauthorized copying have become substantially greater than before. If technological and other private law means of restricting access to and the use of digital materials are widely deployed, then such costs may be lower.⁴⁰ In either case, how an author or publisher analyzes these problems and responds to them is driven by the omnipresence of the digital format in which the work is created, reproduced, and distributed, rather than by the nature of the work (is it a book? a sound recording? an image?) or the framework of much of the existing Copyright Act.⁴¹

The second phenomenon is the standardization of use-based distribution models for the original digital work: computer programs. Years ago, the computer software industry almost uniformly adopted a "license" paradigm for distributing computer program code.⁴² The choice to license rather than to sell software had both technological roots⁴³ and roots in the development of the appropriate legal regime for software in the late 1960s and 1970s.⁴⁴ Software licenses in general, and shrinkwrap licenses in particular, arose in part in response to uncertainty over how to apply copyright law, particularly copyright's "first sale" doctrine,⁴⁵ to packaged software distribution. Early on,

40. See Merges, *End of Friction*, *supra* note 28, at 116-17.

41. See, e.g., 17 U.S.C. § 111 (regarding secondary transmissions by cable systems of performances or displays in primary transmissions); *id.* § 113 (providing protection for pictorial, graphic, and sculptural works); *id.* § 114 (addressing sound recordings); *id.* § 115 (involving compulsory licenses for nondramatic musical works); *id.* § 117 (relating to computer programs); *id.* § 120 (regarding architectural works).

42. At least in the mass market, courts have been reluctant to agree that computer software is in fact licensed, rather than sold as a good, under the UCC. See *Micro Data Base Sys., Inc. v. Dharma Sys., Inc.*, 148 F.3d 649, 655 (7th Cir. 1998) (holding that the delivery of custom software is the sale of a "good" under New Hampshire law). This doctrinal gap has not, in the main, discouraged software publishers from asserting that their programs are merely licensed.

43. Most early computer software was written for and could be used only in conjunction with particular computers, which, on the whole, were neither cheap enough nor practical enough for use outside of educational and industrial applications. The software was physically inseparable from the hardware. It could not be sold because there was nothing to sell apart from the computer system itself, yet there was clearly a separate value to be protected in the program code. See, e.g., Peter S. Menell, *Tailoring Legal Protection for Computer Software*, 39 *Stan. L. Rev.* 1329, 1332-36 (1987) (describing the design of computers and highlighting the relationship between hardware and software).

44. Before the Copyright Act was amended to make it clear that computer programs are expressive works subject to the Act, the relative advantages of copyright, trade secret, and patent law as appropriate legal models for software distribution were widely debated. See Miles R. Gilburne, *The Proprietary Rights Pyramid: An Integrated Approach to Copyright and Trade Secret Protection for Software*, *Computer Law*, Mar. 1984, at 1, 6-8. *But see* Rice, *Digital Information*, *supra* note 10, at 633 (observing that firms seized opportunities presented by shrinkwrap licensing to strip consumers of warranty protections).

45. See 17 U.S.C. § 109(b)(1)(A). The doctrine of first sale restricts the copyright holder's distribution rights in any particular copy of a work that is sold. The purchaser of that copy is free to sell or otherwise dispose of that copy without interfer-

piracy or facilitation by software rental firms was identified as the major business risk associated with distributing copies of computer software.⁴⁶ If copyright law applied to computer programs, then the first sale doctrine, which appeared to enable the owner of a particular copy of a computer program to dispose of that copy without further restriction, arguably did not condemn such piracy as a matter of law. Consumers acquired most packaged software not from publishers themselves but from distributors and resellers who may have been free under the law to re-copy the programs at will. In theory, then, shrinkwrap licenses created contractual privity between the copyright holder and the end-user of the software without requiring the publisher to identify and negotiate a license with each user. These "licenses" asserted the holder's reservation of title and the right to specify the uses to which each copy of the computer program could be put. Specifically, shrinkwrap licenses could and did forbid lending or renting the program.⁴⁷ Guarding against the contingency that copyright law does not apply, software publishers also used shrinkwrap to shoehorn software distribution into the law of trade secrets. They did this either by asserting the creation of a confidential relationship between publisher and user, or by obtaining the user's undertaking not to disclose trade secrets embodied in the program, or both.

Congress has amended the Copyright Act to confirm that copyright applies to computer programs and to clarify that the first sale doctrine does not authorize renting computer software.⁴⁸ Software rental busi-

ence. *See* *Quality King Distrib., Inc. v. L'Anza Research Int'l, Inc.*, 118 S. Ct. 1125, 1134 (1998) (holding that the "first sale" section of the Copyright Act bars copyright infringement action against an importer of lawfully manufactured product bearing copyrighted label, where the importer acquired the product from a foreign distributor that purchased it from the copyright holder).

46. *See* Richard H. Stern, *Shrink-Wrap Licenses of Mass Marketed Software: Enforceable Contracts or Whistling in the Dark?*, 11 Rutgers Computer & Tech. L.J. 51, 51-52 (1985).

47. *See* Rice, *Digital Information*, *supra* note 10, at 630-34; Stern, *supra* note 46, at 57-65.

48. *See, e.g.*, *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1248 (3d Cir. 1983) (confirming that computer programs are copyrightable "literary works"). Section 109(b)(1)(A) of the Copyright Act qualifies the first sale doctrine and forbids the unauthorized "rental, lease, or lending" of a copy of a computer program, "for direct or indirect commercial purposes." 17 U.S.C. § 109(b)(1)(A). The Copyright Act now also includes a discussion of the legitimate uses of computer programs. For example, § 117 of the Copyright Act now provides that the "owner" of a copy of a computer program may make a copy of that program "as an essential step in the utilization of the computer program in conjunction with a machine . . ." *Id.* § 117(1). This amendment was intended to recognize that any use of a computer program involves technically reproducing or making a "copy" of the program, as the code is "copied" from one medium (disk, tape, hard drive) to another (computer memory accessible by the computer processor) and to limit acquirors of computer programs to only that use. *See* *Aymes v. Bonelli*, 47 F.3d 23, 26 (2d Cir. 1995) (citing H.R. Rep. No. 96-1307, pt. 1, at 23 (1980), *reprinted in* 1980 U.S.C.A.N. 6460, 6482). Under § 117, and absent other restrictions imposed by license, the medium containing the computer program may be resold, and the new purchaser may use the program. The

nesses have been absorbed into the market for software licenses.⁴⁹ By building distribution models based on licenses or control of rights of use to guard against threats from piracy and free-riding,⁵⁰ however, software producers have learned the value of use-based models for

seller and buyer, or transferor and transferee, may not, however, concurrently use copies of the same program downloaded from a single disk or other medium.

The extent to which Congress meant what it said when it restricted this privilege to "owners" of computer programs has been disputed, and the ambiguity has preserved, from the standpoint of the statute, a justification for shrinkwrap. The legislative history of the statute does not explain the shift in terminology from "rightful possessor," which appeared in earlier versions, to "owners." See National Comm'n on New Technological Uses of Copyrighted Works, Final Report of the National Commission on New Technological Uses of Copyrighted Works 31 (1978). Courts have been divided over whether § 117 rights accrue to "owners" of the medium (disk, tape, or CD-ROM) that contains the program, who merely "possess," as a result, the sequence of electrons that constitutes the program copy itself. Under this reading of the statute, an ordinary acquirer of computer software is a mere "licensee" of the copy of the program, not an "owner," and has, therefore, only those rights to use the program that the copyright holder specifies rather than those rights provided by § 117. *Compare* Triad Sys. Corp. v. Southeastern Express Co., 64 F.3d 1330, 1333 (9th Cir. 1995) (accepting without comment the "license" character of initial distribution of software), and *Microsoft Corp. v. Harmony Computers & Elecs., Inc.*, 846 F. Supp. 208, 211 (E.D.N.Y. 1994) (accepting the "license" character of software distribution), with *Allen-Myland, Inc. v. IBM Corp.*, 746 F. Supp. 520, 535-36 n.14 (E.D. Pa. 1990) (stating that Congress limited the grant of rights to copy software to the "owner" of a program under § 117). Courts willing to read § 117 as strictly applying only to true "owners" rather than mere "licensees" support publishers' assertion that shrinkwrap licenses validly restrict the use of software, and thus reinforce the conventions of information use with which this part is concerned. See, e.g., *Stenograph L.L.C. v. Boscard Assocs.*, 144 F.3d 96, 100 (D.C. Cir. 1998) (noting that the use of a software program from a computer's hard drive for the program's designated purposes constitutes infringing "copying" unless the use is licensed by the copyright holder); see also Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. Dayton L. Rev. 547, 576 n.180 (1997) [hereinafter Lemley, *Overlapping Copyrights*] (stating that the combination of a narrow reading of § 117 and *ProCD* would read that section out of the Copyright Act); David A. Rice, *Licensing the Use of Computer Program Copies and the Copyright Act First Sale Doctrine*, 30 *Jurimetrics J.* 157, 162-65 (1990) (framing the statutory controversy regarding the Copyright Act first sale doctrine). Section 117, in other words, may have been conceived as a statutory clarification of users' rights in software. It has become an instrument for restricting or eliminating those rights. But see *DSC Communications Corp. v. Pulse Communications, Inc.*, 976 F. Supp. 359, 362-63 (E.D. Va. 1997) (reasoning that whether a possessor of a copy of software is an "owner" depends on "economic realities," not on the nominal characterization of the transaction as a "license").

49. By describing early efforts to combat piracy masquerading as legitimate software rental, I do not intend to understate the significance to software publishers of other restrictions on use in shrinkwrap licenses, particularly those concerning reverse engineering. See *infra* notes 120-50 and accompanying text.

50. The trend toward enforcing software publishers' characterizations of these transactions from an infringement standpoint has not been matched by accepting these characterizations for purposes of applying the UCC. See *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 651 (W.D. Wis.) (treating Zeidenberg's acquisition of a *ProCD* product as a sale for UCC purposes), *rev'd on other grounds*, 86 F.3d 1447 (7th Cir. 1996). The Seventh Circuit's opinion in *ProCD* accepted the district court's determination that the transactions in question were governed by the Wisconsin UCC. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452-53 (7th Cir. 1996).

generating revenue.⁵¹ Distributing computer software via license rather than sale remains the industry norm,⁵² rationalized not only as a mechanism to avoid the transaction costs of individual licenses with each user⁵³ but also as the basis for new business models.⁵⁴ The link between use-regulation as a deterrent to theft and as a predicate for profitability suggests, moreover, that publishers may now be incapable of returning to a "sale" paradigm.⁵⁵ As the entirety of the information

51. See Perritt, Information Superhighway, *supra* note 33, § 10.22, at 458-64; Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 Buff. L. Rev. 845, 869-74 (1997) (arguing that a digital format for copyrighted works increases publishers' ability to price discriminate and reduces the need to expand copyright protection to maintain existing profit levels); Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 Minn. L. Rev. 609, 625-30 (1998) [hereinafter O'Rourke, *Fencing Cyberspace*] (describing different Web-based revenue models); Eric Schlachter, *The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet*, 12 Berkeley Tech. L.J. 15, 21-34 (1997) (explaining the variety of business models being developed on the Internet). Cf. David A. Rice, *Whither (No Longer Whether) Software Copyright*, 16 Rutgers Computer & Tech. L.J. 341, 350-51 (1990) (stating that computer software developers use shrinkwrap as both a shield and a competitive sword).

52. This remains true, notwithstanding predictions that shrinkwrap would die a natural death as computer software increasingly acquired property-like legal characteristics and as the indicia of "sales" of software increasingly surrounded consumer software distribution. See Thomas M.S. Hemnes, *Restraints on Alienation, Equitable Servitudes, and the Feudal Nature of Computer Software Licensing*, 71 Denv. U. L. Rev. 577, 599 (1994) (predicting the demise of shrinkwrap); Pamela Samuelson, *Software Compatibility and the Law*, Comm. ACM, Aug. 1995, at 15, 20 (highlighting the widely-held opinion that shrinkwrap licenses are unenforceable).

53. See, e.g., Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 Duke L.J. 479, 532 (1995) [hereinafter O'Rourke, *Drawing the Boundary*] (noting that "mass-market licensing sprang up because transaction costs made negotiating with every licensee impractical"). Software producers now generally fear reverse engineering, decompilation, and re-distribution of their code across computer networks at least as much as piracy via wholesale duplication of their code.

54. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1449-50 (7th Cir. 1996) (discussing how shrinkwrap licenses may facilitate price discrimination); Perritt, *Property and Innovation*, *supra* note 6, at 307-08; *supra* note 51; see also, e.g., N. Jansen Calamita, Note, *Coming to Terms with the Celestial Jukebox: Keeping the Sound Recording Copyright Viable in the Digital Age*, 74 B.U. L. Rev. 505, 534-551 (1994) (proposing new business model solutions to prevent piracy and free-riding problems).

55. See Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (Or "The Economics of Boilerplate")*, 83 Va. L. Rev. 713, 740-60 (1997) (describing learning and network externalities that limit the mix of innovation and customization and encourage standardization in corporate contracts); see also Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 Harv. L. Rev. 1173, 1222-23 (1983) [hereinafter Rakoff, *Contracts of Adhesion*] (noting that the use of standard form documents directs firms away from individual contract negotiations). But see Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 Cal. L. Rev. 479, 599-600 (1998) (questioning the extent to which network effects cause sub-optimal contracting through the "lock-in" of legal forms). Few software publishers other than computer game developers explicitly adopt a "sale" model for their software. An undercurrent of practitioner advice recommending such a model is generally ignored. See Gilburne, *supra* note 44, at 1 (dis-

world is either created in digital form or is capable of being digitized at minimal cost, technologically it all begins to look like "software." Licensing and shrinkwrap forms migrate accordingly.⁵⁶

The third phenomena are the marked changes for the reader or consumer of works of information in the contrast between tangible products embodying intellectual property and the intangible underlying property interest. Books, for example, have posed comparatively few problems under commercial law because it has been relatively simple to physically, visually, and conceptually distinguish rights in the thing, which are governed by state contract and commercial law, from the copyright holder's rights in the expression, which are governed by copyright law. My sense of what I may and may not do with a book is predicated, in large part, on cues provided by the physical thing, the book itself. The distinction is expressed with reasonable clarity in § 202 of the Copyright Act, which states that ownership of a copyright in a work is distinct from ownership of "any material object" in which the work is embodied,⁵⁷ and further provides that the transfer of ownership of that material object "does not of itself convey any rights in the copyrighted work embodied in the object,"⁵⁸ and in the first sale doctrine, which limits the copyright holder's right to prevent re-distribution of individual copies of its work that have been sold.⁵⁹ With the development of copyrightable computer programs, the relative lack of physical contrast between the "thing" and the "rights" leads to ambiguity in the law⁶⁰ and in the minds of users over precisely what rights accrue to the acquirer of a copy of a computer program. The ability to

curring the circumstances where the sale of object code and source code copies is appropriate); Ian N. Feinberg, *Shrink Wrap Licenses: Do They Cause Software Publishers More Harm Than Good?* (last modified Aug. 26, 1995) <<http://www.softwareindustry.org/issues/docs-htm/shrnkwrp.html>> (noting that warranties and other important terms in shrinkwrap licenses could be as effectively applied in sales transactions for software).

56. The collapse of license, sale, and other forms of information rights transfer is evident in drafts of the proposed Article 2B of the UCC, which, by defining "license" as a contract that controls the use of information and grants fewer than all rights in the information, effectively asserts that the license has become the sole means of transfer of rights in or to works of information. See generally David A. Rice, *Digital Information*, *supra* note 10, 643-45 (arguing that the drafters of Article 2B have improperly conflated property and contract attributes of copyright); *infra* Part IV.C (discussing whether codification of shrinkwrap practice will address and protect open space issues).

57. 17 U.S.C. § 202 (1994).

58. *Id.*

59. See *supra* note 48 and accompanying text. Using books as the paradigm for this example turns out to be more than coincidence; the first sale doctrine under federal law is related to the state common law copyright "right of first publication" that enabled authors of unpublished works to prevent unauthorized distribution of their works. See Karjala, *Federal Preemption*, *supra* note 2, at 523-25.

60. Because using almost any computer software requires making a copy of the code, § 202 suggests that if the software user buys the disk containing the computer program, the user cannot, without some separate authorization from the copyright owner, or as a matter of law, use the embedded software. Section 117 could be read

copyright computer software creates a gap between what § 202 says and what it means because human beings cannot perceive the subject of the intellectual property interest, the copyrighted code itself, in its operable state.⁶¹ As more works of information resemble “software” in a technological sense and as “software” increasingly lacks any “thing”-like physical attributes,⁶² the dominant license norm renders § 202 essentially meaningless. A publisher may assume, for example, that as it licenses computer software, it should license—that is, regulate the use of—digital books, because the physical “thing” is increasingly nothing more than a collection of electronic impulses. A reader, however, assumes that because he buys the book and does with the book itself as his conventional sense dictates, he buys the digital copy of the book in the same sense. Whether he does so from a legal standpoint is unclear.

The fourth phenomena are the various aspects of computer software that make it a unique and somewhat troublesome animal as a

to overcome that problem, but as usually applied, that section reinforces the publisher's position and the user's predicament. *See supra* note 48 and accompanying text.

61. Computer code can be printed as text in either object code (machine readable) or source code (human readable) form. Whether the electronic embodiment of the code is the original work and the printed text is its translation, or vice versa, the result is the same for the consumer or user. If the code is delivered in tangible form at all, it is embedded in a medium (disk, CD-ROM, cartridge) that renders the code inaccessible except via the application of another computer program. A purchaser of a book or magazine can at least see the copyrighted expression on the printed page. Some software developers admonish users to treat their programs as they would treat books. *See Green Book Int'l Corp. v. Inunity Corp.*, 2 F. Supp. 2d 112, 116 n.1 (D. Mass. 1998) (discussing a license that instructed users to treat software like a book because two people cannot easily read the same book at the same time). If one could treat software like one treats a book, one would not need a computer. Yet book publishers are increasingly providing limitations on the use of books, in the same sense that software producers use shrinkwrap to limit use of their programs. *See infra* Part I.C.2. Electronic books are becoming commercially feasible. *See Eugene Volokh, Cheap Speech and What It Will Do*, 104 Yale L.J. 1805, 1823-26 (1995); Peter H. Lewis, *Taking on New Forms, Electronic Books Turn a Page*, N.Y. Times, July 2, 1998, at G1; Steve Silberman, *Ex Libris*, Wired, July 1998, at 98, 98, 101. Accordingly, legal decisions that depend, at least in part, on sharp distinctions between “books” and “software” will be called into question. *See, e.g., Beta Computers (Europe) Ltd. v. Adobe Sys. (Europe) Ltd.*, 1996 Scots L. Times 604, 609 (Scot. Outer House 1995) (holding that the software acquirer who ordered the program by telephone from the distributor was entitled to return the package, unopened, when the shrinkwrap license disclosed objectionable terms: “The analogy with a printed book is, in my opinion, false. . . . A book typically is intended to be read, not copied, as a way of enjoying or using the object”); *see also* Online Originals, *Online Originals* (visited October 10, 1998) <<http://www.onlineoriginals.com>> (publishing “books” on line). The site attracted publicity during the Summer of 1998 when one of its “books,” *The Angels of Russia*, by Patricia LeRoy, was nominated for the Booker Prize, though the “book” had never been “published” in printed form.

62. Increasingly, consumers and institutional users acquire computer software (and other works of information) via computer networks, rather than on media. There is no tangible “thing” at all. *See infra* note 174 and accompanying text.

“literary work”⁶³ under copyright law. Whether computer programs ever have seemed more like copyrightable “books” than patentable “machines” continues to be debated.⁶⁴ Technological evolution only complicates that debate. Definitionally, “software” is an increasingly inapt term for the myriad of products, processes, and tools that are digitized. Within the realm of what is colloquially known as “software,” there are copyrightable computer “programs,”⁶⁵ which instruct a computer, and there are “data,” which are information that, in coded form, does not instruct the computer but instead interacts with “programs.”⁶⁶ Aggregations of data (whether digital or analog) generally are copyrightable if they exhibit at least a modicum of “originality.”⁶⁷ The distinction between these classes is increasingly blurry. Single “products” may consist of combinations of programs and data

63. “Computer programs” are copyrightable as literary works under the Copyright Act. See 17 U.S.C. § 101 (defining “computer program” as “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result”; “copies” as including objects in which a work is “fixed,” from which it can be perceived “either directly or with the aid of a machine or device”; “fixed” as requiring that the work be sufficiently “stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration”); *id.* § 102(a)(1) (discussing literary works); *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240, 1249 (3d Cir. 1983); *Williams Elecs., Inc. v. Artic Int’l, Inc.*, 685 F.2d 870, 874 (3d Cir. 1982). Screen displays, that is, the output of computer programs, are copyrightable “audiovisual works.” See 17 U.S.C. § 101 (defining audiovisual work); *id.* § 102(a)(6) (identifying audiovisual works as protectable subject matter).

64. See Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 Colum. L. Rev. 1865, 1875-80 (1990); J.H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 17 U. Dayton L. Rev. 797, 801-06 (1992); Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 Harv. L. Rev. 1149, 1180-93 (1998) [hereinafter Weinreb, *Functional Expression*]; see also *Computer Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 706-12 (2d Cir. 1992) (applying, in a “substantial similarity” analysis for copyright infringement of computer software, the “abstractions approach” developed by Judge Hand for traditional literary works).

65. “Programs” generally are strings of computer code—statements or instructions—that cause a computer to execute some function(s) or operation(s). See 17 U.S.C. § 101. Historical divisions between “operating systems” and “application programs” are also being called into question. Compare *United States v. Microsoft Corp.*, 147 F.3d 935, 947 (D.C. Cir. 1998) (rejecting the claim that the Microsoft operating system and the Internet browser clearly constituted distinct products for purposes of a consent decree), with Peter S. Menell, *Tailoring Legal Protection for Computer Software*, 39 Stan. L. Rev. 1329, 1334 (1987) (noting two principal classes of programs).

66. The evolution of “object-oriented programming” calls even this division into question. See Michael A. Dryja, *Looking to the Changing Nature of Software for Clues to its Protection*, 3 U. Balt. Intell. Prop. L.J. 109, 131-38 (1995) (arguing that patent rather than copyright law is better suited to the protection of object-oriented programming); *Oops!*, *The Economist*, Feb. 28, 1998, at 82, 82 (describing the growth of object-oriented programming in the database industry). Distributed computing networks may do even more to disrupt the traditional division described in the text. See *After the PC*, *The Economist*, Sept. 12, 1998, at 79, 79-80; Kevin Kelly & Spencer Reiss, *One Huge Computer*, *Wired*, August 1998, at 128, 130-31.

67. See *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344-51 (1991).

that the user cannot, as a functional matter, readily distinguish. "Digital content" providers, as some publishers are now known,⁶⁸ use form "contracts"—shrinkwrap—to control access to and distribution of both.⁶⁹ The blurred distinction becomes more troubling as "software" distribution and use migrates toward networked environments, away from traditional delivery models involving a complete product in exchange for a one-time fee.⁷⁰ Across the Internet or in a networked environment, the program or data user may not receive the complete computer code in one usable package,⁷¹ but instead may receive pieces of the code, or updates, on a "need to use" basis. A prototype consumer software user of the not-too-distant future may not go to a software retailer (whether on-line or on the street corner) and exchange a small sum of money for a package containing the entire program code for the most recent version of Microsoft's Word or Intuit's Quicken. Instead, that person may log onto a network intending to update a resume, a financial portfolio, or a set of blueprints and download pieces of the applicable program, priced accordingly, as the work progresses. From the user and producer's standpoint, computer software—or any digital work—is no longer a thing at all. It may be a process.⁷²

68. See generally Pamela Samuelson, *Foreword: The Digital Content Symposium*, 12 Berkeley Tech. L.J. 1, 2-9 (1997) [hereinafter Samuelson, *Foreword*] (discussing various views of protecting digital content).

69. Distinctions between computer software and computer hardware may also be blurring, see Fred M. Greguras, *Systems-on-a-Chip: Intellectual Property and Licensing Issues* (visited Oct. 7, 1998) <<http://www.fenwick.com/pub/systems-on-a-chip.html>>, raising a thorny legal question that is, fortunately, beyond the scope of this Article: What are the limits of permissible use restrictions that accompany software (which may be copyrightable) that is embedded in (that is, hardwired, not merely copied into the computer's memory) a computer device, which itself is only patentable, or protectable as a "mask work"? See 17 U.S.C. §§ 901-914. Will cell phones, pagers, and digital television sets come with shrinkwrap licenses or notices concerning acceptable use?

70. See generally Rice, *Digital Information*, *supra* note 10, at 641 (recounting traditional forms of transfers of rights in copyrighted works and observing that the Copyright Act does not contemplate the licensor as a "toll-collector"); Schlachter, *supra* note 51, at 24-30 (reviewing Internet-based business models). Current trends in technology industries, at least, take the toll-collection feature of digital technology and networks as an essential element of business planning. See Michael Lewis, *The Little Creepy Crawlers Who Will Eat You in the Night*, N.Y. Times, Mar. 1, 1998, § 6 (Magazine), at 40 (quoting John Doerr, general partner of Kleiner Perkins Caulfield & Byers, a technology-oriented venture capital firm, on the premise that Internet-based companies' information products have a marginal cost of zero: "You just collect the toll as people download it from the Internet").

71. Subject, of course, to patches, bug fixes, and updates.

72. See David R. Johnson & David Post, *Law and Borders—The Rise of Law in Cyberspace*, 48 Stan. L. Rev. 1367, 1385 (1996) (quoting Esther Dyson, *Intellectual Value*, Wired, July 1995, at 136, 138-39, 183 ("The trick is to control not the copies of your work but instead a *relationship* with the customers—subscriptions or membership.")); Radin, *supra* note 9, at 520-21 (questioning whether the scope of Dyson's prediction amounts to evolution or revolution with respect to current practice). Characterizing digital content as process challenges assumptions about what society values

The fifth, and last, phenomenon is the growth of the digital economy, the popularization and commercial importance of products and services based on digital technology, and the growth of the computer software industry in general and of the Internet in particular, to such an extent that the idea of creative "authorship" of expressive works is at best a rhetorical device.⁷³ By creating opportunities for firms to grow and thrive based on little more than intellectual property rights and a business plan, the growing digital economy has commercial and securities law consequences.⁷⁴ In the business world, equity and debt

about works of information. The relevant question may not be only "how do we encourage the development of more computer programs/software/digital works as raw material for social consumption and reuse?" See Dennis S. Karjala, *Copyright Protection of Computer Documents, Reverse Engineering, and Professor Miller*, 19 U. Dayton L. Rev. 975, 980 (1994). It is also, "How do we most encourage the use of computer programs/software/digital works as tools to produce the works that are consumed and reused?" See Lemley & O'Brien, *Software Reuse*, *supra* note 35, at 259 (arguing that patent law is superior to copyright law in promoting the efficient creation of computer program code); Allen Newell, *The Models are Broken, the Models are Broken!*, 47 U. Pitt. L. Rev. 1023, 1034-35 (1986) (concluding that the current models of economic incentives are "broken" as applied to computers and patent law); Perritt, *Property and Innovation*, *supra* note 6, at 271 n.42 (noting how copyright law can decrease the production of information by increasing the price of intellectual works). Roughly equivalent questions—for example, to what extent do we favor originators at the expense of those who create based on prior works?—arise if copyright law is examined less from an economic or instrumental standpoint, and more from the standpoint of the rights or interests of authors themselves in autonomy and self-fulfillment. See William W. Fisher III, *Reconstructing the Fair Use Doctrine*, 101 Harv. L. Rev. 1661, 1745-62 (1988) (describing different philosophical traditions present in analyses of author autonomy in copyright law); Neil Netanel, *Copyright Alienability Restrictions and the Enhancement of Author Autonomy: A Normative Evaluation*, 24 Rutgers L.J. 347, 408-11 (1993) [hereinafter Netanel, *Copyright Alienability*] (describing social, individual benefits from author inalienability rules in copyright). *But see Feist*, 499 U.S. at 349 (stating that the primary object of the copyright statute is to effect the constitutional purpose of copyright, not to reward the labor of authors); *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 546 (1984) (observing that the monopoly created by copyright rewards authors in order to benefit the public).

73. See Keith Aoki, *(Intellectual) Property and Sovereignty: Notes Toward a Cultural Geography of Authorship*, 48 Stan. L. Rev. 1293, 1322-27 (1996) (discussing the creation of the notion of the "romantic author" and the use of that idea to expand modern property law conceptions of copyright).

74. From the Prospectus for the initial public offering of common stock of Netscape Communications Corporation in 1995:

The Company's success and ability to compete is dependent in part upon its proprietary technology. While the Company relies on trademark, trade secret and copyright law to protect its technology, the Company believes that factors such as the technological and creative skills of its personnel, new product developments, frequent product enhancements, name recognition and reliable product maintenance are more essential to establishing and maintaining a technology leadership position. The Company presently has no patents or patent applications pending. There can be no assurance that others will not develop technologies that are similar or superior to the Company's technology. The source code for the Company's proprietary software is protected both as a trade secret and as a copyrighted work. The Company generally enters into confidentiality or license agreements with its employ-

markets increasingly require precise delineation of patent, trade secret, and copyright portfolios in the context of complex transactions.⁷⁵ Private law structuring of intellectual property privileges and obligations, and licenses that anticipate and structure relationships over time as opposed to one-time sales, create the appearance of restoring to the firm the power to privately protect and manage its key resources.⁷⁶ The perceived ability to plan, in turn, strengthens the ability of those firms to use revenue streams to justify investment by shareholders, loans from banks and bondholders and, for debt holders, to have assignable interests, such as license fees, that can be pledged as secur-

ees, consultants and vendors, and generally controls access to and distribution of its software, documentation and other proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use the Company's products or technology without authorization, or to develop similar technology independently. In addition, effective copyright and trade secret protection may be unavailable or limited in certain foreign countries, and the global nature of the Internet makes it virtually impossible to control the ultimate destination of the Company's products. To license its products, the Company primarily relies on "shrink wrap" licenses that are not signed by the end-user and, therefore, may be unenforceable under the laws of certain jurisdictions. Despite the Company's efforts to protect its proprietary rights, unauthorized parties may attempt to copy aspects of the Company's products or to obtain and use information that the Company regards as proprietary. Policing unauthorized use of the Company's products is difficult. There can be no assurance that the steps taken by the Company will prevent misappropriation of its technology or that such agreements will be enforceable. In addition, litigation may be necessary in the future to enforce the Company's intellectual property rights, to protect the Company's trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's business, operating results or financial condition.

Netscape, *Prospectus: 5,000,000 Shares Netscape Common Stock* (visited Sept. 25, 1998) <<http://home.netscape.com/comprod/investor/prospectus.html>>. The density of this text betrays the firm's recognition of investors' reliance on the value of Netscape's software. Despite early success following its initial public offering, Netscape's future prospects are unclear. In early 1998, in response to competitive pressure from Microsoft, Netscape announced that it would release without charge (though not without restriction) copies of the source code for its World Wide Web browser. See Don Clare, *Netscape to Share Browser Program Code*, *Wall St. J.*, Jan. 23, 1998, at B6. By mid-1998, the firm was re-inventing itself as an Internet "portal" company.

75. See, e.g., Diane Holt Frankle, *Sample Agreement and Plan of Reorganization for Technology Company*, in *Acquiring or Selling the Privately Held Company* 364-67 (PLI Corp. L. & Practice Handbook Series No. 1059, 1998) (noting, in a sample agreement for a technology company, the need for detailed schedules of intellectual property rights and obligations).

76. The growth of the digital economy may be pushing transactional norms. Transactional practice may be simultaneously driving the expansion of that economy. See Merges, *Review Essay*, *supra* note 27, at 1571-72 (arguing that growth in "properization" of intellectual property rights is driving increases in transactional practice). The two phenomena are at the least highly symbiotic.

ity.⁷⁷ Intellectual property entrepreneurship in the digital age demands the ability to value and control the use and re-use of intellectual property assets. In turn, these economic demands subvert the ideals of “authors” and “creators” on which my conventional sense of copyright may rely. Business interests always have been wrapped up with copyright law as a practical matter. The digital economy may be making that connection all too transparent.⁷⁸

77. Professor Rice argues that the interests of the other sides in these transactions and flexibility in capital markets generally favor limiting the contractual ability of firms to control the use of their intellectual property assets. See Rice, *Digital Information*, *supra* note 10, at 638-43. Some information-dependent customers may not accept possession of a key asset merely under a “right to use” license. Law firm partners, for example, have ownership interests in the assets of the firm, including the contents of the firm’s library. A collection of CD-ROMs that contains licensed copies of judicial opinions and statutes is worth little to the firm’s balance sheet and provides little incentive for the partners to contribute capital to sustain the firm’s business. Article 9 of the UCC is undergoing revisions that, among other things, may address such problems by freeing licensees of software to encumber their interests without the licensor’s consent. The copyright implications of such a rule are potentially troubling. See *Revision of UCC Article 9 Ready for Presentation to State Legislatures*, 67 U.S.L.W. 2105 (1998); *ABA Section Says Proposed UCC Revision Would Disrupt Intellectual Property Licensing*, 67 U.S.L.W. 2056 (1998). For the text of the revised Article 9, see Uniform Commercial Code: Art. 9 (Proposed Final Draft Revision Apr. 15, 1998).

78. Copyright has long been at least partly concerned with the author’s ability to obtain some return on the investment in creating the work. The fact that copyright law is now explicitly driven by the economic needs of information industries, and the awesome degree to which the information that surrounds us is commonly considered to be copyrightable, and thus expressive, mark a significant departure from copyright’s origins in ensuring paid audiences for “expressive,” i.e. artistic, works. This departure is as yet unaccompanied by a cultural algebra that comfortably relates such breadth of popular experience and use to copyrightable “art” as the fruit of an author’s or artist’s creation. The historian Daniel Boorstin has noted that not until the early twentieth century, with the introduction of film, was a form of “art” or “creative” work introduced to a truly mass audience. See Daniel J. Boorstin, *The Creators* 739 (1992).

Whether film constitutes “art” in the historic and cultural sense is a debate that waxed fiercely for decades. There is little doubt now that both as a copyright matter and culturally, film is (or at least can be) understood to be “expressive.” As a collaborative form published to a mass audience, digital content is film on a huge scale. It surrounds us; it has features of “expressiveness” and features that are purely “mechanical”; it is created and consumed (at least) in equal parts by elites and individual citizens. Socially, we have only begun to figure out, as we have with other forms of popular “art,” what to make of this. Legally, therefore, the decision to deal with all copyright questions under a single standard for determining copyrightability may have been premature. See Jane C. Ginsburg, *No “Sweat”? Copyright and Other Protection of Information After Feist v. Rural Telephone*, 92 Colum. L. Rev. 338, 342-49 (1992) [hereinafter Ginsburg, *No “Sweat”?*] (noting that the Supreme Court in *Feist* imposed a unitary high expression standard of originality on works of both high creativity and low creativity); Lange, *supra* note 14, at 157 (“Indeed, the reach of the new Act can seem ludicrous: notes to babysitters, instructions to chimney sweeps, directions to my house—all of those almost certainly meet the minimal standards of creativity required by the law of copyright . . .”); Alfred C. Yen, *The Legacy of Feist: Consequences of the Weak Connection Between Copyright and the Economics of Public Goods*, 52 Ohio St. L.J. 1343 (1991) [hereinafter Yen, *The Legacy of Feist*] (arguing

B. ProCD, Convention, and the Uses of Contract Doctrine

With these changes afoot, I am not in any position to conclude that I have a firm sense regarding my acceptable use of a computer program, a website, a music clip that I download from the Internet, or the text of a “digital novel.” I strongly suspect, however, that there will develop one belief, which emanates from a presumption that each and every “use” of “information,” no matter how fine-grained, requires a sort of copyright due process: notice from the copyright holder and the holder’s opportunity to grant permission. This suspicion derives not from digital technology itself⁷⁹ but from the legal form—shrinkwrap, as I have broadly defined it⁸⁰—that increasingly accompanies digitized and digitizable information.

By confirming that shrinkwrap is a valid tool, *ProCD* provides the hook, or confirms the presumption, on which the creators and managers of the digital age are setting the legal and public agendas for information use.⁸¹ *ProCD* enables publishers to legally implement the changes that the foregoing summary of new phenomena entails.

that the “creativity” criterion for copyrightability is a poor solution to market failure arguments for fact-based works). There may yet be room for explicit consideration in copyright law of high and low artistic values. See Alfred C. Yen, *Copyright Opinions and Aesthetic Theory*, 71 S. Cal. L. Rev. 247, 301 (1998).

79. Scholarly analysis of the challenges posed by digitization and the growth of the Internet has often focused not on how changing technology affects users’ and consumers’ relationship with copyright law, but on the changing “architecture” of cyberspace. This includes the need to appreciate the details of computer networks, packet switching, browser functionality, and the like to design an efficient legal regime that accounts for these phenomena in creating an optimal incentive for the production of creative works. See, e.g., Lawrence Lessig, *The Zones of Cyberspace*, 48 Stan. L. Rev. 1403, 1403-06 (1996) [hereinafter Lessig, *Zones of Cyberspace*] (describing the limits of cyberspace); O’Rourke, *Fencing Cyberspace*, *supra* note 51, at 630-34 (describing the technical aspects of navigating the Internet); Perritt, *Property and Innovation*, *supra* note 6, at 261-62 (suggesting a proper balance between property ownership and public use of information resources). The desirability of regulating architectural features is contested. See *United States v. Microsoft Corp.*, 147 F.3d 935, 948 (D.C. Cir. 1998) (interpreting a consent decree to permit the marketing of an integrated product that combines functionalities in a way that is advantageous to the purchaser). Rhetorically, however, the focus on the “architecture” of cyberspace suggests that rules and standards are being specified within a bounded space. Conceptually, that rhetoric may miss the degree to which public and private rules and standards should define a space beyond which they do not govern.

80. See *supra* note 3 (defining shrinkwrap in the context of this Article).

81. Deference to “private action” in response to difficulties in capturing an appropriate legal rule in this environment, see *Digital Equip. Corp. v. Altavista Tech., Inc.*, 960 F. Supp. 456, 463 (D. Mass. 1997) (deferring to the parties’ private ordering concerning a trademark license dispute, in light of rapidly changing technology), grants to copyright owners a form of “agenda setting” authority for norms of copyright law. Professor Lessig argues that we need to consider how regulatory principles expressed in law now might be expressed in computer code itself. See Lawrence Lessig, *The Constitution of Code: Limitations on Choice-Based Critiques of Cyberspace Regulation*, 5 Comm. L. Conspectus 181, 186-88 (1996) [hereinafter Lessig, *Constitution of Code*]. The degree to which computer code actually does or will regulate is empirically uncertain. See Radin, *supra* note 9, at 520-21.

Under *ProCD*, there is but one use, which is the authorized use. The broad impact of *ProCD* has gone far beyond the limited holding of the case. It is thus appropriate to first review precisely what *ProCD* dealt with and what the case actually holds.

ProCD, Inc., the plaintiff, assembled and distributed packages of CD-ROM discs (branded "SelectPhone") that contained a large database of residential and business telephone numbers, addresses, zip codes, and, for commercial listings, applicable industry or "SIC" codes, assembled from publicly available telephone directories.⁸² The SelectPhone CD-ROMs also contained a computer program, to which *ProCD* held the copyright, for searching the database and retrieving data.⁸³ *ProCD* packaged a printed user's guide in the box that contained a "license agreement." The user's guide stated that the acquirer's use of the program constituted acceptance of the "license," limited use of the listings and of the computer program to "individual or personal use," and specifically noted that copying the listings of the program to a second computer or to a networked environment was forbidden.⁸⁴ The full text of the license could not be read before acquiring the product, but the exterior of the package bore a notice that use of the contents was subject to a license. Furthermore, the program itself supplied a "pop-up" screen that notified the user that access to the listings was conditioned on acknowledgment, via a mouse click, of a license.⁸⁵ Zeidenberg, the defendant and a Wisconsin resident, acquired SelectPhone, accessed the data using the *ProCD* computer program, and downloaded and copied portions of the database contents to a server connected to the Internet.⁸⁶ He offered public access to the listings over the Internet, allowing users to search and access the listings themselves via a computer program supplied by Zeidenberg.⁸⁷ *ProCD* sued Zeidenberg for copyright infringement, breach of the license agreement, and unfair competition.⁸⁸

On cross motions for summary judgment, the district court granted summary judgment for Zeidenberg.⁸⁹ Specifically, the court held that Zeidenberg's use of *ProCD*'s computer program fell within the scope of § 117 of the Copyright Act.⁹⁰ The court held that the telephone

82. See *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 644 (W.D. Wis.), *rev'd*, 86 F.3d 1447 (7th Cir. 1996).

83. See *id.*

84. See *id.* at 644-45.

85. See *id.*

86. See *id.* at 645.

87. See *id.* The district court noted that Zeidenberg's computer program was "written by" a corporation, defendant Silken Mountain Web Services, Inc., of which Zeidenberg was the sole shareholder and president. See *id.*

88. See *id.* at 644.

89. See *id.* at 662.

90. See *id.* at 649. The relevant text of § 117 follows:

[I]t is not an infringement for the owner of a copy of a computer program to make or authorize the making of another copy or adaptation of that com-

and address data in ProCD's CD-ROMs were not copyrightable because they did not meet the "originality" standard set forth in *Feist Publications, Inc. v. Rural Telephone Service Co.*,⁹¹ but that they nonetheless fell within the "subject matter of copyright."⁹² Therefore, Zeidenberg could not be liable under copyright law as an infringer of any copyright in the data, and federal copyright law preempted ProCD's claims for breach of the license agreement and for unfair competition.⁹³

Thematically, then, the district court opinion focused on copyright law and policy. Technically, however, much of its preemption ruling dealing with the claim for breach of the license agreement is dicta.⁹⁴ The court held that under the Uniform Commercial Code ("UCC"), Zeidenberg did not enter into an enforceable contract with ProCD concerning use of the data⁹⁵ because he did not have adequate notice of the terms of the license, which appeared in the user's manual and in the execution of the computer program itself, before he paid for his copies of SelectPhone.⁹⁶ Thus, absent fair notice of a purported "offer" to license, there could not have been an "acceptance."

puter program provided: (1) that such a new copy or adaptation is created as an essential step in the utilization of the computer program in conjunction with a machine and that it is used in no other manner

17 U.S.C. § 117 (1994). The district court stated that § 117 rights extended to "rightful possessors" of computer programs, relying on certain legislative history of the law that added § 117 to the Copyright Act. *See ProCD*, 908 F. Supp. at 649. According to the district court, Zeidenberg had acted within § 117 because he used ProCD's program only to access the data supplied by ProCD. *See id.* The language of § 117, however, permits only the "owner" of a computer program to make copies of the computer program for certain uses. *See* 17 U.S.C. § 117. The court did not discuss whether the ostensible "license" character of Zeidenberg's acquisition of the program would change the applicability of § 117. *See supra* note 48 and accompanying text. It did conclude separately, however, that for purposes of the UCC, the transaction would be characterized as a sale of goods. *See ProCD*, 908 F. Supp. at 650-51.

91. 499 U.S. 340 (1991).

92. *ProCD*, 908 F. Supp. at 656-57. Sections 102 through 105 of the Copyright Act define the "subject matter" of copyright. *See* 17 U.S.C. §§ 102-105. Courts and scholars generally concur that a class of works, or parts of works, exist that fall within the subject matter of copyright as compilations of facts, *see, e.g., id.* § 103 (excluding pre-existing material from copyright protection but including them in the subject matter of copyright), but that are not themselves protected by copyright. *See ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1453 (7th Cir. 1996).

93. *See ProCD*, 908 F. Supp. at 656-62. ProCD also asserted a claim for violation of Wisconsin's Computer Crimes Act; the court held that this claim, too, was preempted. *See id.* at 661-62. The appellate court's application of preemption doctrine is discussed *infra* at notes 100-03 and accompanying text, and preemption doctrine is discussed generally *infra* Part IV.D.

94. The court's discussion of the preemption ruling might be characterized as an alternative holding, though it seems clear that the preemption issue does not arise unless an enforceable license is found to exist. *See infra* notes 100-03 and accompanying text (discussing the opinion of the Court of Appeals).

95. *See ProCD*, 908 F. Supp. at 650-56.

96. *See id.* at 650-55. Zeidenberg acquired three packages of SelectPhone, in succession, each of which contained identical license terms. *See id.* at 645.

In a decision that emphasizes these contractual aspects of the dispute and downplays its copyright context in roughly the same proportions that the district court did the opposite, the court of appeals reversed and remanded with instructions that judgment be entered in ProCD's favor.⁹⁷ On the facts summarized above, the court found that Zeidenberg did have adequate notice of the terms on which ProCD offered him its product. The exterior of the packaging bore a notice stating that acquiring the product subjected the user to a license, the terms of which were stated inside the package. The ProCD computer program supplied a screen that referred to the license terms, which Zeidenberg had to acknowledge with a key stroke or a mouse click before he could use the program to access the listings. According to the court, he was, therefore, bound by the license terms when he chose to use the product rather than to return it to the "seller." Under Wisconsin's version of the UCC, Zeidenberg accepted one and declined the other of the two options explicitly put to him by ProCD in the license: use the product and accept the license, or reject the license and return the product for a refund.⁹⁸ The court dismissed the district court's preemption analysis. Relying exclusively on § 301 of the Copyright Act, which states that state law rights equivalent to rights in copyright are preempted with respect to works that fall within the subject matter of copyright,⁹⁹ the court drew a nearly absolute distinction between rights concerning works of information transferred by bilateral contracts, the enforceability of which depends almost entirely on proof of an agreement under contract law, and rights under the Copyright Act itself, which impose liability independent of any agreement to honor them.¹⁰⁰ Preemption of a bilateral contract was possible, the court said, but only in more narrow (but unspecified) circumstances.¹⁰¹

97. See *ProCD*, 86 F.3d at 1449.

98. See *id.* at 1452-53. Wisconsin's version of the UCC does not differ in any material respect from the uniform version of the statute.

99. See 17 U.S.C. § 301 (1994).

100. See *ProCD*, 86 F.3d at 1453-55. The Seventh Circuit's subsequent decision in *Hill v. Gateway 2000, Inc.* reinforced the theme of *ProCD* that shrinkwrap generally presents contract questions, not copyright questions. See *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1151 (7th Cir.) (holding that an agreement to arbitrate a defect dispute contained in a "shrinkwrap"-style agreement that accompanied computer hardware was enforceable when the purchaser failed to object before using computer system), *cert. denied*, 118 S. Ct. 47 (1997); see also *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569 (App. Div. 1998) (following *Hill* and enforcing an arbitration clause under New York law). It is possible that cases such as *Hill* and *Brower* depend more on specialized rules and public policies surrounding enforcement of agreements to arbitrate. See, e.g., *Comvest, LLC v. Corporate Sec. Group Inc.*, No. A98A1120, 1998 WL 658555 (Ga. Ct. App. Aug. 21, 1998) (holding that a brokerage customer was bound by an unsigned arbitration agreement, based on a customer's retention of benefits of brokerage services and the expectation that all brokerage accounts would be subject to arbitration agreements).

101. See *ProCD*, 86 F.3d at 1454-55. The court's preemption analysis started and ended with its analysis of preemption doctrine as a statutory matter under § 301. The

As a doctrinal matter, therefore, *ProCD* has little strictly to do with copyright law. The case held that the seller of a non-copyrightable database of facts entered into an enforceable contract with the acquirer of that database not to use the database, or its contents, in any manner or for any purpose contrary to the specifications of the contract itself. That characterization of the case leaves little room for the debate regarding intellectual open space.¹⁰² Open space is a function of interests in information or expression, not a function of contract law. From a certain perspective, one might even hope that the limitations of the case—a decision by a federal court sitting in diversity and asserting its interpretation of how Wisconsin courts would deal with a question under the UCC—would lead to its being distinguished or dismissed as a departure from broader “trends in the law.”¹⁰³

Whatever later courts may do, however, the effect of *ProCD* has not been so limited, and the case should not be understood solely in its contract context. *ProCD* has been absorbed by the licensing bar and by the market for transactions in information as confirming the proposition *that shrinkwrap licenses are enforceable*.¹⁰⁴ For the practicing bar, the lessons of *ProCD* are generally to make sure that the

court did not address the possibility that some form of constitutionally-derived preemption doctrine might bar *ProCD*'s claims. *See infra* Part IV.D.

102. *See supra* notes 13-16 and accompanying text; *infra* Part III.

103. One court has so interpreted *ProCD*. *See* *Novell, Inc. v. Network Trade Ctr., Inc.*, No. Civ. 2:95CV523G, 1997 WL 1048530, at *10 (D. Utah Aug. 18, 1997) (holding, on cross-motions for summary judgment filed by the software developer and software distributor, that the “shrinkwrap license” included by the developer with the original software package did not effectively defeat the application of the first sale doctrine and preclude the distributor from acquiring and re-selling “upgrades” to that software, when only “authorized” acquirers of the original software had the contractual “right” to acquire an upgrade). Factually, however, *Novell* may resemble *ProCD* less than it does *Triad Systems Corp. v. Southeastern Express Co.*, 64 F.3d 1330, 1337 (9th Cir. 1995), in which a technology market leader similarly attempted to use copyright law to attack service and upgrade competition. In *Triad*, however, the court did not attempt to assess the genuineness of the original licensees' assent to form license restrictions on “authorized use.”

104. *See* Fred Greguras et al., *On Line Licensing Can Yield Benefits for Software Sellers*, Nat'l L.J., Mar. 25, 1996, at C14; Gary H. Moore & J. David Hadden, *On-Line Software Distribution: New Life for 'Shrinkwrap' Licenses?*, Computer Law., Apr. 1996, at 1, 1; Thomas O'Rourke, *Recent Developments in Shrink Wrap Licenses*, IPL Newsletter, Summer 1996, at 7, 9, 37; Carey R. Ramos & Joseph P. Verdon, *Shrink-wrap and Click-On Licenses After ProCD v. Zeidenberg*, Computer Law., Sept. 1996, at 1, 5; William A. Streff, Jr. & Jeffrey S. Norman, *Courts, UCC Tackle Shrink-Wrap Licenses*, N.Y. L.J., Oct. 14, 1997, at 56; D.C. Toedt III, *Enforcing Shrinkwrap and Internet 'Click-On' License Agreements*, 145 N.J. L.J., Sept. 30, 1996, at S12; Kent Stuckey, *Shrink-Wrap/Point-and-Click Agreements* (visited Jan. 20, 1998) <<http://www.ljx.com/internet/excerpt.html>>. *See generally* Darren C. Baker, Note, *ProCD v. Zeidenberg: Commercial Reality, Flexibility in Contract Formation, and Notions of Manifested Assent in the Arena of Shrinkwrap Licenses*, 92 Nw. U. L. Rev. 379, 418-32 (1997) (welcoming *ProCD*'s flexible approach to contract formation); Kell Corrigan Mercer, Casenote, *Consumer Shrink-wrap Licenses and Public Domain Materials; Copyright Preemption and Uniform Commercial Code Validity in ProCD v. Zeidenberg*, 30 Creighton L. Rev. 1287, 1344-46 (1997) (arguing that the focus in mass

user or reader has at least some notice in advance of acquiring the product that use or other restrictions follow, that the user has at least a nominal opportunity to reject the additional terms and to obtain a refund, and that the more the transaction genuinely resembles a true offer followed by an opportunity for rejection, the less a court will review the substance of the terms involved.¹⁰⁵ If use-based conventions concerning information are increasingly ingrained in consumers and users via shrinkwrap, the more remarkable it may become that any particular shrinkwrap should be challenged, let alone voided. By the time another court faces the *ProCD* issue squarely, therefore, not only the legal, but also the conventional, landscape may have shifted.¹⁰⁶ The next section discusses the manner in which ProCD-style shrinkwrap licenses and forms are overtaking the universe of published information, setting up a standard, and thereafter a convention, in which the right to use any type of information is controlled by the author and publisher.

C. *Shrinkwrap All Around Us*

The continuing disagreement over what constitutes an effective license or an enforceable contract lies, at one level, at the core of the debate over the proper outcome of *ProCD*. The district court found that the defendant, Zeidenberg, was not bound by shrinkwrap terms of which he had no adequate notice before acquiring the plaintiff's software program and database.¹⁰⁷ The court of appeals found that Zeidenberg did have adequate pre-transaction notice of the terms offered by ProCD.¹⁰⁸ That debate tends to treat "shrinkwrap" and other form notices and "licenses" as if the many versions of these phenomena in fact follow traditional definitions of "license"¹⁰⁹ or meet

market license cases should be on adequacy of notice to consumer of terms in license).

105. See, e.g., D.C. Toedt III, *Shrinkwrap License Enforceability Issues*, in *Shrinkwrap License Enforceability Issues* 613 (PLI Patent Handbook Series 453, 1996) (discussing *ProCD* and the enforceability of shrinkwrap license terms).

106. See Samuelson, *Information*, *supra* note 16, at 17 ("Whatever one's view on the *Pro-CD* [sic] decision, it has unquestionably changed the intellectual landscape about shrinkwrap licenses and copyright policy.").

107. See *ProCD, Inc. v. Zeidenberg*, 908 F. Supp. 640, 655 (W.D. Wis.), *rev'd*, 86 F.3d 1447 (7th Cir. 1996).

108. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452-53 (7th Cir. 1996).

109. Black's Law Dictionary defines "license" as a "personal privilege to do some particular act or series of acts on land without possessing any estate or interest therein, and is ordinarily revocable at the will of the licensor and is not assignable." Black's Law Dictionary 919-20 (6th ed. 1990). For intellectual property rights, Black's provides the following earliest citation, concerning patents: "A written authority granted by the owner of a patent to another person empowering the latter to make or use the patented article for a limited period or in a limited territory. A permission to make, use or sell articles embodying the invention." *Id.* at 920; see also *United States v. Atherton*, 561 F.2d 747, 750 (9th Cir. 1977) (considering whether the facts surrounding the distribution of a film constituted a sale rather than a license and finding

the standards of the Restatement for enforceable “contracts.”¹¹⁰ Limiting the analysis of shrinkwrap to “shrinkwrap as enforceable contracts” misses an important aspect of the impact of *ProCD*, namely the extent to which this case encourages owners of copyrighted and other works of information to create private systems of use and reuse. This Article, therefore, uses “shrinkwrap” to encompass non-negotiable restrictions on the use and consumption of works of information that do not necessarily require any action on the part of the user-reader-consumer:¹¹¹ statements of terms and conditions for access to or use of computer systems, programs, data, and other types and forms of information, including books, magazines, and pre-recorded music and film. Shrinkwrap has been commonplace for computer software for many years. It is, however, increasingly all around us, whether we are Internet addicts, occasional computer users, or Book of the Month Club devotees, pushed by the social, economic, and technological changes summarized above and encouraged by the contract principle of *ProCD*. The following summary of the scope of shrinkwrap is intended to be illustrative, not comprehensive. It strongly suggests, however, the broadening of what once was a relatively esoteric phenomenon. Whether or not these forms are literally enforceable even under the relatively liberal standards of *ProCD*, their increasing use and visibility themselves may have important consequences in copyright law.

1. A Very Brief History of Shrinkwrap

Where we are now is best understood in light of a brief examination of how we got here. Shrinkwrap took its generic name from software producers’ practice of encasing the disks and related documentation in a cardboard package and sealing the package with clear cellophane. A document or card—the “license”—was placed inside the package. In some cases, the prospective acquirer of the software could read the terms of the “license” through the cellophane before paying for the package. In other cases, the text of the card was available for review

that a sale occurred); *United States v. Wise*, 550 F.2d 1180, 1190-92 (9th Cir. 1977) (analyzing the difference between license and sale of film rights).

110. Contract-based arguments over shrinkwrap licenses focus on the extent to which the offeree is bound to terms of which he allegedly was not aware at the time the offer was accepted. See Restatement (Second) of Contracts § 23 cmt. e (1981) (stating that “[a]n offeree, knowing that an offer has been made to him, need not know all its terms”); Mark A. Lemley, *Shrinkwraps in Cyberspace*, 35 *Jurimetrics J.* 311, 317 (1995) [hereinafter Lemley, *Shrinkwraps in Cyberspace*].

111. Section 2B-208 of the proposed Article 2B of the UCC, discussed in greater detail in part IV.C, would apply the standards of Article 2B to “mass-market” licenses. See also H.R. 3048, 105th Cong. (1997) (proposing in pertinent part an amendment to the Copyright Act that would apply to works distributed to the public subject to non-negotiable license terms).

only after the box itself was opened.¹¹² The contractual or “license” nature of the transaction was suggested by a notice, printed on the card, sometimes on the exterior of the package, that by opening the cellophane wrapper, the acquiror agreed to the terms and conditions printed on the card. In theory, the license card constituted an offer and opening the package constituted the acquiror’s acceptance. Users acquired almost all software not from the software publisher or other intellectual property rights holder, but from an intermediary: an OEM (Original Equipment Manufacturer), VAR (Value Added Reseller), or other distributor, integrator, reseller, or retailer. Thus, this device formally created a direct bilateral relationship between the rights holder and the consumer or user, which stated and confirmed the scope of the recipient’s rights and the copyright owner’s duties with respect to the intellectual content and the operation of the software.¹¹³

The discussion above briefly referred to restraints on the user’s ability to loan or rent software as a major influence on early shrinkwrap licenses.¹¹⁴ The terms of the relationship contemplated by a shrinkwrap license is in fact considerably more complex. Current software shrinkwrap practice typically includes a bundle of use regulations designed to guard against piracy or competitive re-use, and to limit free-riding. Without separate and specific authorization from the software publisher, and under the terms of most licenses, users typically may not transfer the software, may not use it except in connection with a specific or a single CPU and, often, a laptop, may not transmit it, distribute it, or load it onto a computer network, may not reverse engineer or decompile the program’s object code or otherwise attempt to discern the source code, and may not modify, adapt, or otherwise create derivative works in any way.¹¹⁵ In short, from doctri-

112. The early practice of shrinkwrap licensing is described in detail elsewhere. *See, e.g.*, David Einhorn, *The Enforceability of “Tear-Me-Open” Software License Agreements*, 67 J. Pat. & Trademark Off. Soc’y 509, 509 (1985) (discussing terms commonly contained in “shrink-wrap” license agreements); Deborah Kemp, *Mass Marketed Software: The Legality of the Form License Agreement*, 48 La. L. Rev. 87, 95-126 (1987) (analyzing the legality of major software agreement provisions); David W. Maher, *The Shrink-Wrap License: Old Problems in a New Wrapper*, 34 J. Copyright Soc’y 292, 293 (1987) (examining “the validity of the statutes that purport to make shrink-wrap licenses enforceable”).

113. *See* Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1241-48. For a description of the risks with which software publishers were initially concerned and to which shrinkwrap initially responded, see *supra* notes 42-46 and accompanying text.

114. *See supra* notes 43-56 and accompanying text.

115. Shrinkwrap licenses for computer software itself may be substantially more exacting (and, from a doctrinal perspective, may raise correspondingly more substantial doubts about enforceability). McAfee Associates (now Network Associates) has required acknowledgment that users will not publish reviews of its products without McAfee’s prior consent. *See* Network Associates, *Software Programs from the McAfee Mail* (visited Sept. 25, 1998) <<http://www.mcafeemail.com/mail/mcafee/vssxpur.html>>.

nal and conventional standpoints, the software may not be used at all except insofar as the software publisher declares that the user may do so.

Temporarily setting aside networked distribution of information products, use of any given computer system today involves a myriad of such shrinkwrap "relationships." The path of a piece of software from developer to end-user now takes any number of routes. A small, independent developer may license its code to a larger, integrated firm located in Redmond, Washington, for example. That firm may, in turn, license a bundle of programs that it controls for distribution with personal computers sold by a large PC vendor located in, perhaps, Texas or South Dakota. The computer software may arrive at the end user's location already loaded onto the computer's hard drive, may arrive in the form of floppy disks or CD-ROMs encoded with the products, or both. The small, independent developer and the large, integrated firm may separately distribute its products individually or in small or large bundles, over the telephone, through catalogs, in computer software stores, toy stores, and business supply stores.¹¹⁶ Each point in these chains has the opportunity to, and often does, impose separate sets of terms and conditions that are passed on to the next step and ultimately to the consumer, in effect "shrinkwrapping" its contribution to the project as a whole.¹¹⁷ For example, if I order a personal computer from Dell Computer Corporation, I may receive a CPU, monitor, keyboard, mouse, speakers, and modem, together with pre-loaded and diskette or CD-ROM copies of operating system software and applications proprietary to Dell, to Microsoft, to firms supplying code to Microsoft, and to other third parties dealing directly with Dell. Along with my computer, I receive a stack of "license" cards, legends, notices, inserts in user's manuals, and wrappers emanating from each of these sources, formally made effective, according to their terms, by opening packages, breaking seals, and installing and using software.¹¹⁸

Software distribution via the Internet in effect digitizes each of the "analog" business models implicit in the foregoing summary and, as a result, "digitizes" use regulation by publishers. Bits and pieces of dif-

116. The preface to the current draft of Article 2B (the "Draft") of the UCC contains a useful primer on distribution methods for computer programs and other information products. See National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft).

117. See Gomulkiewicz & Williamson, *supra* note 28, at 346-50 (arguing that end-user license agreements offer cost and information benefits for consumers).

118. Not to mention the "web-wrap" agreement that governs my access to and use of the Dell website from which I ordered the computer in the first place. See *infra* notes 137-45 and accompanying text. The bundling of this software and hardware, of course, makes effective "rejection" of any particular shrinkwrap license extremely difficult as a practical matter.

ferent business strategies can be swiftly and relatively cheaply aggregated, disaggregated, and re-aggregated to respond to changing market conditions.¹¹⁹ While the paradigm license-card-in-a-box-of-software model still exists, so many other models have been developed that the shrinkwrap form is now as much metaphor as it is literal reality. For much computer software, the "license" exists not in paper form at all but as part of the "boot-up" process for the software¹²⁰ or as part of a script included with the installation instructions for the program, or both. Suppose, for example, that I download an executable program from a server connected to the Internet, or I merely purchase a program that comes on a floppy disk in a box. To install the program on my computer, I locate the file containing the executable code and click on it. Before the program will install itself on my computer, I must click on a screen icon that says "I Agree" and that refers me to a "ReadMe" file or otherwise to a dense set of "license" terms, which I may read if I so desire. Downloading the code in the first place may also require clicking on an "I Agree" icon.¹²¹ The terms "keywrap," "clickwrap," and "click-on" license have been coined from these various improvements on the original shrinkwrap concept. Officially, such licenses are often entitled "End User License Agreements"¹²² to distinguish them from master licenses between developers and OEMs and to mitigate the harsher aural implications of "shrinkwrap."

2. Beyond Software: Shrinkwrap Expanded

Shrinkwrap licenses for computer software typically include specific terms that support their proponents' attempts to re-characterize information norms.¹²³ Deployed more broadly, shrinkwrap may be simi-

119. Speaking of "publishers' interests" or a "publisher community" is thus even more of an overstatement than is commonly observed. Cf. Perritt, *Property and Innovation*, *supra* note 6, at 262 (arguing that law should not simply defer to the "owner's" wishes).

120. Each time I use my copy of WinZip, a popular file compression program, a screen pops up demanding that "I Agree" to a short list of license terms before I can access the program's functions. DOS-based programs often include an initial or "boot" screen that flashes on the screen for a moment, then automatically disappears, that states certain basic information thought necessary to preserve copyright, trade secret, and license rights.

121. Similar techniques are employed for other purposes. Qualcomm, which distributes its Eudora Pro and Eudora Lite electronic mail software across the Internet, has required prospective users and downloaders to obtain a download password by filling out an on-line questionnaire that verifies U.S. citizenship and the user's intention to use the software only domestically. Eudora is bundled with encryption software; the questionnaire is designed to satisfy Qualcomm's burden of demonstrating that it is taking adequate measures to comply with applicable federal export regulations.

122. See Gomulkiewicz & Williamson, *supra* note 28, at 336-37.

123. See *id.* at 340-41.

larly shifting the user's¹²⁴ conventional sense of "appropriate" use of all works of information more closely to the publisher's private expectations concerning that use. Increasingly, use-defining terms accompany information, access to information, and the creation of information without explicitly anticipating any individual acquiescence, beyond that assent inferred from the acquisition, use, or creation of the product or information itself. Resulting norms and conventions define the scope of disputes, and the resolution of such disputes defines, for all practical purposes, public and private expressions of "open space."¹²⁵ Use-defining shrinkwrap, through license and notice alike, is laying the groundwork not only for introducing new contract-based, use-controlling regimes, but for formalizing copyright policy doctrine, and convention that presumes that the copyright holder is entitled to control all use of the work, regardless of license or notice terms. If that happens, then what remains of "open space" disappears. The new dimensions of shrinkwrap include:¹²⁶

a. "Copyright management" systems, sometimes known as "trusted systems," and labeled by at least one scholar as systems of "automated rights management,"¹²⁷ which have been referred to as "the ultimate

124. As the discussion of shrinkwrap broadens here beyond computer software, I continue to employ this terminology for convenience, despite three linguistic connotations with which I am uncomfortable: first, that readers, listeners, viewers, etc. merely "use" the "thing" that publishers produce, in a narrow instrumental sense, second, that such "use" is regular or habitual, and third, that only one person may "use" a work at a given time.

125. *See infra* Part IV.A.

126. The following categorizes new shrinkwrap forms based on media and technology rather than on types of work or information. There may be profit in analyzing the frequency with which the new forms are attached to different species of information, by different types of actors. The examples below suggest, I think, that while differences in detail may be evolving, the idea of new shrinkwrap practice, of legal-ware, is rapidly becoming a universal phenomenon.

127. Bell, *supra* note 27, at 560 (describing "automated rights management"); *see* Cohen, *A Right to Read Anonymously*, *supra* note 28, at 983-89; Cohen, Lochner in *Cyberspace*, *supra* note 18 (manuscript at 11); Mark Stefik, *Shifting the Possible: How Trusted Systems and Digital Property Rights Challenge Us to Rethink Digital Publishing*, 12 Berkeley Tech. L.J. 137, 139-40 (1997); Mark Stefik, *Trusted Systems*, *Sci. Am.*, March 1997, at 78, 79. The broader term "copyright protection" appears in various legislative proposals to regulate the technology. *See infra* note 438 and accompanying text. As a counter to the benign characterization of these technologies as "trusted" systems, one might describe them as "copyright surveillance" or "copyright control" systems. The technologies vary, from codes attached to pieces of individual content that report their status and form a foundation for commercial transactions, *see, e.g.*, Merges, *End of Friction*, *supra* note 28, at 117 (describing how self-reporting content systems could lower costs associated with information exchanges); The International DOI Foundation, *The Digital Identifier (DOI) System* (last modified Sept. 22, 1998) <<http://www.doi.org>> (describing the Digital Object Identifier System), to "Things," object-oriented programming tools for the World Wide Web, *see* Parable, *ThingMaker* (visited Oct. 6, 1998) <<http://www.thingworld.com/hello/thingmaker1.html>>, to "cryptolopes," secure virtual containers to safeguard information, access to which can be metered, *see* IBM, *IBM Network Computing* (visited Oct. 2, 1998) <<http://www.software.ibm.com/security/cryptolope>>, and other implementations of encryp-

shrink-wrap,"¹²⁸ not only anticipate and often implement non-negotiable terms that the user must accept in connection with access to the information, but also may operate as invisibly and as automatically as the flow of electrons that constitute the digital information itself,¹²⁹ making and accepting offers, bargaining over terms, and asserting and enforcing rights to payment—all in accordance with instructions provided earlier and with learned behavior.¹³⁰ The substance that the technology protects is in a sense immaterial. Such systems are equally adept at managing distribution of and access to copyrighted works, such as computer programs, uncopyrightable works, such as unprotected databases, and unpatented processes and formulas, such as trade secrets.

"Trusted systems" raise difficult questions concerning the extent to which private regulation via technology ought to be constrained by public law,¹³¹ but the specter of such systems displacing "real-space" human behavior governed by legal rules may be overestimated. First,

tion algorithms, to proposals for network architectures that claim to facilitate client-to-client (human or automated) "bargaining" over access to and use of information. The American Bar Association has launched a "Software Agents Project" to study the legal ramifications of using "electronic agents" for business purposes. See Martin Röscheisen, *FIRM: A Network-Centric Design for Relationship-Based Rights Management* (1997) (Ph.D. dissertation, Stanford University), available at <<http://pcd.stanford.edu/rmr/thesis>>; Electronic Contracts Work Group, American Bar Association, *Software Agents and the Law* (visited Oct. 15, 1998) <<http://www.tiac.net/biz/danielg/agents>>. The concept also embraces such technologies as digital watermarking, see, e.g., Digimarc Corp., *It's What You Don't See That Counts* (visited Nov 30, 1998) <<http://www.digimarc.com/>> (discussing "Digimarc-enhanced" imaging, a computer "message," not visible to the naked eye, embedded in an image), and "streaming" of code and data, downloading bits of information across a network as they are used, which may incorporate encrypted data that is used to monitor re-use of the downloaded material, see Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 Berkeley Tech. L.J. (forthcoming 1998) (manuscript at 5 n.9, on file with author) [hereinafter, Cohen, *Self-Help*].

128. Perritt, *Property and Innovation*, *supra* note 6, at 292 n.121; see also Cohen, *A Right to Read Anonymously*, *supra* note 28, at 1002 (referring to copyright management systems as "standardized adhesion contracts in digital form").

129. In yet another sense, then, a system of protection designed in large part to promote human interaction and endeavor ends up in the service of virtual systems and beings. Cf. *Urantia Found. v. Maaherra*, 114 F.3d 955, 963-64 (9th Cir. 1997) (holding that a text derived from the thoughts received from celestial beings is entitled to copyright protection).

130. This species of software is known as "intelligent agents," or "Distributed Artificial Intelligences." See Curtis E.A. Karnow, *Liability for Distributed Artificial Intelligences*, 11 Berkeley Tech. L.J. 147, 152 (1996).

131. Compare Cohen, *Self-Help*, *supra* note 127 (manuscript at 43-52) (discussing the way the public/private distinction mediates the relationship between copyright and contract), and Cohen, *Lochner in Cyberspace*, *supra* note 18, at 86 (arguing that "private ordering necessarily presupposes a prior public commitment to recognizing and enforcing a particular distribution of entitlement"), with Bell, *supra* note 27, at 581-90 (arguing that trusted systems are consistent with the social welfare function assumed by copyright law) and Mark Gimbel, Note, *Some Thoughts on the Implications of Trusted Systems for Intellectual Property Law*, 50 Stan. L. Rev. 1671 (1998) (arguing in favor of trusted systems from a copyright perspective).

use of any of these technologies requires some "opt-in" by the user. To use IBM Cryptolope technology, I must download cryptolope software; to use Marimba's streaming software, I must download the Marimba "tuner"; before I can access the secure Cisco Systems "Cisco Connection" network of support services, I must be a Cisco Systems customer and register with the company.¹³² When I do so, I still encounter a text-based shrinkwrap form, a sort of meta-shrinkwrap, to be sure, but an opportunity to exercise a choice and for the legal system to examine and regulate human behavior rather than technology.¹³³ Second, as an empirical matter, the extent to which any substantial amount of information is available solely in digital form or via a digital computer network, access to which is mediated by a mandatory automated licensing system, is unclear. Networked storage of digital information has vastly reduced the cost of locating, retrieving, and accessing large quantities of information. Books and other information in physical form, however, continue to play an important role.¹³⁴ We may be headed toward a world of "open" and "closed" information systems.¹³⁵ That is not the same as a world of purely private information, or public information managed solely under privately dictated terms that lie beyond the reach of public law. Such a division does appear to preserve the continuing validity of examining, through public law, the extent to which information space should remain open.¹³⁶

132. See Cisco, *Cisco CCO Non-Disclosure Agreement* (visited Sept. 25, 1998) <<http://www.cisco.com/public/docs/nda.html>>.

133. The extent to which this will continue to be true is technologically driven. As such systems are embedded in other products and electronic services, the opportunity functionally to opt-in or opt-out of the monitoring technology may be reduced or even disappear. See also Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (forbidding tampering with copy protection technologies); *infra* note 438 (discussing the Act).

134. See Geoffrey Nunberg, *The Places of Books in the Age of Electronic Reproduction*, Representations, Spring 1993, at 13, 13-16.

135. See Lessig, *Zones of Cyberspace*, *supra* note 79, at 1407-11 (describing the potential for, and pitfalls of, cyberspace zoning); O'Rourke, *Fencing Cyberspace*, *supra* note 51, at 701-04 (anticipating the use of "fencing" technologies in cyberspace); Perritt, *Property and Innovation*, *supra* note 6, at 323-24 (noting possible differences in protection of intellectual property in open and closed systems). So far, at least, there seems to be a significant public component to the types of information that lies largely (at least potentially) within a more or less technologically "closed" sphere. Perhaps the largest closed networks in existence at present, the WESTLAW and Lexis-Nexis information databases, consist almost entirely of information that is either published elsewhere or that lie, as a matter of law, in the public domain. Both, moreover, continue to move away from the pure closed, proprietary network architecture that characterized each of them initially and toward more open, Internet-based platforms where text-based shrinkwrap continues to play an important role. See Reed Elsevier Inc., *Lexis-Nexis* (visited Oct. 2, 1998) <<http://www.lexis-nexis.com>>; West Group, *Westlaw.com* (visited Sept. 24, 1998) <<http://www.westlaw.com>>.

136. One might legitimately question whether this argument adequately responds to private restraints on the distribution of and access to scientific research. See Reichman & Samuelson, *supra* note 8, at 152-55 (arguing for special attention to ac-

b. "Web-wrap" or "net-wrap" notices and agreements consist of sets of terms and conditions posted on sites on the World Wide Web that purport to govern use of information found within the site and the conduct of visitors. Under some circumstances, the web-wrap is designed by analogy to "key-wrap" or "click-wrap" agreements. Before proceeding further into the site, the user is prompted to view a screen of terms and must click "I Agree."¹³⁷ For other sites, the web-wrap looks and acts more like a copyright notice for a book. Through a page of text that is accessible through a link or notice located somewhere on the site's home page (but that usually is not available in full on the home page itself), visitors to the site are deemed,¹³⁸ by virtue of entering the site or remaining on it, to have consented to whatever terms the site owner posts.

Specific terms vary in their definitions of appropriate use of websites or information such sites contain. Law firms may disclaim any intention to form an attorney-client or other confidential relationship.¹³⁹ Commercial and non-commercial sites use their web-wrap

cess of scientific and educational information in an intellectual property regime concerning the legal protection of databases). With respect to published research, this objection falls within the scope of the shrinkwrap problem as this Article as a whole considers it. With respect to unpublished research, the primary issue seems not to be private institutional restrictions on public use of research results, but instead the circumstances under which such data ought to be the subject of commercial exploitation.

137. This is perhaps most common for websites with "adult" content and is largely both a legacy of the Communications Decency Act, which, prior to its being substantially invalidated by the Supreme Court, *see Reno v. ACLU*, 117 S. Ct. 2329, 2348 (1997), provided a defense to operators of "indecent" and "obscene" websites based on good faith efforts to limit access to their sites by minors, and a practice that anticipates further attempts to regulate the Internet based on the extent to which it makes sexually explicit material available to children.

138. To "deem" is "to treat [a thing] as being something that it is not, or as possessing certain qualities that it does not possess." Bryan A. Garner, *A Dictionary of Modern Legal Usage* 254 (2d ed. 1995). *But see Hotmail Corp. v. Van\$ Money Pie Inc.*, 47 U.S.P.Q.2d (BNA) 1020, 1025 (N.D. Cal. 1998) (noting the probable validity of a breach of contract claim based on a "click-wrap" agreement).

139. *See, e.g., Debevoise & Plimpton, The Law Firm of Debevoise & Plimpton* (visited Sept. 24, 1998) <<http://www.debevoise.com>> ("The information provided to you at this site does not create an attorney-client relationship with D&P, nor does it substitute for the provision of legal advice."). Perhaps it should not be a surprise that examples drawn from law firms offer a blend of ambiguous drafting and preoccupation with the commercial dimensions of law practice. The Debevoise & Plimpton website further states: "End users may view and use the contents of this site for personal uses only. All other uses are prohibited." *Id.* Morrison & Foerster provides its World Wide Web site "for informational purposes only." Morrison & Foerster LLP, *Morrison & Foerster* (visited Sept. 24, 1997) <<http://www.mof.com/mof/home/copyright.html>>. Others take a less restrictive approach. Dorsey & Whitney "encourages you to copy documents and information published on its home page for your usage, provided that the above copyright notice and any other proprietary notices, including this permission notice, appear. All other rights reserved." Dorsey & Whitney LLP, *Dorsey & Whitney* (visited Feb. 11, 1998) <<http://www.dorseylaw.com/copy.html>>. Morrison & Foerster, however, "disclaims any implied warranties, including warranties of merchantability and fitness for a particular purpose." Morrison & Foerster, *supra*. Wilson Sonsini Goodrich & Rosati states: "This web site is not intended to be

terms to limit commercial use or other re-use of both factual, that is, non-copyrightable, and arguably "creative" or "expressive," that is, copyrightable, material posted on the sites.¹⁴⁰ Ticketmaster, for example, which has been embroiled in a dispute with Microsoft over Microsoft's attempts to maintain a "hyperlink" between a Microsoft-owned website containing entertainment information and Ticketmaster's ticket-selling site, now posts a web-wrap notice that, among other things, restricts visitors to the Ticketmaster site from maintaining such links.¹⁴¹ Strict limits on commercial re-use in particular are

advertising and Wilson Sonsini Goodrich & Rosati does not wish to represent anyone desiring representation based upon viewing this website in a state where this website fails to comply with all laws and ethical rules of that state." Wilson Sonsini Goodrich & Rosati, *About the Firm* (visited Oct. 2, 1998) <<http://www.wsgr.com/disclaim.htm>>.

140. See, e.g., Amazon.com, Inc., *Amazon.com* (visited Sept. 24, 1998) <<http://www.amazon.com/exec/obidos/subst/misc/copyright.html>> (on-line bookseller) ("Permission is granted to electronically copy and to print in hard copy portions of this Web site for the sole purpose of placing an order with Amazon.com or using this Web site as a shopping resource."); Cable News Network, Inc., *CNN Interactive Service Agreement* (visited Oct. 2, 1998) <http://www.cnn.com/interactive_legal.html> ("CNN owns a copyright in the selection, coordination, arrangement and enhancement of such content, as well as in the content original to it. . . . Subscriber may download copyrighted material for Subscriber's personal use only."); Consumers Union of U.S., Inc., *Consumer Reports Online* (visited Oct. 2, 1998) <<http://www.consumer-reports.org/visnot.html>> ("This site is available only for your personal, noncommercial use."). Consider, as well, this shrinkwrap:

All content on this Service is copyrighted as a collective work of [ZiffDavis] pursuant to applicable copyright law. . . . Users of the Service may use the Content only for their personal, noncommercial use.

You may not modify, publish, transmit, transfer or sell, reproduce, create derivative works from, distribute, perform, display, or in any way exploit any of the Content, in whole or in part, except as expressly permitted in the Agreement.

ZDNet, *Chumbocom* (visited Oct. 2, 1998) <<http://www.zdnet.com/findit/terms.html>> (Internet services and software distributor).

141. See Ticketmaster Corporation, *Ticketmaster Online* (visited Sept. 24, 1998) <<http://www.ticketmaster.com>> ("Use of this site is subject to express terms and conditions. By continuing past this page, you expressly agree to be bound by those terms and conditions."); see also *Ticketmaster Corp. v. Microsoft Corp.*, No. 97-3055 DDP (C.D. Cal. filed May 9, 1997) (alleging that Microsoft has established unauthorized links to Ticketmaster's Web page); O'Rourke, *Drawing the Boundary*, *supra* note 53, at 634-37 (describing the Ticketmaster/Microsoft litigation); Ticketmaster Corporation, *Ticketmaster Online Terms and Conditions* (visited Sept. 24, 1998) <<http://www.ticketmaster.com/terms2.html>> (stating Ticketmaster's acceptable use agreement). A similar case was brought by the owners of ExpertPages.com. See *Advice & Counsel*, *Expert Pages* (last modified September 24, 1998) <<http://expertpages.com/anti-webpiracy/buckalew.htm>> ("By accessing Expert Pages for Free, visitor confirms that his/her use is for purposes of retaining an expert or evaluating this site and agrees that s/he will not use any information on this site for marketing or solicitation."); see also *Expert Pages v. Buckalew*, No. C-96-2109-VRW, 1997 WL 488011, at *5 (N.D. Cal. Aug. 6, 1997) (dismissing a complaint against a competing website owner who copied material from Expert Pages for lack of personal jurisdiction). Not all web-wrap notices are so formal. See, e.g., CBS Worldwide Inc., *Copyright: The Golden Rules of the CBS Site* (visited Nov. 30, 1998) <<http://www.cbs.com/prd1/now/copyright.copy1>> ("Here's the scoop . . . straight from the home office in New York, New York!!!"). In another location, CBS changes its tone, but not its tune. See CBS

often associated with websites that provide data or information that is primarily factual and thus likely benefits from little or no copyright protection.¹⁴² Websites that more clearly contain significant amounts of copyrightable material may often contain equally or more restrictive legends concerning their use. *Salon Magazine*, an on-line magazine, confines its notice to the simple statement that “[r]eproduction of material from any Salon pages without written permission is strictly prohibited.”¹⁴³ Disney posts a particularly onerous set of terms, which includes the proviso that

No material from DISNEY.COM or any Web site owned, operated, licensed, or controlled by DISNEY may be copied, reproduced, republished, uploaded, posted, transmitted, or distributed in any way, except that you may download one copy of the materials on any single computer for your personal, non-commercial home use only

Worldwide Inc., *Copyright* (visited Nov. 30, 1998) <<http://www.cbs.com/prd1/now/copyright.copy2>> (“[Y]our access and use of the Site is subject to the following terms and conditions . . . and all applicable laws. By accessing and browsing the Site, you accept, without limitation or qualification, the Terms and Conditions.”).

142. See, e.g., Reed Elsevier Inc., *Martindale-Hubbell Terms & Conditions* (visited Oct. 2, 1998) <<http://www.martindale.com/site/terms.html>> (regarding its list of attorneys).

[A] nonexclusive, nontransferable, limited license to view, reproduce, print, and distribute insignificant portions of materials retrieved from this Site [is granted] provided (a) it is used only for informational, non-commercial purposes. . . . Except as expressly provided above, no part of this Site, including but not limited to materials retrieved therefrom and the underlying code, may be reproduced, republished, copied, transmitted, or distributed in any form or by any means. In no event shall materials from this Site be stored in any information storage and retrieval system without prior written permission from Martindale-Hubbell.

Id.; see Dell Computer Corporation, *Dell Products* (visited Sept. 24, 1998) <<http://www.dell.com/dell/legal/disclosure.htm>> (manufacturer of computer equipment); Fisher Scientific Company, *Fisher Scientific-Legal Notices* (visited Oct. 2, 1998) <<http://www.fisher1.com/notice.html>> (catalog of scientific instruments) (“These materials are provided by Fisher Scientific as a service to the public and are to be used for personal informational purposes only. Reproduction without the express written permission of Fisher Scientific is strictly prohibited.”). Dell specifically states:

Except as stated herein, none of the material may be copied, reproduced, distributed, republished, downloaded, displayed, posted or transmitted in any form or by any means, including, but not limited to, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Dell or the copyright owner. Permission is granted to display, copy, distribute and download the materials on this Site for personal, non-commercial use only provided you do not modify the materials

Dell Computer Corporation, *supra*.

143. Salon Internet Inc., *Salon Magazine* (visited Sept. 24, 1998) <<http://www.salonmagazine.com>>. Compare this with Salon’s rival, Slate, owned by Microsoft. Slate’s copyright notice links to the all-purpose license agreement applicable to material on all Microsoft servers, including those which supply copies of Microsoft program code. See Microsoft Corporation, *Microsoft Information on Terms of Use* (visited Mar. 13, 1998) <<http://www.microsoft.com/MISC/COPY-RIGHT.HTM>>; Slate, *Slate-BoilerSlate* (visited Sept. 24, 1998) <<http://www.slate.com/Services/BoilerSlate/BoilerSlate.asp>>.

. . . . For purposes of these terms, the use of any such material on any other Web site or networked computer environment is prohibited.¹⁴⁴

In addition, website owners, whether protecting expressive or factual information, may try to create “rights” in their information that exist neither under the Copyright Act nor at common law. *The San Jose Mercury News*, the leading daily newspaper in the Silicon Valley, posts a notice on the home page of its website stating: “The information you receive online from Mercury Center is protected by the copyright laws of the United States. The copyright laws prohibit any copying, redistributing, re-transmitting, or re-purposing of any copyright-protected material.”¹⁴⁵

c. Books and other printed works, the most traditional of copyrighted works, are increasingly accompanied by copyright notices that not merely state the identity of the copyright owner but that purport to restrict unauthorized re-use of the copyrighted material.¹⁴⁶ Consider the following representative language, found in a recent casebook on intellectual property law: “No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from

144. Disney, *Terms and Conditions of Use* (last modified Feb. 20, 1998) <http://www.disney.com/Legal/conditions_of_use.html>.

145. San Jose Mercury News, *Mercury Center* (visited Sept. 24, 1998) <<http://www.sjmercury.com/>>. The print version of the newspaper does not carry a similar notice.

146. A restrictive notice has an advantage over a purported license in that it is intended to apply against all possessors of the work, not merely against those to whom the work is transferred. Digital shrinkwrap is supposed to operate the same way. If a computer program contains a pop-up license screen that requires acknowledgment before the program will proceed, anyone who uses that program and acknowledges the screen is, in theory, bound to the license. Traditional distinctions in copyright doctrine between (nonbinding) notices and (binding) licenses, see *Bobbs-Merrill Co. v. Straus*, 210 U.S. 339, 350 (1908), likely still have doctrinal vitality. In *Bobbs-Merrill*, a publisher inserted a notice in a book that any retail sale of the book at a price less than one dollar constituted copyright infringement. See *id.* at 341. The Supreme Court held that the notice was unenforceable; the initial sale of each volume of the book exhausted the publisher’s rights in that volume and barred the publisher from enforcing any post-sale restrictions. See *id.* at 350-51. The Court thus established the first sale doctrine, distinguishing this case from one involving a license, involving covenants to which the acquirer would assent. See *supra* note 45 and accompanying text (noting the continued vitality of the “first sale” doctrine). The prevalence and terms of shrinkwrap notices as well as licenses suggest that those distinctions are eroding in practice. Under *ProCD*, such erosion may increasingly be reflected in doctrine. This concern may not be new, see Leon R. Yankwich, *What is Fair Use?*, 22 U. Chi. L. Rev. 203, 203 (1954) (suspecting that restrictive copyright notices cause writers to be “cowed into the belief that a reasonable use of copyrighted materials of others . . . is not safe without permission from the owners of the copyright . . .”), but it is undoubtedly much more substantial now than ever.

the publisher.”¹⁴⁷ Similar restrictions are likely to become increasingly common and prominent, with musical and pre-recorded visual

147. Robert P. Merges et al., *Intellectual Property in the New Technological Age* at iv (1997). Restrictive legends hold powerful sway over all authors, including those such as Professors Lemley and Merges, two of the authors of this casebook, who have written thoughtfully and at length about the problems that shrinkwrap licenses pose for copyright law. As with the web-wraps cited above, the intended or anticipated audience for the work plays some part in calculating the type of notice to use. From another casebook, *Cyberlaw*:

This work may not be translated or copied in whole or in part without the written permission of the publisher . . . except for brief excerpts in connection with reviews or scholarly analysis. Use in connection with any form of information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed is forbidden.

Jonathan Rosenoer, *Cyberlaw: The Law of the Internet* at iv (1996). Like an increasing number of law reviews, the law review of the University of Wisconsin includes the following notice on its title page:

Wisconsin Law Review articles in which the University of Wisconsin holds copyright may be duplicated for classroom use, provided that (1) each copy is distributed at or below cost, (2) the author and the Wisconsin Law Review are identified, (3) proper notice of copyright is affixed to each copy, and (4) the Wisconsin Law Review is promptly notified of the use.

1997 Wis. L. Rev. 865 (title page of the issue). Works of literature posted in digital format may call for an intermediate form of notice: “Texts may be printed out or saved for teaching or research, providing that the rights of original copyright holders are not infringed. Such copyrights are clearly identified in the database.” Chadwyck-Healey Ltd., *Literature Online, Terms and Conditions* (visited Sept. 29, 1998) <<http://lion.chadwyck.com/frames/html/copyrite.htm>>. Evolving norms for books are typified by copyright notices for three books written by Professor Edward Tufte of Yale University. The first two, Edward R. Tufte, *The Visual Display of Quantitative Information* (1983) and Edward R. Tufte, *Envisioning Information* (1990), originally bore “standard” copyright notices. The third, Edward R. Tufte, *Visual Explanations* (1997), bore a new notice:

This work may not be copied, reproduced, or translated in whole or in part without written permission of the publisher, except for brief excerpts in connection with reviews or scholarly analysis. Use with any form of information storage and retrieval, electronic adaptation or whatever, computer software, or by similar or dissimilar methods now known or developed in the future is also strictly forbidden without the written permission of the publisher.

Id. Compare, as well, notices in different editions of Douglas Adams’s science fiction. The following is from the original *Hitchhiker’s Guide to the Galaxy* (1979): “All rights reserved, including the right to reproduce this book or portions thereof in any form whatsoever.” From *Six Stories by Douglas Adams: The Ultimate Hitchhiker’s Guide* (1996) (collecting and reprinting the entire series): “No part of this book may be reproduced or transmitted in any form or by any means electronic or mechanical including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.” In both cases, the change seems clearly to respond to, and to discourage, the likelihood that the text would be scanned onto computers.

recordings,¹⁴⁸ which, like books, have traditionally been distributed publicly through sales rather than licenses.¹⁴⁹

The absence of privity has in principle presented book publishers with the same problem faced by computer software developers. The relatively clear distinctions in technology and resulting norms of books were confirmed in different license and notice practices of software publishers and book publishers. The uses of digital technology are changing the print environment in at least two ways. First, the possibility that printed works will be cheaply converted to digital form without the consent of the copyright holder means that free riding and piracy costs for print publishers approach those faced by software publishers. Second, in a different sense, the print community is welcoming digital technology. Authors, particularly novelists, increasingly sell books not just to print publishers but simultaneously to movie producers and computer game developers, exploiting digital markets for their works as part of the initial exchange of intellectual property rights. Magazines and newspapers publish digital archives of back issues on the World Wide Web, often charging for access to the back issues, but not for access to recent versions. For most printed works, at present, existing distribution processes limit the publisher's ability to refine a contractual mechanism as primitive as a shrinkwrap

148. Digital technology is changing the prior conditions that made restrictive notices or licenses unnecessary. See Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 Harv. L. Rev. 281, 299-300 (1970) [hereinafter Breyer, *Uneasy Case for Copyright*] (noting that lead-time advantages and strategic pricing may give the publisher adequate incentive to introduce new works).

149. Cassette decks raised the specter of large scale piracy of pre-recorded music long before digital technology appeared, leading to prompt statutory regulation of digital recording technology itself. See 17 U.S.C. §§ 1001-1010 (1994). So while notices of use limitations on digital music media may be lagging behind, rather than ahead of, the threat of piracy in the digital environment, producers may be recovering their investments, and profiting, via statutory royalties. The Rolling Stones's 1997 *Bridges to Babylon* compact disc, for example, notes in very small print: "Unauthorized reproduction of this recording is prohibited by Federal law and subject [sic] to criminal prosecution." The Rolling Stones, *Bridges to Babylon* (Virgin Records America, Inc. 1997) (back cover of the CD cover). The notice is visible but readable (though only with a magnifying glass) through the exterior clear packaging of the product. Similar notices are sometimes printed on the compact disk itself. The increasing availability of recorded music via the World Wide Web, however, has produced web-wrap notices comparable to those quoted above. This is, in short, shrinkwrap radio. See, e.g., broadcast.com inc., *Broadcast.Com Terms and Conditions* (visited Sept. 29, 1998) <<http://www.broadcast.com/about/terms.html>> (providing "streamed" radio broadcasts and claiming that "[m]aterial from the Site or any Web site owned, operated, licensed, or controlled by broadcast.com may not be copied, reproduced, republished, uploaded, posted, transmitted, or distributed in any way"). Shrinkwrap television may not be far behind. The technologies of digital, pay-per-view, and other forms of both broadcast and cable television could easily be adapted to support shrinkwrap use regulation. As the FCC considers regulation of technical standards for digital set-top boxes, copy protection—shrinkwrap television—is on its agenda. See Carriage of Transmissions of the Digital Television Broadcast Stations, 13 F.C.C.R. 15092 (1998).

license. The restrictive notice, however, is no less effective than software shrinkwrap in conveying the message that use prerogatives concerning this information remain with the publisher.¹⁵⁰ The intended impact on conventions of information use is clear. The publisher is no longer merely declaring its rights (the right not to have the book scanned onto a network server, or the right to adapt the novel as a computer game). Instead, it is attempting to enlist the user or reader in an involuntary bargain¹⁵¹ to protect those rights. With the spread of digital technology and the extension of shrinkwrap that emerged with original digital content, computer software, books, music, and films¹⁵² are in effect being “licensed” to users¹⁵³ through shrinkwrap.

150. *The Economist*, for example, includes the following legend on the Table of Contents page of its printed version: “No reproduction is permitted in whole or part without the express consent of The Economist Newspaper Limited.” *The Economist*, Sept. 19-25, 1998, at 7, 7. The electronic edition of the magazine includes the following notice:

Unless otherwise stated, the copyright and similar rights in all material published on the Site are owned by The Economist or its licensors. You are permitted to print or download extracts from this material for your personal use only. None of this material may be used for any commercial or public use. No part of the Site or any material appearing on the Site may be reproduced on, stored in or transmitted to any other web site. No material appearing on the Site may be disseminated in any form, either electronic or non-electronic, nor included in any retrieval system or service without the prior written permission of The Economist and the payment of a specified fee.

The Economist Newspaper Limited, *The Economist* (visited Oct. 8, 1998) <<http://www.economist.com>>. Other publishers use the opposite model. The most recent edition is available only to subscribers; back issues are available for free.

151. Not a legal bargain, but a bargain concerning the scope of the convention concerning acceptable use.

152. Pre-recorded videotapes typically bear a notice that the film is “licensed for home [or personal] use/exhibition only.” *But see* Robert A. Rosenbloum, *The Rental Rights Directive: A Step in the Right and Wrong Directions*, 15 Loy. L.A. Ent. L.J. 547, 567 n.108 (1995) (describing and quoting the 1983 congressional testimony of Walt Disney Attorney Peter Nolan to the effect that “shrinkwrapping” videotapes is not feasible); *see also infra* notes 204-09 and accompanying text (discussing how conventions of protection change over time with use and re-use).

153. The more elaborate and custom-written the notice, the more it may feel like a “legitimate,” “legal,” or “negotiated” license. The author draws the reader into the fiction of a unique, one-to-one relationship. Consider the following:

No part of this book may be reproduced, replicated, reiterated, duplicated, conduplicated, retyped, transcribed by hand (manuscript or cursive), read aloud and recorded on audio tape, platter, or disk, lipsynched, stored in a retrieval system, or transmitted in any form or by any means, including genetic, chemical, mechanical, optical, xerographic, holographic, electronic, stereophonic, ceramic, acrylic, or telepathic (except for that copying permitted by Sections 107 and 108 of U.S. Copyright Law and except by reviewers for the public press who promise to read the book painstakingly all the way through before writing their reviews) without prior written permission from the Publisher.

Hillel Schwartz, *The Culture of the Copy: Striking Likenesses, Unreasonable Facsimiles* 4 (1996). This is amusing, particularly given the subject matter of the book—the

d. Database access, information service, and interactive World Wide Web service agreements make shrinkwrap applicable to compilations of fact and to expression generated, not by the publishers providing the information or services, but by the users themselves. Combining these categories illustrates how shrinkwrap is being used to establish private definitions and conventions of appropriate use regarding the input and output of the material covered so far. Access to a compilation of fact was the context of *ProCD*. In that case, the plaintiff had created a compilation of telephone numbers and distributed it on a CD-ROM accompanied by a notice that appeared on the user's screen that, in part, prohibited noncommercial use of this data.¹⁵⁴ West's WESTMATE software, which a researcher must use to access the WESTLAW database (largely a compilation of fact),¹⁵⁵ comes in a shrinkwrap package that contains a "no reverse engineering" restriction.¹⁵⁶ The WESTLAW database itself, moreover, contains the following restriction: "No part of a WESTLAW transmission may be copied, downloaded, stored in a retrieval system, further transmitted or otherwise reproduced, stored, disseminated, transferred or used, in any form or by any means, except as permitted in the WESTLAW Subscriber Agreement or with West's prior written agreement."¹⁵⁷ Note that this language acts and reads like a copyright notice for a book more than it operates like a shrinkwrap form for

cultural meaning of "twins" of various types. When all is said and done, Schwartz's reader still literally has "fair use" rights, even under this notice. But is that the understanding that this text is intended to generate?

154. See *supra* notes 82-93 and accompanying text.

155. The scope of West's proprietary interest in the public materials that it makes available is the subject of much litigation and legislative attention. Most recently, a panel of the Second Circuit held that West's copyright in its compilations of reported decisions did not extend beyond the arrangement, indices, headnotes, and selection of cases, that is, the information created or contributed by West. See *Matthew Bender & Co. v. West Publ'g Co.*, 158 F.3d 693 (2d Cir. 1998); *Matthew Bender & Co. v. West Publ'g Co.*, 158 F.3d 674 (2d Cir. 1998).

156. See West Publishing Corp., WESTLAW Software License Agreement (1997) (on file with author) ("User may not loan, lease, distribute or transfer the Software or copies thereof to third parties, nor reverse engineer or otherwise attempt to discern the source code of the Software.").

157. See West Publishing Corp., Westmate 6.1 Copyright Notice (1996) (on file with author). The Subscriber Agreement does, however, expressly allow "fair use" under the Copyright Act, but one must observe not only what the service says, but what it does: the shrinkwrap "contractual" use restriction is coupled with the mandate that the WESTLAW subscriber access the database via the WESTMATE software, the use of which is limited to possessors of passwords. Thus, both code and contract act as gatekeepers for material that, at most, has limited proprietary content and that, much of the time, consists of public domain information. In *ProCD*, ProCD similarly tried to protect its nonproprietary database of telephone numbers by bundling it with a proprietary computer program that was used to access the database. See *supra* notes 82-93 and accompanying text. The data, however, were formatted in a way that producing a different, but also effective, computer program to search the data was relatively uncomplicated. See *supra* notes 82-93 and accompanying text.

software.¹⁵⁸ To control the risk of piracy, WESTLAW instead relies on its technology. Apart from questions of enforceability, the notice is a marker that signals the reader that WESTLAW has defined and maintains control over use of the information.¹⁵⁹

For intermediaries and access providers, who control the means of accessing data but do not create data themselves, shrinkwrap works in reverse. Control over information or data use lies not in the hands of the author and creator, but in the hands of the service provider. Thus, for example, Erol's, an Internet Service Provider, includes the following in its "Internet Access Agreement":

You agree that by posting or transmitting Content to any public area (such as public chat rooms, message boards, newsgroups, web-space or software libraries) you are requesting Erol's to make that material available to other Internet users and that such access will result in copies of your Content being transmitted to others. In order to permit Erol's to publish your Content, you automatically grant, or represent that the owner of any such Content has expressly authorized you to grant, Erol's a royalty-free, perpetual, irrevocable, non-exclusive right and license to reproduce, publish, distribute, perform and display such Content (in whole or in part) worldwide to service your request.¹⁶⁰

158. There may be, in other words, no requirement (as there was in *ProCD*) that the user of a factual database acknowledge the restricted rights or expanded obligation. Advances in mechanisms of technological monitoring of information use may moot the need for the second layer of legal form. The "open space" implications of this development thus overlap with rather than only lead to arguments over the degree to which the law should intervene to cure "market failure" that arguably impedes investment in the creation of valuable databases. Compare Reichman & Samuelson, *supra* note 8, at 137-62 (proposing a market protective legal regime for databases), with Laura D'Andrea Tyson & Edward F. Sherry, *Statutory Protection for Databases: Economic & Public Policy Issues* (visited Sept. 25, 1998) <<http://www.infoindustry.org/ppgrc/doclib/grdoc015.htm>> (arguing in favor of database protection legislation). In 1998, the House of Representatives considered a version of the "Digital Millennium Copyright Act" that would, among other things, forbid extracting or using "in commerce, all or a substantial part . . . of a collection of information gathered . . . through the investment of substantial monetary or other resources, so as to cause harm to the actual or potential market . . . for a product or service that incorporates that collection of information . . ." H.R. 2281, § 1302, 105th Cong. (1998). The Senate's version of this legislation did not include this protection for factual databases, see S. 2037, 105th Cong. (1998), and it was omitted from the bill signed by President Clinton, see Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

159. The notice, of course, serves a practical protective note vis-à-vis a particular "user" as well as this more abstract function.

160. Erol's Internet, *Erol's Internet Access Agreement* (visited Nov. 19, 1997) <<http://www.erols.com/erols/index/agreement.htm>>; see Netcom On-Line Communications Services, Inc., *NETCOM On-Line Communication Services, Inc. Terms and Conditions for Netcom Services* (last modified Apr. 1, 1998) <<http://www.netcom.com/netcom/terms.html>> (reserving Netcom's right to access and disclose information, including "personal electronic communication passing through its network and any other information it deems necessary or appropriate").

Instead of accepting a license by using the software, here a user of the service involuntarily grants a license. Because the default is public distribution, one might argue that this outcome is better than that produced by “traditional” shrinkwrap. It is the same. Private parties declare the scope of the public interest in the information. They assume the privilege that was historically reserved to public institutions to articulate what is “public,” that is, free of control, and what is “private.”¹⁶¹ The form endorses and promotes the convention that it is appropriate to document and define all permitted uses of the material.¹⁶²

Interactive services, the third of the three examples listed above, make this concern even clearer. An increasing number of websites allow or encourage visitors to post messages or files of various types as part of the business conducted through the website or as a means of encouraging discussion among visitors mediated by the site. Such sites often post “conditions” of use that either require the poster to warrant that if copyright interests are at stake, then the poster has obtained express consent from relevant copyright owners for the material to be posted, or appropriate the poster’s proprietary interest in the posting itself. ESPN’s SportsZone site, for example, which includes “chat”

161. The role of public institutions has been not merely to declare *a priori* what should be reserved as “public,” but also to confirm social understandings of “public” use. See Rose, *Comedy*, *supra* note 21, at 774-81 (arguing that law responds to evolving norms of “commerce” and “socializing behavior” in determining definitions of “inherently public property”).

162. Efforts by database providers to maximize control over the terms of access to data are linked to efforts by access providers to distance themselves from data. The terms of the ISP agreement likely respond to *Religious Technology Center v. Netcom On-Line Communication Services, Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995), in which the court held that an ISP would not be liable for hosting material that possibly infringed copyrights owned by a third party, absent notice of possible infringement. See *id.* at 1374. The Digital Millennium Copyright Act in effect codifies the *Netcom* ruling. See *supra* note 158.

One traditional method of severing this connection, and preserving “the public domain,” has been to assert a privilege for the reverse engineering of computer software that acts as a gatekeeper as a means of preserving public access to unprotectable information. Whether reverse engineering of computer software object code is “fair use” of the code is a question answered generally in the affirmative. See, e.g., *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1527-28 (9th Cir. 1992) (finding that the disassembly of programs is a fair use of a copyrighted work when it is the only way “to gain access to the ideas and functional elements embodied in a copyrighted computer program” and there is a legitimate need for access); *Atari Games Corp. v. Nintendo of America, Inc.*, 975 F.2d 832, 843 (Fed. Cir. 1992) (holding that “reverse engineering object code to discern the unprotectable ideas in a computer program is fair use” (citation omitted)). Reverse engineering of computer code is, however, an expensive, time-consuming, and difficult means of creating competitive and compatible software programs. See Andrew Johnson-Laird, *Software Reverse Engineering in the Real World*, 19 U. Dayton L. Rev. 843, 843 (1994). As a practical matter, preserving the ability to reverse engineer may not be enough to secure a viable “open space.” The defendant in *ProCD* was able to access ProCD’s data even without reverse engineering ProCD’s program. See *supra* notes 82-93 and accompanying text.

areas for visitor discussions, posts “Terms of Service” that state, among other things,

Copyrighted material, including without limitation text, photographs, sound, video and music, may not be placed on the Service without the express permission of the author or owner of the copyright of the material. Customer acknowledges that only the owner or someone authorized by the owner to post the material may do so.¹⁶³

Disney posts this daunting statement:

If . . . despite our request that you not send us any . . . creative materials, you send us creative suggestions, ideas, notes, drawings, concepts, or other information (collectively, the “Submissions”), the Submissions shall be deemed, and shall remain, the property of DISNEY. None of the Submissions shall be subject to any obligation of confidence on the part of DISNEY, and DISNEY shall not be liable for any use or disclosure of any Submissions. Without limitation of the foregoing, DISNEY shall exclusively own all now known or hereafter existing rights to the Submissions of every kind and nature throughout the universe and shall be entitled to unrestricted use of the Submissions for any purpose whatsoever, commercial or otherwise, without compensation to the provider of the Submissions.¹⁶⁴

NBC television is equally explicit:

By posting messages, uploading files, inputting data, or engaging in any other form of communication (a “Communication”) through this service, you are granting NBC a royalty free, perpetual, non-exclusive, unrestricted, worldwide license to:

1. Use, copy, sublicense, adapt, transmit, publicly perform or display any such Communication; and
2. Sublicense to third parties the unrestricted right to exercise any of the foregoing rights granted with respect to the Communication.

The foregoing grants shall include the right to exploit any proprietary rights in such Communication, including but not limited to rights under copyright, trademark, servicemark, or patent laws under any relevant jurisdiction.¹⁶⁵

163. ESPN/Starwave Partners d/b/a ESPN Internet Ventures, *Starwave Terms of Service Agreement* (last modified Jan. 12, 1998) <<http://ESPN.SportsZone.com/sitertools/terms.html>>; see also Microsoft Corporation, *Microsoft® Expedia® WebSite Terms, Conditions, and Notices* (visited Nov. 30, 1998) <<http://expedia.msn.com/daily/home/legal.htm>> (posting, by an Internet travel agency, a similar statement).

164. Disney, *Terms and Conditions of Use* (visited Nov. 30, 1998) <http://www.disney.com/Legal/conditions_of_use.html>. These terms seem to far exceed those necessary to defeat a claim concerning misappropriation or an implied contract to pay for the poster’s ideas. See *Grubb v. NFL Properties, Inc.*, 901 F. Supp. 36 (D. Mass. 1995), *aff’d*, 88 F.3d 1 (1st Cir. 1996); *Vantage Point, Inc. v. Parker Bros.*, 529 F. Supp. 1204 (E.D.N.Y. 1981), *aff’d*, 697 F.2d 301 (2d Cir. 1982).

165. National Broadcasting Company, *NBC Terms of Use Agreement* (visited Mar. 13, 1998) <<http://www.nbc.com/nbc/disclaimer.nbc>>.

Until recently, individual readers and writers have had little reason to suspect that publishers of existing works would be watching (literally or figuratively) to limit the re-use of small amounts of material in new works. At worst, intermediaries (libraries, research centers, photocopiers) were subject to increased monitoring. Those intermediaries did their best to shift the risks of copyright compliance to the individual.¹⁶⁶ Absent digitization of expression on a wide scale, however, there remained more than a little room for uncontrolled, unmonitored re-use. Digital technology heralds not a demise of these intermediaries,¹⁶⁷ but changes of their form and function and corresponding changes to how copyright operates on the "user." Monitoring technology—software and hardware—potentially decreases the amount of uncontrolled use. Conceptual intermediaries—legalware—figuratively monitor that which the technology does not literally monitor. Even where the intended result of the legal form is wide distribution of the information or product, the use of shrinkwrap declares that private use control, rather than publicly determined norms of distribution and use, is the norm against which any particular use or claim of infringement is measured.¹⁶⁸ The intermediate form is thus

166. For example, unsupervised photocopy machines in libraries are commonly labeled with a notice warning users of potential copyright infringement. *See, e.g.*, 17 U.S.C. § 108(d)(2), (e)(2) (1994) (providing for signs warning of copyright infringement in libraries and archive copy centers); 37 C.F.R. § 201.14 (1998) (same). These sections enable certain libraries and archives to make photocopies of copyrighted works from their collections at the request of library patrons, so long as the library's photocopy center displays a notice warning patrons of potential infringement. Moreover, 17 U.S.C. § 108(f) states:

Nothing in this section (1) shall be construed to impose liability for copyright infringement upon a library or archives or its employees for the unsupervised use of reproducing equipment located on its premises: *Provided*, that such equipment displays a notice that the making of a copy may be subject to the copyright law.

17 U.S.C. § 108(f); *see also* Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc., 907 F. Supp. 1361, 1374 (N.D. Cal. 1995) (holding the bulletin board operator not liable for copyright infringement due to lack of notice); Perritt, *Property and Innovation*, *supra* note 6, at 314-18 (addressing the possibility of statutory immunity for electronic intermediaries).

167. Digital technology may in fact heighten the power of intermediate firms and organizations. *See, e.g.*, Kathleen M. Sullivan, *First Amendment Intermediaries in the Age of Cyberspace*, 45 UCLA L. Rev. 1653, 1674-77 (1998) (noting the possibilities that the Internet creates for user-directed re-intermediation); Joe Nickell, *Samples Silence Negativland* (last modified Oct. 6, 1998) <<http://www.wired.com/news/news/email/explode-infobeat/culture/story/14765.html>> (discussing the refusal of a CD manufacturer to press a band's CD because of concern over copyright infringement via music samples; the manufacturer's policy was based on "CD Plant Good-Business Practices" issued by the Recording Industry Association of America).

168. The Free Software Foundation, which takes as its charter the proposition that computer software should be free of anti-copying restrictions, uses a shrinkwrap form for its GNU software that confirms how this proposition is implemented. *See* Free Software Foundation, Inc., *GNU General Public License* (last modified Feb. 16, 1998) <<http://www.fsf.org/copyleft/gpl.htm>>, *reprinted in* Ira V. Heffan, Note, *Copyleft: Licensing Collaborative Works in the Digital Age*, 49 Stan. L. Rev. 1487, 1515 (1997).

not merely a distribution method, but a bearer of a normative message: open space is, or at least should be, disallowed.

Looking at these forms not as such, but taking account of their specific terms, yields a similar conclusion. Shrinkwrap in its original form and in its new expressions increasingly share a mechanism by which the user formally accepts the terms proffered by the publisher or agrees to return the work, a definition of the product or information to which the terms apply, a full-blown enabling license (what the user may do) as well as a restrictive license (what the user may not do), transfer restrictions, and—most important here—risk allocation (warranty and liability) provisions.¹⁶⁹ From the standpoint of the user, via specific shrinkwrap terms, books are becoming software not only technologically and from the standpoint of relevant conventions of use and re-use,¹⁷⁰ but conceptually as well.

That is, risk allocation provisions (limitations of warranty and liability) are increasingly appearing in works of information other than computer programs, particularly in websites and in books.¹⁷¹ This

For an argument that use of licenses, like the one promulgated by the Free Software Foundation, ought to be encouraged, see Heffan, *supra*, at 1511-14.

169. See Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1242-48 (summarizing the principal elements of most shrinkwrap licenses).

170. The collapse (intended by publishers) of cultural distinctions between “books” and “programs” is perhaps best illustrated by the sample shrinkwrap license from Borland International reproduced in Nimmer on Copyright:

[Y]ou must treat this software just like a book, except that you may copy it onto a computer to be used and you may make archival copies of the software for the sole purpose of backing-up our software and protecting your investment from loss.

By saying, “just like a book,” Borland means, for example, that this software may be used by any number of people and may be freely moved from one computer location to another, so long as there is no possibility of it being used at one location while it’s being used at another or on a computer network by more than one user at one location. Just like a book can’t be read by two different people in two different places at the same time, neither can the software be used by two different people in two different places at the same time. (Unless, of course, Borland’s copyright has been violated or the use is on a computer network by up to the number of users authorized by additional Borland licenses . . .).

5 Nimmer & Nimmer, *supra* note 3, § 27.02[B], at 27-14 to -15 (quoting Borland). The notable text here is not Borland’s restriction on how its software is used, but Borland’s not-so-subtle shift in the definition of the appropriate way to “use” a book. Consider the effect, under this model, of the following possible notice: “You may read this book silently, to yourself . . . and quote brief passages from it in reviews, but do nothing else. You may transfer this book to another person so long as that person expressly agrees to the foregoing restriction.” Software publishers have been accused of manipulating conventional understandings of information so that computer programs seem less like “machines” and more like “books” in order to justify treating software as a proper subject matter of copyright. It is equally, if not more, the case that publishers are manipulating those conventions to make books seem more like machines. See *infra* note 174. In Borland’s world, I envision examining copyright notices to see whether I am permitted to read books aloud to my children.

171. Morrison & Foerster’s website includes a notice that disclaims implied warranties of fitness and merchantability. See Morrison & Foerster, *supra* note 139. CNN’s

may be so in part because the expansion of information distribution across computer networks diminishes publishers' ability to control risk based on distribution or marketing practices alone.¹⁷² It is difficult, for example, to target the "audience" for a website in the same way that modern advertising and marketing techniques can target products to certain audiences.¹⁷³ As a result, a publisher and its consumers are unlikely to share any understanding about the "intended" use and scope of acceptable re-use of the published information.¹⁷⁴ Caps on warranty and liability attempt, among other things, to shift the risk associated with that gap from the publisher to the user. In addition, however, applying risk-shifting terms to other works of information re-values the information content itself, making it a commodity.¹⁷⁵ Liability disclaimers attached to copies of software at least appear to preserve the distinction between damage caused by the "thing" (the disk, for example) embodying the information and the information itself. When that disclaimer appears on a "thing" that necessarily, of itself, cannot likely do any damage—a book, a website—clearly the implication is if the information itself is misused by a third party, such misuse may cause harm.¹⁷⁶

website does likewise. See Cable News Network, Inc., *supra* note 140. The American Bar Association has worked out a recommended notice for inclusion in professional texts that disclaims any intention to provide legal or other advice. It is a short step to the more widespread inclusion of notices limiting liability in books, beginning with "how to" manuals and guides, and on copies of pre-recorded movies or videocassettes.

172. See Perritt, *Property and Innovation*, *supra* note 6, at 307-10 (describing possible non-legal alternatives for publishers to use to recapture such control); see also Breyer, *Uneasy Case for Copyright*, *supra* note 148, at 294-300 (discussing the benefits conferred on publishers by traditional distribution model).

173. Internet marketers, however, are striving to develop effective techniques to do so. See, e.g., Firefly Network, Inc., *Personalize Your Network* (visited Mar. 23, 1998) <<http://www.firefly.net>> (advertising a web service offering personalized content, community, and services).

174. See *ProCD, Inc., v. Zeidenberg*, 86 F.3d 1447, 1449-50 (7th Cir. 1996) (describing the use of shrinkwrap licenses as a device to segregate consumer and professional markets).

175. See Radin, *supra* note 9, at 520-21 (arguing that socially commodified classes of "fungible" information is an empirical proposition to be tested).

176. See, e.g., Yahoo! Inc., *Disclaimer* (visited Jan. 5, 1997) <<http://www.yahoo.com/docs/pr/disclaimer.html>> ("Yahoo disclaims any liability for any damage arising out of use of the Yahoo directory."). Some information, if "misused," arguably can cause harm. See, e.g., *Waller v. Osbourn*, 763 F.Supp. 1144, 1153 (M.D. Ga. 1991), 763 F. Supp. at 1153 (granting summary judgment against an allegation that the recording of a song by Ozzy Osbourne incited the plaintiff's son to commit suicide), *aff'd mem.*, 958 F.2d 1084 (11th Cir. 1992); *United States v. Progressive, Inc.*, 467 F. Supp. 990, 1000 (W.D. Wis.) (granting a preliminary injunction against the publication of an article describing instructions for the hydrogen bomb), *appeal dismissed*, 610 F.2d 819 (7th Cir. 1979). Defamation law is constructed on the premise that under some circumstances, protected expression can be causatively linked to compensable injury. Given the context of the disclaimers described in the text, it is doubtful that it is this sort of liability that the publishers' counsel had in mind. The harm attributable to defamation is harm inflicted by the publisher. The liability disclaimed under these

Thus, these terms may reinforce the publisher's more explicit attempts in shrinkwrap to define what amounts to the "intended" or "appropriate" use of the information. If "information" is a "product" in the sense intended by risk-shifting provisions, then the user of that product expects and accepts instructions regarding its use, that is, the enabling and disabling features of the license. Conceptually (though not literally), this is a framework for rights and duties based not in copyright but in tort, where the foreseeability of the harm governs the scope of the tortfeasor's duty and where potential defendants can employ warnings concerning appropriate use to avoid or reduce their liability for damages.¹⁷⁷ Shrinkwrap implicitly argues that nonconsensual use constitutes a tort against the copyright holder. Conventionally, dissemination and acceptance of that premise encourages what shrinkwrap sets forth as, and what is therefore understood to be appropriate and, by extension, law-abiding behavior, framed as the "right" way to use the product.¹⁷⁸ This is a question that concerns fundamentally private interests, not public values. My argument is that over time, and applied more broadly and deeply, the practice of legal-ware itself confirms this premise and thus defines the conventions of copyright. Copyright is declared to be "about" the use and distribution of information, not "about" the normative values associated with authors, creators, disclosure, and dissemination of creativity and expression, nor anything else.

II. SOCIAL CONVENTIONS AND THE CONTEXT OF COPYRIGHT AND CONTRACT

The editorial page of the *New York Times* published a piece entitled *Deport the Bear!* in which the author Edmund Morris offered wry observations on a request by the British government for the repatriation

shrinkwrap forms is liability inflicted by third parties using the published expression as a tool.

177. The content vs. thing dichotomy harks back to ongoing ambiguity under copyright law concerning the copyright status of computer programs themselves. See Weinreb, *Functional Expression*, *supra* note 64, at 1180-93 (noting the tension between "books," which are within copyright's scope, and "machines," which generally are not). Rather than bringing computer programs closer to the sense of copyrightable "books," from this standpoint shrinkwrap pushes other works of information toward characterization as "machines." The effect is to legitimize the private ordering of rights concerning those "machines." The extreme implications of this argument are more troubling, as it leads toward principles of product liability and the extent to which manufacturers may by contract shift to consumers the risks inherent in their products. See *East River S.S. Corp. v. Transamerica Delaval, Inc.*, 476 U.S. 858, 866 (1986) (noting that strict liability arose from the policy judgment that consumers need more protection from dangerous products than that provided by the law of warranty).

178. The objection will be made that no one reads shrinkwrap licenses anyway, let alone understands them. There is little doubt, however, that users are aware that shrinkwrap exists (even if most do not refer to it as such). The fact of shrinkwrap—legal-ware, to repeat the metaphor—constrains as much as the particular terms themselves.

of the original stuffed Winnie-the-Pooh, Tigger, Kanga, and Eeyore from a library in New York. He noted evidence that the animals had been brought to the United States under questionable circumstances—“[b]y a *publisher*, no less-clear evidence of moral turpitude”—and quoted four lines from a poem by Delmore Schwartz that (Morris surmises) may have encouraged A.A. Milne’s son to so dispose of Pooh. The text that surprises, however, appears at the end of the piece: “Delmore Schwartz excerpt (c) 1959 reprinted by permission of New Directions Publishing Corporation.”¹⁷⁹ The willingness of *The New York Times* to obtain express permission for the use of four lines of poetry in an opinion piece that pokes gentle fun at publishers, among other things, illustrates that more than just black letter law and economic theory are involved in analyzing incentives to create expressive works and providing opportunities to access and re-use those works.¹⁸⁰ The discussion in part I concerning shrinkwrap practices and their impacts is below put into the context of the modern copyright regime.

The proposition that copyright law consists of a balance of interests is largely uncontested.¹⁸¹ The traditional and still perhaps majority

179. Edmund Morris, *Deport the Bear!*, N.Y. Times, Feb. 9, 1998, at A19. The *Times* itself carries a notice, usually buried somewhere in the first few pages of the newspaper, that states “The Associated Press is entitled exclusively to the use for republication of all news dispatches credited to it or not otherwise credited in this paper and local news of spontaneous origin published herein. Rights for republication of all other matter herein are also reserved.” N.Y. Times, Sept. 30, 1998, at A4. The on-line version of the *Times* includes a considerably more restrictive notice:

All materials contained on this site are protected by United States copyright law and may not be reproduced, distributed, transmitted, displayed, published or broadcast without the prior written permission of *The New York Times Company*. . . .

However, you may download material from The New York Times on the Web (one machine readable copy and one print copy per page) for your personal, noncommercial use only.

The New York Times Company, *The New York Times, Copyright Notice* (visited Mar. 13, 1998) <<http://www.nytimes.com/subscribe/help/copyright.html>>.

180. See I. Trotter Hardy, *Contracts, Copyright and Preemption in a Digital World*, 1 Rich. J.L. & Tech. 2 (April 17, 1995) <<http://www.urich.edu/~jolt/v1i1/hardy.html>> [hereinafter Hardy, *Digital World*]; Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. Chi. Legal F. 217 [hereinafter Hardy, *Property (and Copyright)*]; Perritt, *Property and Innovation*, *supra* note 6, at 272, 279 (noting features of markets that may provide returns to information producers, without formal copyright protection).

181. The constitutional provisions for copyright and patent protection includes express, but vague, limits on congressional authority: Congress may adopt legislation to promote “the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. Const., art. I, § 8, cl. 8. This authority must concurrently be balanced with the demands of the First Amendment. Descriptively, the characterization of the result varies. See, e.g., Jane C. Ginsburg, *Putting Cars on the “Information Superhighway”*: *Authors, Exploiters, and Copyright in Cyberspace*, 95 Colum L. Rev. 1466, 1468 (1995) [hereinafter Ginsburg, *Putting Cars on the “Information Superhighway”*] (arguing that fostering authorship remains a primary goal of copyright law, while the

view of intellectual property law holds that the Copyright Act,¹⁸² the Patent Act,¹⁸³ and related federal statutory regimes¹⁸⁴ alone represent unalterable congressionally-determined balances between the public interest in access to the fruits of invention and creation and the appropriate private incentive for generating that invention and creation.¹⁸⁵ The constitutional grant of authority to enact legislation protecting intellectual property delineates what is patentable and copyrightable subject matter. It outlines what is within the scope of federal intellectual property law, and to some extent, defines what intangible property is legally protectable under any legal regime¹⁸⁶ and what must

rights of users remain secondary, because without authors, there would be no works); Wendy J. Gordon, *Toward a Jurisprudence of Benefits: The Norms of Copyright and the Problem of Private Censorship*, 57 U. Chi. L. Rev. 1009, 1020-26 (1990) [hereinafter Gordon, *Jurisprudence of Benefits*] (discussing how in the Copyright Act Congress determined a balance between original and later authors); see also Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 580 (1985) (Brennan, J., dissenting) ("The challenge of copyright is to strike the difficult balance between the interests of authors . . . and society's competing interest in the free flow of ideas."); Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984) (balancing the interests of authors with society's interest in the "free flow of ideas, information, and commerce").

182. 17 U.S.C. §§ 101-1101 (1994).

183. 35 U.S.C. §§ 1-376 (1994).

184. See, e.g., Semiconductor Chip Protection Act of 1984, 17 U.S.C. §§ 901-914 (granting protection, subject to limitations, to mask works in a semiconductor chip product as well as exclusive, limited rights to a mask works owner).

185. See *Stewart v. Abend*, 495 U.S. 207, 230 (1990) ("[I]t is not our role to alter the delicate balance Congress has labored to achieve.").

186. The scope of federal preemption of state anti-copying and unfair competition laws by the Patent Act remains less than settled. State "anti-copying" legislation is preempted by federal law if it attempts to extend patent-like protection to subject matter that lies beyond the scope of the Patent Act. See *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237 (1964); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 229-31 (1964). The Patent Act does not, however, prevent the states from granting protection via trade secret law to unpatented processes. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 478-79 (1974). Specialized state anti-copying protection for unpatentable processes may be preempted. See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 166-68 (1989). Under some circumstances, private parties may contract around patent law, see *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 261-62 (1979), and in some circumstances they may not, see, e.g., *Lear, Inc. v. Adkins*, 395 U.S. 653, 674 (1969) (holding that the contract doctrine of estoppel could not prevent a party from asserting the invalidity of a patent as a defense); *Bru-lotte v. Thys Co.*, 379 U.S. 29, 32 (1964) (stating that the contracts at issue were "a bald attempt to exact the same terms . . . after the patents had expired"); *Everex Sys. Inc. v. Cadtrak Corp. (In re CFLC, Inc.)*, 89 F.3d 673, 678 (9th Cir. 1996) (holding that federal law is binding in the assignment of patent licenses). In patent law, however, preemption is a constitutional question. The Patent Act itself is silent as to its preemptive effect. The Copyright Act contains an express preemption section. See 17 U.S.C. § 301. The reach of the preemptive effect of the Copyright Act, as a constitutional matter, remains unclear. The Supreme Court has held in the copyright context that the Constitution does not confer on Congress the exclusive power to legislate on intellectual property matters. See *Goldstein v. California*, 412 U.S. 546, 560 (1973). That case, however, was decided before the present Copyright Act was enacted in 1976. Did Congress, in the Copyright Act, intend to assert that the statute preempts all that it constitutionally might? For arguments that non-statutory, constitutional

remain part of the public domain. Within the confines of these two statutes, the relatively short term of patent protection and high standards for obtaining a patent,¹⁸⁷ the longer term of copyright protection, combined with the lower standard of copyrightability, and the doctrine of fair use and other limitations on copyright owners' exclusive rights,¹⁸⁸ are the factors that define the outlines of appropriate intellectual property equilibria.¹⁸⁹ Private contracts and state law doctrines may assign rights within, but not beyond, the limits set by Congress. For copyright law, the levers of public policy—expansion and contraction of the public domain, of the term of protection, and of fair use and other access rules—are the legitimate means for adjusting the incentive/access equation to bring creative output and social welfare into closer alignment.¹⁹⁰ Applying this framework to shrinkwrap leads to an argument that software developers and other publishers have no legitimate claim to public enforcement of contracts that limit access to facts within the public domain or that limit statutory fair use of copyrighted works.

This formulation assumes that the Copyright Act accurately calibrates and implements the “right” social welfare function, the “balance,” that our copyright system ought to serve. It is increasingly apparent, however, that neither supposition likely holds. The “conventions” that part I described are important components of the copyright “system,” and a complete account of that “system” needs to address how those conventions operate.¹⁹¹ More precisely, for exam-

preemption exists for copyright law, see Dan L. Burk, *Protection of Trade Secrets in Outer Space Activity: A Study in Federal Preemption*, 23 Seton Hall L. Rev. 560, 593-608 (1993), Ginsburg, *No “Sweat”?*, *supra* note 78, at 365-66, and Karjala, *Federal Preemption*, *supra* note 2, at 533-34. Even if such constitutional preemption exists, however, its scope is unclear. See *infra* note 438 and accompanying text. The court in *ProCD* analyzed the preemptive effect of the Copyright Act on use-restrictive terms of the shrinkwrap license in question only under § 301 and (some would argue pointedly) omitted considering possible constitutional arguments. See *supra* notes 82-93 and accompanying text.

187. See 35 U.S.C. §§ 101-103 (stating conditions for issuance of patent); *id.* § 154 (creating the contents and term of a patent).

188. See 17 U.S.C. §§ 102-103 (stating the subject matter of copyright); *id.* §§ 107-112 (providing examples of limitations on exclusive rights); *id.* § 302 (describing the duration of copyright for works created after January 1, 1978).

189. See, e.g., Dan Rosen, *A Common Law for the Ages of Intellectual Property*, 38 U. Miami L. Rev. 769, 785 (1984) (“The task [in copyright law] is not one of striking a new balance between private and public interests. Rather, it is determining how new machines fit into the existing balance.”).

190. See, e.g., Robert W. Kastenmeier & Michael J. Remington, *The Semiconductor Chip Protection Act of 1984: A Swamp or Firm Ground?*, 70 Minn. L. Rev. 417, 440-42 (1985) (setting out a four-part test to demonstrate that the public would benefit from proposed legislative action concerning intellectual property).

191. Others take the constitutional and statutory framework of intellectual property rights as a baseline from which publishers and consumers may, by contrast, depart. The scholarship illustrates how debating whether copyright rules are “default” or “mandatory” rules is inevitably inconclusive. See, e.g., Karjala, *Federal Preemption*, *supra* note 2, at 521 (arguing that copyright law cannot be a default position, at least

ple, in the context of digital works, Professor Trotter Hardy has argued that the scope of intellectual property protection afforded the publisher of a copyrightable work is a function of four things. First is the extent of the protection afforded by the formal, public legal regime. Second is the extent to which the publisher can secure protection via bilateral contract. Third is the sophistication of the technology available to inhibit unauthorized reproduction of the work (anti-free riding technology).¹⁹² Finally, the fourth is the sophistication of reproduction technology itself (the technology of piracy).¹⁹³ Professor Hardy argues that as more expressive works are created or made available in digital form, the increasing sophistication of the technology of piracy and, in opposition, of anti-free riding technology, will foster an increasing number of disputes between those who can and want to opt out of a public intellectual property system in favor of private, technological regulation and those who view copyright law as

for widely distributed works); O'Rourke, *Market-Based Approach*, *supra* note 5, at 86 (concluding that the better view is that of copyright as a set of default rules); Rice, *Digital Information*, *supra* note 10, at 636-38 (arguing that the nature of computer program code and the social interest in decompiling that code to discover "ideas" embedded in computer programs dictate mandatory preemption of contract terms that forbid reverse engineering or decompiling computer programs); Gary H. Moore & J. David Hadden, *On-Line Software Distribution: New Life for 'Shrinkwrap' Licenses?*, *Computer Law*, Apr. 1996, at 1, 6 (stating that legislative history shows that § 109 (first sale doctrine) and § 117 (rights of owners of computer programs) of the Copyright Act were meant to be default rules). Default and mandatory rules literature in general has recognized the need to examine that distinction in context rather than in the abstract. See Ian Ayres, Comment, *Preliminary Thoughts on Optimal Tailoring of Contractual Rules*, 3 S. Cal. Interdisc. L.J. 1, 15-18 (1993) (stating that the choice between rule and standard is related to parties' ability to contract around legal principle); Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 Yale L.J. 87, 127 (1989) (noting that gap-filling rules should respond to reasons for gaps in contracts); Todd D. Rakoff, *Social Structure, Legal Structure, and Default Rules: A Comment*, 3 S. Cal. Interdisc. L.J. 19, 24-28 (1993) [hereinafter Rakoff, *Social Structure*] (arguing that the default/mandatory distinction needs to account for social construction of the context of the legal principle).

192. For computer software, such technology includes older "copy protection" systems, which required that "authorized" computer users use a separate computer program to "unlock" the program that they wanted to use, and recent "copyright management" systems, which include a variety of software-based technologies to define the class of users authorized to access and use restricted information. See David M. Hornik, *Combating Software Piracy: The Softlifting Problem*, 7 Harv. J.L. & Tech. 377, 413-14 (1994) (describing the failures of original copy protection schemes); *supra* notes 127-38 and accompanying text. This class of measures also encompasses "architectural" solutions to the problems of free-riding and piracy. See Perritt, *Property and Innovation*, *supra* note 6, at 290-93 (suggesting that in certain computer network environments, technological features may increase "private" characteristics of copyrightable works and reduce the need for legal entitlements to protect them).

193. See Hardy, *Digital World*, *supra* note 180, ¶¶ 6-7; see also Lessig, *The Constitution of Code*, *supra* note 81, at 185 (arguing that legal, technological, and social means of regulating cyberspace are not necessarily interchangeable).

embodying certain ideals of the public interest that neither producers nor consumers may avoid.¹⁹⁴

Generally, such a transactional explanation of intellectual property law and of copyright law in particular normatively tends to relegate what I have called open-space concerns to a secondary role. At worst, it erases those concerns altogether.¹⁹⁵ Open space is what remains, rhetorically, conceptually, and doctrinally speaking, after the transactors (and courts that affirm their transactions) have departed the field.¹⁹⁶ This perspective tends to assume that the “bargains” that constrain or extend given intellectual property rights are purposeful, voluntary, and genuine. No one uses or may use intellectual property rights who is not a knowing transactor in them. In other words, we are all self-aware potential free-riders, if not potential pirates, or both, living on the edge between (licensed) legitimacy and (unlicensed) uncertainty, or malfeasance.

This is not, however, how the world actually works. These are not the assumptions upon which works of information are universally created and used. Vast quantities of intellectual property and especially copyright “rights” are acquired on a daily basis by readers, viewers, listeners, and users who have only the vaguest idea that they are acquiring something more than a mere book, newspaper, or computer program.¹⁹⁷ Intellectual property rights are in transit on a vast scale, yet wholesale or partial copying (or other forbidden re-use) does not, as a rule, occur.¹⁹⁸ More than either formal publicly declared rights or

194. Professor Hardy predicts that as a result of the increase of the sophistication of reproduction technology, conflicts between intellectual property protection via contract and intellectual property protection via legal rule—manifested in litigation over federal preemption—is likely to increase. See Hardy, *Digital World*, *supra* note 180, ¶¶ 47-48. Elsewhere, Professor Hardy's views about the correct results in such cases are made clear. He argues that copyright law ought not to limit copyright owners' rights to expand their copyright monopoly via contract. See Hardy, *Property (and Copyright)*, *supra* note 180, at 224.

195. See Cohen, *A Right to Read Anonymously*, *supra* note 28, at 994-96.

196. The degree to which a licensing market exists or might exist for a copyrighted work increasingly weighs against a finding of nonconsensual fair use. See *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 929-31 (2d Cir. 1995) (holding that a loss of potential licensing revenue weighs against a finding of fair use); *infra* Part III.B.1.

197. This is equally true, if not more so, with respect to patents, but patent law includes no provision for “fair use” during the life of a patent to which an idea of open space might attach.

198. This statement skirts the debate concerning the consequences of case law that suggests that mere use of a computer program involves the creation of a “copy” that, unless expressly authorized by the copyright owner, infringes. See *Triad Sys. Corp. v. Southeastern Express Co.*, 64 F.3d 1330, 1337 (9th Cir. 1995); *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 518-19 (9th Cir. 1993). See generally I. Trotter Hardy, *Computer RAM “Copies”: Hit or Myth? Historical Perspectives on Caching as a Microcosm of Current Copyright Concerns*, 22 U. Dayton L. Rev. 423, 426-29 (1997) (arguing that the implications of *MAI* and *Triad* should be dealt with on a case-by-case basis). The Digital Millennium Copyright Act addresses this problem in part by

transaction rules are involved in the copyright regime; behaviors and understandings abet legal and technological protections from free-riding and piracy. These understandings assure creators an appropriate return,¹⁹⁹ or provide other incentives to produce works of information, and assure that the information they contain and their manner of expression remain open and accessible. Works of information may be produced and published even without the expectation or promise of financial reward.²⁰⁰ This is true of much of the information available on the Internet. It is also true of data collected and distributed by the federal government.²⁰¹

Works of information are protected through self-enforcement by consumers or users, an internalized discipline of non-violation (that is, of non-reproduction or non-infringement)²⁰² or of voluntary compensation for use.²⁰³ These beliefs and behaviors concern what one ought

granting immunity from infringement liability to ISPs who merely create and transmit "cache" copies of web pages. See sources cited *supra* note 158.

199. The social context of copyright has not gone unnoticed; the federal government proposed that it be appropriated and folded wholesale into the transactional analysis. See Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights 204-10 (1995) [hereinafter White Paper] (advocating the development of education curricula concerning intellectual property, to provide cultural norms discouraging unauthorized use). In some cases, private industry is employing a similar strategy. See Recording Industry Association of America, *Soundbyting* (visited Sept. 16, 1998) <<http://www.Soundbyting.com/html>> (stating that the website, administered by the Recording Industry Association of America, is attempting to "educate" students about the importance of respecting copyrighted sound recordings in cyberspace).

200. See Lessig, *Constitution of Code*, *supra* note 81, at 183-84 (asserting that sets of understanding constrain behavior in cyberspace just as they do in real space, but arguing generally that among law, norms, and "nature," or technology, regulation of cyberspace by technology (nature) is of greater importance than regulation of real space); Radin, *supra* note 9, at 515-16 (noting the vast amount of free information available on the World Wide Web and observing the software development overseen by the Free Software Foundation). Shareware lies between works published without any financial incentive and those published only upon that premise, the value of which is based on an informal compliance norm. Shareware is computer software released without advance payment of a purchase price or license fee. It is typically accompanied by a statement that payment should be made on an "honor system." The success of McAfee Associates (now Network Associates), publisher of anti-virus software and other computer and network maintenance tools and a company founded on a shareware model, suggests that such a norm may sustain a viable intellectual property-based business at least long enough to allow the "norm-based" model to be converted to a fee-for-product model.

201. See 17 U.S.C. § 105 (1994) (requiring no copyright in U.S. government works).

202. See Mark A. Fischer, *Reserving All Rights Beyond Copyright: Nonstatutory Restrictive Notices*, 34 J. Copyright Soc'y 249, 250 (1987) (stating that the power of new technology is unmatched by an individual or collective sense of responsibility in its use); Lemley, *Overlapping Copyrights*, *supra* note 48, at 578 (noting the ineffectiveness of a legal regime that is "out of touch" with the way the world works).

203. "Social norms" are usually defined as existing only in the context of some *ex post* sanctioning power, with the source and extent of that authority embedded in other social phenomena. See Robert C. Ellickson, *Order Without Law: How Neigh-*

not to do with certain works. Others concern what one should, or at least may, do. Together with other legal, technological, and economic constraints, they are part of the equation that attempts to define whether creators are receiving excessive or insufficient rewards. They are what I refer to as copyright "conventions." In those conventions is the variety and nuance that amounts to the raw material of fair use and the public domain, of our conceptual open space.²⁰⁴

Such conventions touch on but do not necessarily incorporate the whole of the technical requirements of the law. More generally, they apply what is "right," or ethical, for those among us (in the population at large and within particular communities) who believe we honor copyright law.²⁰⁵ At least in relatively stable circumstances, copyright

bors Settle Disputes 177-80 (1991); Sunstein, *Social Norms*, *supra* note 13, at 914-28. This is the sense in which most discussion of the regulation of cyberspace via norms has proceeded. *See, e.g.*, Johnson & Post, *supra* note 72, at 1387-91 (discussing whether responsible self-regulating structures will emerge on the Internet); Radin, *supra* note 9, at 525-26 (suggesting that self-regulation on the Internet partly depends on the continuing strength of an underlying cyberspace culture). This Article does not attempt to sort out the identities and workings of those phenomena in this context. It is not clear, in any case, that social factors do not inhibit copying even in the absence of some informal sanctioning mechanisms. The Article avoids "norms" as such and speaks instead of conventions.

Social phenomena of this sort are generally believed to respond to collective action problems. *See* Sunstein, *Social Norms*, *supra* note 13, at 955. The particular mechanisms through which they arise are not well-understood. *See* Robert Cooter, *Normative Failure Theory of Law*, 82 *Cornell L. Rev.* 947, 975-77 (1997) (illustrating the role of law in solving a "public goods" problem in supply of norms, by modulating the supply of respect and disdain). Two attempts to describe economic models of norm creation are Robert D. Cooter's *Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant*, 144 *U. Pa. L. Rev.* 1643, 1657-77 (1996), and Eric A. Posner's *Law, Economics and Inefficient Norms*, 144 *U. Pa. L. Rev.* 1697, 1713-19 (1996). Cognitive limitations on individuals' abilities to understand and follow the prescriptions of legal forms generate conflicting opinions regarding how the law should respond to those limits. *See, e.g.*, Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 *Stan. L. Rev.* 211, 213-16 (1995) [hereinafter Eisenberg, *Limits of Cognition*] (discussing limitations based on rationality, disposition, and detective capability); Howard A. Latin, "Good" Warnings, *Bad Products, and Cognitive Limitations*, 41 *UCLA L. Rev.* 1193, 1206-57 (1994) (arguing that there are numerous reasons why consumers fail to read product warnings); Kenneth Ian Weissman, *A "Comment J" Parry to Howard Latin's "Good" Warnings, Bad Products, and "Cognitive Limitations"*, 70 *St. John's L. Rev.* 629, 638-43 (1996) (challenging the behavioral paradigms underlying Professor Latin's criticism of ineffective product warnings). There is little doubt that those limits nonetheless allow, as they must, that an awareness of the existence and purpose of forms has a substantive effect. *Cf.* Paul H. Robinson & John M. Darley, *The Utility of Desert*, 91 *Nw. U. L. Rev.* 453, 468-70 (1997) (arguing that compliance with law depends in part on an internalized moral sense).

204. For a discussion of the doctrines of fair use and the public domain and the different conceptions of those doctrines expressed in the case law and scholarship, see *infra* Part III.

205. *See* Dale A. Nance, *Guidance Rules and Enforcement Rules: A Better View of the Cathedral*, 83 *Va. L. Rev.* 837, 861-62 (1997) (distinguishing between "law-abiders" and recalcitrants among citizens, and criticizing some interpretations of entitlement theory for assuming that all citizens are recalcitrants); *see also* Lloyd L. Weinreb,

consumers possess a vocabulary of appropriate behaviors or understandings concerning a given market or technology.²⁰⁶ For traditional copyrighted works, such as books, there is some understanding among consumers that photocopying, quoting, or otherwise using some amount of the text is permissible (or at least is not illegal so long as no personal, financial reward is anticipated on account of the use).²⁰⁷ For such works, informal approximations of the legal doctrines concerning improper use and access have been “close enough” to maintain a socially acceptable balance between protection and nonconsensual use.²⁰⁸ In new or nontraditional markets, such conventions may not exist, or multiple sets of proto-conventions may be competing with one another. For example, many Internet users believe that anything posted to the World Wide Web is intended to be, and therefore is, fair game to be copied and redistributed. This view competes with, among other things, the belief elsewhere that mere nonconsensual “linking”

Fair's Fair: A Comment on the Fair Use Doctrine, 103 Harv. L. Rev. 1137, 1161 (1990) [hereinafter Weinreb, *Fair's Fair*] (stating that fair use gives effect to established community practices and understandings concerning what is “fair”). The crudity of the description also roughly corresponds to the inability in economic perspectives on copyright law to determine the incentive and reward effects of formal copyright law. See Marci A. Hamilton, *Copyright Duration Extension and the Dark Heart of Copyright*, 14 Cardozo Arts & Ent. L.J. 655, 657 (1996) (noting the absence of empirical research addressing the efficacy of formal copyright entitlements in generating works of expression); see also Weinreb, *Functional Expression*, *supra* note 64, at 1252-54 (observing that copyright as a whole may be considered to be a convention).

206. Cues may be based on tangible things, on behaviors, on language, and on combinations thereof. See Lessig, *Social Meaning*, *supra* note 16, at 956-62 (discussing the types and uses of social meanings). Professor Lessig's article is primarily directed toward understanding another dimension of public regulation of behavior, see *id.* at 1019, but much of his argument may be extended to regulation by private actors.

207. Direct evidence of such an understanding is difficult to come by. Indirect evidence exists, perhaps, in the fact that until recently, book publishers took few steps, beyond a statutory copyright notice, to inhibit copying of the copies they sold. That practice is changing. See *supra* notes 146-53 and accompanying text; see also Lemley, *Overlapping Copyrights*, *supra* note 48, at 577-78 (giving examples of popular shorthand for “fair use” concerning books and songs). Particular communities provide somewhat better data on related behaviors. See Ellickson, *supra* note 203, at 258-64 (describing academic photocopying governed by norms rather than by copyright law); see also Jessica Litman, *Revising Copyright Law for the Information Age*, 75 Or. L. Rev. 19, 48 (1996) [hereinafter Litman, *Information Age*] (noting that copyright law is not popularly understood as applying to non-commercial use).

208. Conventions, by definition, work imperfectly. They do not make fair use litigation disappear entirely. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 574-94 (1994) (discussing the fair use conflict between rap music group 2 Live Crew and the publisher of the song *Oh, Pretty Woman*). Even with respect to more “traditional” works, moreover, these approximations do nothing more than offer guidance on what “may” be done. There is no similar vocabulary guiding what ought to be done. Moreover, there are no similar norms derived from copyright law promoting fair use or the free exchange of information as an affirmative good.

by one website to another is at least inappropriate and arguably unlawful.²⁰⁹

Conventions depend on context. To the extent that context changes—or can be changed—conventions may change as well.²¹⁰ This proposition underscores the two-fold importance of these phenomena. First, they may have a substantive regulatory effect. If my account in part I of “the acceptable uses” of a book²¹¹ is widely shared, then book publishers avoid losses through piracy and free-riding partly on account of this social discipline. Second, the existence of this discipline itself affects the extent to which the edges of permissible copying and re-use are tested. Thus, conventions define the choices that create the disputes that ultimately lead to the evolution of legal doctrine. If and when the context changes—technological conditions, social conditions, economic conditions, and market conditions being the more obvious factors—conventions are subject to change. When the conventions change, the nature of the disputes within the legal system is likely to change as well. Conventions form an important part of a jurisprudential feedback loop: the “system” provides the parameters that define the scope of disputes while the resolution of these disputes refines the parameters of the “system.”²¹²

Before returning to the shrinkwrap context, this feedback relationship can be illustrated with two recent, relatively well-known examples involving copyright law, new transactional practice, and new technologies: home use of videocassette recorders, and distribution of academic “coursepacks.” In *Sony Corp. of America v. Universal City*

209. See O'Rourke, *Fencing Cyberspace*, *supra* note 51, at 631-40 (describing “linking” litigation); *broadcast.com inc.*, *supra* note 120 (containing a web-wrap notice stating that unauthorized linking to streamed audio content is forbidden).

210. *But see* Lessig, *Social Meaning*, *supra* note 16, at 993-97 (summarizing problems of collective action as obstacles to evolution of social meanings). Conventions of information use and re-use expressed through copyright law have historically both been context specific and vague, often simultaneously. See *infra* Part III.B.1 (describing recent fair use decisions). Broad but shallow, and narrow but deep conventions are poorly suited to resist technological or other transactional incursions on unregulated “open space.” Judgments concerning whether and the extent to which we should resist such incursions depend on determining the proper scope of public and private “space” in the first place.

Professor Lessig argues that the “plasticity” of computer code distinguishes it from other regulatory agents, *see* Lessig, *Constitution of Code*, *supra* note 81, at 183-84, and that this characteristic of the technology limits the regulatory power of law and norms. Code can be easily changed; code-dependent behavior can be easily modified. The proposition rests on an empirical judgment of the extent to which society, or any particular medium, or (for works of information) type of work is subject to regulation via private technology. This judgment, in turn, rests on the degree to which there is a robust convention of information use or re-use that resists the technology.

211. See *supra* Part I.A.

212. Cf. Ellickson, *supra* note 203, at 132, 240-64 (anticipating the operation of feedback loops among different “controllers,” or the source of rules of behavior and sanctions that back up rules).

Studios, Inc.,²¹³ the Supreme Court held that “time-shifting” of broadcast television programs by home users of videotape players constitutes fair use.²¹⁴ The litigation arose and the decision was published at a point when the videotape players’ popularity as home entertainment devices was starting to grow. Given the relative novelty of the technology, therefore, it was not clear whether any social convention regulated home taping to any significant degree. The argument focused on the present and potential economic effects of VCR use on the production of television programs, perceived to be the primary source of “content” for VCR users. If the case arose for the first time today, one wonders whether time-shifting would again dominate the analysis of home use of videotape players. Sales and rentals of pre-recorded videocassettes have exploded.²¹⁵ Playback of pre-recorded tapes and home movies now constitutes the bulk of VCR usage.²¹⁶ One might argue that by exploiting the videotape rental market, television and film producers in effect changed the VCR socially, making it a playback device far more than a recording device. It achieved a goal through behavioral change that could not be accomplished through the legal system. In retrospect, the Court’s holding stalled the development of a doctrinal or statutory framework regulating VCR use and

213. 464 U.S. 417 (1984); see Paul Goldstein, *Copyright’s Highway: From Gutenberg to the Celestial Jukebox* 143-58 (1994) [hereinafter Goldstein, *Copyright’s Highway*] (summarizing the political and industrial context of the “Betamax” litigation).

214. See *Sony Corp.*, 464 U.S. at 456. “Time-shifting” is the consumer practice of using a VCR to record a television program, watching it once at a later time, and erasing the recording at a later time. See *id.* at 423.

215. Sales and rentals of pre-recorded videotapes now represent the largest single revenue source for United States movie studios. See Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, II Communications Reg. (P & F) 147, 185 (1998).

The argument is necessarily incomplete. First, having created a market for pre-recorded videotapes, producers created a huge market for pirated tapes. Home taping is no longer the major bugaboo for film producers. Large scale tape-to-tape copying is. Producers also believe they have a largely effective solution: Macrovision, a technology that interferes with the signal from the source tape to an extent that the copy is not of commercial grade. Second, VCR manufacturers did not literally remove the Record button from the VCR, and they did not conceal it or disable it. The “VCR as playback device” convention, to the extent it exists, is elastic. A generation trained to download material from computer networks may in time revise its elders’ abandonment of the Record function, though the function likely would assume its new role in the context of a networked, digital device.

216. See Seonsu Lee & James R. Lumpkin, *Differences in Attitudes Toward TV Advertising: VCR Usage as a Moderator*, 11 Int’l J. Advertising 333, 334 (1992) (noting that surveys of VCR purchasers from the early 1980s found that a large majority identified record and playback as most significant features); The Radio Advertising Bureau, *Media Facts* (visited Aug. 28, 1998) <<http://rab.com/station/mediafact/mftv.html>> (stating that by 1994, VCRs were used twice as much for playback as for recording (citing a 1994 American Association of Advertising Agencies Television Production Cost Survey)).

may have allowed such a convention to develop.²¹⁷ A healthy community of time-shifters and home tapers of broadcast content persists, but a potential convention supporting time-shifting and home archiving on a vast scale has been largely supplanted by the ready and inexpensive supply of pre-recorded videotapes of motion pictures and television programs. The causal link may be impressionistic, but the result is clear: home videotaping disputes have disappeared from the legal stage.

“Coursepack” caselaw, which condemns nonconsensual reproduction of articles for distribution to students by university faculty,²¹⁸ developed despite, rather than in the absence of, a relevant social norm. Notwithstanding norms of “reciprocal fair use” that Professor Ellickson describes, publishers determined that targeting photocopy shops with infringement claims would further deter what the publishers believed to be illegitimate re-use.²¹⁹ “Coursepack” disputes have not disappeared, but as practices of coursepack creation and distribution have developed in response to judicial decisions, the scope and nature of subsequent disputes have, not surprisingly, narrowed. The question is no longer whether faculties are subject to rules rather than norms regarding fair use. The question is, in light of licensing collectives that owe their creation to coursepack caselaw, in what situations do the relevant rules precisely control, and in what situations may scholars and teachers continue to rely on fair use.²²⁰

What should we make of such conventions and shrinkwrap? In the digital age, conventions throughout information law are in dispute.²²¹

217. Many scholars state this point differently, arguing that the Court correctly held off interfering with the development of a new copying technology. Professor Goldstein, on the other hand, suggests that appropriately nuanced legislation would have produced a better result. See Goldstein, *Copyright's Highway*, *supra* note 213, at 146.

218. See *Princeton Univ. Press v. Michigan Document Servs., Inc.*, 99 F.3d 1381, 1384 (6th Cir. 1996), *cert. denied*, 117 S. Ct. 1336 (1997); *Basic Books, Inc. v. Kinko's Graphics Corp.*, 758 F. Supp. 1522, 1537 (S.D.N.Y. 1991).

219. Professor Ellickson notes that a “reciprocal fair use” norm effects transaction cost savings; he also observes that the norm is supported by academic norms that encourage the free exchange of information. See Ellickson, *supra* note 203, at 258-64.

220. Licensing collectives and the imperatives of copy facilities leave little or no room for faculty judgments concerning acceptable nonconsensual use. Even if scholars more aggressively retain the copyrights to their published research, however, the game may not be over: norms may be reasserted in the academic sphere. See Lisa Guernsey, *A Provost Challenges His Faculty to Retain Copyright on Articles*, *Chron. Higher Educ.*, Sept. 18, 1998, at A29 (discussing the provost at Cal Tech, who is encouraging scholars not to assign copyrights to journal articles).

221. See, e.g., Radin, *supra* note 9, at 522-26 (arguing that preserving an early cyberspace vision of openness depends upon the continuing strength of the culture of early cyberspace). Recent trademark and right of publicity litigation provide examples of how intellectual property law continues to use and respond to conventions in flux. In *Washington Post Co. v. TotalNews, Inc.*, No. 97 Civ. 1190 (PKL) (S.D.N.Y. filed Feb. 28, 1997), the plaintiff argued that the defendant's use of “framing” technology on its website confused Web surfers as to the origins of the plaintiff's content. Whether such confusion in fact existed is very much open to debate. The case sug-

How social structures should relate to law generally is debated.²²² If my proposition concerning a feedback relationship is correct, however, then the evidence of broadening shrinkwrap practice described in part I suggests a changing convention with broad implications. Historically, consumer users of computer programs commonly understood that they were “buying” those programs,²²³ thereby effectively substituting a set of conventions for software developers’ attempts to constrain re-use via shrinkwrap license.

The deployment of all types of digital information creates a framework for a convention that increasingly rejects this historic understanding and accepts the propriety of the “use” model that these licenses and notices—reinforced by *ProCD*—promote. The resulting doctrinal raw material—the source of the disputes that, when litigated, create the backdrop for further information production—is more likely to turn solely on whether the “use” is expressly authorized, without any equivalent or corresponding evolution of social conventions for information that preserve a social and intellectual open space.²²⁴ The only such “convention” is the Copyright Act itself,

gests, however, how one class of Web residents is using the legal process to establish the terms upon which such an understanding might be based in the absence of a shared understanding of acceptable behavior concerning frames and links. See O’Rourke, *Fencing Cyberspace*, *supra* note 51, at 641-45 (evaluating “netiquette” as a basis for determining the appropriate rule for linking). Changing perceptions of television technology and its derivatives were at issue in *Wendt v. Host International, Inc.*, 125 F.3d 806 (9th Cir. 1997). In this right of publicity decision, the court reversed an order granting the defendants’ motion for summary judgment. See *id.* at 814. The norm at stake was Norm himself, the fictitious television character played by George Wendt on the Cheers television series. Wendt and Ratzenberger sued the developer of a bar based on the Cheers series. The bar incorporated robots that adopted the function, but not the appearance, of Wendt’s and Ratzenberger’s Cheers characters. Wendt and Ratzenberger argue, in effect, that they are entitled to control an associative value—a legally cognizable right of publicity—that exists in the fictitious personae they helped to create. Whether that is so depends in part on whether the “situations” in situation comedies have progressed (or regressed) to the point that they are legally indistinguishable from reality. What are the relevant conventions that define Norm Peterson and Cliff Claven—or “Norm’s norms?”

222. Compare Sunstein, *Social Norms*, *supra* note 13, at 947-66 (describing grounds that may warrant government regulation of social norms), with Bernstein, *supra* note 28, at 1795 (reviewing efficiency losses from codifying commercial trade practices), and Robert D. Cooter, *Structural Adjudication and the New Law Merchant: A Model of Decentralized Law*, 14 Int’l Rev. L. & Econ. 215, 226 (1994) (noting that the obligation of the state is to elevate efficient commercial norms to the level of law), and Merges, *Contracting into Liability Rules*, *supra* note 26, at 1372-85 (stating that the law should facilitate the development of private collective rights organizations for repeat transactions in intellectual property rights), and Todd D. Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1239 (“[I]f we bring social structure too directly within the ken of the law, we will end up specifying the structure by law in a way that undermines the ability of manifold centers of power to thwart the possibly threatening designs of government.”).

223. See Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1244 n.23.

224. Cf. Cass R. Sunstein, *Legal Interference with Private Preferences*, 53 U. Chi. L. Rev. 1129, 1145-50 (1986) (discussing the role of law in shaping individual preferences

which, outside of its attempts to vaguely delimit what is fair use²²⁵ and what works are uncopyrightable,²²⁶ neither supports nor encourages conventions concerning information use and re-use that translate readily across forms, formats, technologies, and species of works.²²⁷ For the vast majority of works, shrinkwrap is itself becoming a (or perhaps “the”) convention of information use. What is “fair” in fair-use debates ends up being defined in terms of what the convention allows. The normative content of open space flows from an ongoing debate concerning the proper scope of fair use and the public domain. To the extent that the terms of that debate are set by shrinkwrap, the use-related convention that shrinkwrap encourages disrupts the debate and distorts the outcome. The outcome, of course, reinforces the convention. The resulting feedback loop may ultimately drive out open space altogether.

Two examples, both cases decided by the Court of Appeals for the Second Circuit, illustrate how this loop may be reflected in judicial practice. In 1982, an attorney in New York, John Diamond, wrote a letter to the editor of *American Lawyer* correcting certain facts about him published in an issue of the magazine. The letter stated, among other things, “You are authorized to publish this letter but only in its entirety.”²²⁸ *American Lawyer* published the letter in edited form. Diamond sued the magazine for copyright infringement and for invasion of privacy, defamation, and improper use of his name.²²⁹ The district court granted the defendants’ motion for summary judgment, ruling that the publication of the edited letter constituted “fair use.” Diamond did not assert, it appears, that his stated qualification on the

and values); Sunstein, *Social Norms*, *supra* note 13, at 939-47 (describing choices as functions of norms, meanings, and social roles).

225. See 17 U.S.C. § 107 (1994).

226. See *id.* § 102(b).

227. First Amendment law, of course, is premised largely on the social benefits generated by the broadest possible dissemination of ideas. The distinction in copyright law between protectable “expression” and unprotectable “ideas” is, among other things, designed to separate copyright law from First Amendment constraints. See *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985); *New York Times Co. v. United States*, 403 U.S. 713, 726, n.* (1971) (Brennan, J., concurring). The First Amendment, in other words, generally is understood to stand in contrast to the Copyright Act, rather than in sympathy with it. See Ginsburg, *No “Sweat”?*, *supra* note 78, at 385-86 (stating that the co-existence of copyright law and the First Amendment requires a context-specific rather than a categorical approach); Neil Weinstock Netanel, *Asserting Copyright’s Democratic Principles in the Global Arena*, 51 *Vand. L. Rev.* 217, 232 n.48, 299 n.322 (1998); *infra* note 447 and accompanying text. Doctrinally, for example, although fair use is characterized by statute as a class of use that is not infringing, see 17 U.S.C. § 107, in copyright litigation fair use is raised as an affirmative defense, not as an element of the plaintiff’s claim of infringement, see *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 590 (1994); *Harper & Row*, 471 U.S. at 561.

228. *Diamond v. Am-Law Pub’g Corp.*, No. 82-6273C, 1984 WL 2121, at *1 (S.D.N.Y. Jan. 4), *aff’d*, 745 F.2d 142 (2d Cir. 1984).

229. See *id.* at *2.

magazine's right to publish the letter constituted an offer of a contract or a restrictive notice or license that bound *American Lawyer* when it published the letter. Nonetheless, the court wrote: "Although plaintiff purported to set forth the condition in his letter that only the entire letter could be published, it would appear clear that plaintiff had no right to impose such a condition."²³⁰ The court of appeals affirmed. The court reviewed the four fair use factors stated in the Copyright Act²³¹ in light of the editorial changes made by *American Lawyer*.²³² The court made no mention of Diamond's qualification, other than in its quotation of the letter itself. The author's attempt to bind a user of his work with a primitive shrinkwrap license (really, a notice) so little troubled the court either conceptually or doctrinally that the issue was peremptorily dismissed.²³³

The second case arose in a very different context. The plaintiff in *Ringgold v. Black Entertainment Television, Inc.*²³⁴ created a "story quilt," an image of which was reproduced on a poster that the creator had licensed. The defendants produced a television series that used a copy of the poster in the set for their program. The poster was visible in the background of a single scene of one episode. The episode itself was broadcast several times. Ringgold sued for copyright infringement and unfair competition. The district court granted the defendants' motion for summary judgment, ruling that use of the poster constituted fair use of the plaintiff's copyrighted quilt.²³⁵ The court of appeals reversed and remanded. The details of the appellate court's analysis of the four statutory fair use factors are not particularly useful in drawing comparisons with *Diamond*, as the nature of the work and the nature of the nonconsensual use are quite different. The instructive contrast with *Diamond* arises, rather, in the rhetorical (in other

230. *Id.* at *3.

231. The Copyright Act states in relevant part:

In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—

- (1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- (2) the nature of the copyrighted work;
- (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- (4) the effect of the use upon the potential market for or value of the copyrighted work.

17 U.S.C. § 107.

232. *See Diamond*, 745 F.2d at 147-48.

233. Of course, Diamond's notice was not a shrinkwrap license in any traditional sense and, as a doctrinal matter, the proposition that the notice constituted an "offer" that the magazine "accepted" is highly debatable. What is notable, rather, is Diamond's effort to invoke the convention that he, the author, had the power to control the terms of publication, and the court's quick conclusion that the convention did not exist.

234. 126 F.3d 70 (2d Cir. 1997).

235. *See id.* at 73.

words, conventional) posture of Ringgold's claim and the court's willingness to accept that characterization. The Copyright Act, the court wrote, created a "licensing right" in the copyright owner.²³⁶ The essence of Ringgold's claim was "exploitation of the copyrighted material without paying the *customary price*."²³⁷

Notwithstanding the risk of reading too much into illustrations provided by these two cases, particularly where the factual settings differ as much as these do, the courts' different treatments of the possibility that the creator might legitimately and unilaterally impose restrictions on the character of the use of the work is compelling. In *Diamond*, the plaintiff did not stand on this theory and the district court dismissed its premise as untenable without discussion of authority. In *Ringgold*, the same premise represented the core of the plaintiff's case and of the court's decision that the plaintiff was entitled to a trial on the merits.²³⁸ Not only are the conventions of information use moving toward a baseline that begins with the copyright owner's exclusive right to define the appropriate terms of use of the work, but litigated disputes over unauthorized re-use are adopting the terms of the convention thus framed. The example from the *New York Times* with which this part began may seem trivial, but it is emblematic of how this baseline is moving out of the cases and into everyday information

236. *See id.* ("In the absence of defenses, these exclusive rights normally give a copyright owner the right to seek royalties from others who wish to use the copyrighted work.")

237. *Id.* at 81 (citing *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 562 (1985) (emphasis added) ("The crux of the profit/nonprofit distinction is not whether the sole motive of the use is monetary gain but whether the user stands to profit from exploitation of the copyrighted material without paying the customary price.")). *Harper & Row* held that the unauthorized publication of excerpts of President Ford's memoirs by *The Nation* magazine did not constitute fair use under the Copyright Act. *See Harper & Row*, 471 U.S. at 570.

238. The connection between these two cases is drawn into sharper focus by the extensive reliance by the court in *Ringgold* on the decision of the Supreme Court in *Harper & Row*, which in turn heavily relied on the right of first publication that belonged to the author under common law copyright. Conceptually, in other words, apart from the type of work and type of use at issue, the court in *Ringgold* gives substantially greater weight to the creator's right to define privately the scope of any subsequent use. What was "customary" to the Court in *Harper & Row* was the creator's collecting a license fee or royalty if one were set. To the court in *Ringgold*, it was "customary" for no use to be made of a work without a fee being paid. *See Karjala, Federal Preemption, supra* note 2, at 524 (arguing that the Copyright Act should implement the "right of first publication" concept by giving greater discretion to authors of narrowly distributed works to contract privately for limited use of their works). The scope of the copyright holder's right to license, and the holder's ability to dictate the terms on which it will license or refuse to license its work, presents a closely related issue. *See, e.g., LucasArts Entertainment Co. v. Humongous Entertainment Co.*, 870 F. Supp. 285, 290 (N.D. Cal. 1993) ("[T]he essence of a copyright interest is the power to exclude use of the copyrighted work by those who did not originate it or who are not authorized to use it. The right to license a patent or copyright . . . is the 'untrammled right' of the intellectual property owner." (citations omitted)); *infra* notes 382-83 and accompanying text (discussing the doctrine of "copyright misuse").

practice. *ProCD* does not mark the boundary between *Diamond* and *Ringgold*. Within copyright doctrine, credit for the conceptual shift toward the effect of licensing and markets on fair use doctrine belongs to *Harper & Row* and to *Campbell v. Acuff-Rose Music, Inc.*²³⁹ *ProCD* takes that concept from copyright law, however, and gives it significant additional doctrinal and practical heft, supporting and encouraging the idea that the “balance” between the creator’s incentive to create, and the public interest in access to and use of the work, is a question of purely private definition. That proposition and its consequences are defining what is, or should be, open space. How and why that is a problem is considered next.

III. FAIR USE, THE PUBLIC DOMAIN, AND THE CONSTRUCTION OF “OPEN SPACE”

This Article refers to fair use under the Copyright Act and to the public domain as the doctrinal representations of open space, but it has not, so far, explained what those concepts might represent or how disputed and disparate copyright conventions of open space, and the ways in which those conventions find public expression in the law, expose the vulnerability of copyright law to legal-ware. This, in a nutshell, is the problem: the Constitution and Congress each suppose that something approximating what this Article refers to as “open space” does and should exist. Neither provides much in the way of specifics regarding its contours and content, and its very existence has been under attack from one quarter or another. The existence of ongoing debates about fair use and the public domain may have been sufficient, until recently, to preserve a substantive open space. Shrink-wrap threatens to short circuit or terminate those debates. If we have

239. 510 U.S. 569 (1994). In *Campbell*, the Supreme Court clarified the suggestion in *Harper & Row* that the central feature of fair use analysis was the character of the copyright holder’s interest, and restored, at least formally, a fair use standard that gives equal weight to each of the four statutory factors. *See id.* at 583-86 (stating that it was error for the court of appeals to conclude that nonconsensual commercial re-use of a song lyric rendered such re-use presumptively unfair); Pierre N. Leval, *Nimmer Lecture: Fair Use Rescued*, 44 UCLA L. Rev. 1449, 1465-66 (1997) [hereinafter Leval, *Nimmer Lecture*] (arguing that *Campbell* properly focuses the fair use inquiry on the dichotomy between transformative and superseding use). *Campbell’s* statement of fair use principles recast rather than rejected prior cases that explicitly placed greater weight on the extent to which the “fair” use tapped markets for the originals, by acknowledging that “transformative” uses were more likely to be “fair” in part because there would likely be no market in “transformative” uses for the copyright holder to exploit. *See American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 930-31 (2d Cir. 1995); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 Tex. L. Rev. 989, 1061 (1997) [hereinafter Lemley, *Economics of Improvement*] (noting that a refusal to license parodic works may not constitute true market failure). If the Supreme Court intended to put to rest the notion that commercial re-use of copyrighted works is presumptively unfair, however, it may need to speak to the point again, more directly. *Cf. Micro Star v. FormGen, Inc.*, 154 F.3d 1107, 1113 (9th Cir. 1998) (holding commercial re-use presumptively unfair).

not figured out what fair use and the public domain are about, then we must identify a process that will enable us to do so in order to resist the inimical effect of shrinkwrap.

A. *The Ideas of Fair Use and the Public Domain*

The 1976 Copyright Act took a judicially-crafted doctrine of “fair use” of copyrighted works and wrote it explicitly into the United States Code.²⁴⁰ For a little more than twenty years since, determinations of nonconsensual fair use have been primarily questions of interpretation of the four “non-exclusive” factors stated in the statute.²⁴¹ Whether a particular use of a copyrighted work is “fair” and, therefore, does not constitute infringement, is determined by evaluating, among other things: (i) the nature of the fair use; (ii) the nature of the underlying work; (iii) the extent of the work taken for the use; and (iv) the effect of the second use on the market for the original.²⁴² Listing these four factors, despite their explicitly non-exclusive character, has led to different degrees of emphasis among courts and scholars on the relative weight accorded to each listed factor, the extent to which their non-exclusive character opens the door for broader approaches,²⁴³ and the degree to which fair use analysis can, or should, be understood or informed by a conceptual analysis of copyright law as a whole. There are multiple “ideas” of fair use that conflict and overlap with one another. The nature and extent of the conflict with public values created by shrinkwrap, and the extent to which practice norms are pushing those values aside, vary depending on the theory advanced. This section briefly summarizes the leading scholarly, and some of the judicial, attempts to rationalize fair use doctrine and its cousin, the public domain. The balance of this part describes how, notwithstanding continuing diversity in the debate over the role of fair use and the public domain, courts generate and reflect norms and conventions of use that support the type of private use regulation described above.

A number of scholars view fair use (and all of copyright law) primarily in economic terms. A somewhat simplified version of the argument is this: the goal of copyright law is the efficient creation and distribution of rights in creative works. Private holders are best situ-

240. See Copyright Act, Pub. L. No. 94-553, 90 Stat. 2541, 2546 (codified at 17 U.S.C. § 107 (1994)); *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575-78 (1994) (reviewing the evolution of the statutory fair use doctrine).

241. See *Campbell*, 510 U.S. at 577-78.

242. See 17 U.S.C. § 107 (1994). The statute specifically states that “fair use of a copyrighted work . . . is not an infringement of copyright” and provides illustrations of types of uses that likely would be considered “fair”: “[C]riticism, comment, news reporting, teaching, . . . scholarship, or research.” *Id.*

243. See, e.g., *Educational Testing Serv. v. Stanley H. Kaplan, Educ. Ctr., Ltd.*, 965 F. Supp. 731, 736 (D. Md. 1997) (dispensing with a factor-by-factor analysis of fair use and relying on the “broader perspective” of alleged unfairness of copying).

ated to maximize the welfare gains associated with distribution of their works. Licensing of copyrighted works is encouraged because it promotes efficiency, that is, the ability of the creator to generate revenue by licensing particular uses, and because it promotes the generation and distribution of creative works that otherwise might not exist.²⁴⁴ Certain transfers of rights concerning copyrighted works are efficient but do not occur because of market failure: transaction costs of one type or another interfere with the transfers. In some cases, rights holders object to proposed uses and attempt to collect disproportionately high license fees or refuse to license material altogether. In other cases, costs of identifying appropriate parties, of negotiating, or of enforcing what are often one-shot deals vastly exceed the economic and social benefits anticipated on account of a license. Fair use is disfavored, then, if it interferes with the operation of an actual or potential market for the work.²⁴⁵ When such markets do not exist, fair use enables users of copyrighted works to use those works without securing prior permission from the copyright holders; it permits these transfers to occur, curing market failure.²⁴⁶ One might extend the point to suggest that, as an affirmative proposition, fair use should be favored when it promotes the distribution of works that otherwise would not occur.²⁴⁷

Other scholars and some courts characterize these “failures to license” wholly or partly as opportunities to support one or more essentially redistributive goals rather than opportunities to act where the

244. Representative examples of this argument can be found in 2 Paul Goldstein, Copyright § 10.1.1, at 10:4-10:7 (2d ed. 1998), and 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, 1610-14 (1982) [hereinafter Gordon, *Fair Use as Market Failure*], and the argument is implicit in, among other things, copyright models that embrace private copyright collective rights organizations as means of overcoming transaction cost barriers to efficient licensing. See Merges, *Contracting into Liability Rules*, *supra* note 26, at 1390-91. Professor Cohen points out that “economic” arguments for copyright encompass a variety of what might be better referred to as “utilitarian” approaches; what the text describes is a generalized version of modern neo-classical economic analysis of copyright. See Cohen, *Lochner in Cyberspace*, *supra* note 18 (manuscript at 55).

245. Some recent cases have adopted this approach. For example, one Second Circuit case stated that:

[I]t is not unsound to conclude that the right to seek payment for a particular use tends to become legally cognizable under the fourth fair use factor when the means for paying for such a use is made easier. . . . [I]t is sensible that a particular unauthorized use should be considered “more fair” when there is no ready market or means to pay for the use The vice of circular reasoning arises only if the availability of payment is conclusive against fair use.

American Geophysical Union v. Texaco, Inc., 60 F.3d 913, 930-31 (2d Cir. 1995).

246. See Paul Goldstein, *Copyright and Its Substitutes*, 1997 Wis. L. Rev. 865, 866.

247. But see Jonathan Dowell, Comment, *Bytes and Pieces: Fragmented Copies, Licensing, and Fair Use in a Digital World*, 86 Cal. L. Rev. 843, 876-77 (1998) (arguing that the market failure premise for fair use does not necessarily lead in all cases to a denial of fair use privilege even if the market exists).

market does not or cannot.²⁴⁸ Fair use under this approach is designed to privilege or subsidize certain uses that society normatively values, whether in connection with producing additional creative works or with subsidizing other valuable behaviors, independent of the extent to which such works are, or may be, undervalued by the market.²⁴⁹ There is, however, disagreement as to which types of access and use ought to receive such special treatment. Such privileges may extend to scientific and educational research,²⁵⁰ “transformative” uses, such as parody and criticism,²⁵¹ use that furthers or supports “democratic values” of informed citizenship and political participation,²⁵² “personal” use,²⁵³ “non-commercial” use,²⁵⁴ or “environmen-

248. See, e.g., Merges, *End of Friction*, *supra* note 28, at 134-35 (arguing that legislation should more explicitly address redistributive features of copyright).

249. The redistributive argument goes beyond the market failure argument and suggests that certain uses should be privileged even if a market for the transactions in fact exists. One construction of the *Diamond* decision described in part II, and the proposition that fact-oriented works lend themselves more readily to fair use, see *Diamond v. Am-Law Publ'g Corp.*, 745 F.2d 142, 148 (2d Cir. 1984), is that in this context, fair use most closely resembles the First Amendment in supporting unconstrained public discourse.

250. See Goldstein, *Copyright's Highway*, *supra* note 213, at 230. Other commentators write:

The important question is how to recreate a “fair use” zone in cyberspace that protects the strong public interest in ensuring that certain uses and certain users, notably the scientific and educational communities, are not priced out of the market or forced to cut back upon the kind of basic research that has heretofore played a crucial role in U.S. economic and technological growth.

Reichman & Samuelson, *supra* note 8, at 101 n.216.

251. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578-79 (1994); *Micro Star v. FormGen, Inc.*, 154 F.3d 1107, 1113 n.6 (9th Cir. 1998) (stating that transformative use is entitled to broader deference); Gordon, *Jurisprudence of Benefits*, *supra* note 181, at 1034-35 (arguing that copyright law may need to create safe harbors for “hostile” uses); Yankwich, *supra* note 146, at 214 (suggesting that publishing a work constitutes, in part, an invitation to consume for purpose of criticism). Judge Leval believes that the *Campbell* decision restores a normatively and prescriptively appropriate equilibrium to fair use jurisprudence as a whole. See Leval, *Nimmer Lecture*, *supra* note 239, at 1464-66; see also Lemley, *Romantic Authorship*, *supra* note 4, at 1077-83 (arguing that the existing fair use doctrine should be construed to protect “radical improvements” wrought by the transformative user). Post-*Campbell* caselaw, however, shows that the case has not succeeded in unifying fair use jurisprudence. See *infra* Part III.B.

252. See Cohen, *A Right to Read Anonymously*, *supra* note 28, at 1036-38 (arguing that law should be amended to address privacy concerns of individuals in using copyrighted networked materials); Fisher, *supra* note 72, at 1762-66 (suggesting that copyright laws may be linked, under certain circumstances, to promoting access to a better life); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 Yale L.J. 283, 364-82 (1996) (linking copyright policy to political foundations of liberal society).

253. See, e.g., Niva Elkin-Koren, *Cyberlaw and Social Change: A Democratic Approach to Copyright Law in Cyberspace*, 14 Cardozo Arts & Ent. L.J. 215, 283-89 (1996) (discussing whether personal use is fair use).

254. See, e.g., Litman, *Information Age*, *supra* note 207, at 40-44 (discussing the difference between using copyrighted material for commercial and non-commercial purposes). Professor Karjala proposes a variation on exemptions for “non-commer-

tal” concerns that derive neither from the nature of the original work nor from the nature of the re-use, but from the context or texture of the information itself.²⁵⁵ The number of competitors and the vigor of the present debate lead to only one conclusion, which is that what fair use means, and what it should mean, is not clear as a policy matter. In practice, the only way to deal with the indeterminacy is to approach disputes on a highly contextualized basis.²⁵⁶

The phrase “public domain” raises questions and problems similar to those raised by fair use, but does so with respect to a different class of works, and without a constitutional or affirmative statutory text from which to work. The public domain is primarily a negative concept.²⁵⁷ Works and portions of works that do not meet both constitutional and statutory requirements for copyrightability, but that fall within the “subject matter of copyright,” lie in the public domain.²⁵⁸ Similarly, works that have fallen out of copyright because the term of copyright protection has expired because former statutory prerequisites for obtaining or renewing copyright were not met, because they

cial” use: a distinction between “widely distributed” and “narrowly distributed” works. See Karjala, *Federal Preemption*, *supra* note 2, at 522-25.

255. Some argue that “cyberspace” is a separate “place” that deserves its own body of doctrine independent of the rules that govern “real” (tangible) space. See Johnson & Post, *supra* note 72, at 1378-87. An increasingly frequent response is that if “real” or tangible space may be zoned, then no principled distinction exists to suggest that “cyberspace,” a broad term that might be considered inclusive of all digital information, may not similarly be zoned into, among other things, public (free and fair use) and private zones. See Lessig, *Zones of Cyberspace*, *supra* note 79, at 1408-10. Theories of zoning may illuminate this debate, see, e.g., Jerry Frug, *The Geography of Community*, 48 Stan. L. Rev. 1047, 1081-1107 (1996) (proposing a radical revision of urban zoning policies to build communities), and, by extension, the fair use question as a whole. Fair use may be a route not to facilitating certain types of uses and transactions that otherwise would be under-represented, but to assuring that the “information content” of the modern world is broad, rich, and diverse. Cf. Frug, *supra*, at 1075-77 (arguing that cities should teach people how to interact with strangers). In a similar vein is Professor Yen’s argument that copyright decisions are inevitably informed by aesthetic judgments. See Yen, *The Legacy of Feist*, *supra* note 78, at 1343-48.

256. Cf. Pierre N. Leval, *Toward a Fair Use Standard*, 103 Harv. L. Rev. 1105, 1105 (1990) (criticizing courts for failing to develop a consistent set of principles or values to govern fair use); Weinreb, *Fair’s Fair*, *supra* note 205, at 1152-53 (arguing that fair use represents a community sense of “fairness,” but not explaining how such a sense might arise and extend beyond a particular case).

257. See, e.g., Jessica Litman, *The Public Domain*, 39 Emory L.J. 965, 977-94 (1990) [hereinafter Litman, *Public Domain*] (describing the development of copyright law as shaping the contours of the public domain).

258. These works lie in the public domain because they lack the necessary constitutional “originality,” see *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991), or fail one or more of the statutory requirements for copyrightability: originality, work, authorship, fixation, “tangible medium of expression . . . from which [the work] can be perceived, reproduced, or . . . communicated,” excluding ideas, procedures, processes, systems, methods of operation, concepts, principles, or discoveries, 17 U.S.C. § 102(a)-(b) (1994).

were created before statutory copyright schemes arose,²⁵⁹ or because Congress has declared that no copyright exists in them²⁶⁰ lie in the public domain and in principle are available for use and re-use by all without restriction. Nevertheless, it is common for publishers to collect and publish these works, or the information they contain, and charge readers and users for their use.²⁶¹ If a work lies in the public domain, either because Congress has declared that it is not (or is no longer) copyrightable, or because the Constitution dictates that it may not be copyrighted, how do we conceive of the “public domain” in a meaningful way that allows that result to restrain, to a socially acceptable degree, privately-adopted measures such as shrinkwrap that might limit access to this material?

As a cousin of fair use, the public domain attracts similar arguments concerning its function. Nominally, the public domain provides essential raw material for adoption and use by authors and other creators. The public domain is an essential component of the original “authorship,” and without it copyright cannot arise.²⁶² The public domain may do more: it provides a common reference library of publicly accessible facts and ideas—an intellectual commons—that gives our diverse polity the vocabulary and syntax necessary to engage in a variety of political and social debates and to function at some level as a single community.²⁶³ Questions concerning the scope of the public domain may not, in theory, draw forth debates over distinctions among context-specific types or species of use. In copyright law, material either lies within the public domain, because it constitutes “ideas” or “facts,” or it does not, because it is “expression.”²⁶⁴ Like fair use, however,

259. Sections 302 through 304 state the term of copyright for works created at different times and under different U.S. copyright regimes, including requirements for renewal of copyright for works created prior to January 1, 1978. See 17 U.S.C. §§ 302–304.

260. See *id.* § 105.

261. It is accepted that to some degree, absent the ability to charge for access, some number of works either would not be created (because the costs of assembling the information could not be recovered by the publisher) or would not be as broadly distributed. That, among other things, is the rationale underlying *ProCD*. What is hotly disputed is the extent to which depriving publishers of the ability to charge for access would simultaneously deprive them of the needed incentive to publish the information.

262. See Litman, *Public Domain*, *supra* note 257, at 965-67.

263. See Lange, *supra* note 14, at 163-65 (discussing the preemption “by default” of individual rights in the public domain); Netanel, *Copyright Alienability*, *supra* note 72, at 423-24 (describing communitarian aspects of copyright law); see also Peter A. Jaszi, *Goodbye to All That—A Reluctant (and Perhaps Premature) Adieu to a Constitutionally-Grounded Discourse of Public Interest in Copyright Law*, 29 Vand. J. Transnat'l L. 595, 600-01 (1996). This broader political or social function of the public domain is part of what I have tried to capture in the phrase “open space.”

264. This traditional formulation, codified in 17 U.S.C. § 102(b) (providing that copyright protection does not extend to ideas, procedures, concepts, or principles), dates from the Supreme Court's decision in *Baker v. Selden*, 101 U.S. 99 (1879). This point, and the discussion that follows, refers in broad terms to material that is ex-

conflicts in these general statements of policy or purpose demand a contextualized approach to the public domain as doctrine.

As Professor Litman has persuasively argued,²⁶⁵ virtually the only conceptual framework in which some normative vision of “the public domain” may be expressed as a function of newly created works is provided by the Supreme Court’s decision in *Feist Publications v. Rural Telephone Service*,²⁶⁶ which held that a work must be “original” to be “copyrightable” and to qualify for protection under the Copyright Act.²⁶⁷ *Feist* concerned the copyrightability of a telephone directory compilation of addresses and telephone numbers. The Court held that the Constitution requires at least a nominal amount of “originality” to support the “authorship” constitutionally required for copyright protection.²⁶⁸ “Originality” and “authorship” are necessary to provide some basis for distinguishing copyrightable from uncopyrightable material. Nevertheless, they are fuzzy and manipulable as prescriptive concepts,²⁶⁹ and they do not fit comfortably within any of the candidate “public domain” concepts summarized above. Like arguments over fair use, there is nothing in the arguments over the scope of the public domain, even from the point of view of those who urge that greater attention be paid to the doctrine, which suggests that we are close to figuring out what the public domain does or should mean.²⁷⁰

cluded from copyright protection, rather than material that has fallen out of copyright protection.

265. See Litman, *Public Domain*, *supra* note 257, at 1000-12.

266. 499 U.S. 340 (1991).

267. See *id.* at 345.

268. See *id.* at 348-51.

269. See Litman, *Public Domain*, *supra* note 257, at 1019. Professor Ginsburg pointed out shortly after *Feist* that the Supreme Court passed on an opportunity to distinguish as a statutory matter between works of “high” expression, works that display a significant investment of creative effort and are relatively widely distributed, and those of “low” expression, works of minimal creativity and little distribution. See Ginsburg, *No “Sweat”?*, *supra* note 78, at 340-41. The effect of *Feist*, however, is to lump all works into “high” copyright analysis. That standard, when coupled with the low “originality” threshold that *Feist* established for entry into the halls of “high” copyright, opens the door for “authorship” inquiries in which courts either perform strange contortions to bring works within the scope of federal copyright law rather than expose publishers to the risks of the public domain, *see, e.g.*, *American Dental Ass’n v. Delta Dental Plans Ass’n*, 126 F.3d 977, 979 (7th Cir. 1997) (determining that taxonomy of dental procedures is copyrightable); *Urantia Found. v. Maaherra*, 114 F.3d 955, 959 (9th Cir. 1997) (finding authorship despite a disclaimer of authorship by the copyright holder); *Adobe Sys., Inc. v. Southern Software, Inc.*, No. C 95-20710 (N.D. Cal. Feb. 2, 1998) (order granting in part plaintiff Adobe’s motion for summary judgment on copyright claims) (on file with author) (stating that machine-generated computer program code is copyrightable under *Feist*), or avoid the question altogether by focusing on private contract, as in *ProCD*.

270. On the one hand lie admonishments to restore some vision of the public domain as an institutional safety valve, *see* Litman, *Public Domain*, *supra* note 257, at 1023 (finding substantial legal public policy bases to support the idea that computer program algorithms are unpatentable), and on the other hand lie explicit appeals to

B. *Fair Use and the Public Domain in Action*

For fair use and public domain concepts, disagreements among scholars are mirrored, to a large degree, in disagreements and conflicts within the cases. There are ongoing divisions concerning the correct jurisprudential approach to fair use and public domain disputes. The correct outcome of such disputes might be of less concern, however, were it not for the suggestion in the cases, *ProCD* in particular, that shrinkwrap seems to be pushing conventions or practices of copyright and information use that preempt (in a colloquial sense)²⁷¹ dis-

politics and deal-making, *see, e.g.*, Reichman & Samuelson, *supra* note 8, at 160 (“Ideally, the database legislation should institutionalize these and other fair-use related issues, together with an overall dispute-resolution mechanism, within the larger framework of an apposite collection society, which would mediate between funders, providers, distributors, and users.”). Neither course seems likely to produce a robust or stable result.

271. This section argues that judicial decision-making provides the right lens through which the impact of *ProCD* should be examined. Both markets and legislatures present legitimate institutional claims for addressing this issue. The market approach is that of *ProCD* itself. Its weaknesses have been alluded to here and are addressed in greater detail in the next part. *See infra* Part IV.A. The failings of legislatures and legislative processes in responding to social, technological, and market changes affecting intellectual property have been well-documented elsewhere. *See, e.g.*, Jessica D. Litman, *Copyright, Compromise, and Legislative History*, 72 Cornell L. Rev. 857 (1987) [hereinafter Litman, *Copyright Compromise*] (documenting the involvement of interest groups in the legislative history of the 1976 Copyright Act); Barbara Ringer, *First Thoughts on the Copyright Act of 1976*, 22 N.Y.L. Sch. L. Rev. 477, 478-82 (1977) (discussing extensive legislative compromises involved in passing the Copyright Act of 1976). Other scholars are more willing to entrust Congress with such judgments. *See* Goldstein, *Copyright's Highway*, *supra* note 213, at 216-25; Merges, *End of Friction*, *supra* note 28, at 134-35. Ongoing legislative or quasi-legislative attempts to deal with fair use issues perpetuate a paradigm, however, similar to that implemented by shrinkwrap, that defines “appropriate” use before the normative dimensions of that use have been fully explored. *See, e.g.*, Working Group on Intellectual Property, Report to the Commissioner on the Conclusion of the First Phase of the Conference on Fair Use 18-20 1997 (developing “guidelines” for fair use for use of digital images, distance learning, educational multimedia, electronic reserve systems, interlibrary loan, document delivery, and software in libraries); Mark D. Rosen, *What Has Happened to the Common Law?—Recent American Codifications, and Their Impact on Judicial Practice and the Law's Subsequent Development*, 1994 Wis. L. Rev. 1119, 1199-1252 [hereinafter Rosen, *What Has Happened to the Common Law?*] (discussing how the codification of a body of law frames the normatively acceptable terms of further discourse regarding legal evolution). As matters of copyright doctrine and tradition, fair use and “copyrightability” have been judicial creations because what is “fair” in any particular context, or what constitutes an “idea” rather than “expression,” is likely to be highly fact and context-specific. Legislation that might implement a more precise rule yet remain cognizant of the variety of disputes that might likely arise would merely restate rather than resolve the present difficulty. *See, e.g.*, Cate, *supra* note 33, at 1052-54, 1064-65 (discussing the effects of technological convergence on the need for reform in regulation of telephone companies by legislatures and courts); Lemley, *Economics of Improvement*, *supra* note 239, at 1077-83 (arguing that existing fair use doctrine should be construed to protect “radical improvements” wrought by a transformative user).

putes about the proper scope of open space.²⁷² This section suggests how this is so. First, it reviews recent caselaw on the application of the fair use doctrine and analyses of “copyrightability”²⁷³ in copyright infringement disputes. Second, it surveys applications of the *ProCD* case itself in intellectual property litigation.

1. A Snapshot of Fair Use and of the Public Domain

Simple searches on WESTLAW for recent cases adjudicating fair use and copyrightability disputes yielded thirteen of the former and ten of the latter.²⁷⁴ Such a small number of available opinions on each issue can yield but a few observations. In this context, only the following emerges from these cases. There is no grand unifying theory of open space in place or in the works. Courts and particular judges adopt a number of different approaches to analyzing these problems. It is difficult to predict the approach that will control in a particular case.

a. *Fair Use*

Recent fair use decisions should be understood in the context of two important propositions, one substantive, the other procedural. Substantively, in *Campbell v. Acuff-Rose Music, Inc.*,²⁷⁵ the Supreme Court attempted to confirm that the general jurisprudential approach to fair use decisions ought to remain that of “case-by-case analysis,”

272. The ultimate success of such a result would reflect the power of the conventional authority of the practice, not the normative strength of *ProCD*'s market theory. From a theoretical standpoint, the difficulty with current market failure explanations of copyright is that they either assume the normative value of the market rather than demonstrate it, or they have no normative content at all—in a pure market-driven world, as transaction costs reduce to zero, fair use is necessary, if at all, for non-market reasons. See, e.g., Bell, *supra* note 27, at 592-95 (acknowledging that in a world of zero transaction costs, fair use might nonetheless protect “objectionable” use).

273. This is the modern category into which “public domain” analysis falls. See *infra* Part III.B.1.

274. Search of WESTLAW, ALLCASES Database (March 11, 1998) (using search terms “‘fair use’ and date (aft 1996)”); search of WESTLAW, ALLCASES Database (March 11, 1998) (using search terms “copyright and 102(b) and date (aft 1996) but not ‘fair use’”). Admittedly, the methodology is crude. I define “recent” for these purposes arbitrarily: decisions released between January 1, 1996 and March 1, 1998. The results include published and unpublished opinions, and decisions of trial and appellate courts, but not opinions by state courts. Cases that cite *ProCD* are excluded from both sets of results. The Article separately deals with them below. As a barometer of “trends” in the law, the sample is too small. As a measure of how parties and courts frame and resolve these disputes, the sample does not include cases resolved on terms that do not find their way into the “ALLCASES” file in WESTLAW. I argue merely that the snapshot provided by these opinions illustrates the status in practice of the arguments about copyright law presented in the first section of this part.

275. 510 U.S. 569 (1994).

rather than application of “bright-line rules.”²⁷⁶ The Court further emphasized that, especially in light of the legislative history of the statutory version of the fair use doctrine, courts should “continue the common law tradition of fair use adjudication”²⁷⁷ that existed prior to the enactment of the current Copyright Act in 1976.²⁷⁸ In the context of *Campbell*, the Court’s approach led to its conclusion that nonconsensual commercial re-use of a copyrighted work should not generate a presumption that the use was unfair.²⁷⁹ Nor should the effect of the re-use on the market for the copyrighted work dominate fair use analysis.²⁸⁰ Each of the four factors relating to fair use described in the Copyright Act deserves consideration, and they should be considered together.

The procedural proposition is that fair use has been found to be an affirmative defense, to be pleaded and proven by the defendant,²⁸¹ rather than an element of the plaintiff’s claim of infringement. Even though § 107 of the Copyright Act defines fair use of a copyrighted work as “not an infringement of copyright,”²⁸² the plaintiff need not allege or prove that the defendant’s allegedly infringing use does not constitute fair use. The combination of these procedural hurdles and the Supreme Court’s admonition to apply common-law concepts suggests the appropriateness of the Second Circuit’s observation a decade ago, that “[b]ecause the fair use question is so highly dependent on the particular facts of each case, courts have usually found it appropriate to allow the issue to proceed to trial,”²⁸³ ought to still be the case.

The opinions, however, belie the implication that fair use cases should usually go to the factfinder. They also belie what some might take to be the logical corollary of the “common law” approach confirmed in *Campbell*, the proposition that common law adjudication of fair use issues should, and will, produce fair use “rules.” The thirteen fair use decisions referred to above break down roughly into two

276. See *id.* at 577. The four non-exclusive statutory fair use factors are listed at *supra* note 242 and accompanying text.

277. *Campbell*, 510 U.S. at 577.

278. See *id.* at 577-78. In his concurrence in *Campbell*, Justice Kennedy observed that “[t]he common-law method instated by the fair use provision of the copyright statute . . . presumes that rules will emerge from the course of decisions.” *Id.* at 596 (Kennedy, J., concurring) (citation omitted). The concurrence highlights an ambiguity in the formulation of the common-law tradition, which is explored in part V.

279. See *Campbell*, 510 U.S. at 583-85.

280. See *id.* at 577-78; *American Geophysical Union v. Texaco, Inc.*, 60 F.3d 913, 926 (2d Cir. 1995) (relying on the absence from *Campbell* of a statement, from *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 566 (1985), that market effect of the re-use is the most significant of the four fair use factors).

281. See *Campbell*, 510 U.S. at 590; *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 561 (1985). *But see* *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532, 1542 n.22 (11th Cir. 1996) (identifying fair use as a “right” granted by the Copyright Act).

282. 17 U.S.C. § 107 (1994).

283. *Maxtone-Graham v. Burtchaell*, 803 F.2d 1253, 1258 (2d Cir. 1986).

groups. Seven of the thirteen rely to some extent on reasoning by analogy to other cases of a similar type, although categorization by type correlates poorly with consistency of result. *Leibovitz v. Paramount Pictures Corp.*²⁸⁴ and *Dr. Seuss Enterprises v. Penguin Books USA, Inc.*²⁸⁵ involved fair use defenses to infringement claims brought against publishers of parodies. In *Leibovitz*, the photographer, Annie Leibovitz, challenged the parody of her photograph of the actress Demi Moore used in an advertising campaign for the movie *Naked Gun 33 1/3: The Final Insult*. The court of appeals affirmed a judgment granting the defendant's motion for summary judgment on fair use grounds, relying largely on *Campbell*, which concerned a parody of Roy Orbison's *Oh! Pretty Woman*, and a fact-specific analysis of the four fair use factors.²⁸⁶ In *Dr. Seuss*, the court affirmed a preliminary injunction against the distribution of a parody of the criminal trial of O.J. Simpson written in the style of Dr. Seuss, rejecting, under *Campbell* and these same four factors, the defendants' fair use defense.²⁸⁷

Three cases deal with fair use of "facts" or "news." In *Groden v. Carroll & Graf Publishers, Inc.*,²⁸⁸ the court ruled that the defendants' use in a book of "enhanced" images from the Zapruder film of the Kennedy assassination constituted fair use, in part because the use itself was minimal and in part because the unusual historical value of the Zapruder film, in previous cases, sustained fair use findings.²⁸⁹ In *Kulik Photography v. Cochran*,²⁹⁰ the plaintiff challenged the use by defense counsel for O.J. Simpson in the Simpson murder trial, and Court TV's subsequent broadcast of that use, of the plaintiff's copyrighted photograph. The court granted the defendants' motion to dismiss for lack of jurisdiction and noted that broadcast of the photograph was presumptively fair as "news reporting."²⁹¹ In *Los Angeles News Service v. KCAL-TV Channel 9*,²⁹² the district court granted the motion for summary judgment of a television station accused of improperly broadcasting plaintiff's videotape of a beating during the 1992 Los Angeles riots. The court of appeals reversed the judgment and remanded for trial. Even though the videotape was "factual" and undoubtedly touched a matter of important public concern, the court found that the defendant's use of the tape was arguably

284. 137 F.3d 109 (2d Cir. 1998).

285. 109 F.3d 1394 (9th Cir. 1997), *cert. dismissed*, 118 S. Ct. 27 (1998).

286. *See Leibovitz*, 137 F.3d at 114-17.

287. *See Dr. Seuss*, 109 F.3d at 1400-03.

288. No. 92 Civ. 8670 (LBS) (DFE), 1997 WL 739585 (S.D.N.Y. Nov. 25, 1997).

289. *See id.* at *8.

290. 975 F. Supp. 812 (E.D. Va. 1997).

291. *See id.* at 814. Section 107 of the Copyright Act lists several illustrations of types of uses that might support fair use determinations. "News reporting" is one of them. *See* 17 U.S.C. § 107 (1994).

292. 108 F.3d 1119 (9th Cir. 1997), *cert. denied*, 118 S. Ct. 81 (1998).

unfair in light of the station's knowing evasion of a request by the news service for payment of a license fee.²⁹³

The final two cases dealing with types of fair use are *DSC Communications v. Pulse Communications Inc.*²⁹⁴ and *Sandoval v. New Line Cinema Corp.*²⁹⁵ In *DSC Communications*, the plaintiff, a producer of computer technology, challenged the defendant's reverse engineering of one of the plaintiff's products in order to obtain access to the source code of plaintiff's software. On the defendant's motion for judgment as a matter of law at the close of the plaintiff's case at trial, the court held that such reverse engineering constituted fair use because it represented the only method of obtaining access to ideas and functional elements contained in the plaintiff's computer program.²⁹⁶ In *Sandoval*, the plaintiff, a photographer, challenged use by the producers of the movie *Seven* of certain photographs in the background of one scene. On cross motions for summary judgment, the court ruled that the use was fair, in part contrasting this case with other set decoration cases.²⁹⁷

The balance of the fair use decisions in this sample avoid categories and analogy, and instead address themselves almost exclusively to the operation of the four statutory fair use factors in the context of the particular case at hand. Equally important, they typically rely most heavily on the fourth factor, "the effect of the use upon the potential market for or value of the copyrighted work."²⁹⁸ The division between the cases that primarily rely on prior case law on the same or related use and those that follow the four factors is not sharp. Several of the cases above that deal with fair use in categories also discuss, either briefly²⁹⁹ or at length, the statutory factors and the market impact of the re-use in particular.³⁰⁰ This second group of cases from the

293. See *id.* at 1123.

294. 976 F. Supp. 359 (E.D. Va. 1997).

295. 973 F. Supp. 409 (S.D.N.Y. 1997), *aff'd*, 147 F.3d 215 (2d Cir. 1998).

296. See *DSC Communications*, 976 F. Supp. at 363-64 (comparing this dispute with those presented in *Sega Enters. Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992), and *Atari Games Corp. v. Nintendo of Am., Inc.*, 975 F.2d 832 (Fed. Cir. 1992), each of which affirmed that reverse engineering of computer programs constituted fair use). For a summary of reverse engineering authorities, see Lemley & McGowan, *supra* note 55, at 525 n.197.

297. See *Sandoval*, 973 F. Supp. at 413-14. In affirming the judgment, the court of appeals distinguished the case from *Ringgold v. Black Entertainment Television*, 126 F.3d 70 (2d Cir. 1997), on the ground that the defendant's use of the plaintiff's photographs was *de minimis*. See *Sandoval*, 147 F.3d at 217-18.

298. 17 U.S.C. § 107(4) (1994).

299. See *Groden v. Carroll & Graf Publishers, Inc.*, No. 92 Civ. 8670 (LBS) (DFE), 1997 WL 739585, at *8 (S.D.N.Y. Nov. 25, 1997).

300. See *Los Angeles News Serv. v. KCAL-TV Channel 9*, 108 F.3d 1119, 1122-23 (9th Cir. 1997) (holding that the market impact factor did not weigh in the defendant's favor when a television station evaded an existing license offered by the plaintiff news service for rights to use the videotape in question, thereby precluding summary judgment on fair use grounds), *cert. denied*, 118 S. Ct. 81 (1998); *Sandoval*, 973 F.

sample is notable, however, for the willingness of courts to reason solely from the text of the statute and from the evidence presented by the case.

*Ringgold v. Black Entertainment Television, Inc.*³⁰¹ already has been discussed for its emphasis on a paradigm of copyright law that focuses on the right to license.³⁰² Here, it is noteworthy in part for the fact that the court of appeals reversed the district court's judgment granting the defendant's motion for summary judgment on fair use grounds and in part for the fact that the court's review of the fair use issue was limited to how the plaintiff's evidence related to the statute.³⁰³ In *Marobie-FL, Inc. v. National Ass'n of Fire and Equipment Distributors*,³⁰⁴ the court granted the plaintiff's motion for summary judgment against the defendant who copied the entirety of the plaintiff's "clip art" software portfolio onto a website and made that portfolio available for downloading. Not only did the court analyze the facts of the case against the statutory fair use factors, but the court also applied the proposition, rejected earlier by the Supreme Court in *Campbell*, that the defendant's commercial re-use of the copyrighted work was presumptively unfair.³⁰⁵ In *Infinity Broadcasting Corp. v. Kirkwood*,³⁰⁶ the court granted summary judgment to the defendant, who marketed "listen lines" that made radio broadcasts available across telephone lines to individual and firm subscribers who wanted access to the broadcasts for a variety of monitoring purposes. The absence of any evidence of market harm appeared to persuade the court that the defendant was engaged in a legitimate use under the circumstances.³⁰⁷ In *Castle Rock Entertainment v. Carol Publishing Group, Inc.*,³⁰⁸ the court held, on motion for summary judgment by the plaintiff, that the defendants' publication of a book of trivia concerning the *Seinfeld* television show did not constitute fair use. The effect of such a work on the market for a similar authorized work was dispositive of the case because the court found the other three statutory fair use factors did not clearly favor one party or the other.³⁰⁹ In *Storm Impact, Inc. v. Software of the Month Club*,³¹⁰ the plaintiff produced

Supp. at 413 (holding that a "fleeting and obscured" use of the plaintiff's photographs could not affect the market for the plaintiff's works).

301. 126 F.3d 70 (2d Cir. 1997).

302. See *supra* notes 236-37 and accompanying text.

303. See *Ringgold*, 126 F.3d at 78-81.

304. 983 F. Supp. 1167 (N.D. Ill. 1997).

305. See *id.* at 1175-76.

306. 965 F. Supp. 553 (S.D.N.Y. 1997), *rev'd*, 150 F.3d 104, 111 (2d Cir. 1998) (holding that the potential market impact of the defendant's use tipped the balance of harms in the plaintiff's favor).

307. See *id.* at 560.

308. 955 F. Supp. 260 (S.D.N.Y. 1997), *aff'd*, 150 F.3d 132 (2d Cir. 1998).

309. See *id.* at 270.

310. 44 U.S.P.Q.2d (BNA) 1441 (N.D. Ill. 1997).

shareware computer games.³¹¹ The defendant compiled and sold a series of CD-ROMs containing a "best of" selection of such games, including a game produced by the plaintiff. On cross-motions for summary judgment, the court denied both motions concerning infringement and fair use, ruling that material disputes of fact remained concerning the nature of the fourth factor (effect of the re-use on the market for the work) under the facts presented. The plaintiff's program included a notice that purported to restrict commercial re-distribution of the game. The court indicated that, in light of this notice, it needed more evidence to assess the plaintiff's market, customs, and practice concerning shareware generally.³¹²

The last of the fair use cases in the sample, and the one that fits neatly into neither of the previous categories, is *Educational Testing Service v. Stanley H. Kaplan, Educational Center, Ltd.*³¹³ Here, the court expressly declined to analyze the defendant's "fair use" of the plaintiff's standardized test under the four statutory factors because such an analysis would be inconclusive. Instead, the court held that fact questions remained concerning the defendant's conduct that precluded summary judgment, and it referred to the "common law" standard confirmed by the Supreme Court in *Campbell* and announced that it would apply fair use as an "equitable rule of reason."³¹⁴

b. *Public Domain*

Understanding the public domain cases requires notes similar to those that preceded the fair use decisions. No statutory or Supreme Court authority directly supports the proposition that determining what lies in the public domain, or what divides "idea" from "expression," is a matter of common law or case-by-case adjudication. Nonetheless, such a proposition is at least implicit in *Feist*'s standard that, in order to separate "idea" from "expression," only "original works of authorship" may form the basis of an action for infringement of copyright.³¹⁵ If copyrightability is questioned, then courts must inquire, for

311. *See id.* at 1442-43.

312. *See id.* at 1446-47. The district court subsequently ruled that the defendant could not rely on a "fair use" defense. *See Storm Impact, Inc. v. Software of the Month Club*, 13 F. Supp. 2d 782, 791 (N.D. Ill. 1998) ("[E]xpress reservations of distribution rights are valid, enforceable, and militate against a finding of fair use."). In so ruling, the court relied heavily on testimony offered by the defendant's expert, who noted that commercial re-distribution of shareware (i.e., in violation of a notice) would not benefit the public. *See id.* Under the reasoning used by the court, traditional shrinkwrap licenses and restrictive notices are legally indistinguishable.

313. 965 F. Supp. 731 (D. Md. 1997).

314. *Id.* at 736-37 (quoting *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 560 (1985)).

315. *Feist Publications v. Rural Tel. Serv.*, 499 U.S. 340, 347-49 (1991); *see also Peter Pan Fabrics, Inc. v. Martin Weiner Corp.*, 274 F.2d 487, 489 (2d Cir. 1960) (identifying the division between "ideas" and "expression" as "inevitably . . . *ad hoc*"). As noted earlier, this discussion does not encompass material that, for one technical rea-

any particular work, whether apparently factual material is "selected, coordinated or arranged" in a way that renders the work creative or original.³¹⁶ Procedurally, the public domain operates, like fair use, as an affirmative defense ("the work in question is not copyrightable") to a claim of infringement.³¹⁷ The case-by-case nature of copyrightability analysis, therefore, ought to be even more pronounced than with fair use decisions, and one expects even less consistency than that encountered above.

What the sample suggests, however, is that copyrightability or public domain analysis is almost entirely a function of the "category" or type of case to which a particular case is assigned. There is very little generalized "copyrightability" jurisprudence among these cases aside from bows to the "originality" standard from *Feist* itself. Three of the ten cases apply the standards of *Feist* directly, dealing as *Feist* did, with compilations of facts or data:³¹⁸ *American Delta Ass'n v. Delta Dental Plans Ass'n*,³¹⁹ *Warren Publishing, Inc. v. Microdos Data Corp.*,³²⁰ and *Practice Management Information Corp. v. American Medical*

son or another, might be copyrighted but is not, see *Estate of Martin Luther King, Jr., Inc. v. CBS, Inc.*, 13 F. Supp. 2d 1347 (N.D. Ga. 1998) (holding that the common law copyright in Dr. King's civil rights speech was lost through publication), or falls out of copyright, see Edward Samuels, *The Public Domain in Copyright Law*, 41 J. Copyright Soc'y 137, 151 (1993) (arguing that different categories of public domain material require different analyses).

316. See *Feist*, 499 U.S. at 358. This sets up the parallel with fair use jurisprudence. "Originality," which is contingent, is an administrable proxy for the idea-expression dichotomy, which assumes a static division between "fact" and "not fact." See *id.* at 358-59 (citing the legislative history of the Copyright Act of 1976: "The most important point here is . . . that . . . copyright . . . has no effect one way or the other on the copyright or public domain status of the preexisting material."). Under *Feist*, the public domain already exists and it awaits discovery. "Originality," however, like fair use, may be determined. But see Litman, *Public Domain*, *supra* note 257, at 1019-22 (arguing that "originality" does not provide a coherent basis on which to divide copyrightable from uncopyrightable material).

317. Registration of the copyright is a prerequisite to maintaining a suit for infringement, and a valid certificate of registration creates a rebuttable presumption that the copyright is valid. See *Harris Mkt. Research v. Marshall Mktg. & Communications, Inc.*, 948 F.2d 1518, 1526 (10th Cir. 1991); see also 17 U.S.C. § 410(c) (1994) (providing that a certificate of registration made within five years of the first publication constitutes prima facie evidence of validity of copyright). Functionally, therefore, lack of originality must be proved by the alleged infringer. The Registrar of Copyrights may reject the application for registration, see *id.* § 410(b), but it only infrequently does so, see Nelson R. Capes, *The Software Copyright 'Super Patent'*, *Computer Law*, June 1, 1995, at 8, 12-13; Nancy H. McAleer, *A Bird's Eye View of Copyright Registration*, *N.J. Law.*, Feb. 15, 1993, at 15.

318. Compilations of data are specifically listed in the Copyright Act as a type of work that falls within the subject matter of copyright. See 17 U.S.C. § 103(a) ("The subject matter of copyright as specified by § 102 includes compilations and derivative works . . ."); *id.* § 103(b) ("The copyright in a compilation or derivative work extends only to the material contributed by the author of such work . . .").

319. 126 F.3d 977, 979 (7th Cir. 1997) (holding that taxonomy of dental procedures is sufficiently original to be copyrightable and vacating summary judgment granted in the defendant's favor).

Ass'n.³²¹ Two cases apply a specialized standard developed in the context of computer programs to separate protectable "copyrightable" elements of such programs from unprotected elements: *Mitel, Inc. v. Iqtel, Inc.*³²² and *Softel, Inc. v. Dragon Medical & Scientific Communications, Inc.*³²³ Two cases briefly dispose of copyrightability questions by characterizing the works in question as formulas or sets of instructions:³²⁴ *Lambing v. Godiva Chocolatier*³²⁵ and *Continental Micro, Inc. v. HPC, Inc.*³²⁶ Two specialized doctrines that deal with circumstances in which idea and expression are inextricably linked form the core of one case apiece. In *Acuff-Rose Music, Inc. v. Jostens, Inc.*,³²⁷ the court rejected, on cross motions for summary judgment, the claim that an advertising campaign infringed the copyright of singer Aaron Tippin in the title to a song, because the lyric was a "common motto" that could not be copyrighted.³²⁸ Although the court did not expressly rely on the doctrine, its reasoning generally parallels that of the "scènes à faire" doctrine, which denies copyright protection to expression that is indispensable or standard in the treatment of a given topic.³²⁹ In *Hart v. Dan Chase Taxidermy Supply Co.*,³³⁰ the court dismissed the plaintiff's copyright infringement claim in fish forms for use in taxidermy.³³¹ The court applied the doctrine of merger, under which copyright protection is denied for expression of facts or ideas

320. 115 F.3d 1509, 1520-21 (11th Cir.) (vacating an injunction granted to the plaintiff because a selection of communities in a directory of cable television systems was not original enough to be copyrightable); *cert. denied*, 118 S. Ct. 397 (1997).

321. 121 F.3d 516, 521 (9th Cir. 1997) (holding that the copyright in a directory of medical procedure codes could not be enforced on the basis of copyright misuse and reversing a preliminary injunction granted to the defendant publisher), *cert. denied*, 119 S. Ct. 40 (1998), and amended by 133 F.3d 1140 (9th Cir.), *cert. denied*, 118 S. Ct. 2367 (1998).

322. 124 F.3d 1366, 1371-72 (10th Cir. 1997) (applying the abstraction-filtration-comparison standard for computer programs); *see also* *Computer Assocs. Int'l, Inc. v. Altaï, Inc.*, 982 F.2d 693, 706-11 (2d Cir. 1992) (explaining the abstraction-filtration-comparison standard).

323. 118 F.3d 955, 963 (2d Cir. 1997) (holding that the district court erred by failing to properly apply the abstraction-filtration-comparison standard), *cert. denied*, 118 S. Ct. 1300 (1998).

324. *See* 17 U.S.C. § 102(b) (1994) (providing that copyright protection does not extend to procedures or systems, among other things).

325. No. 97-5697, 1998 WL 58050 (6th Cir. Feb. 6, 1998) (involving a recipe and design for chocolate truffles), *cert. denied*, 118 S. Ct. 2372 (1998).

326. No. 95 C 3829, 1997 WL 309028 (N.D. Ill. June 4, 1997) (discussing code cards that provide directions for locksmiths to cut keys).

327. 988 F. Supp. 289 (S.D.N.Y. 1997), *aff'd*, 155 F.3d 140 (2d Cir. 1998).

328. *See id.* at 294-95. The result is also consistent with categorical treatment of "common motto" or "ordinary phrase" cases.

329. *See* *Gates Rubber Co. v. Bando Chem. Indus.*, 9 F.3d 823, 838 (10th Cir. 1993) ("Under the *scènes a faire* [sic] doctrine, we deny protection to those expressions that are standard, stock, or common to a particular topic or that necessarily follow from a common theme or setting.").

330. 967 F. Supp. 70 (N.D.N.Y. 1997), *aff'd mem.*, 152 F.3d 918 (2d Cir. 1998).

331. *See id.* at 73.

that can be expressed in only one or a handful of ways.³³² Alone among the cases in this sample, only *Great Importations, Inc. v. Caffco International, Inc.*³³³ deals with a copyrightability question in what might be called a “common law” manner, or at least in a manner that is not “category” dependent. At issue in that case were two sets of three porcelain candleholders, consisting of the letters “J,” “O,” and “Y” and decorated with holly and angels. The court granted the defendants’ motion for summary judgment on the ground that the defendants had not infringed copyrightable expression.³³⁴ The court reasoned by analogy, relying on cases involving the design of toys, jewelry, hats, and sculpture, in reaching the conclusion that the plaintiff could not assert infringement claims against candleholders that used the same elements, but not precisely as the plaintiff had done.³³⁵

2. The Progeny of ProCD

The manner in which courts handle public domain and fair use cases, by “categorizing” some disputes and dealing with most others strictly on a non-common law case-by-case basis, is not necessarily surprising, nor is it, in the abstract, necessarily wrong. In light of the decision in *ProCD* and the increasing prevalence of shrinkwrap and other contract forms for transactions in information, however, the courts’ handling of these cases creates a risk that *ProCD*’s analytic vocabulary is not well-prepared to deal with conflicts between the inherently public nature of fair use and public domain doctrine and private definitions or conventions of what may be protected and used. As a general matter, the vocabulary of fair use and copyrightability, whether that is the vocabulary of categories or of *a priori* application of fair use factors, is not concerned with notices, licenses, and agreements. A jurisprudence that suggests that the latter sweep aside consideration of the former, then, presents considerable potential danger.

As with the cases summarized above concerning fair use and the public domain itself, caselaw following *ProCD* and manifesting the risk just described is somewhat sparse and, therefore, at best suggestive. The suggestion, however, is that the risk is real. There is a hint of the problem in *Storm Impact*.³³⁶ The court in that case determined that assessing whether the defendant had made fair use of the plaintiff’s shareware computer game depended, in part, on use-proscribing norms both explicit and implicit in the shrinkwrap legend that the plaintiff included with each copy of the game. The court, however, made no reference to *ProCD*.

332. See *id.* at 72-73. Enforcing a copyright under such circumstances would be tantamount to granting a copyright in the idea or facts themselves.

333. No. 95 Civ. 0514 MBM SEG, 1997 WL 414111 (S.D.N.Y. July 24, 1997).

334. See *id.* at *7.

335. See *id.* at *3-*7.

336. See *supra* notes 310-12 and accompanying text.

There are more substantial hints in cases that refer to *ProCD* in intellectual property contexts. Mainly, those cases have made clear that, notwithstanding the fact that *ProCD* itself concerned shrinkwrap applied to public domain material and technically concerned the elements of an enforceable license, its reasoning is being extended to contexts involving copyrightable material and the assertion of so-called "proprietary rights."

Three cases have relied explicitly on *ProCD* to support the proposition that contracts or licenses concerning works of information are categorically distinct from rights under copyright law and, as a result, state law enforcement of such contracts is not preempted under the Copyright Act.³³⁷ *Expeditors International of Washington, Inc. v. Direct Line Cargo Management Services, Inc.*,³³⁸ involved claims for theft of trade secrets, breach of contract, and copyright infringement arising from the use of computer software by the defendant after a license allegedly had expired. The court denied the defendant's motion for summary judgment that argued the contract claims were preempted, citing *ProCD*.³³⁹ In *Lattie v. Murdach*,³⁴⁰ the plaintiff sued the defendant in state court for breach of contract, misrepresentation, and unfair competition. The plaintiff alleged that the defendant, following some negotiations with the plaintiff, appropriated public domain catalog materials and published them.³⁴¹ The defendant removed the case to federal court, asserting that the Copyright Act preempted the claims.³⁴² The district court granted the plaintiff's motion to remand, concluding, among other things, that under *ProCD*, the plaintiff's contract claim was categorically different from a copyright claim and could be tried in state court.³⁴³ Finally, in *Architectronics, Inc. v. Control Systems, Inc.*,³⁴⁴ the court rejected the defendants' argument on summary judgment that the Copyright Act preempted a breach of contract claim by a software development firm against two joint venturers.³⁴⁵ The court concluded that *ProCD*, among other cases, supported the proposition that rights in contract are categorically different from rights under the federal copyright statute.³⁴⁶

337. *ProCD* did not assert quite such a blunt proposition. See *supra* notes 99-101 and accompanying text. For a more detailed discussion of preemption of contract claims under the Copyright Act, see *infra* note 434 and accompanying text.

338. 995 F. Supp. 468 (D.N.J. 1998).

339. See *id.* at 483-84.

340. 42 U.S.P.Q.2d (BNA) 1240 (N.D. Cal. 1997).

341. See *id.* at 1241-42.

342. See *id.* at 1242-43.

343. See *id.* at 1244-45.

344. 935 F. Supp. 425 (S.D.N.Y. 1996).

345. See *id.* at 438-41.

346. See *id.* at 439; see also *NBA v. Motorola, Inc.*, 105 F.3d 841, 849-50 (2d Cir. 1997) (discussing *ProCD* in the context of preemption of a state law claim for misappropriation and noting that contract claims are not preempted under *ProCD* because they do not lie within the "general scope" of copyright).

ProCD's potential influence on analysis of claims concerning both copyrightable and uncopyrightable material is even more clearly suggested by two cases that, more directly than those above, implicate restrictions on access and use of information. In *Micro Star v. FormGen, Inc.*,³⁴⁷ the producers of a commercially distributed add-on to a copyrighted computer game sued the manufacturers of the game for a declaration that the add-on, and associated packaging and screen savers, infringed neither copyright nor trademark.³⁴⁸ The defendant moved for a preliminary injunction against distribution of the add-on, and the court granted the motion regarding the packaging and screen savers.³⁴⁹ The defendant expressly contemplated that users of the game would construct add-ons for their own use, and it provided software tools in the original game to enable users to do so.³⁵⁰ With the tools, however, the defendant included a "license.doc" file that provided restrictions on the use of add-ons constructed with the tools provided by the defendant, including restrictions on commercial sales of such new code.³⁵¹ The court declined to enforce the terms of the "license.doc" file as a shrinkwrap license. The court noted, but did not rule, that this notice was distinguishable from the license in *ProCD* in its inaccessibility prior to the plaintiff's acquisition of the game and in its relative lack of indicia that the plaintiff consented to its terms.³⁵² The plaintiff's knowledge of the license prior to the distribution of its add-on software, however, defeated its argument that the plaintiff possessed an implied license commercially to distribute its add-on code.³⁵³ The contractual framework of *ProCD*, in other words, did not fit the specifics of the license form used by the software producer in this case, but it encouraged the court to conclude that the defendant's use of the plaintiff's copyrighted work was, colloquially speaking, unfair.³⁵⁴

347. 942 F. Supp. 1312 (S.D. Cal. 1996), *aff'd in part, rev'd in part*, 154 F.3d 1107 (9th Cir. 1998).

348. *See id.* at 1314-15.

349. *See id.* at 1319-20.

350. These "add-ons" consisted of additional levels of play. *See id.* at 1315.

351. *See id.*

352. *See id.* at 1317-18.

353. *See id.* at 1318.

354. *See id.* Fair use as such was addressed by the court separately, but briefly. *See id.* at 1317 (arguing that the application of the fourth fair use factor—impact on market for work—compelled the conclusion that the fair use defense does not apply). The Ninth Circuit affirmed the injunction as to the packaging and screen savers, and it found that the software producer, FormGen, was entitled to a preliminary injunction as to distribution of the add-on. *See Micro Star v. FormGen, Inc.*, 154 F.3d 1107, 1114 (9th Cir. 1998). The court stated in dicta that if FormGen's license were binding, it forbade Micro Star's use. If the license were not binding, then FormGen had granted no written license rights, and Micro Star's use was barred because it did not amount to fair use. *see id.* at 1113.

*Tax Analysts v. United States*³⁵⁵ provides the final and clearest example of the way in which *ProCD* may be extended, how the compartmentalization to which public domain and fair use analysis are susceptible may yield, in a most uncritical way, to legal-ware. In the district court, a not-for-profit organization sought to enforce a Freedom of Information Act (“FOIA”) request demanding disclosure of the contents of the legal database used by the Department of Justice, known as JURIS. JURIS is created and supplied to the Department by West Publishing pursuant to a license agreement. The Department had declined to produce its contents, and West, in intervention, had objected to its production, in part on the ground that the terms of the license prohibited the disclosure.³⁵⁶ The district court declined to order the production of the database, and on appeal, the court of appeals affirmed.³⁵⁷ Relying almost entirely on the district court’s opinion, the court of appeals nonetheless added the following comment: “To the extent that appellant argues that West could not assert proprietary rights over a database of information from the public domain, it is wrong as a matter of law.”³⁵⁸ The court cited *ProCD*.³⁵⁹

IV. CONTRACT PARADIGMS AND THE DILEMMA OF OPEN SPACE

The preceding part suggested that, by relying heavily on analyses of “types” of works and their uses or on ad hoc examinations of equitable factors, existing analytic frameworks for dealing with fair use and the public domain may not be up to the task of moderating the influence of *ProCD* and preserving a meaningful open space. There is no synthetic open space approach that encourages courts to process copyright disputes in similar ways—notwithstanding the fact that shrink-wrap conventions are breaking down the typology on which courts and consumers have traditionally and typically relied. Shrinkwrap increasingly makes copyright disputes look alike, though courts still deal with them as unique phenomena. *ProCD*, moreover, implies that existing analytic frameworks are irrelevant, suggesting that any open space (as I have called it) in the context of intellectual property licens-

355. No. 96-5109, 1997 WL 71746 (D.C. Cir. Jan. 21, 1997).

356. See *Tax Analysts v. United States*, 913 F. Supp. 599, 603-04 (D.D.C. 1996), *aff’d mem.*, 107 F.3d 923 (D.C. Cir.), *cert. denied*, 118 S. Ct. 336 (1997). The lower court drew a distinction between the legal materials themselves—judicial opinions, codes, and regulations—and arrangements of that material and supplemental material supplied by West. See *id.* at 605. The latter, the court ruled, did not constitute a “record” in the “control” of the Department, under the terms of a license that limited the Department’s right to transfer the material. See *id.* at 606-07.

357. See *Tax Analysts*, No. 96-5109, 1997 WL 71746, at *1 D.C. Cir. Jan. 21 1997) (unpublished opinion), *cert. denied*, 118 S. Ct. 336 (1997) (citation omitted).

358. *Id.* (citation omitted); see also *Gilmore v. Department of Energy*, 4 F. Supp. 2d 912 (N.D. Cal. 1998) (following the District Court’s opinion in *Tax Analysts* in holding that records relating to the Energy Department’s CLERVER video conferencing software were not subject to disclosure under FOIA).

359. See *Tax Analysts*, 1997 WL 71746, at *1.

ing should and will be the product of private transactions, incorporating whatever regulation of those transactions (if any) that current contract, commercial, and copyright law provide. This part assesses the merits of *ProCD*'s position and the possibility of building open space using the terms that *ProCD* itself proffers. The court itself suggests four different possibilities for different outcomes, and, thus, four possibilities for continued dialogue on the extent of fair use and of the public domain in the context of shrinkwrap.

First, there is the court's claim that firms will compete on terms of use just as they compete on product price and features. Software users may choose whether they wish to accept oppressive shrinkwrap terms with cheap software or pay more for a product accompanied by more liberal terms.³⁶⁰ More broadly, the court noted the pro-competitive function of the shrinkwrap license in *ProCD*'s market. *ProCD*'s selection of telephone and address listings removed no information from the public domain. Arguably, the shrinkwrap license enhanced the competitiveness of the information marketplace by providing an incentive to *ProCD* to produce its CD-ROMs at a low price.³⁶¹ Second, the court noted that, arguably, users are coerced into accepting unfair contract terms, a situation to which black letter contract law itself and in particular the law of unconscionability may apply.³⁶² Third, the court followed the proposition that commercial law should generally specify background rules that adopt norms of commercial practice and usage. *ProCD* strongly suggests that its outcome is consistent with established patterns of marketing and distribution of computer software and that parties should specifically bargain if they desire a different result.³⁶³ Fourth, the court's discussion of the doctrine of preemption of state law rights, and state contract law in particular, by federal copyright law suggests a final inquiry.³⁶⁴ Taking the court at its word, the barrier to preemption of contracts concerning intellectual property rights is not absolute.³⁶⁵ To evaluate the possibility that the market may right itself, that *ProCD* and shrinkwrap prac-

360. *See ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1453 (7th Cir. 1996) ("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." (citation omitted)).

361. *See id.* at 1455 (explaining the pro-competitive merits of a license that facilitates distribution of object code while concealing the source code).

362. *See id.* at 1449 ("Shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general (for example, if they violate a rule of positive law, or if they are unconscionable).").

363. *See id.* at 1451-52 (noting that a majority of software sales take place in an environment where a "terms first, sale second" framework would be impractical).

364. *See id.* at 1454-55.

365. *See id.* The limited evidence to date suggests that other courts have not read *ProCD* so carefully, but the possibility remains that the doctrine might be more refined.

tice and doctrine might be leading us, after all, toward a satisfactory accommodation of private ordering and public values, each of the foregoing themes is briefly reviewed below.

A. *The Market for Open Space*

The Seventh Circuit's direct response to Zeidenberg, and to shrink-wrap opponents, was the proposition that judicial interference in the private market for contract forms is unwarranted, at least absent evidence that this market is not functioning efficiently. "ProCD has rivals," the court wrote, "which may elect to compete by offering superior software, monthly updates, improved terms of use, lower price, or a better compromise among these elements."³⁶⁶ If Zeidenberg wanted the right to make fair use of a copyrighted work or to access and distribute public domain material that is collected and packaged by others, then he should be prepared to pay for it. It is also reasonable to expect that firms will compete with one another, on those terms, for his money.

The correctness of the court's economic theory may be debated, although recent scholarship fairly persuades that such competition is unlikely either to occur³⁶⁷ or be effective.³⁶⁸ If the theory is correct, however, the result is, effectively, a private, unregulated pricing regime for fair use and the public domain. This Article has objected to modes of information distribution that enable and encourage publishers privately to determine norms and conventions of information use. Leaving open space to the market plays to, rather than opposes, this tendency.³⁶⁹ If courts ratify this premise by enforcing agreements that

366. *Id.* at 1453. The court in *ProCD* relied on its decision in *Digital Equipment Corp. v. Uniq Digital Technologies, Inc.*, 73 F.3d 756 (7th Cir. 1996), arguing that it should defer to a competitive market rather than edit contract terms. The latter decision concerned an antitrust claim in a market for computer hardware. There, the court wrote: "Computer manufacturers are vigorous rivals; prices drop daily; this is one of our economy's most competitive sectors." *Id.* at 761. Computer hardware and software markets may, in time, merge, but there seems to be little empirical justification for the court's generalized "computer markets" analysis.

367. Arguably, in a competitive market with low elasticity of demand, firms may compete on contract terms if they cannot compete on price. Regardless of elasticity of demand, however, markets that rely on form contracts may evolve toward standard terms and away from competition for terms, because of path dependence and network effects, see Kahan & Klausner, *supra* note 55, at 750-51, or "herd" tendencies implicit in theories of cultural evolution, see Jody S. Kraus, *Legal Design and the Evolution of Commercial Norms*, 26 J. Legal Stud. 377, 378 (1997) (arguing that commercial norms are likely to evolve efficiently but are also likely to cease evolving before they reach socially optimal levels).

368. Cognitive phenomena may limit consumers' ability to discriminate between forms offered by different firms in the same market. See Eisenberg, *Limits of Cognition*, *supra* note 203, at 243-44 (arguing that because of cognitive limitations on understanding form contract terms, competition is more likely to result in degradation of form terms than in socially optimal terms).

369. In a more generalized property law context, Professor Nance suggests that if one wants to encourage non-consensual takings, it is more effective to set a price. If

parse access to open space before it is demonstrated that open space ought to be dealt with in this way,³⁷⁰ then the private market for open space becomes the public value.³⁷¹ Open space becomes another dimension of the creator's ability to control the use of the work.

A broader reading of *ProCD*'s market-based approach focuses not only on the market for forms, but on shrinkwrap as a component of a competitive market structure³⁷² that provides the incentive necessary for *ProCD* to produce its CD-ROM. If the underlying product market is not perfectly competitive, one could conceive of intervening on a market failure premise to protect by fiat, among other things, open space that by assumption a well-functioning market otherwise would produce.

There are at least three variants of this possibility circulating in copyright scholarship and case law. Professors Reichman and Samuelson argue that the "anti-copying" framework underlying intellectual property law inadequately meliorates the costs of market failure. The failure of market mechanisms to provide adequate incentives to produce works of information³⁷³ should be replaced by a "market-preserving" framework, at least for uncopyrightable compilations of fact.³⁷⁴ In their view, market failure depends on the assumption that

one wants to discourage such takings, it is more effective to set sanctions. *See Nance, supra* note 205, at 880-81. Such strategies may fail adequately to account, either substantively or procedurally, for other, possibly public, values. *See Robert W. Gordon, The Path of the Lawyer*, 110 Harv. L. Rev. 1013, 1014 (1997) (stating that setting prices for conduct undervalues law as embodying norms of the political community); Carol M. Rose, *Rethinking Environmental Controls: Management Strategies for Common Resources*, 1991 Duke L.J. 1, 29-36 (arguing that setting prices for environmental conduct may undercut informal norms against polluting). Pricing open space for works of information similarly undercuts conventions or norms that otherwise promote nonconsensual use as a social good. *Cf. Heller, supra* note 15, at 667-79 (arguing that when multiple users are given legal entitlements to exclude others from a scarce resource, an "anticommons" results, leading to under-use of common resources).

370. The ultimate definitions of fair use and the public domain await determination through some process in which different approaches or concepts are heard and, one hopes, eventually reconciled. *See infra* Part V.

371. Apart from their enforcement, the existence of such contracts may represent welfare gains, so long as the contracts are genuine, rather than "conventional." *See Kennedy & Michelman, supra* note 23, at 740-42 (arguing that social welfare gains from private contracts may exist even in the absence of mandatory enforcement of such contracts); Edward L. Rubin, *The Nonjudicial Life of Contract: Beyond the Shadow of the Law*, 90 Nw. U. L. Rev. 107, 110-22 (1995) (noting the importance of nonjudicial interpretations of contracts and the contracting process in contract theory).

372. *See ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1453 (7th Cir. 1996).

373. *See supra* notes 34-34 and accompanying text.

374. *See Reichman & Samuelson, supra* note 8, at 137-63. The earlier *Manifesto* of Professor Samuelson and her colleagues sounded a similar theme for copyrightable computer programs. *See Pamela Samuelson et al., A Manifesto Concerning the Legal Protection of Computer Programs*, 94 Colum. L. Rev. 2308, 2310-15 (1994); *see also* Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutory Impulse*, 78 Va. L. Rev. 149, 222-29 (1992) (suggesting the development of a "malcompetitive" or market destructive tort).

absent some legal protection or incentive, compilers of fact, such as scientists and other scholars, will have insufficient incentives to create factual works.³⁷⁵ Legal frameworks based on anti-copying rules and bilateral contracts, bolstered by copyright management technologies, “over-protect” such compilations and leave insufficient room for socially desirable re-use. Instead, a “market-based” framework should be built into the law, with socially-determined “lead-times”³⁷⁶ assigned to certain markets that insulate data compilers from market-destructive behavior by those who re-use the compiled data solely during those “lead-times.” In theory, a form of compulsory licensing for intellectual works provides for incentive-ensuring returns based on initial market advantage and allows for bilateral negotiation concerning access and re-use.³⁷⁷ Until a comprehensive scheme can be worked out, Professors Reichman and Samuelson recommend a case-by-case analysis of anti-competitive or market destructive behavior through nonconsensual use, using existing unfair competition principles.³⁷⁸

A second variant is the call for increased reliance on or recognition of unfair competition law,³⁷⁹ or on existing or a reformulated law of trade secrets³⁸⁰ in protecting a competitive balance between the information creator’s right to protect or limit access to or use of the work and open space. In both instances, as with the “lead-time” approach

375. The ease with which markets for such information might be appropriated creates the market failure. Creators and compilers cannot preserve their “lead-time” advantage long enough to capture monopoly returns large enough to justify investing in the initial compilation. *But see* Goldstein, *Comments on a Manifesto*, *supra* note 39, at 2573-74 (arguing that the market failure argument that focuses on the inability to capture a monopoly return undervalues market failure based on the indivisibility of works of information).

376. The extent of any particular “lead-time” should be determined based on a dialogue concerning a balance between incentives to produce and room for second-comers. *See* Reichman & Samuelson, *supra* note 8, at 149 (stating that lead-times should be the products of bargaining among various constituent groups).

377. *See id.* at 145-51. Thus, this approach has much in common with arguments that conclude that accommodating re-use or access considerations is best accomplished in law by encouraging the creation of private collectives that facilitate bilateral transactions in information rights. *See* Merges, *Contracting into Liability Rules*, *supra* note 26, at 1391-93 (arguing that property rule entitlements are more likely than compulsory licenses to encourage the formation of licensing collectives).

378. *See* Reichman & Samuelson, *supra* note 8, at 139-45.

379. *See* Perritt, *Information Superhighway*, *supra* note 33, §§ 10.1, 10.21, at 416-18, 455-57 (noting the importance of trade secret and unfair competition law). Unfair competition law would contextualize the parties’ allegedly unlawful behavior, as does current fair use doctrine, *see supra* Part III.A, and accompanying text, without requiring copyright’s “reproduction” predicate. Under current law, to the extent that state law unfair competition standards address anti-copying behavior regulated by copyright law, application of such standards is likely preempted by the Copyright Act. *See* *NBA v. Motorola, Inc.*, 105 F.3d 841, 848 (2d Cir. 1997) (finding that a claim for the general misappropriation of a broadcast of basketball games was preempted).

380. *See* J.H. Reichman, *Legal Hybrids Between the Patent and Copyright Paradigms*, 94 *Colum. L. Rev.* 2432, 2519-57 (1994).

described above, the analysis focuses not on the manipulation of the work itself, but on the market position of the plaintiff—the creator or compiler of the work—and the need to protect that market position from ethically or economically inappropriate behavior, either on an individual or market-wide basis, in order to ensure the creation of the work in the first place.³⁸¹

The emerging doctrine of “copyright misuse” is the third variant. A defendant charged with infringement may assert that the copyright holder’s refusal to consent to the use (under any terms, or under terms to which the defendant objects) is based not on a good faith effort to obtain returns from exploiting the work, but on an unlawful scheme to protect the holder’s market from competition.³⁸² The distinction between information law and antitrust law is tenuous. For this reason,

381. Trade secret law and the law concerning covenants not to compete look at the problem as one of *ex ante* planning; unfair competition law looks at it as one of *ex post* fairness. See Lemley, *Beyond Preemption*, *supra* note 2 (manuscript at 55-57).

382. The handful of courts that have recognized the copyright misuse doctrine have done so only as an affirmative defense. No case has recognized an affirmative claim for relief based on the theory. See, e.g., *Image Tech. Servs., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1218-20 (9th Cir. 1997) (affirming a judgment against Kodak for the anti-competitive refusal to license copyrighted manuals to third-party service organizations), *cert. denied*, 118 S. Ct. 1560 (1998); *Practice Management Info. Corp. v. Am. Med. Ass’n*, 121 F.3d 516, 520 (9th Cir. 1997) (adopting the rule that misuse is a defense to copyright infringement), *cert. denied*, 119 S. Ct. 40 (1998), *and amended by* 133 F.3d 1140 (9th Cir.), *cert. denied*, 118 S. Ct. 2367 (1998); *DSC Communications Corp. v. DGI Techs., Inc.*, 81 F.3d 597, 600 (5th Cir. 1996) (recognizing the availability of the copyright misuse defense); *Triad Sys. Corp. v. Southeastern Express Co.*, 64 F.3d 1330, 1337 (9th Cir. 1995) (finding that the unilateral refusal to license copyrighted work does not constitute copyright misuse); *Lasercomb Am., Inc. v. Reynolds*, 911 F.2d 970, 978-79 (4th Cir. 1990) (barring the enforcement of copyright where a license restricted the right of a licensee to use a competitive product); *In re Independent Serv. Orgs. Antitrust Litig.*, 989 F. Supp. 1131, 1142-44 (D. Kan. 1997) (holding that the copyright holder may deny access to products covered by the copyright even if the exclusion raises antitrust issues); *Advanced Computer Servs. v. MAI Sys. Corp.*, 845 F. Supp. 356, 368-69 (E.D. Va. 1994) (finding that selective software licensing is acceptable to protect copyrighted works); see also Lemley, *Beyond Preemption*, *supra* note 2 (manuscript at 42-49) (suggesting that the copyright misuse doctrine may be appropriately fine-grained for tailoring copyright incentives); James A.D. White, *Misuse or Fair Use: That Is the Software Question*, 12 *Berkeley Tech. L.J.* 251, 272-88 (1997) (arguing in favor of an expanded role for the misuse doctrine, rather than the fair use doctrine, in preserving access to copyrighted works); cf. *Juno Online Servs. v. Juno Lighting, Inc.*, 979 F. Supp. 684, 687 (N.D. Ill. 1997) (stating that no affirmative claim exists for trademark misuse).

The doctrine of implied license is conceptually related to this defense. An unauthorized user charged with infringement may defend on the ground that the plaintiff by its conduct and statements authorized the use in question. The copyright misuse defense involuntarily limits the legitimate scope of the copyright owner’s market; the implied license defense involuntarily expands it. See *I.A.E., Inc. v. Shaver*, 74 F.3d 768, 775 (7th Cir. 1996); 3 *Nimmer & Nimmer*, *supra* note 3, § 10.03[A][3], at 10-40 to -41.

some have suggested that the two be formally collapsed into a single approach.³⁸³

In the form most helpful to affirmative notions of open space, unfair competition models make explicit the desire to preserve some area of open space by curing market failure only to the extent necessary to ensure the creation of works of information that otherwise would not exist and, in the case of the proposal by Professors Reichman and Samuelson, by attempting to make explicit provision for open space for academic and scientific research.³⁸⁴ Providing for publicly-defined open space, however, is at best an assumption of this framework, rather than its goal. Making open space an assumption rather than an outcome renders it merely another condition of market failure, a market feature that may legitimately be cured not by an expression of public norms, but by private remedy. From the perspective of achieving an affirmative normative sense of open space, each of these unfair competition variants suffers from the flaws inherent in their transactional origins.³⁸⁵ Once market failures are cured, open space results from efficient transactional norms.³⁸⁶ We return to, rather than escape from, conventions that legitimize private definitions of all use.³⁸⁷

B. *Unconscionability, Contracts of Adhesion, and Form Contracts*

The second suggestion proffered by *ProCD* is general contract law and, in particular, the law of unconscionability, which for standard or form contracts traditionally restrains the focus of modern contract law on “assent” as the keystone of enforceability of agreements. The implication of *ProCD* is that shrinkwrap is special, that in a “take it or leave it context” (but not one of so-called equal bargaining power) a

383. See O'Rourke, *Drawing the Boundary*, *supra* note 53, at 555-58 (arguing that form license terms should be preempted by federal copyright policy if their use creates “market power” in a relevant market). Proof of a “copyright misuse” defense does not, however, require proof of an antitrust violation. See *Practice Management Info.*, 121 F.3d at 521; Julie E. Cohen, *Reverse Engineering and the Rise of Electronic Vigilantism: Intellectual Property Implications of “Lock-Out” Programs*, 68 S. Cal. L. Rev. 1091, 1190-98 (1995) (arguing in favor of a misuse-based limit on both patented and copyrighted “lock-out” devices that is distinct from an antitrust-based misuse defense); *id.* at 1202 n.500 (surveying copyright misuse authorities and distinguishing among those that require market power and those that do not).

384. One might substitute other privileged uses—criticism, news reporting, or parody, for example—for these two, or collect a defined universe of such uses. In essence, the analysis remains the same.

385. See *supra* Part III.

386. See Gordon, *Fair Use as Market Failure*, *supra* note 244, at 1602 (arguing that the “fair use” doctrine best implements a balance between producers’ and consumers’ interests); Reichman & Samuelson, *supra* note 8, at 149-51 (arguing that a liability rules approach together with private collection societies can efficiently process the licensing needs of science and education at reasonable cost).

387. Cf. James E. Krier, *The Tragedy of the Commons, Part Two*, 15 Harv. J.L. & Pub. Pol’y 325, 337 (1992) (noting that collective coordination is no solution to the “commons” problem because coordination is the cause of the problem).

restraint on re-use of information might not be enforced, under certain circumstances, as an unconscionable contract term.

Existing unconscionability doctrine, which is clearly what the Seventh Circuit has in mind, focuses on unfairness in the process of contract formation and on unfairness in substantive contract terms. Typically, a plaintiff must prove both elements to prevail on an unconscionability claim.³⁸⁸ It is commonly observed that a plaintiff who seeks to avoid contractual liability on unconscionability grounds faces a difficult challenge under any circumstances.³⁸⁹ Under *ProCD*, however, publishers have a roadmap to secure ground that relies solely on the procedural half of the doctrine.³⁹⁰ Procedurally, the court's holding validates placing a notice of license term on the exterior of the package, and the terms themselves inside the package (or even inside the work), as a "fair" method of contracting. Anything more direct and explicit, which places (even nominally) an "accept/reject" device in the hands or in front of the eyes of the consumer, only enhances the procedural fairness of the transaction.³⁹¹ Not all firms will adapt their

388. "Procedural unconscionability consists of an absence of meaningful choice by one party due to oppression and surprise. Substantive unconscionability occurs when the contract terms result in overly harsh or one-sided results, or when the risks of the bargain are allocated in an objectively unreasonable or unexpected manner." *Pennington's, Inc. v. Brown-Forman Corp.*, No. 92-35243, 1993 WL 306155, at *2 (9th Cir. Aug. 11, 1993) (citation omitted); *see also Jones Distrib. Co. v. White Consol. Indus., Inc.*, 943 F. Supp. 1445, 1459-64 (N.D. Iowa 1996) (reviewing the unconscionability law of Ohio, Illinois, and Indiana, among others).

389. The circumstances in which shrinkwrap licenses are "formed" are easily characterized as adhesive. *See* Paul T. Sheils & Robert Penchina, *What's All the Fuss About Feist? The Sky is Not Falling on the Intellectual Property Rights of On Line Database Proprietors*, 17 U. Dayton L. Rev. 563, 572-74 (1992); James T. Peys, Note, *Commercial Law—The Enforceability of Computer "Box-Top" License Agreements Under the U.C.C.*, 7 Whittier L. Rev. 881, 906-10 (1985). Particular terms may also be unconscionable. These conclusions, however, have little practical effect given the low probability that a person subject to an allegedly unconscionable contract term will have the resources and interest to justify litigating the issue, and because courts rarely uphold such claims. *See* Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1193-97 (noting that courts are reluctant to relieve parties' of their obligations despite the expansion of the adhesion contract doctrine).

390. The court in *ProCD* assumed away any question of the substantive fairness of license terms by declaring that the fairness of the license terms was a question for the market. *See ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452-53 (7th Cir. 1996).

391. A separate body of contract theory dealing with problems of the "assent" model of contract, "relational" contract analysis, fares no better in dealing with "unfairness" in shrinkwrap. *See generally* Ian R. Macneil, *Values in Contract: Internal and External*, 78 Nw. U. L. Rev. 340, 343-45 (1983) (discussing relational patterns in contracts); Perritt, *Dispute Resolution*, *supra* note 21, at 366-72 (discussing "relational contracts" in detail). The "relational" contract doctrine examines contracts as devices that not only allocate risk between the parties, but also define a cooperative relationship, ongoing over time; thus, the core enterprise of classical contract analysis, identifying the basis of assent to an agreement, becomes less important than identifying and regulating the ongoing obligations of both parties. *See* Robert W. Gordon, *Macaulay, Macneil, and the Discovery of Solidarity and Power in Contract Law*, 1985 Wis. L. Rev. 565. At present, it is difficult to see that, in most cases, those who "use" information products do so regularly enough to characterize that use as a "relationship"

forms equally to resemble contracts, but those that do adapt to *ProCD*, and we have seen that many have and more are being encouraged to, will foreclose with new forms most of what is left of the possibility of voiding a *ProCD*-type license on traditional unconscionability grounds.

“Reconstructing” contract doctrine for form or adhesive contracts, to focus more explicitly on the substantive fairness and efficiency of the terms themselves in light of their transactional and institutional contexts,³⁹² offers little help in analyzing the enforceability of use limitations in shrinkwrap. Professor Rakoff argues that courts should sort form contract terms into, and decide cases based on, what he describes as “visible” and “invisible” categories.³⁹³ “Visible” terms are those terms that consumers “shop,” or compare, when making purchases (and as to which, accordingly, manufacturers may be more likely to compete). Such terms would be subject to a presumption of enforceability. “Invisible” terms are the balance; such terms would be subject to an opposite presumption.³⁹⁴ Professor Slawson takes a different approach, one that purports to supply a substantive answer to the question raised by contract terms that cannot be enforced on public policy grounds. In his view, contract terms, including form contract terms, should be enforceable to the extent that the proponent (developer) of the form reasonably expects that the consumer understand

with the information producer or provider. See Perritt, *Dispute Resolution*, *supra* note 21, at 366-72 (concluding that traditional contract models handle most issues arising under computer network service agreements).

392. See W. David Slawson, *Binding Promises: The Late 20th-Century Reformation of Contract Law* 90-21 (1996); Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1220-45.

393. See Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1248-83.

394. See *id.* at 1258-83. Evidence that the purpose of such “invisible” terms was merely to promote or protect firms’ interests in managing risk and disciplining their organizations would fail to overcome the presumption. Professor Rakoff identifies a number of internal firm benefits from the use of form contracts, beyond those generated by the use of forms possibly to reduce external transaction costs in connection with mass distribution. Form contracts reduce the cost of contract formation and consummation. They minimize uncertainty and the potential liability it creates. They impose a manageable structure for disputes that are not filtered out through routine processing devices incorporated in the forms. By imposing a set of uniform decision-making rules, forms reduce or even eliminate sources of discretion at lower levels of the organization, thus both reducing the cost of policing variations from firm policy, but also concentrating power (and wealth) in the organization at higher levels of management. See *id.* at 1221-22. In the context of the computer software developer, use of a form license has an additional communicative purpose: the publisher can communicate simultaneously and quickly to a number of audiences, see Gomulkiewicz & Williamson, *supra* note 28, at 341-52, and can express not only particular information concerning the product, but also a set of shared values and norms. Firms use forms to communicate information to the market and to individual consumers, information about how the firm perceives and conceives of the market, information about what technical, legal, and social matters the firm believes are relevant and irrelevant, information about the product itself, the goals it is designed to accomplish, and how those goals are implemented. See Slawson, *supra* note 392, at 69.

the terms proffered.³⁹⁵ That is the point, he argues, at which the parties and a reviewing court could legitimately locate true “assent” to an agreement.³⁹⁶

Both models, however, leave aside the normative content of the law that applies in the absence of the unenforced contract term. Professor Rakoff suggests that courts apply a body of default principles,³⁹⁷ but he specifies neither what those are nor how they should be derived.³⁹⁸ At the least, his model functions best in a mature market, where a distinction between “visible” and “invisible” terms is more accessible. Professor Rakoff acknowledges that in a market in which interests and contract forms are continuing to evolve, deferring to a particular contract practice might well be preferable to building a legal rule around that practice.³⁹⁹ Professor Slawson suggests that courts, rather than legislatures, should guide the development of contractual norms, by using common law techniques to develop specialized bodies of “reasonable” standards to deal with classes of contracts.⁴⁰⁰ For the use regulation of works of information via shrinkwrap, that means that a reconstructed doctrine for analyzing form contracts, without more, is, at most, unlikely to be helpful in the challenge to find open space within the terms of *ProCD* and is at least (given the implication that under many conditions, deference to form developers is appropriate) likely to continue to set the debate in unsatisfactory market terms.

395. See Slawson, *supra* note 392, at 49-68.

396. See *id.* at 51.

397. See Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1244.

398. See Friedrich Kessler et al., *Contracts: Cases and Materials* 275 (3d ed. 1986) (criticizing Professor Rakoff's argument for its failure to state a normatively appropriate balance between commercial organizations and individuals).

399. Professor Rakoff has written that:

If enterprises are to go forward as independent sources of social practice, they will have to invent new solutions to legal problems; that task cannot be made so treacherous, so subject to the imposition of unexpected burdens, that it stifles the necessary incentive. If firms are to establish new practices, some legal force must be accorded to the very fact of that establishment.

Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1281. Professor Rakoff cautions against “long-term” deference, *see id.* at 1283 n.335, but does not make clear how to determine the point where a form has become sufficiently common to be adopted, either judicially or legislatively, as a background rule that substitutes for invalidated “invisible” terms.

400. See Slawson, *supra* note 392, at 66-68. Professor Rakoff criticizes this approach for inappropriately delegating to developers of form contracts the ability initially to set the terms from which the proper balance is derived. See Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1213. In any particular context, however, it is not clear that judges or legislators are institutionally superior to private parties in identifying and implementing at least initially legitimate terms. The acknowledged premises of a discourse inevitably reflect certain norms about its content. The discourse, however, has to begin somewhere. See generally Thomas C. Grey, *The Constitution as Scripture*, 37 *Stan. L. Rev.* 1, 13-17 (1984) (debating whether the constitutional text should be the sole source of law for purposes of judicial review). This is particularly so if you believe, as I do, that the discourse should be inductive rather than deductive.

C. Trade Usage and the Codification of Commercial Norms

Professors Rakoff and Slawson do note that contract forms may evolve benignly or even efficiently, apart from their enforcement by courts, and it is conceivable that open space might be found within such a social convention. In that possibility lies law that formally recognizes the third “take” on the reasoning of *ProCD*, which focuses on the court’s deferral to commercial practices. *ProCD* makes the following argument: Article Two of the UCC explicitly countenances variations on standard commercial practices. Such variations may be invalidated by certain special provisions of Article Two, but none of the specialized substantive mandates of Article Two of the UCC applies to the terms at issue between Zeidenberg and ProCD.⁴⁰¹ The ProCD license is consistent with commercial practices in the software industry.⁴⁰² Modifying the UCC specifically to regulate shrinkwrap licenses might be a bad idea,⁴⁰³ but defenders of open space might take to heart the possibility that a practice or usage concerning open space might be specified in (legal) code, and if this were done, then cases like *ProCD* might come out differently. Parties could contract out of the practice only under limited circumstances, or not at all.⁴⁰⁴

That implication—specification of a set of industry practices to which transactions would default in the absence of other explicit agreements—is the premise of the project to draft an Article 2B of the UCC,⁴⁰⁵ a purportedly comprehensive set of rules dealing with

401. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452-53 (7th Cir. 1996).

402. See *id.* at 1451.

403. See *id.* at 1453 (“[A]djusting terms in buyers’ favor . . . would lead to a response, such as a higher price, that might make consumers as a whole worse off.”).

404. *Id.* Trade usage is “any practice or method of dealing having such regularity of observance in a place, vocation or trade as to justify an expectation that it will be observed with respect to the transaction in question.” U.C.C. § 1-205(2) (1983). “[F]ull recognition is . . . available for . . . usages currently observed by the great majority of decent dealers, even though dissidents ready to cut corners do not agree.” *Id.* § 1-205 cmt. 5.

405. See National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft). The history and status of the Article 2B project are most readily available through several sites on the World Wide Web. See National Conference of Commissioners, *The National Conference of Commissioners on Uniform State Laws; Drafts of Uniform and Model Acts* (visited Sept. 27, 1998) <<http://www.law.upenn.edu/library/ulc/ulc.htm>> (official site); Raymond T. Nimmer, *Uniform Commercial Code Article 2B Revision Draft Download Site* (visited Sept. 24, 1998) <<http://www.law.uh.edu/ucc2b/>>; Carol A. Kunze, *A Guide to the Proposed Law on Software Transactions: Draft UCC Article 2B-Licenses* (visited Jan. 7, 1998) <<http://www.SoftwareIndustry.org/issues/guide/>> (software industry site); The Consumer Project on Technology, *Welcome to the Consumer Project on Technology’s Protest Page on: Uniform Commercial Code Article 2B* (visited Jan. 7, 1998) <<http://www.cptech.org/ucc/ucc.html>>. The current schedule for drafting and revising the project has the completed draft being submitted to the American Law Institute membership in May 1999 and to the Annual Meeting of the National Conference of Commissioners on Uniform State Laws during the Summer of 1999.

licenses in information. The overall thrust of Article 2B has been criticized and defended in detail elsewhere.⁴⁰⁶ For present purposes, the question it raises, particularly as the draft addresses shrinkwrap, is this: is codification of a norm for shrinkwrap (independent of the specific norm adopted) likely to protect consideration of open space issues, by the market or otherwise, that *ProCD* otherwise discourages?

For codification efforts in general, the answer appears to be that codification tends to limit innovation in forms and practices and, thus, tends to freeze whatever welfare benefits or losses inhere in the underlying practice reflected in the code.⁴⁰⁷ Whether that result is itself welfare-enhancing depends on whom the code serves. Professor Bernstein argues that in repeat player situations, legal rules that use evidence of trade usage or trade practice to interpret written commercial agreements frustrate rather than confirm parties' expectations about their ability to plan and anticipate the rules that will actually apply to their conduct, by limiting the extent to which they may deviate from "normal" practice.⁴⁰⁸ She argues that a better regime of commercial law should, instead, structure safe harbors for repeat market participants, so that commercial parties could safely opt in to or opt out of default legal rules that rely on evidence of "trade usage" to

406. See, e.g., Amelia H. Boss & Jane Kaufman Winn, *The Emerging Law of Electronic Commerce*, 52 Bus. Law. 1469, 1469-70 (1997) (arguing in favor of the need for a stable set of commercial rules for on-line transactions); Bryan G. Handlos, *Drafting and Negotiating Commercial Software Licenses: A Review of Selected Issues Raised by Proposed Uniform Commercial Code Article 2B*, 30 Creighton L. Rev. 1189, 1191 (1997) (discussing the UCC draft proposal to limit the ability to vary certain provisions of the Uniform Code); Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1263-92 (recommending modifications to the UCC proposal that would prevent licenses from withholding certain rights from licensees); Rice, *Digital Information*, *supra* note 10, at 630-36 (criticizing the framework of Article 2B); Stephen P. Tarolli, Comment, *The Future of Information Commerce Under Contemporary Contract and Copyright Principles*, 46 Am. U. L. Rev. 1639, 1670-73 (1997) (suggesting how the law of contract and copyright may better protect the commercial exchange of information). The results of a symposium on the project held in the Spring of 1998 are available at Haas School of Business, University of California at Berkeley, *Intellectual Property & Contract Law in the Information Age: The Impact of Article 2B* (visited Oct. 6, 1998) <<http://sims.berkeley.edu/BCLT/events/ucc2b/>>.

407. See Goetz & Scott, *supra* note 28, at 289-305 (arguing that doctrines of implied contract terms restrict, rather than expand, parties' freedom of contract); Elizabeth Warren, *Trade Usage and Parties in the Trade: An Economic Rationale for an Inflexible Rule*, 42 U. Pitt. L. Rev. 515, 541-46 (1981) (arguing that trade usage rules in commercial law produce efficiency gains).

408. See Bernstein, *supra* note 28, at 1782-87. Professor Bernstein uses transaction cost analysis to suggest, by example, the efficiency of formal contractual statements that restrict rights and warranties provided by a manufacturer (or a software developer). Such statements may, if interpreted strictly, enable the manufacturer to vary its behavior in any particular case by providing broader services than encompassed in the written contract without raising the risk that its conduct will establish a practice that will be deemed to bind the manufacturer in all cases. Application of trade usage norms to the end-game rules stated in the contract eliminates those transaction cost savings. See *id.* at 1815-26. Professor Rakoff makes a similar argument from a non-economic perspective. See Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1221.

interpret ambiguous contract provisions.⁴⁰⁹ For one-shot or occasional market participants (such as consumers), the contextual approach of the UCC is preferred.⁴¹⁰

Such arguments, applied to shrinkwrap, suggest the following problems. First, a UCC-style response to the issues raised in *ProCD* undermines rather than enhances the possibility that a market modified by commercial norms-as-legal-code may be an effective barometer of both producer and consumer welfare concerning use limitations.⁴¹¹ If market solutions to the problem of open space are indeed feasible, then norms-as-code (refusing enforcement of use-related terms or dictating enforcement of use-related terms only on certain conditions) deters parties from evolving different, enforceable solutions because courts are likely to view skeptically variations from the norm. That, in turn, makes identifying the relevant commercial norm even more critical than it is already in commercial law, and that requires some method of distinguishing repeat actors (who can protect themselves) from one-shot or occasional actors (who earn the protection of the code). The second problem, then, is that distinguishing one from the other in any given market can be difficult empirically. In the copyright (and especially digital) marketplace, doing so *ex ante* may be impossible.⁴¹² Rather than declare a distinction in law, Professor Bernstein recommends structuring “safe harbors” and allowing market participants to sort themselves out: opt in, and producers may rely on custom contract; fail to opt in, and (possibly consumer protective) default rules will apply. “Safe harbors” (the default being unregulated access, for example, in the shrinkwrap context), however, work no better than the norms-as-code that they are designed to avoid. In practice, the safe harbor becomes the default. If a “safe harbor” exists, then rational firms will opt into it.⁴¹³ The distinction disappears.

409. See Bernstein, *supra* note 28, at 1820-21; see also Douglas G. Baird & Robert Weisberg, *Rules, Standards, and the Battle of the Forms: A Reassessment of Section 2-207*, 68 Va. L. Rev. 1217, 1261-62 (1982) (stating that formal rules tend to work better than standards in preserving flexibility for merchants).

410. See Bernstein, *supra* note 28, at 1820 n.168.

411. See Lemley, *Economics of Improvement*, *supra* note 239, at 1065-67.

412. See *ProCD, Inc., v. Zeidenberg*, 86 F.3d 1447, 1449-50 (7th Cir. 1996) (describing how producers use shrinkwrap limitations to try to segregate consumer and commercial markets by price).

413. For standard form contracts, for example, it may be more efficient for firms to adopt a single practice that permits relatively costless discretionary variance than to police the boundaries between multiple, more finely grained policies. See Kahan & Klausner, *supra* note 55, at 727-29. Professor Kraus's “cultural evolution” argument leads to the same conclusion. See Kraus, *supra* note 367, at 406-07. Conceiving of open space in the context of this Article as a “safe harbor” for nonconsensual use, see Gordon, *Jurisprudence of Benefits*, *supra* note 181, at 1034-35 (recommending “safe harbors” within copyright law to preserve “hostile” uses that are important to cultural vitality), confirms rather than challenges publishers' interests in private definitions and conventions of use. What is “safe” from the user's standpoint is “safe,” in the

Both difficulties are manifested in the current draft of the proposed Article 2B (and in particular in its treatment of shrinkwrap) in ways that make particularly clear that commercial law does not lead the way to open space. First, the project enforces the “license” as the norm for all transactions in “information”⁴¹⁴ and “informational rights” by defining license as

a contract that authorizes access to or use of information or of informational rights and expressly limits the contractual rights or permissions granted, expressly prohibits, limits, or controls uses, or expressly grants less than all informational rights in the information. A contract may be a license whether the information or informational rights exist at the time of contract or are to be developed, created, or compiled thereafter, and whether or not the contract transfers title to a copy. “License” includes an access contract and, for purposes of [the Uniform Commercial Code], a consignment of a copy, but does not include a reservation or creation of a financier’s interest.⁴¹⁵

Regardless of the apparent form of a transaction in information,⁴¹⁶ any grant or reservation of rights in “information” or “informational rights” makes the transaction a “license” and thus subject to Article 2B. The very scope of Article 2B goes hand in hand with the argument implicit in *ProCD* that the core value to the producer in information creation and distribution is the ability to constrain its re-use and that this value should be determined in private markets. Given the premise of Article 2B as a regime of commercial rules built on commercial practice,⁴¹⁷ there remains no incentive for market partici-

sense that expectations are secured in advance, from the point of view of the publisher.

414. “Information” is defined in Section 2B-102(24) of the Draft as “data, text, images, sounds, mask works or works of authorship.” As only “works of authorship” are copyrightable, the Draft is intentionally far broader in scope than the Copyright Act. See Lemley, *Beyond Preemption*, *supra* note 2 (manuscript at 15-21).

415. National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* § 2B-102(28) (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft). “Informational rights” are defined as “all rights in information created under laws governing patents, copyrights, mask works, trade secrets, trademarks, publicity rights, or any other law that permits a person, independently of contract, to control or preclude another person’s use of the information on the basis of the rights holder’s interest in the information.” *Id.* § 2B-102(27).

416. “Contract” is not separately defined by the Draft. Under the reasoning of *ProCD*, however, there is only a narrow difference between a classic bargained-for license in information and a notice reserving or limiting rights to use information. See *supra* notes 97-103 and accompanying text. Article 2B takes what little responsibility courts retain to determine the correct characterization of a transaction as a “sale” or a “license” under copyright law and assigns it wholesale to the information producer.

417. See National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information*, Preface, Introduction (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft).

pants to develop or employ distribution models not based on "use," even if the Article 2B Draft were to allow them to do so.⁴¹⁸

Moreover, having encouraged use-based norms for the substance of information transactions, the Draft confirms a *ProCD*-like handling of what it refers to as "mass-market" licenses (its approximation of a class of what are referred to above as shrinkwrap⁴¹⁹) from a proce-

418. The drafters note that using "information" as the intended scope of Article 2B is intended not to interfere with choices by different publishers to sell, rather than license, their works. *See id.* at Preface, pt. 2. In practice, however, works and media that are conventionally "sold," such as books, magazines, and newspapers, already frequently contain use restrictions that may qualify them as licensed materials under Article 2B's definition, though the Draft tries to exclude ordinary sales of books, magazines, and newspapers. *See id.* § 2B-103 reporter's notes 1 and 3. Article 2B is, therefore, not truly anticipating continued diversity in distribution. It is embracing a single distribution norm. If that development is troublesome, because it potentially limits material subject to re-use via "fair use" or the public domain, then responding to the challenge should include rules and devices that preserve different methods of distributing and gaining access to works of information. The drafters of Article 2B seem to agree that access to a broader range of sources and types of information, and accommodating a diverse range of methods of access and use, are important public policy goals. *See id.* The first threshold issue the Draft presents, however, defeats both.

Setting up a definition of "license" as (presumably) a state law matter also makes a hash of things from a doctrinal perspective. In the context of Article 2B, the definition of "license" renders the distinction between "licenses" and "sales" finally a question of state law, even if the limitation on use that distinguishes a license from a sale may be unenforceable under federal law. The Draft itself explicitly acknowledges that federal law prevails, as it must, in any conflict between the Draft and federal intellectual property or antitrust statutes. *See* National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* § 2B-105 (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft). For works within the subject matter of copyright, however, the scope and extent of the rights concerning that work are questions of federal law. The definition thus creates a pragmatic problem. If issues concerning copyright interests—that is, the validity of use limitations—are federal, then questions of the scope of Article 2B—that is, "is this transaction a license?,"—ought to be decided by federal courts. In hearing such cases, federal judges would be interpreting state law, that is, whether the transaction is a license under Article 2B, and in that role would, at best, be guided by their beliefs about what state courts would do with such questions. Because of exclusive federal jurisdiction over copyright cases, however, *see* 28 U.S.C. § 1338(a) (1994), state court judges may be barred from ruling on them. Federal courts could only anticipate state law, but state courts would be barred from interpreting that law. This morass appears to follow from the drafters' wholehearted adoption of a characterization of information as "thing." *See* Rice, *Digital Information*, *supra* note 10, at 643-48 (stating that the fundamental error of Article 2B is that it assumes that the transfer of any copy of a work of intellectual property transfers some right in the intellectual property itself, which the producer has the right to control).

419. Section 2B-102(32) defines "mass-market license" as "a standard form that is prepared for and used in a mass-market transaction." "Mass-market transaction" is defined as

a transaction within this article that is a consumer transaction and, any other transaction in information or informational rights directed to the general public as a whole under substantially the same terms for the same information with an end-user licensee. A transaction other than a consumer transaction is a mass-market transaction only if the licensee acquires the

dural perspective, excluding, as a practical matter, any possibility that open space could be anything but a market phenomenon.⁴²⁰ The

information or informational rights in a retail market transaction under terms and in a quantity consistent with an ordinary transaction in that market. A transaction other than a consumer transaction is not a mass-market transaction if it is: (A) a contract for redistribution; (B) a contract for public performance or public display of a copyrighted work; (C) a transaction in which the information is customized or otherwise specially prepared by the licensor for the licensee other than minor customization using a capability of the information intended for that purpose; (D) a site license; or (E) an access contract.

National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* § 2B-102(32) (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft). The Draft thus squarely straddles the distinction between commercial (or repeat-play) actors and one-shot or occasional market participants that supports substantive consumer-protective rules.

420. Proposed Section 2B-208, "Mass Market Licenses," now reads:

(a) A party adopts the terms of a mass-market license for purposes of Section 2B-207 only if the party agrees to the mass-market license, by manifesting assent or otherwise, before or during the initial performance or use of, or access to, the information or informational rights. However, a term does not become part of the contract:

(i) if it is unconscionable under Section 2B-110 or
 (ii) subject to Section 2B-301 with regard to parol or extrinsic evidence, if it conflicts with terms to which the parties to the license expressly agreed.

(b) If a party does not have an opportunity to review a mass-market license before becoming obligated to pay for the information and subsequently does not agree, by manifesting assent or otherwise, to the mass market license after having that opportunity, the party has a right, on delivering all copies of the information or destroying the copies pursuant to instructions, to:

(1) a refund;
 (2) reimbursement of any reasonable expenses incurred related to the return and complying with any instructions of the licensor for return or destruction of the information or, in the absence of instructions, return postage or similar reasonable expenses in returning the information; and
 (3) compensation for any foreseeable loss caused by the installation of information in order to view the license, including any reasonable expenses incurred in restoring the particular information processing system to its condition before the required installation, if: (A) the information must be installed in an information processing system to enable review of the license; and

(B) the installation alters that information processing system or information contained in the system but does not return the system or information to its previous condition when the installed information is removed due to the rejection of the license.

Id. § 2B-208. Section 2B-207 currently provides:

(a) Except as otherwise provided in Section 2B-208, a party adopts the terms of a record, including a standard form, if the party agrees, by manifesting assent or otherwise, to the record:

(1) before or during the initial performance or use of or access to the information or informational rights; or (2) at any time after the party has had an opportunity to review the record, if at the time performance or use commenced the party expected that the agreement would be represented in whole or in part by a record if the parties agreed to the record, but the

Draft thus (i) validates “mass-market” license terms that are not “unconscionable,” (ii) allows negotiated licenses to take precedence over mass-market license terms, and (iii) imposes a mandatory refund option for mass-market license terms that cannot be accessed or reviewed before the user pays for the “information.” This is the contract framework applied by the court in *ProCD*. The manner in which the mandatory default is presented in this section assures, in other words, that this section will reinforce rather than suspend the trend in shrinkwrap practice to confirm private bilateral restrictions as the norm for information use and distribution.⁴²¹ Article 2B reinforces as public policy the norm in practice that enforces copyright as private definitions of “use” and undermines potentially countervailing norms of open space in copyright or conventions. The question is not what open space should be. The discipline encouraged by Article 2B is asking producers whether open space should exist at all.⁴²²

D. Preemption, “Extra Elements,” and “Private Legislation”

The fourth and final source of possible open space in *ProCD*, and the one best elaborated doctrinally in the case itself, is preemption theory. This is the existing doctrinal hook for the proposition that under some circumstances federal copyright interests in use and re-use of information trump state created rights concerning information.⁴²³ Of the doctrines considered in this part, only preemption deals explicitly with conflicts between federal intellectual property policy and state law efforts to regulate intellectual property, including enforcement of private contracts concerning copyright, patent, and trade secret interests. The court in *ProCD* considered whether federal policy would ever trigger preemption by federal law of enforcement of private agreements concerning copyrighted, or copyrightable, works, and it stopped barely short of declaring that such agreements always would avoid preemption:

party did not have an opportunity to review the record or the record had not been completed at the time the performance began or use commenced.

(b) Except as otherwise provided in Section 2B-208, if a party adopts the terms of a record, including a standard form, the terms of the record are the terms of the contract without regard to the party’s knowledge or understanding of individual terms in the record. However, a term that fails to satisfy a requirement of this article or other law for enforceability is not enforceable.

Id. § 2B-207.

421. Earlier versions of this section relied explicitly on conformance with industry practice to validate mass-market terms. See Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1259-63 (commenting on the Oct. 8, 1994 draft). The current Draft tends to propagate a single norm for “mass-market” licenses rather than accept and confirm existing norms.

422. See Rosen, *What Has Happened to the Common Law?*, *supra* note 271, at 1199-1253 (stating that codification enables parties to capture the terms of the political market for future debate, shifting away from what is fair and just, and toward what is “standard”).

423. See *supra* notes 93-101 and accompanying text.

Just as § 301(a) [of the Copyright Act] does not itself interfere with private transactions in intellectual property, so it does not prevent states from respecting those transactions. Like the Supreme Court in *Wolens*, we think it prudent to refrain from adopting a rule that anything with the label "contract" is necessarily outside the preemption clause: the variations and possibilities are too numerous to foresee.⁴²⁴

ProCD itself thus opens only a narrow passage to open space, via preemption.⁴²⁵

Other versions of preemption theory might, conceptually, do more. Section 301 of the Copyright Act provides that

all legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright . . . are governed exclusively by this title. . . . [N]o person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.⁴²⁶

Because of its unclear text and even less clear legislative history,⁴²⁷ this section has had a tumultuous existence as applied to state statutes and common law claims. Most recently, and perhaps notoriously, the Court of Appeals for the Second Circuit held that most of the law of "misappropriation" of the State of New York is preempted under § 301.⁴²⁸ Shrinkwrap highlights the more complex question of when a particular state law claim for breach of contract turns out to be, in fact, a question of federal copyright law because the contract claim consists of a right "equivalent" to a right within "the general scope of copyright." For copyrighted works under § 301, courts have supplied the "extra element" doctrine to distinguish copyright from contract claims.⁴²⁹ The majority formulation of that doctrine holds that if a claim for relief requires proof of an "extra element" beyond those required to establish liability under the Copyright Act, then the claim is not preempted by federal law. For contract claims, proof of a bilateral promise itself provides the "extra element." In effect, § 301

424. *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1455 (7th Cir. 1996).

425. Later courts have interpreted *ProCD* as not leaving open even this narrow passage. See *supra* notes 337-59 and accompanying text.

426. 17 U.S.C. § 301 (1994).

427. See *Architectronics v. Control Sys., Inc.*, 935 F. Supp. 425, 438-41 (S.D.N.Y. 1996) (citing, among other sources, Litman, *Copyright Compromise*, *supra* note 271, at 860).

428. See *NBA v. Motorola, Inc.*, 105 F.3d 841, 848 (2d Cir. 1997).

429. See 1 Nimmer & Nimmer, *supra* note 3, § 1.01[B][1][a], at 1-15 to -22. A related question arises with respect to federal subject matter jurisdiction over claims for breach of a license agreement for subject matter that lies within the scope of copyright law. See *Lattie v. Murdach*, 42 U.S.P.Q.2d (BNA) 1240, 1244-45 (N.D. Cal. 1997) (applying the "extra element" standard and remanding to state court a breach of contract claim concerning public domain material); James M. McCarthy, Comment, *Federal Subject Matter Jurisdiction: When Does a Case Involving the Breach of a Copyright Licensing Contract "Arise Under" the Copyright Act?*, 19 U. Dayton L. Rev. 165 (1993).

preempts virtually no breach of contract claims.⁴³⁰ Assuming a meaningful threshold of proof for establishing an “agreement” under state law,⁴³¹ this standard presents few conceptual conflicts with federal copyright policy.⁴³²

Because under the majority approach the mandates of federal intellectual property policy are explicitly subject to the states’ power to define a minimal threshold of proof of “assent” to an agreement, a minority of courts take a more restrictive approach to the “extra element” test. These courts preempt enforcement of a state contract law claim unless the claim requires proof of an element that is both not required by the Copyright Act (such as “an agreement”) and goes to a right or promise that is beyond the scope of the copyright holder’s rights enumerated in the Copyright Act. This minority approach, in other words, tries to preserve the enumeration of the copyright

430. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1454 (7th Cir. 1996) (citing *National Car Rental Systems, Inc. v. Computer Associates International, Inc.*, 991 F.2d 426 (8th Cir. 1993); *Taquino v. Teledyne Monarch Rubber*, 893 F.2d 1488, 1490 (5th Cir. 1990); *Acorn Structures, Inc. v. Swantz*, 846 F.2d 923, 925-26 (4th Cir. 1988)); see also *supra* notes 93-101. But see *Symantec Corp. v. McAfee Assocs., Inc.*, No. C-97-20367-JF(EAI), 1998 WL 740798, at *14-*16 (N.D. Cal. June 9, 1998) (holding that the plaintiff’s claim for unfair competition, which was based on the defendant’s alleged breach of a “no reverse engineering” provision of a software license agreement, was preempted by § 301 of the Copyright Act). Professor Karjala correctly notes that this rule creates the risk that states might define contract law in ways that fundamentally alter federal copyright policy by, for example, enacting a statute that deems a certain limitation on use to inhere in every contract or license that transfers rights to a copyrightable work. See Karjala, *Federal Preemption*, *supra* note 2, at 528 & nn.56-57. He endorses a standard that favors preemption only of contracts or licenses that concern widely-distributed works, as to which bargaining to determine the scope of the distribution is less likely. See *id.* at 530-32. The waxing influence of *ProCD* substantially lessens the already-low probability that courts will acknowledge this risk and apply a more restrictive version of the extra element test. See Jane C. Ginsburg, *Copyright, Common Law, and Sui Generis Protection of Databases in the United States and Abroad*, 66 U. Cin. L. Rev. 151, 166-67 (1997) [hereinafter Ginsburg, *Protection of Databases*] (stating that the “extra element” test is not persuasive as applied to shrinkwrap licenses if the result is that shrinkwrap creates an enforceable contract with everyone).

431. By validating shrinkwrap that satisfies a de minimis standard of user acknowledgment, one way to look at the proposed Article 2B of the UCC is that it substitutes a legislative extra element test for a judicial one. See National Conference of Commissioners on Uniform State Laws, *Uniform Commercial Code: Software Contracts and Licenses of Information* § 2B-208 (visited Nov. 30, 1998) <<http://www.law.uh.edu/ucc2b/080198/080198.html>> (August 1, 1998 draft). Then again, a more aggressive preemption approach (requiring more substantial evidence of an agreement) would vitiate the Draft entirely.

432. This is so simply because, in theory, contract law would remain the framework for governing obligations voluntarily assumed between parties who are in some relationship with one another, and copyright law would govern relations between and among those who lack such a relationship. The voluntariness of the former likely would eliminate or at least substantially reduce the extent of the problem identified in this Article, the shaping of conventions concerning open space. As a practical matter, however, once an agreement is identified, under whatever standards state law supplies, the copyright analysis ends. See *ProCD*, 86 F.3d at 1454.

holder's statutory rights as an exclusive preserve of federal law. In *American Movie Classics Co. v. Turner Entertainment Co.*,⁴³³ for example, the plaintiff, the exclusive licensee of a film from the defendant, claimed that when the defendant nonetheless broadcast that film over its cable television channel, the defendant breached the license agreement. The court held the claim preempted, finding that the plaintiff's breach of contract allegations did not involve violation of a right not provided by the Copyright Act.⁴³⁴

A different take on preemption doctrine tries to effect the same result by examining the market for such shrinkwrap transactions. Scholars including Professors Merges, O'Rourke, and Lemley, in different formulations, each argue that usage of certain forms of license and license terms may become so prevalent in the market that consumers have no choice but to accept them as a condition to acquiring products or services in that market. If such forms or terms purport to restrict rights granted by statute, then, in theory, public legislation affecting that market has been effectively amended by "private legislation."⁴³⁵ Such "private legislation" should be preempted by the Copyright Act.⁴³⁶

433. 922 F. Supp. 926 (S.D.N.Y. 1996).

434. *See id.* at 931-32; *see also* *Frontline Test Equip., Inc. v. Greenleaf Software, Inc.*, 10 F. Supp. 2d 583 (W.D. Va. 1998) (holding that the breach of contract claim was not preempted by federal copyright law); *Wolff v. Institute of Elec. & Elecs. Eng'rs, Inc.*, 768 F. Supp. 66 (S.D.N.Y. 1991) (holding that the plaintiff's state law claim for breach of contract was preempted by the Copyright Act). Both formulations of the "extra element" test deal equally, in principle, with works that are not copyrightable but that are shrink wrapped with use and disclosure restrictions. These include shrinkwrap for uncopyrightable works that fall within the subject matter of copyright (such as factual compilations) as well as works of information that do not (unprotectable processes or ideas, which may be protected, for example, as trade secrets under non-disclosure agreements).

Scholars argue that courts dealing with the "extra element" test often improperly bypass the question of constitutional preemption of copyright license claims. *See* Ginsburg, *No "Sweat"?*, *supra* note 78, at 361-67 (examining several bases of preemption and their possible application to copyright, including congressional occupation of the field, interference with the purpose of a federal statute, conflict with the provisions of a federal statute, and dormant Commerce Clause concerns); Karjala, *Federal Preemption*, *supra* note 2, at 533-34 (describing constitutional preemption in the copyright context as an "occupies the field" preemption). The court in *ProCD* did not address constitutional preemption arguments. The older shrinkwrap case with which *ProCD* is sometimes compared, *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255 (5th Cir. 1988), relied on constitutional preemption arguments to invalidate a Louisiana statute that purported to validate certain shrinkwrap terms.

435. *See* Lemley, *Shrinkwraps in Cyberspace*, *supra* note 110, at 319; Merges, *End of Friction*, *supra* note 28, at 115; Merges, *Review Essay*, *supra* note 27, at 1611-12; O'Rourke, *Market-Based Approach*, *supra* note 5, at 55; *see also* Rice, *Public Goods*, *supra* note 28, at 561-67 (articulating the market-wide effects of contracts of adhesion).

436. Constitutional preemption gives effect to the negative implications of congressional legislation on a case-by-case basis; "private legislation" preemption does so on a market-wide basis. The Copyright Act operates as a default, in effect, so long as copyright owners act individually, but as a set of mandatory obligations if similar ac-

Setting aside the different current variations of preemption doctrine from a copyright policy standpoint, and particularly from the standpoint of protecting open space interests (by preempting contractual limitations on re-use that conflict, for example, with fair use rights), the doctrine has only that substance that the federal statute provides. Transaction-oriented preemption theories merely enforce in public form private use-based conventions of copyright. Under any theory, however, if enforcement of a copyright license is preempted because it interferes with the federal scheme concerning "use," then the parties are remanded to that scheme, whatever it may be. If the scheme itself is less than clear on what it requires as a substantive matter, then preemption will not supply an answer. Nothing in preemption doctrine itself suggests what fair use or the public domain are, or can or should be. It merely asserts the primacy of federal law.⁴³⁷ Preemption itself supplies no normative view to displace or compete with the conventions shaped by shrinkwrap practice. Under *ProCD*, § 301 of the Copyright Act becomes a vehicle for, rather than a limitation on, the evolution of the transactional practices with which this Article is concerned.⁴³⁸ The majority extra element test opens the gates for all

tion is taken market-wide. The distinction thus resembles Professor Karjala's suggestion that preemption rules distinguish between widely and narrowly distributed works. See Karjala, *Federal Preemption*, *supra* note 2, at 525-28. The scope of the relevant practice, or market, is the key to applying the concept. If "private legislation" theories are interpreted too narrowly, they collapse into variants of the extra element test and the contractualism of *ProCD* and the Article 2B proposal. That is, if "private legislation" preemption kicks in only for broadly defined markets, or for markets in which the promoter of the license form has "market power," bilateral license terms that differ slightly from the industry norm may be validated. Cf. Lemley, *Shrinkwrap Licenses*, *supra* note 27, at 1274 n.158 (positing that shrinkwrap usage may be a damned if you do, damned if you don't issue: Conforming to trade usage would validate shrinkwrap under a prior version of Article 2B but condemn it as "private legislation"). Many, even most, form contracts (including shrinkwrap), however, are deployed by firms that lack market power. See Rakoff, *Contracts of Adhesion*, *supra* note 55, at 1218-20. The more narrow the relevant market becomes, or as market power itself drops out of the analysis, however, the more the concept looks like the minority "extra element" test.

In practical terms, private legislation theories raise administrability questions. Particular license terms would in theory reach some critical level of ubiquity at which preemption would apply. It is unclear, thereafter, how such "private legislation" could be repealed. If a single-market participant with, for example, some threshold market share, modified its form to abandon the offending term, would that firm thereby reclaim its right to contractual protection? Would the remaining firms, which one assumes would retain the offending language, be liberated by the defection of one firm?

437. Cf. Lemley, *Beyond Preemption*, *supra* note 2 (manuscript at 25-34) (stating that preemption is an incomplete solution to the copyright incentive problem because the approach lacks nuance and does not account for non-statutory, non-federal aspects of intellectual property rules).

438. One need look no further than recent congressional activity concerning § 301 for evidence that preemption rules tie in directly to norms of practice, not to public values underlying copyright. In each of the last two Congresses, bills have been introduced that would provide special legislative protection against private interference

manner of transactions. Market-oriented preemption narrows those gates dramatically. Private transactions are permitted or not permitted. Neither approach to preemption, however, suggests an affirmative sense of value. No preemption strategy is informed by a normative explanation of the public values implicit in copyright policy, how such normative values could or should be derived, or how conventions of use that shrinkwrap in particular promotes might be substantively reconciled with them.⁴³⁹

with "copyright management" systems. See H.R. 2281, 105th Cong. (1998); S. 1146, 105th Cong. (1997); S. 1121, 105th Cong. (1997); H.R. 3048, 105th Cong. (1997). See generally Cohen, *A Right to Read Anonymously*, *supra* note 28, at 1019-31 (describing earlier "copyright management" legislation and arguing that such protection in general undermines the right to anonymous participation in constitutionally-protected activity). By the end of the session in the Fall of 1998, Congress had passed and President Clinton had signed the Digital Millennium Copyright Act, *see supra* note 158, that includes legislative prohibition on circumvention of "technological measures" that "effectively control" access to copyrighted works. The Act delays implementation of its anti-circumvention provisions for two years, during which time the Librarian of Congress is directed to determine whether the prohibition is likely to affect the ability to make noninfringing uses of classes of works. The legislation implements the United States's obligation to address such technologies under recent international copyright conventions. See World Intellectual Property Organization: Copyright Treaty, Dec. 20, 1996, arts. 11 & 12, 36 I.L.M. 65, 71-72; World Intellectual Property Organization: Performances and Phonograms Treaty, Dec. 20, 1996, arts. 18 & 19, 36 I.L.M. 76, 86-87.

That such systems amount to the "ultimate shrinkwrap" has already been considered. See *infra* Part I.C.2. All but one of these bills would have left it to courts to ponder remaining conflicts between copyright law and rights and obligations privately exchanged in the context of these technological systems, presumably under existing preemption law. That mode simply closes the circle (under the standard extra element test) by enforcing any "agreements" that such systems enable. See Bell, *supra* note 27, at 557. The exception was H.R. 3048, the so-called Campbell-Boucher bill, which, in addition to privileging "copyright management technology," would also have amended § 301 of the Copyright Act as follows:

When a work is distributed to the public subject to non-negotiable license terms, such terms shall not be enforceable under the common law or statutes of any state to the extent that they—

- (1) limit the reproduction, adaptation, distribution, performance, or display, by means of transmission or otherwise, of material that is uncopyrightable under section 102(b) or otherwise; or
- (2) abrogate or restrict the limitations on exclusive rights specified in sections 107 through 114 and sections 117 and 118 of this title.

H.R. 3048, 105th Cong. § 7 (1997). In other words, the legislation would have preempted use-limiting terms accompanying works consisting of public domain material and terms that conflicted with the rights of owners and users of copyrighted works as prescribed by the Copyright Act. The bill at least avoided the circularity of proposals that simply forbade tampering with copyright management technologies, but it, like other preemption approaches, neither supplied nor encouraged any normative view of values for works of information, the open space that the bill was trying to preserve.

439. These pitfalls are illustrated by the vagueness inherent in the suggestion that the preferred approach to preemption questions is one that accepts fact-specific determinations of the "reasonableness" of particular contracts in light of constitutional goals and the purposes of fair use. See Ginsburg, *Protection of Databases*, *supra* note 430, at 170.

V. OVERCOMING LEGAL-WARE

This Article has argued that the inadequacies of existing fair use and public domain jurisprudence, on the one hand, and of market and contract paradigms, on the other hand, exist in part because a major portion of our working system of copyright exists beyond and is only indirectly touched by formal legal entitlements and obligations enforced by courts. Even under the best of circumstances, social conventions of information creation and distribution are largely private constructions. How we manage the formal system of copyright nudges them in one direction or another. Even well-informed and public-spirited scholars and legislators, fully conscious of the potentially pernicious effects of legal-ware and mindful of the need for open space, may be incapable of devising a legal process that efficiently absorbs and asserts both the public nature of copyright as a system of information management and the private interests of individual system participants—and that creators, users, re-users, and those who supervise resolution of disputes among them all follow to the degree that the devisers intend.

At the same time, it is unrealistic to suggest that the form of copyright law is irrelevant, or that it can or should be discarded. Clearly, the law sets out important substantive rules to be observed and enforced to a large degree in their specifics. As a manager and resolver of disputes, the law takes the effects of copyright conventions and filters them through formal rules, thus refreshing the rules and refining the conventions. Open space, legal-ware, bilateral contract, the market for forms and works of information, and formal doctrines of fair use and the public domain are all constituent parts of and functions of this process. The argument thus far suggests that management of the process ought to be an essentially public function, that the process is being rapidly privatized, that the scope of the conventions that bring disputes to the system to be resolved is being narrowed, and that reversing or mitigating that trend by direct regulation of its several substantive parts is highly problematic.⁴⁴⁰ One might respond: So what? It may be so that open space is “good” and that legal-ware is “bad,” but it has proved feasible neither to declare the existence of the former nor to ban the latter outright. We do not truly know what we want and need from open space under our system of copyright. We have at hand a host of theories and possibilities. Until we know, or at least have a method of arriving at an answer, we will not be able to tell how much or little open space we should have, and how much or little legal-ware. That method ought to be one function of copyright law. Instead, right now, the answer is increasingly the function of legal-ware itself.

440. See *supra* notes 347-59 and accompanying text.

What is the proper institution or mechanism for processing and filtering facts, information, and values concerning open space?⁴⁴¹ The question has three principal dimensions: Do we prefer results generated by private or by public processes, decision-making at the state or at the federal level, and decisions by legislators or by judges? Given the argument so far, the first two dimensions can be dealt with summarily. Part IV argued that contractual ordering and private markets form the foundations of the problem that this Article addresses. Contracts and markets are the traditional methods of dealing with most basic private law issues; their public consequences, based on recent changes in social, technological, and economic changes, threaten open space. We might limit the permissible range of contract, or rely on the market to manage itself, but either approach leaves open space an essentially private phenomenon.⁴⁴² State law seems inadequate to the task for related reasons. For private arrangements like licenses, contract law is primarily state law. *ProCD* itself, though it concerned the interpretation of a uniform law, addressed a question of state law. Article 2B, if it is ratified as a uniform statute and forwarded to state legislatures, will become the state law of as many states as decide to adopt it. State law by definition may vary from state to state; one of the premises of the federal system is that local needs and conditions justify tailoring law to fit them. As influential as *ProCD* has been as a practical matter, variable and potentially inconsistent state regimes are incapable of dealing with matters that require a national perspective. Copyright law, for its part, has always been a matter of federal concern. The pressures described earlier in this Article now require that information law be a virtually (and a virtual) federal preserve.⁴⁴³ Digital technology and computer networks allow information to exist simultaneously and cheaply in every community throughout the world. *ProCD* and legal-ware are spreading a single contractual norm across communities, media, and all types of works. If ever there was a

441. Cf. Gordon, *Jurisprudence of Benefits*, *supra* note 181, at 1037-38 (describing the problem as one of identifying norms to support types of uses that should be protected under various copyright theories and suggesting possibly searching for policy concerns common to fact patterns in the cases, identifying a "dominant purpose" in the cases, or searching for converging policies). The problem, I think, is not one of detection, but of determination.

442. Cf. Robert C. Clark, *Contracts, Elites, and Traditions in the Making of Corporate Law*, 89 Colum. L. Rev. 1703, 1745-46 (1989) (noting the tension between the preference for common law rules dealing with basic and enduring private law topics and the need for a modern regulatory framework to deal with shifting institutional arrangements and new social phenomena).

443. Until the adoption of the current copyright statute in 1976, federal and state copyright regimes existed in parallel, the federal scheme dealing with published works and state schemes dealing with unpublished works. Pre-1976 copyright law was considerably more complex, but in general the federal interest extended only to published works. In 1976, Congress brought unpublished works into the federal scheme. See Karjala, *Federal Preemption*, *supra* note 2, at 515-17.

time for a national perspective on open space, this is it.⁴⁴⁴ The intangible nature of information means that open space must be determined at once, not in innumerable separate and disparate proceedings.

That conclusion leads to the federal system. Federal legislation has a number of obvious advantages. Congress has the power and (in principle) the expertise to investigate and distill vast quantities of complex technical information. It can gather information from a wide variety of sources and analyze that information in the context of national policy debates. Legislation can be comprehensive and subtle. It can balance certainty and flexibility by setting out rules and delegating particular applications to courts. Congress can respond relatively quickly to social and economic change, and with appropriate legislation it can preempt significant harm resulting from that change. Congress is a representative body. Because members are accountable through the electoral process, legislation benefits from a presumption of institutional legitimacy. Substantive legislation defining or preserving open space, in short, has much to recommend it.⁴⁴⁵

All signs, however, do not point to Congress. To begin with, the Constitution constrains what Congress may and may not do. The combination of the Copyright Clause of the Constitution,⁴⁴⁶ which authorizes the creation of copyright interests, and the First Amendment, which severely limits restraints on free expression, might be considered to stand for the proposition that expression that Congress has not protected in copyright (and patent) legislation cannot be protected in

444. The zoning analogy from physical space applies again, this time in reverse. Local control of zoning of real property makes sense because the costs of zoning are typically spread across or internalized by the local community, which then has both the incentive and opportunity to object. To the extent that such costs are improperly assessed against individuals, there is effectively a "national law of zoning" that restores those costs to the community, under the Takings Clause of the Fifth Amendment. See *Dolan v. City of Tigard*, 512 U.S. 374, 391 (1994) (requiring, under the Fifth Amendment, a "reasonable relationship" between the zoning conditions imposed upon a private person in exchange for a building permit); *Nollan v. California Coastal Comm'n*, 483 U.S. 825, 837 (1987) (holding that when a conveyance of property is a condition of the removal of a land use restriction, the condition must be a valid regulation; if not, then it is a taking); *Del Monte Dunes at Monterey, Ltd. v. City of Monterey*, 95 F.3d 1422, 1434 (9th Cir. 1996) (affirming a judgment on a jury verdict that "essentially accepted Del Monte's argument that the City forced Del Monte to bear the burden of creating open space for the public to enjoy"), *cert. granted*, 118 S. Ct. 1359 (1998). "Zoning" of digital or information space via shrinkwrap allows one community (one publisher, or all publishers) to externalize virtually all of (what that community considers) its costs. A comparable "national law of information zoning," or a national body of open space law, would spread those costs (characterized as a benefit, from the users' perspective) across the entirety of the relevant space.

445. See Ginsburg, *No "Sweat"?*, *supra* note 78, at 377-78 (arguing that the judicial function should be limited to ensuring that legislation is consistent with constitutional goals: "Decisions as to what constitutes knowledge and how to achieve its progress seem particularly ill-adapted to the judicial branch").

446. See U.S. Const. art. I, § 8, cl. 8.

any other way. That argument does not define what fair use and open space should be, but it does suggest certain boundaries. It even suggests to some degree that courts need merely to be compelled to follow a constitutional scheme that is implicit in existing law. On this reasoning, *ProCD* is simply wrong, and the practice that it endorses and that follows it ought to be invalidated as a matter of federal constitutional law. It is reasonably well-established, however, that the Constitution and the Copyright Act do not behave so categorically. Non-copyright based schemes for the protection of intellectual property, both state and federal, are constitutionally permitted, though the First Amendment and the Commerce Clause affect their legitimate scope.⁴⁴⁷ The First Amendment does prescribe that open space exist to some extent.⁴⁴⁸ It should protect whatever we constitute as the public domain from privatization through copyright. It may also, on the other hand, proscribe Congress from legislating precisely what the substance of that open space should or should not be,⁴⁴⁹ as it is doubt-

447. For discussions of First Amendment concerns, see *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 354 (1991) (observing the adverse effects on the free flow of information caused by monopolies on material in the public domain); *Harper & Row, Publishers, Inc., v. Nation Enterprises*, 471 U.S. 539, 556 (1985) (noting the First Amendment interest in the unrestricted availability of facts); Ginsburg, *No "Sweat"?*, *supra* note 78, at 384-87 (concluding that a categorical view of the Constitution vis-à-vis public domain is not persuasive); Mark A. Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 Duke L.J. (forthcoming 1998) (manuscript at 53, on file with author) (arguing that under First Amendment law, copyright law "should have standards that are as definite and nondiscretionary as possible"); Jessica Litman, *Reforming Information Law in Copyright's Image*, 22 U. Dayton L. Rev. 587, 612-13 (1997) (finding fair use doctrine; a "troublesome safe harbor" for First Amendment rights because it requires a case by case analysis); and Michael J. Haungs, Note, *Copyright of Factual Compilations: Public Policy and the First Amendment*, 23 Colum. J.L. & Soc. Probs. 347, 364 (1990) (describing the tension between copyright law and the First Amendment). As to the Commerce Clause, the Supreme Court in *Feist* ruled that "originality" of copyrightable material is a constitutional demand, *see Feist*, 499 U.S. at 346, which suggests that congressional regulation of non-copyrightable material that nonetheless lies within the "subject matter of copyright" (such as databases or compilations of fact) is not legitimate under the Copyright Clause but may be so under the Commerce Clause.

448. *See supra* note 227 and accompanying text.

449. Completely federalizing the law of copyright licensing (preemption doctrine currently federalizes it, to a degree) represents an intermediate option that is unworkable in practice, given the volume of federal litigation that would likely result. The preemptive scope of § 301 of the Copyright Act might be interpreted as authorizing the development of a federal law of contracts concerning copyright. *See Lingle v. Norge Div. of Magic Chef, Inc.*, 486 U.S. 399, 403-13 (1988) (stating that the Taft-Hartley Act preempts state law claims that depend on the meaning of collective bargaining agreements); *Textile Workers Union v. Lincoln Mills*, 353 U.S. 448, 456-57 (1957) (holding that the preemption section of the Taft-Hartley Act authorized the judicial creation of federal law interpreting collective bargaining agreements). Moves elsewhere in intellectual property law to federalize parts of traditional state law regimes, *see, e.g.*, Federal Trademark Dilution Act of 1995, 15 U.S.C.A. § 1125(c)(1) (West Supp. 1998), (unfair competition law); Economic Espionage Act of 1996, 18 U.S.C.A. §§ 1831-1839 (West Supp. 1998) (trade secret law), generally have enhanced

ful that Congress may explicitly take a position privileging certain uses.⁴⁵⁰

Moreover, the strength of legislation, its breadth and comprehensiveness, is also its weakness. Existing statutory fair use and public domain rules are broad declarations intended for case-by-case application as local needs and conditions dictate.⁴⁵¹ Decentralizing the process avoids public choice criticisms of legislation,⁴⁵² allows local actors (courts, firms, and individuals) to experiment with and analyze novel approaches,⁴⁵³ enhances the degree to which individuals and firms come into direct contact with and affect the law,⁴⁵⁴ and, most important from the point of view of this Article, by exposing the legal system more directly to community norms and conventions of information practice, creates the greater potential for ensuring that those conventions are reconciled in the individual instance and as a collective matter with constitutional norms and federal copyright policy. The incremental nature of judicial decision-making ought to produce

the control of creators over re-use or distribution of their intellectual products, on the supposition that state courts were not giving creators sufficient protection.

450. What the government may not do directly under the First Amendment, however, it may often do indirectly. See Lessig, *Social Meaning*, *supra* note 16, at 1035-42. Congress might promote particular conventions or norms that give meaning to open space. Under some formulations of existing doctrine, to a degree, it already does. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 596 (1994) (Kennedy, J., concurring) (discussing fair use as common law that "presumes that rules will emerge from the course of decisions"). But see *supra* notes 284-87 and accompanying text (noting that, notwithstanding *Campbell*, courts fail to apply common law methods to fair use cases). Further efforts, such as exhorting consumers to make greater use of fair use rights, are doubtful as a political matter. In matters of norms, conventions, and meanings, government efforts to mandate particular outcomes are likely to be viewed with significant skepticism. See Lessig, *Social Meaning*, *supra* note 16, at 1016-19.

451. See *Campbell*, 510 U.S. at 577 (noting that the legislative history of the 1976 Copyright Act confirms that Congress intended that the fair use doctrine continue to be elaborated on a case-by-case basis); *Harper & Row*, 471 U.S. at 560 (same); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 448-49 (1984) (finding that the legislative history of the statute shows that Congress intended that fair use be applied, as it was prior to the statute, as an equitable rule of reason).

452. In the abstract, common law decision-making is predicted to be welfare-enhancing in contexts where both plaintiffs and defendants have equal interests in the precedential value of decisions. See Marc Galanter, *Why the "Haves" Come Out Ahead: Speculation on the Limits of Legal Change*, 9 L. & Soc'y Rev. 95 (1974); William M. Landes & Richard A. Posner, *Adjudication as a Private Good*, 8 J. Legal Stud. 235, 280 (1979); see also Richard A. Posner, *Economic Analysis of Law* 35-99 (5th ed. 1998) (exploring the congruence between common law rules and efficiency).

453. See *Campbell*, 510 U.S. at 577 (noting the importance of avoiding a rigid application of the fair use doctrine that would stifle creativity).

454. See Larry Kramer, *The Lawmaking Power of the Federal Courts*, 12 Pace L. Rev. 263, 265-73 (1992) (rejecting the anti-democratic criticism of common law rule-making and arguing that allowing or encouraging the development of federal common law may increase citizen access to the apparatus of lawmaking); Christopher J. Peters, *Adjudication as Representation*, 97 Colum. L. Rev. 312, 320-46 (1997) (explaining how law-making can claim democratic legitimacy by ensuring constructive participation through interest representation).

over time relatively stable bodies of rules that reflect community standards of fairness, including open space.⁴⁵⁵

This description sounds like the status quo. But it differs. We ought to preserve the judicial role, but change how judges are deciding cases. Federal courts dealing with public domain and fair use issues are not, as a rule, dealing with them in a modern common law sense. Part III illustrated that courts today undertake detailed case-by-case applications of the statutory fair use factors and searches for “originality” in primarily factual works. What courts do not do, as a rule, is take an additional step, reach beyond the particular facts of each case to consider how analysis of those facts is related to prior analyses of similar and dissimilar facts—that is, how the “categories” of fair use and the public domain analysis may, in practice, be connected to one another.⁴⁵⁶ They do not, in short, exercise their common law “power” to create the law of open space.⁴⁵⁷ Congress and the Supreme Court may have told lower federal courts to act as common law adjudicators,⁴⁵⁸ but those courts continue to approach the cases by trying to find open space, rather than by developing it. By applying rules rather than shaping them, they are helping to sustain the contract-oriented default that *ProCD* is supplying.⁴⁵⁹ If shrinkwrap excludes open space, then open space will not be found. The common law mandate needs to be made more explicit. Let me suggest, then, an amendment to the Copyright Act, a procedural or institutional ap-

455. See Melvin Aron Eisenberg, *The Nature of the Common Law* (1988) (describing the nature of common law adjudication); Weinreb, *Fair's Fair*, *supra* note 205, at 1253 (describing the characteristically limited judicial function).

456. See *supra* Part III.B.1.

457. See Eisenberg, *supra* note 455, at 154-61.

458. Although they did so in slightly different senses. *Feist* admonishes courts to develop “copyrightability” guided by fidelity to constitutional purpose. *Campbell* admonishes courts to develop “fair use” guided by fidelity to congressional purpose. Neither construction, however, explains how cases should be decided. The difficulty may lie in ambiguity in the legislative history of the Copyright Act, which encourages case-by-case or equitable resolution of fair use claims, or in judicial appreciation of the common law method. The different opinions in *Campbell* seem to take both sides of the issue. Compare *Campbell*, 510 U.S. at 577 (“Congress . . . intended that courts continue the common-law tradition of fair use adjudication. . . . [T]he statute, like the doctrine it recognizes, calls for case-by-case analysis.”), with *Campbell*, 510 U.S. at 596 (Kennedy, J., concurring) (“The common-law method instated by the fair use provision of the copyright statute . . . presumes that rules will emerge from the course of decisions.”).

459. See Catherine L. Fisk, *Lochner Redux: The Renaissance of Laissez-Faire Contract in the Federal Common Law of Employee Benefits*, 56 Ohio St. L.J. 153, 225-32 (1995) (arguing that rule application, rather than rule creation, through federal common law is more likely to lead to a contractually-oriented default); Paul Lund, *The Decline of Federal Common Law*, 76 B.U. L. Rev. 895, 954-1012 (1996) (stating that the trend in federal common law is to incorporate related doctrines of state law, which tends to undermine rather than promote the use of federal common law for specifically federal goals).

proach⁴⁶⁰ rather than a direct assault on the content of copyright (or contract) law itself. Congress should expressly delegate authority to the federal judiciary to develop a common law of fair use and of the public domain, to allow and encourage courts to create the content of open space as a matter of federal policy. For § 107,⁴⁶¹ concerning fair use, the existing text of the statute should be assigned to a subdivision (a), and a new subdivision (b) should be adopted that reads, "This section shall be governed by the principles of the common law as they may be interpreted by the courts of the United States in light of reason and experience." The same amendment should be added as a new subsection (c) to § 102,⁴⁶² concerning the subject matter of copyright in general, and § 103,⁴⁶³ concerning the subject matter of copyright in compilations and derivative works.⁴⁶⁴

Express delegations of federal common lawmaking authority are rare, but they exist,⁴⁶⁵ and they are intended, as this proposal is intended to promote the development of a national, uniform legal framework that is consistent with congressional purposes, yet lies beyond congressional skill or interest in legislating more particularized

460. Purely procedural changes might include making the negation of fair use an affirmative element of the plaintiff's case for infringement, or deleting the presumption of copyrightability that accompanies the issuance of a copyright registration. As a practical matter, such changes might slow the pace even of legitimate copyright infringement claims to a trickle, given the existing difficulty presented by proving and disproving claims of "fairness" and "originality" as affirmative defenses, with few offsetting benefits that could not be obtained under a more evolutionary approach.

461. 17 U.S.C. § 107 (1994).

462. *Id.* § 102.

463. *Id.* § 103.

464. The effect of the proposal on the preemptive reach of the Copyright Act would be felt through the corresponding evolution in application of § 301. *See id.* § 301. The definition of preempted rights under that section specifically incorporates the "subject matter of copyright" as specified by § 102 and § 103 and the definition of "exclusive rights" under § 106, to which § 107 explicitly specifies exceptions. *See id.*

465. The proposal is based on Rule 501 of the Federal Rules of Evidence, which authorizes the development of a federal common law of privilege for cases in federal courts for which federal law provides the rule of decision:

Except as otherwise required by the Constitution of the United States or provided by Act of Congress or in rules prescribed by the Supreme Court pursuant to statutory authority, the privilege of a witness, person, government, State, or political subdivision thereof shall be governed by the principles of the common law as they may be interpreted by the courts of the United States in the light of reason and experience. However, in civil actions and proceedings, with respect to an element of a claim or defense as to which State law supplies the rule of decision, the privilege of a witness, person, government, State, or political subdivision thereof shall be determined in accordance with State law.

Fed. R. Evid. 501 (1993). Section 301 of the Taft-Hartley Act is interpreted as delegating to the federal courts the power to develop a federal common law of collective bargaining agreements. *See Lingle v. Norge Div. of Magic Chef, Inc.*, 486 U.S. 399, 403-06 (1988); *Textile Workers Union v. Lincoln Mills*, 353 U.S. 448, 456-57 (1957); *see also Fisk, supra* note 459, at 228 ("Congress intended that courts create a body of federal common law to govern ERISA cases.").

rules or in adapting existing legal rules to changed conditions.⁴⁶⁶ The potential benefits of such an approach in this context seem clear. Most important, it continues to locate the evolution of copyright doctrine at the local level, the point where innovation and change both in the creation of new works and types of works, in conventions of use and re-use, and in their social, technological, and economic contexts, actually is taking place. Innovation and evolution in practice enter the legal system as raw data, rather than filtered and expressed only as policy concerns. Common law adjudication requires that courts analyze innovation and change, and each claim for control over re-use or for involuntary open space, incrementally, in the context of other cases.⁴⁶⁷ It requires that courts justify their results on those terms. A clear and unambiguously concise approach to fair use and to public domain issues is not likely to result (nor is it necessarily to be desired),⁴⁶⁸ but requiring courts to consider and to justify how different allegedly “fair” uses are or are not related to one another, for example, should illuminate why open space is important in general. Use-based definitions and limitations in shrinkwrap and bilateral contract are not reflexively preempted or validated; particular unconsented uses and classes of use are characterized as fair (or not fair) not only

466. The nature of the judicial decision-making contemplated is that implicit in *Campbell*: the creation and elaboration of a body of open space doctrine that is consistent with—but extends—congressional expression of constitutional purpose found in sections 102 and 103 of the Copyright Act. It assumes that *Feist*'s originality requirement and the limitations on copyrightability in existing § 102(b) (no copyright in ideas or processes), see 17 U.S.C. § 102(b), are co-extensive. That is, that Congress authorized in § 102(b) the copyrightability of all (constitutionally) copyrightable works.

467. As an illustration of how different institutional processes might handle such issues, consider the argument that temporary Random Access Memory (“RAM”) or cache copies of computer codes constitute infringing copies of digital works. See *Triad Sys. Corp. v. Southeastern Express Co.*, 64 F.3d 1330 (9th Cir. 1995). The plaintiffs in *Triad* and in the case on which it relied, *MAI Systems Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993), raised copyright claims initially as levers to attack competitive challenges to their computer hardware service businesses. In that context, claims of infringement by RAM or cache copies of software are closely related to claims of copyright misuse raised by so-called Independent Service Organizations (“ISO”). See *In re Independent Serv. Orgs. Antitrust Litig.*, 989 F. Supp. 1131, 1142-43 (D. Kan. 1997) (rejecting the copyright misuse defense against copyright infringement claims). Both classes of claims are rarely seen as posing serious challenges to the structure of copyright law, and the Digital Millennium Copyright Act contains a legislative safe harbor for software maintenance performed by such ISOs. See *supra* note 438. The same argument played out quite differently in the legislative context. The Clinton Administration's White Paper proposed to legislatively reconstruct the exclusive rights of the copyright holder around the doctrine. See White Paper, *supra* note 199, at 63-66, 100-01 (describing the *Triad* and *MAI* decisions as unexceptional applications of the copyright holder's right of reproduction found in the Copyright Act of 1976); *id.* at 217-20 (proposing the codification of a copyright owner's right of “transmission” and the amendment of the definition of “publication” to include electronic transfer).

468. See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994). The balance between certainty and flexibility, however, is ultimately for the courts to determine.

in the idiosyncratic contexts in which disputes arise, but in the process of judicially weaving the legal fabric of creative expression. Taking *ProCD* as but one example, the approach would re-define the relevant question, from whether or not an enforceable contract existed (the approach of the court), or whether or not the compiled material lay in the public domain (the approach of *ProCD*'s critics), to how this use-restriction (which forbade loading the compiled data onto a computer network), in the context of this compiled information (telephone numbers and addresses), suited (or failed to suit) a balance among incentives to produce this type of work and the need for the unfettered availability of the data, as evident from prior cases. To the extent that copyright law ought to be concerned with limiting the effects of legal-ware and private conventions on discourse and behavior concerning information that does not lead to litigation, or at least to published opinions, local expressions of the law ought to be more effective. Local courts are more likely responsive than legislatures or higher courts; citizens similarly are more responsive to, and typically have greater trust in, lower level institutions.⁴⁶⁹

Objections to the proposal, I think, can be overcome. First, it is true that to a certain extent, the proposal encourages a return to the type of judge-made fair use jurisprudence that existed prior to enactment of the current Copyright Act in 1976.⁴⁷⁰ The goal of the proposal above, however, is also consistent with the original goal of the statute, which was to take a disparate body of law and create a framework, consistent with that body, that would produce more reliable results. If that was Congress's intention in 1976, however, that has not been the result. Reliance on existing open space doctrines is now producing results that seem fundamentally at odds with congressional and constitutional purposes.⁴⁷¹ The amendment attempts to restore some balance to the administration of the statute. Second, the relatively shallow pool of cases on which part III of this Article is based suggests that too few fair use and public domain cases may be heard, decided, and published to allow a coherent open space framework to evolve except over a long period of time—too long, then, to have any effect on the legal-ware phenomenon now developing. The third and perhaps sharpest objection is closely related to the second, that is, the

469. See Sunstein, *Social Norms*, *supra* note 13, at 952.

470. See Yankwich, *supra* note 146, at 212-14.

471. The risk that judges will simply get it wrong is no greater and likely far less than the risk of congressional mistake. If *ProCD* is an example of error, then I recognize that this exception might swallow the rule. *ProCD* is, however, evidence of the failure to follow common law principles rather than the common law at work. The UCC is neither common law product nor process. See Slawson, *supra* note 392, at 158-61. The pace of change in the technological context of copyright law is so rapid that any legislative intervention will probably be obsolete within a short time of enactment. On the other hand, my point that *ProCD* has had a wide impact suggests that the judicial decision-making might not be such a crude and sluggish instrument in dealing with rapidly changing technologies and institutions.

proposal does nothing in and of itself to deal with legal-ware; in fact, it largely leaves the development of legal-ware alone and attends only to copyright law itself. What open space results from the development of the common law evolves is based, among other things, on contract and license terms specified by authors and publishers, which, this Article argues at length, constrain the nature and form of disputes that enter the judicial realm. As practical and theoretical matters, however, these two objections describe the condition in which the system exists today even more than it describes the proposed change. It is the object of the proposal to introduce a dynamic that does not eliminate voluntary transactional considerations, but places them on a footing with competing considerations of involuntary access. To close on the counterpart of the theme with which the Article began, it is neither surprising nor inappropriate to afford authors and publishers the benefit of a conventional understanding that at some level they are entitled to a say in how their work is consumed. That say is, too, a part of the construction of open space. We cannot create a system of perfectly unconstrained choice. We can, however, recognize the constraints that exist and adjust the system to a degree, hoping to account for their influence.

CONCLUSION

The Internet and digital technology allegedly make every soul on the planet a potential author, editor, and publisher. What the technology really does is make every one of us a potential "user."⁴⁷² I "use" the service provided by my Internet Service Provider when I send or receive e-mail, surf the Net, and post a home page on the World Wide Web. I "use" the websites that I visit. I "use" the computer software with which I wrote this Article. I "use" the journals and books on which I rely for authority. I have no context, no norms or understandings, that helps me to understand what I can or may do as a "user." Copyright and other information law is only distantly related, at present, to digital needs. The market, however, can and does provide. Shrinkwrap is privately generating context. It defines me as a "user." It defines my "use." If there is a public interest in information, in creativity and expression embodied in text, image, and sound, shrinkwrap is defining that interest out of existence.

ProCD, Inc. v. Zeidenberg, which enforced a shrinkwrap license, confirms that tendency in legal doctrine, beginning in contract law and extending through copyright. The relevant question for copyright law and practice is not whether cases will emerge that contradict the result in *ProCD* as a matter of contract law. Such cases may. The more important question is how to deal with a transactional reality that is rapidly absorbing *ProCD*, that has legal justification for making me a

472. I do at last object to this term. See *supra* note 124 and accompanying text.

mere “user.” Public interest concerns must find outlets to respond to the “lessons” of *ProCD*—that by framing shrinkwrap as a nominal contract, publishers can not only avoid copyright law but can define the scope of legitimate debates about what society values in access to and use of information.

The challenge for public policy is to find public means to reinvigorate and define open space positively. Shrinkwrap has expanded and pushed the legal structure governing works of information to a new position. Formal public law can push back, but it cannot effectively engage the transactional norms of shrinkwrap unless it more directly and affirmatively puts other practices and conventions in play, defined not merely as the residue of transactional conventions, but on those independent grounds copyright consumers may bring to the system. The robustness of open space can be tested by not only empowering courts but directing courts to apply methods of common law decision-making within copyright itself.

Notes & Observations