

PRIVATELY LEGISLATED INTELLECTUAL PROPERTY RIGHTS:
RECONCILING FREEDOM OF CONTRACT WITH PUBLIC
GOOD USES OF INFORMATION

J.H. REICHMAN
JONATHAN A. FRANKLIN[†]

INTRODUCTION.....	876
I. CONTRACTING AROUND THE OUTER EDGE OF THE FEDERAL INTELLECTUAL PROPERTY SYSTEM.....	884
A. <i>The Dual Function of Information in the Networked Environment</i>	884
1. Collapse of the Patent-Copyright Dichotomy.....	888
2. Islands of Competition in a Sea of Exclusive Property Rights?	891
B. <i>The Restored Power of the Two-Party Deal</i>	897
C. <i>Privately Legislated Intellectual Property Rights</i>	899
1. The Statutory Framework.....	899
a. <i>Licenses Define the Product</i>	900
b. <i>Perfecting the Pro-Licensors Tilt</i>	903
2. Non-negotiable Terms Valid Against the World.....	906
3. Changing the Balance of Public and Private Interests	911
II. RECONCILING FREEDOM OF CONTRACT WITH PUBLIC GOOD USES OF INFORMATION.....	914
A. <i>In Search of Existing Means to Redress the Statutory Imbalance</i>	915
1. Lack of Guidance from a True Information Policy.....	916
2. Ineffectiveness of Traditional Doctrinal Constraints	920
a. <i>Preemption</i>	920
b. <i>Misuse</i>	922
c. <i>The "Public Policy" Exception</i>	925

[†] Copyright 1999 by J.H. Reichman, Professor of Law, Vanderbilt University School of Law, and Jonathan A. Franklin, Senior Reference Librarian, University of Michigan Law School.

An early version of this Article was presented to the Berkeley Symposium on Intellectual Property and Contract Law in the Information Age: The Impact of Article 2B of the Uniform Commercial Code on the Future of Transactions in Information and Electronic Commerce, April 23-25, 1998. We thank the organizers of that conference, and especially Pamela Samuelson, for the opportunity to air these views, and we are indebted to those who, at various intervals, have provided invaluable advice and support, including Gail E. Evans, Wendy Gordon, Ronald Mann, Harvey Perlman, Kent Syverud, J.J. White, and Nick Zeppos. We are, of course, equally grateful to all the participants in the Symposium, whose views have helped to illuminate this new and difficult field, and many of their contributions are noted in the footnotes to this Article. Further thanks go to Patricia Reichman, Louise Franklin, and Elizabeth TeSelle for their assistance and patience with this endeavor.

d. <i>Unconscionability</i>	927
B. <i>Validating Non-negotiable Terms That Respect the Balance of Public and Private Interests</i>	929
1. A Doctrine of “Public-Interest Unconscionability”	929
2. Further Reflections on the Proposed Amendment	932
a. Supplementary Tenets	933
b. A Minimalist Approach	936
C. <i>Relations Between “Public Interest Unconscionability” and the Doctrine of Preemption</i>	938
1. Contracts Limiting the Reverse Engineering of Computer Programs	939
2. Contracts Overriding Fair Use and Other Exceptions to Copyright Protection	943
3. Contracts Restricting the Use of Noncopyrightable Collections of Data	947
III. A NON-ASSENT-DRIVEN PARADIGM OF CONTRACT FORMATION FOR THE DIGITAL AGE	951
A. <i>A Doctrine to Curb the Misuse of Standard Form Digital Information Contracts Is Not Radical</i>	951
B. <i>The Social Costs of Accessing Information Under State-Enforced Contracts of Adhesion</i>	953
1. Basketing Transaction Costs over Time	954
2. Antidotes to the Problems of Enforcement	959
C. <i>Final Reflections Concerning a Non-negotiable Middle Ground</i>	960
1. Distinguishing Public-Interest Unconscionability from “Impermissibility” and the Public Policy Exception	961
2. Distinguishing Licenses from Sales	964
3. Ironies of a Non-negotiable Middle Ground	965
4. Non-negotiable Contracts as Stepping Stones to a Broader Information Policy	968

INTRODUCTION

In an age of omnipresent clickwrap licenses,¹ we acknowledge the need for a uniform set of default rules that would validate non-negotiable licenses

¹ See generally Charles R. McManis, *The Privatization (or “Shrink-Wrapping”) of American Copyright Law*, 87 CAL. L. REV. 173 (1999) (discussing the role of shrinkwrap and clickwrap licenses in the distribution of information goods).

There is a lack of consensus on the validity and status of “shrinkwrap,” “click-on,” and other standard form contracts, despite their obvious utility in the digital telecommunications environment. Compare *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91, 105 (3d Cir. 1991) (holding that the “Limited Use License Agreement” printed on packaging containing computer software was not part of the parties’ agreement), and *Arizona Retail Sys., Inc. v. Software Link, Inc.*, 831 F. Supp. 759, 764 (D. Ariz. 1993) (holding that “[t]o the extent that the parties had entered into an agreement before ARS opened the shrink wrap package, the license agreement would constitute a proposal for modification of the agreement pursuant to section 2-209” of the U.C.C.), with *CompuServe, Inc. v. Patterson*, 89 F.3d 1257 (6th Cir.

as a mechanism for minimizing transaction costs likely to hinder economic development in a networked environment.² However, we contend that any model of contract formation not driven by the traditional norms of mutual assent³ requires specially formulated doctrinal tools to avoid undermining long-established public good uses of information for such purposes as education and research, technical innovation, free speech, and the preservation of free competition.⁴

With the convergence of digital and telecommunications technologies, creators and innovators who distribute computerized information goods online⁵ can increasingly combat the causes of market failure directly⁶—even in the absence of statutory intellectual property rights—by recourse to standard

1996) (upholding an electronic agreement in which assent was signified by typing the word “agree”), and *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1449 (7th Cir. 1996) (holding that “[s]hrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general”). See generally G.E. Evans & B.F. Fitzgerald, *Information Transactions Under UCC Article 2B: The Ascendancy of Freedom of Contract in the Digital Millennium?*, 21 U. NEW S. WALES L.J. 404-35 (1998) (arguing for the government’s need to protect society given the recent shift of market power in the information economy).

² See Raymond T. Nimmer, *Breaking Barriers: The Relation Between Contract and Intellectual Property Law*, 13 BERKELEY TECH. L.J. 827, 904-08 (1998) (arguing that Article 2B drafters must recognize the differences between the sale of goods and the licensing of software and information in formulating default rules for Article 2B if the economic growth fueled by the software and information industries is to continue).

³ See *infra* text accompanying notes 142-64 (“Non-negotiable Terms Valid Against the World”).

⁴ See McManis, *supra* note 1, at 176 (asserting that the validation of shrinkwrap licenses could infringe on users’ federally created privileges); see also Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089 (1998) (arguing that the proposed Article 2B allows self-help to a degree that could threaten constitutionally mandated limits on copyright protection); Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93, 100-01 (1997) (criticizing *ProCD*); 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 (1992) (addressing the shortcomings of contract law in dealing with socially beneficial aspects of public goods in the context of computer programs).

⁵ See generally Henry H. Perritt, Jr., *Property and Innovation in the Global Information Infrastructure*, 1996 U. CHI. LEGAL F. 261 (explaining how technology can alter the exclusivity and rivalry of information).

⁶ See *infra* text accompanying notes 149-55 (discussing licensors’ use of technical protection measures to control the use of information goods). For the problem of market failure, to which intellectual property laws respond, see Wendy J. Gordon, *Asymmetric Market Failure and Prisoner’s Dilemma in Intellectual Property*, 17 U. DAYTON L. REV. 853, 868 (1992) [hereinafter Gordon, *Asymmetric Market Failure*], concluding that a “prisoner’s dilemma or other market failure suggests [that] there may be an economic need for intellectual property protection,” 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, 1601 (1982) [hereinafter Gordon, *Fair Use*], illustrating “how the courts and Congress have employed fair use to permit uncompensated transfers that are socially desirable but not capable of effectuation through the market.”

form contractual agreements that allow access to electronically stored information only on the licensor's terms and conditions. In the networked environment, however, routine validation of mass-market access contracts and of non-negotiable constraints on users would tend to convert standard form licenses of digitized information goods into functional equivalents of privately legislated intellectual property rights.⁷ Firms possessing any degree of market power could thereby control access to, and use of, digitized information by means of adhesion contracts that alter or ignore the balance between incentives to create and free competition that the Framers recognized in the Constitution and that Congress has progressively codified in statutory intellectual property laws.⁸

Because existing legal doctrines appear insufficient to control the likely costs of such a radical social experiment, the main thrust of this Article is to formulate and develop minimalist doctrinal tools to limit the misuse of adhesion contracts that might otherwise adversely affect the preexisting balance of public and private interests.⁹ We believe such tools ought to figure prominently in any set of uniform state laws governing computerized information transactions, whether or not they emerge from the current debate surrounding a proposed Article 2B of the Uniform Commercial Code ("U.C.C." or "the Code").¹⁰

⁷ See *infra* Part I.C.3 (describing non-negotiable licenses as equivalent to private legislation); see also Robert P. Merges, *Intellectual Property and the Costs of Commercial Exchange: A Review Essay*, 93 MICH. L. REV. 1570, 1611-13 (1995) (framing contracts of adhesion as "private legislation"); cf. Robert P. Merges, *The End of Friction? Property Rights and Contract in the "Newtonian" World of On-Line Commerce*, 12 BERKELEY TECH. L.J. 115 (1997) [hereinafter Merges, *The End of Friction?*] (discussing the increasing importance of low transaction cost contracts in the licensing of digitized intellectual property).

⁸ See U.S. CONST. art. I, § 8, cl. 8 (granting the exclusive rights to writings and discoveries to their respective authors and inventors); 17 U.S.C. §§ 107-20 (1994) (codifying exceptions, limitations, and immunities pertaining to copyright law); Digital Millennium Copyright Act, Pub. L. No. 105-304, § 403, 112 Stat. 2860, 2889 (1998) (postponing the implementation of certain provisions intended to prevent alteration of copyright management systems data until the Register of Copyrights can assess the impact of those provisions on fair use).

⁹ See *infra* text accompanying notes 231-40 (discussing and analyzing a proposed "public-interest unconscionability" doctrine); see also McManis, *supra* note 1, at 173 (addressing the ability of Article 2B to alter the existing balance embodied in copyright law). But see Joel Rothstein Wolfson, *Contract and Copyright Are Not at War: A Reply to "The Metamorphosis of Contract into Expand,"* 87 CAL. L. REV. 79, 102-03 (1999) (attempting to rebut David Nimmer's presumption, in David Nimmer et al., *The Metamorphosis of Contract into Expand*, 87 CAL. L. REV. 17, 19 (1999), that Article 2B distorts the balance between content providers and content consumers in the context of database access agreements).

¹⁰ See U.C.C. art. 2B—Licenses (Proposed Official Draft Feb. 1999) (focusing on providing a common legal framework for transactions in digital information and software licenses). All internal references to "Article 2B" refer to the February 1999 proposed draft unless otherwise stated. The Introduction from the August 1998 draft was removed from the

Digitized transactions in information goods are typically configured as licenses of intangible rights, rather than as "contracts for the sale of goods" within the jurisdiction of Article 2 of the U.C.C.¹¹ The vagaries of the common law of contracts, as elaborated in fifty different forums, are then often compounded by the uncertain boundaries between these state laws and those supporting the federal intellectual property system, which implements possibly conflicting purposes and policies.¹² In the belief that this uncertainty hampers the growth of both the domestic and worldwide information economies,¹³ the American Law Institute and the Commission on Uniform

December 1998 and February 1999 drafts, so all citations to the Introduction still refer to the August 1998 draft.

¹¹ See U.C.C. § 2-102 (1978) (discussing the scope of Article 2 and excluding secured transactions).

¹² Judicial views about the proper relations between state contract laws and federal intellectual property laws vary considerably from one jurisdiction to another, and sometimes among different panels in the same jurisdiction. See *supra* note 1. For a discussion of conflicting applications of the preemption doctrine, rooted in the Supremacy Clause of the Constitution, U.S. CONST. art. VI, see MARSHALL A. LEAFFER, UNDERSTANDING COPYRIGHT LAW 356-63 (2d ed. 1995), discussing § 301 of the 1976 Copyright Act, enacted by Congress to abolish common law copyright and to establish specific "criteria to resolve preemption issues"; and Dennis S. Karjala, *Federal Preemption of Shrinkwrap and On-Line Licenses*, 22 U. DAYTON L. REV. 511, 514 (1997), arguing that state contract law must be preempted by federal copyright law to prevent the frustration of the federal scheme.

Possible conflicts also exist between state contract laws and state trade secret laws with repercussions that affect the balance of interest under the federal intellectual property system. See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 493 (1974) (asserting that "[s]tates should be free to grant protection to trade secrets"); see also Rochelle Cooper Dreyfuss, *Do You Want to Know a Trade Secret? How Article 2B Will Make Licensing Trade Secrets Easier (but Innovation More Difficult)*, 87 CAL. L. REV. 191, 195-96 (1999) (discussing trade secrecy licensing and how Article 2B would alter the existing balance); Mark A. Lemley, *Beyond Preemption: The Law and Policy of Intellectual Property Licensing*, 87 CAL. L. REV. 111, 133-34 (1999) (addressing the relationship between Article 2B and state trade secret law).

¹³ Optimal growth of the information economy in the United States and abroad depends in part on the price-setting functions of a virtual marketplace and on the ability of entrepreneurs operating within its confines freely to exchange intangibles without undue friction or disorder. See, e.g., Kenneth W. Dam, *Self-Help in the Digital Jungle*, U. Chi. Working Paper No. 59) (exploring the need for a legal infrastructure that facilitates implementation of technological copy protection measures); I. Trotter Hardy, *Project Looking Forward: Sketching the Future of Copyright in a Networked World* (May 1998) (final report prepared for the U.S. Copyright Office) (presenting current legal issues raised by the expansion of the Internet to the U.S. Copyright Office); Carlyle Ring, *Presentation at the Symposium on Intellectual Property & Contract Law in the Information Age: The Impact of Article 2B of the U.C.C. on the Future of Transactions in Information and Electronic Commerce*, Apr. 23-25, 1998 (Berkeley, CA) (discussing the goal of exporting Article 2B to other countries in the hope of harmonizing the licensing of digitized information goods); cf. Wendy J. Gordon, *On Owning Information: Intellectual Property and the Restitutory Impulse*, 78 VA. L. REV. 149 (1992) (promoting a restitutory theory of unfair competition rights allied to intellectual property rights).

State Laws have formulated a draft Article 2B of the U.C.C. to govern the licensing of computer software and other information goods.¹⁴

While sympathetic to the goals of this project, we believe that the drafters of the proposed Article 2B have systematically subordinated the public good nature of information¹⁵ to the private interests of licensors and so-called "content providers."¹⁶ As we read the literature, an efficient set of default rules¹⁷ should reflect the needs and interests of both licensors and licensees¹⁸—most transactors will, in fact, play one or the other role at different times—and not just the dictates of a few powerful firms who happen to control a disproportionately large share of the world's information goods in the last quarter of the twentieth century.¹⁹ Such rules must also take account of the dual nature of information, which functions both as a valuable commodity and as the foundation of knowledge in the information economy.²⁰

¹⁴ R. Nimmer, *supra* note 2, at 829-30 (describing the goals of the Article 2B project).

¹⁵ See ROBERT COOTER & THOMAS ULEN, *LAW AND ECONOMICS* 40-41 (2d ed. 1997) (noting that public goods are both nonexcludable and nonrivalrous).

¹⁶ Cohen, *supra* note 4, at 1096-118 (describing the benefits that proposed Article 2B gives licensors).

¹⁷ See Ian Ayres & Robert Gertner, *Filling Gaps in Incomplete Contracts: An Economic Theory of Default Rules*, 99 *YALE L.J.* 87, 95-107 (1989) (discussing several types of default rules and when "efficiency-minded" courts and legislatures should use each); Randy E. Barnett, *The Sound of Silence: Default Rules and Contractual Consent*, 78 *VA. L. REV.* 821, 876 (1992) ("[O]ne of the functions of freedom to contract is to enable persons to exchange entitlements they have for those that they subjectively prefer, thereby making them better off."); see also Todd D. Rakoff, *Contracts of Adhesion: An Essay in Reconstruction*, 96 *HARV. L. REV.* 1173, 1176-80, 1185-97 (1983) (concluding that traditional contract law overgeneralizes the actual context of the parties facing contracts of adhesion); Todd D. Rakoff, *Social Structure, Legal Structure, and Default Rules: A Comment*, 3 *S. CAL. INTERDISC. L.J.* 19, 23 (1993) (further discussing the contextualization of default contract rules).

¹⁸ See Jason Scott Johnston, *Strategic Bargaining and the Economic Theory of Contract Default Rules*, 100 *YALE L.J.* 615, 618-19 (1990) (discussing the various parties' incentives under default rules and how a failure to bargain around a default rule may not necessarily reflect its efficiency and vice versa).

As regards Article 2B, it is important to note that in some cases, such as with freelance authors, it may be the licensee, not the licensor, who has the market power and ability to impose the standardized terms. See Jane C. Ginsburg, *Authors as "Licensors" of "Informational Rights" Under U.C.C. Article 2B*, 13 *BERKELEY TECH. L.J.* 945, 965-66 (1998) (arguing that in the case of authors, reducing the barriers to creating licenses could hurt those authors and encourage exploitation by their publishers or distributors).

¹⁹ See Michele C. Kane, *When is a Computer Program Not a Computer Program? The Perplexing World Created by Proposed U.C.C. Article 2B*, 13 *BERKELEY TECH. L.J.* 1013, 1021 (1998) (arguing that Article 2B needs to be redrafted to balance the interests of licensors and licensees because even large entertainment companies need to license many properties).

²⁰ See Lewis M. Branscomb, *Information Infrastructure for the 1990s: A Public Policy Perspective*, in *BUILDING INFORMATION INFRASTRUCTURE* 15, 16 (Brian Kahin ed., 1992) ("Information technology is a particularly important driver of productivity growth, because in

We concede that entrepreneurs should have broad powers contractually to control the online exchange of downstream products in which they have bundled information to achieve specific commercial effects, without encountering excessive or premature governmental regulations.²¹ It does not necessarily follow, however, that entrepreneurs should have equal autonomy to restrict use of the unbundled information in their possession as raw materials of science and education or as inputs into the production of value-adding or second-generation information goods.²² To ignore such discriminations as these is to risk watching model laws, adopted to govern the virtual marketplace for information goods, foster conditions that actually decrease innovation, discourage competition, and stifle the traditional marketplace of ideas.

Accordingly, we propose a set of countervailing doctrinal tools, tentatively collected under a “public-interest unconscionability” rubric,²³ that courts could apply case by case to limit the adverse effects of mass licensing contracts and their non-negotiable terms and conditions without necessarily invoking either the preemption doctrine familiar from intellectual property

a service-intensive economy, information is substituted for energy.”); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 *SCIENCE* 698, 699 (1998) (discussing the tragedy of the “anticommons” in biomedical research, which occurs when the development of a new useful product is inhibited by a lack of access to patented information that is necessary to produce the new product); Jessica Litman, *Revising Copyright Law for the Information Age*, 75 *OR. L. REV.* 19, 46 (1996) (arguing that the public has “an affirmative right to gain access to . . . information and other public domain material embodied in protected works”); J.H. Reichman & Pamela Samuelson, *Intellectual Property Rights in Data?*, 50 *VAND. L. REV.* 51, 54-57 (1997) (recognizing the importance of some formal legal protection for producers of databases in order to maintain the incentive for production, but also advocating refinement of the present proposals so that they do not impede improvements and access to that information).

²¹ Efforts to remove legal obstacles to the exercise of these contractual powers in the online environment likely seem to yield most of the same kind of benefits that economists associate with the exercise of freedom of contract generally.

²² See Heller & Eisenberg, *supra* note 20, at 701 (urging biomedical property rights policymakers “to ensure coherent boundaries of upstream patents and to minimize restrictive licensing practices that interfere with downstream product development”); see also Reichman & Samuelson, *supra* note 20, at 134 (recognizing the importance of a minimalist form of legal protection for producers of noncopyrightable databases to maintain the incentive for production but also advocating exceptions and limitations that would avoid impeding value-adding uses and access to that information); Open Letter from Bureaus of Consumer Protection and Competition and of the Policy Planning Office of the Federal Trade Commission (Oct. 30, 1998), available in Article 2B of the Uniform Commercial Code—V980032 (last modified Nov. 2, 1998) <<http://www.ftc.gov/be/v980032.htm>> (recommending “that Article 2B incorporate provisions that would clearly conform to existing intellectual property and antitrust laws with respect to innovation and competition issues”).

²³ See *infra* Part II.B.1 (proposing that a doctrine of “public-interest unconscionability” be added to Article 2B to enable courts to better protect users from socially undesirable constraints imposed by licenses “without any true manifestation of assent”).

law²⁴ or other equally unsatisfactory doctrines, including the public policy exception, familiar from standard contract law.²⁵ While legislative adoption of our proposed doctrinal safeguards would enable entrepreneurs to preserve the benefits of Article 2B for most market-enhancing information contracts, it would discourage them from converting mass-market contracts that control access to information into privately legislated intellectual property rights that undermine essential public good uses of information.

In Part I of this Article, we begin by identifying key misconceptions concerning the interface between federal intellectual property rights and state contract laws that have marred the drafters' own notes and comments in the various iterations of Article 2B. We then explain how digital technologies, when combined with mass-market contracts, enable information providers to alter the existing legislative balance between public and private interests in unexpected and socially harmful ways. We further demonstrate that the uniform state laws proposed to validate these private rights have been crafted without balancing the social costs of legal incentives to innovate against the benefits of free competition, and without regard for the constitutional mandate to "promote the [p]rogress of [s]cience and useful [a]rts."²⁶ On the contrary, the drafters of Article 2B empower purveyors of digitized information goods to undermine, by contract, long-standing policies and practices that directly promote cumulative and sequential innovation as well as the public interest in education, science, research, competition, and freedom of expression.²⁷

²⁴ See 17 U.S.C. § 301(a) (1994) (stating that all rights within the scope of copyright law are governed by title 17 and, therefore, all other laws conferring equivalent rights on copyrightable subject matter are preempted); see also *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 167-68 (1989) (striking down a Florida statute forbidding the use of a direct molding process to duplicate unpatentable boat hulls, "plug molds," as a disruption of federal patent policy concerning subject matter that Congress left in the public domain); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237 (1964) (holding that an unpatentable design may be copied at will, and that the use of state unfair competition law to enjoin such is in conflict with federal patent laws); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231-32 (1964) (same). See generally Douglas Gary Lichtman, *The Economics of Innovation: Protecting Unpatentable Goods*, 81 MINN. L. REV. 693, 733 (1997) (concluding, in part, that "[p]atent law's implicit assumption that lead time advantages adequately protect unpatentable innovation is becoming . . . unrealistic").

²⁵ See RESTATEMENT (SECOND) OF CONTRACTS § 178 (1981) (addressing contractual terms that may violate public policy); see, e.g., *Sierra Diesel Injection Serv., Inc. v. Burroughs Corp.*, 874 F.2d 653, 657 (9th Cir. 1989) (finding that the warranty disclaimer in a computer sales contract was ineffective, and holding the computer vendor liable for breach of warranty); RESTATEMENT (SECOND) OF CONTRACTS § 208 (noting that a court may refuse to enforce an unconscionable term of a contract).

²⁶ U.S. CONST. art. I, § 8, cl. 8.

²⁷ Although the drafters of Article 2B acknowledge some of the potential tensions between the proposed harmonization of state contract laws and the policies underlying federal

In Part II, we discuss the new doctrinal tools with which we would empower courts to apply public-interest checks on standardized access contracts and on non-negotiable terms and conditions affecting users of computerized information goods. In so doing, we take pains to preserve the maximum degree of freedom of contract, not just with respect to negotiated terms generally, but even with respect to non-negotiable terms lacking any socially harmful or demonstrably anticompetitive impact over time. We also compare the costs and benefits of Article 2B, as refined by the addition of our proposed safeguards, with those likely to ensue if Article 2B were adopted in its present form. Here, we focus particularly on issues affecting the legal protection of computer software, on the role that the "fair use" exception of copyright law might play in information transactions generally, and on issues affecting bundles of factual information that cannot be copyrighted under existing laws.

In Part III, we explore the deeper implications of a shift from the traditional, assent-driven model of contract formation to a model that validates non-negotiable contracts of adhesion containing socially acceptable terms and conditions. We show that a minimalist regulatory tool along the lines of our proposed "public-interest unconscionability doctrine" yields positive social benefits, despite the transaction costs and enforcement problems it logically engenders. We also explore the connection between the kind of "non-negotiable middle ground" we deem indispensable to a paradigm shift in contract formation and the need for a broader information policy. We conclude with a prediction that if Article 2B were to incorporate the safeguards we propose, it might better yield sound empirical data for devising the long-term information policies that elude us in our present state of ignorance and uncertainty.

intellectual property rights that most concern us, *see* U.C.C. art. 2B (Proposed Official Draft Aug. 1998), Part I. Context: Law Reform and the UCC (discussing the conflict between property rights as governed by traditional contract law and those created by the modern property law in information), they claim to take no position that would change the existing uneasy equilibrium between these regimes. *See id.* at Preface: Benefits and Positions in Draft Article 2B by Party (omitted in Feb. 1999 draft) (asserting that the draft's proposals, if adopted, would not change the "relationship between contract and intellectual property law"). These claims are disingenuous at best. *See infra* text accompanying notes 156-77 (describing the unbalanced nature of the current draft of Article 2B). Similarly, the drafters' professions of neutrality ignore the anticompetitive effects and other social costs likely to ensue when the heightened technological and legal power of intellectual property licensors to control access to information and to impose restrictions on users in the digital environment is combined with the sweeping validation of non-negotiable terms and conditions that Article 2B implements in its current format. *See infra* text accompanying notes 156-77.

I. CONTRACTING AROUND THE OUTER EDGE OF THE FEDERAL
INTELLECTUAL PROPERTY SYSTEM

Information manifests awkward properties that have always challenged standard economic assumptions.²⁸ The convergence of digital and telecommunications technologies, which triggered new opportunities for the production and marketing of information goods, has further strained the conventional economics of innovation by blurring heretofore settled lines of demarcation between the private and public domains.²⁹ The growth of the networked environment has also required state contract laws to fill widening gaps in the federal intellectual property regime.

The forces driving the information-based sectors of the economy thus tend to destabilize the relationship between state and federal laws that had previously buttressed the national system of innovation. Whether the traditional reliance of that system on public good uses of information can withstand the privatizing assault on the public domain that has accompanied these phenomena increasingly depends on the extent to which state contract laws governing access to information will validate standardized “click on” and “shrinkwrap” licensing agreements.

A. The Dual Function of Information in the Networked Environment

Classical intellectual property law has always recognized the dual function of information as both a potential object of protection under specified conditions and as the building block of knowledge that remained unprotectable under ordinary circumstances.³⁰ In one dimension, entrepreneurs bun-

²⁸ The failure of existing legal regimes to protect adequately database makers can be partially attributed to the peculiar characteristics of information: “[A] commodity . . . particularly embarrassing for the achievement of optimal allocation.” W. KIP VISCUSI ET AL., *ECONOMICS OF REGULATION AND ANTITRUST* 831 (2d ed. 1995) (quoting Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources to Invention*, in *THE RATE AND DIRECTION OF INVENTIVE ACTIVITY* 609, 616 (National Bureau of Economic Research ed., 1962)). That is, optimal information utilization occurs when information is free, while optimal information production occurs only when producers expect to appropriate the economic value of their investments. *See id.* at 831-33 (concluding that [p]atents . . . can be regarded as one way of achieving a balance between appropriability and use”).

²⁹ Perritt, *supra* note 5, at 263 (suggesting that existing law with minor modifications will be sufficient for the information age).

³⁰ *See Kellogg Co. v. National Biscuit Co.*, 305 U.S. 111, 118 (1938) (stating that upon expiration of a patent, both a process and its common name are given to the public); *International News Serv. v. Associated Press*, 248 U.S. 215, 250 (1918) (Brandeis, J. dissenting) (“The general rule of law is, that the noblest of human productions—knowledge, truths ascertained, conceptions and ideas—become, after voluntary communication to others, free as the air to common use.”); *see also* David Lange, *Recognizing the Public Domain*, 44 *LAW & CONTEMP. PROBS.*, Autumn 1981, at 147, 164-65 (arguing that the public domain has been

dle information into goods that compete on the general products market with or without intellectual property protection. In the absence of exclusive property rights, these entrepreneurs rely on contracts,³¹ on actual secrecy,³² and on trade secret laws (or laws of confidential information),³³ to gain lead time in which to recoup their investments and establish their trademarks.³⁴ When, instead, larger "grain-size" information goods attract legal protection as patentable inventions or copyrightable works of authorship,³⁵ qualifying

undervalued in recent trademark and unfair competition case law); Litman, *supra* note 20 (noting that social norms may not parallel federal copyright law).

³¹ See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1450 (7th Cir. 1996) (holding, inter alia, that property rights in marketing information distributed on CD-ROMs were governed by the agreed terms of a shrinkwrap license).

³² See J.H. Reichman, *Legal Hybrids Between the Patent and Copyright Paradigms*, 94 COLUM. L. REV. 2432, 2520-21 (1994) (discussing the role of actual and legal secrecy in industrial innovation).

³³ See *Rockwell Graphic Sys., Inc. v. DEV Indus.*, 925 F.2d 174, 180 (7th Cir. 1991) (discussing the procompetitive functions of trade secret law); David D. Friedman et al., *Some Economics of Trade Secret Law*, J. ECON. PERSP., Winter 1991, at 61, 64-66 (stating that trade secret laws provide incentives for innovation while promoting economic exploitation of information through both confidential disclosures and the practice of reverse engineering). It is worth noting, however, that sometimes the actual secrecy requirement of trade secret law is not strictly enforced. See *Data Gen. Corp. v. Grumman Sys. Support Corp.*, 825 F. Supp. 340, 359 (D. Mass. 1993) (holding that the plaintiff need only have taken reasonable steps to preserve secrecy, regardless of his actual success).

³⁴ Because of their intangible, indivisible, and ubiquitous character, information goods would attract insufficient investment if free riders could simply duplicate them and appropriate the fruits of investment without more. Intellectual property rights combat this risk of market failure in different ways. See, e.g., WILLIAM KINGSTON, *INNOVATION, CREATIVITY AND LAW* 79-106 (1990) (proposing the protection of investment in the production of innovations); Gordon, *Asymmetric Market Failure*, *supra* note 6, at 859-66 (demonstrating how strategic behavior may prevent licensing in various contexts); Gordon, *supra* note 13, at 199 (proposing a tort of malcompetitive copying). Trade secret laws (or related laws of confidentiality) impose a set of default liability rules governing subpatentable innovation generally, which endow entrepreneurs with a limited entitlement to enjoin only instances of reverse engineering by improper or dishonest means. See generally Reichman, *supra* note 32, at 2439-47 (discussing the ways in which trade secret laws reinforce the competitive ethos).

³⁵ See, e.g., 17 U.S.C. § 102(a) (1994) (stating that copyright laws protect "original works of authorship"); 35 U.S.C. §§ 102, 103 (1994 & Supp. II 1996) (listing novelty, utility, and nonobviousness as prerequisites for patent protection). Commentators have offered diverse economic and social justifications for these rights. See, e.g., Wendy J. Gordon, *An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory*, 41 STAN. L. REV. 1343, 1413-69 (1989) (comparing a hypothetical legal regime of no copyright law with the present regime); Wendy J. Gordon, *A Property Right in Self-Expression: Equality and Individualism in the Natural Law of Intellectual Property*, 102 YALE L.J. 1533, 1540-83 (1993) (using a natural law analysis to argue for a narrowing of intellectual property rights); Edmund W. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265, 275-80 (1977) (introducing the prospect theory of patent protection); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 324-36 (1996) (critiquing the economic analysis of copyright as a property regime); A. Samuel Oddi, *Un-Unified Economic Theories of Patents—The Not-Quite-Holy Grail*, 71 NOTRE

creators are rewarded with exclusive property rights that limit specified competing uses well beyond the period of natural lead time that trade secret laws otherwise make possible.

In another dimension, unbundled information constitutes the building blocks of knowledge, and there is a constitutionally recognized public interest in ensuring its availability for the progress of education, science and research, for freedom of speech in general, and for the development of new, value-adding information goods.³⁶ Access to information for these and other pursuits is further guaranteed by express exceptions and limitations built into the classical intellectual property paradigms, and, more generally, by the negative economic mandates of these same paradigms, which traditionally subjected all unprotectable information goods to the rigors of free competition.³⁷

Until the European Union's controversial decision to extend *sui generis* protection to noncopyrightable databases in 1996,³⁸ there was no generally accepted exclusive property right in any collection of information that lacked original and creative authorship.³⁹ The international intellectual

DAME L. REV. 267 (1996) (exploring different justifications for the patent system). While classical intellectual property law divides its universe of discourse into patents and copyrights, a proliferation of hybrid exclusive property rights has actually emerged, which protects ever smaller grain-sized innovations. See J.H. Reichman, *Charting the Collapse of the Patent-Copyright Dichotomy: Premises for a Restructured International Intellectual Property System*, 13 CARDOZO ARTS & ENT. L.J. 475, 496-517 (1995) (asserting that classical patent and copyright models are unable to account for, or adequately deal with, the many creations that now inhabit the intellectual property universe); Reichman, *supra* note 32, at 2500 (asserting that cutting edge intellectual creations break down classical patent and copyright law paradigms).

³⁶ See *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 359 (1991) (explaining that "copyright is not a tool by which . . . [one] may keep others from using the facts or data . . . he or she has collected"); Marci A. Hamilton, *Justice O'Connor's Opinion in Feist Publications, Inc. v. Rural Telephone Service Co.: An Uncommon Though Characteristic Approach*, 38 J. COPYRIGHT SOC'Y 83 (1991) (indicating that the result of *Feist* could have been reached without addressing the "sweat-of-the-brow" rationale); see also *Harper & Row, Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 557-60 (1985) (holding that factual historical material contained in a creative work is not itself protectable).

³⁷ See *supra* note 24 (citing Supreme Court cases that express the traditional regime). But see Digital Millennium Copyright Act, Title V, Vessel Hull Design Protection Act, Pub. L. No. 105-304, 112 Stat. 2860, 2905 (1998) (granting federal protection to boat hull designs); see also Reichman, *supra* note 35, at 475, 485-96 (discussing the negative economic premises underlying the dominant legal paradigms).

³⁸ See Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the Legal Protection of Databases, 1996 O.J. (L77) preamble [hereinafter E.U. Directive]. For an extensive discussion of the Directive, see Reichman & Samuelson, *supra* note 20, which describes the European database protection Directive and critiques database producers' efforts to import this regime into the United States.

³⁹ See, e.g., *Feist Publications, Inc.*, 499 U.S. at 362 (holding that originality is a constitutional condition for copyright and is absent in the alphabetical organization of the white

property system, based on the patent-copyright dichotomy handed down from the nineteenth century,⁴⁰ thus ensured that once unbundled information had been made available to the public, it promptly entered the public domain.⁴¹

pages of a telephone directory); E.U. Directive, *supra* note 38, at preamble (noting databases are not sufficiently protected in all the Member States). Possible exceptions included the protection of noncreative databases in the United Kingdom's copyright law, *see* Paul Edward Geller, *Copyright in Factual Compilations: U.S. Supreme Court Decides Feist Case*, 22 INT'L REV. INDUS. PROP. & COPYRIGHT L. (IIC) 802 (1991), and a type of hybrid law enacted in the Nordic countries that protected noncopyrightable catalogues and directories against slavish imitation for a period of 10 years. Whether this law operated as an exclusive property right or a de facto misappropriation law remains an open question. *See, e.g.*, Reichman, *supra* note 32, at 2492-93 (citing authorities and noting that the question of whether transformative but derivative compilations are forbidden under Nordic law is unsettled). Another possible exception was an Italian law protecting verbal (and graphic) construction project designs against duplication in another's construction project for a period of 20 years. However, this law cannot be classified as an exclusive property right. *See id.* at 2477-78 (discussing Italian Copyright Law Article 99).

⁴⁰ *See* Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, as last revised at Stockholm, July 14, 1967, 21 U.S.T. 1583, 828 U.N.T.S. 305; Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, as last revised at Paris, July 24, 1971, 102 Stat. 2853, 828 U.N.T.S. 4.

⁴¹ Patent law, for example, traditionally did not protect "writings" or printed matter, mathematical formulas, or disembodied sets of data. *But see* 35 U.S.C. § 101 (1994), *as interpreted by In re Alappat*, 33 F.3d 1526 (Fed. Cir. 1994) (en banc) (construing a process implementing a mathematical formula as a subject of patent protection even though the process was merely a more precise application of the well-known formula). In criticizing the result, Chief Judge Archer noted that "[a]s a whole, there is no 'application' apart from the mathematical operation that is asserted to be the invention or discovery. What is going on here is a charade." *In re Alappat*, 33 F.3d at 1564 (Archer, C.J., dissenting). Classical patent law protects only large-scale ("big grain size") aggregates of information known as inventions, which represent novel, nonobvious, and utilitarian applications of science to industry. *See* 35 U.S.C. § 103 (1994) (imposing the requirement of nonobvious subject matter for patent protection); *id.* § 102 (noting the "[c]onditions for patentability; novelty and loss of right to patent"); *id.* § 101 (stating the usefulness requirement). All routine innovations of a lesser "grain size" (together with all their informational content) were relegated to free competition in the public domain unless rescued by trade secret laws or copyright laws. *See supra* note 24 (describing cases in which state laws to protect subpatentable creations were preempted).

Trade secret law, by contrast, punishes only the acquisition of information by improper conduct, and it permits the use of the first comer's secret information whenever the second comer extracts it by honest means of reverse engineering. *See* UNIF. TRADE SECRETS ACT § 1(4), 14 U.L.A. 438 (1990) (limiting trade secret information to that information which "derives independent economic value, actual or potential, from . . . not being readily ascertainable by proper means," such as independent invention, reverse engineering, and public observation); RESTATEMENT (THIRD) OF UNFAIR COMPETITION §§ 39-45 (1995); *see also* Neal Chatterjee, *Should Trade Secret Appropriation Be Criminalized?*, 19 HASTINGS COMM. & ENT. L.J. 853, 869-75 (1997) (discussing trade secret law as liability regime). Furthermore, copyright laws protect only the stylistic expression of facts or information in the form of "original works of authorship," 17 U.S.C. § 102(a) (1994), and they expressly relegate facts, data, information, ideas, methods, principles, and systems to the public domain. *See* 17 U.S.C. § 102(b) (1994) (precluding copyright protection for "any idea, procedure, process, system, method of operation, concept, principle, or discovery"). Thus, whenever factual or

Sooner or later, indeed, this system relegated even the bundles of information it protected as patentable inventions or copyrightable literary and artistic works to that same public domain.⁴² In this respect, the public owned a remainderman's interest in all information goods.⁴³ Until that interest ripened, the dual functions of information were largely preserved by the eligibility requirements or by the exceptions and limitations that became integral components of the mature patent and copyright systems. One cannot overemphasize the extent to which these requirements together with the exceptions and limitations promoting the public interest in education, science, research, innovation, and free competition lead to the creation of new information goods that are privately exploited either on the general products market or on the specialized market for literary and artistic works.

1. Collapse of the Patent-Copyright Dichotomy

We are the first to admit that this classical system was ill equipped to deal with commercially valuable bundles of information that become subject to effortless parasitical copying when made available to the public under present-day conditions.⁴⁴ Moreover, the convergence of telecommunications networks and digital technology has led to the production and marketing of large bundles of electronically aggregated data or information whose chief selling point is completeness rather than engineering or design

functional works are published, copyright law traditionally deprives the authors of all exclusive rights to the information that these works convey, and simply requires second comers to independently express that same information in their own words. See Lloyd L. Weinreb, *Copyright for Functional Expression*, 111 HARV. L. REV. 1149, 1152-53 (1998) (distinguishing the legal treatment of books and machines). But see Jane C. Ginsburg, *Sabotaging and Reconstructing History: A Comment on the Scope of Copyright Protection in Works of History After Hoehling v. Universal City Studios*, 29 J. COPYRIGHT SOC'Y 647 (1982) (criticizing the judicial tendency to underprotect expressive historical works).

⁴² In the United States, the Constitution authorizes Congress to grant monopolies only for "limited times." U.S. CONST. art. I, § 8, cl. 8.

⁴³ See Julie E. Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management"*, 97 MICH. L. REV. 462, 504 n.155 (1998) (discussing the concept that the public domain parallels a remainderman's interest).

⁴⁴ Like industrial designs generally, information designs often consist of "[i]ncremental [i]nnovation [b]earing [k]now-[h]ow on [or near] [i]ts [f]ace." J. H. Reichman, *Computer Programs As Applied Scientific Know-How: Implications of Copyright Protection for Commercialized University Research*, 42 VAND. L. REV. 639, 656 (1989); see also Pamela Samuelson, Randall Davis, Mitchell D. Kapor, & J.H. Reichman, *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308, 2346-47 (1994) [hereinafter Samuelson et al., *Manifesto*] (discussing common problems of appropriability affecting computer software and semiconductor chips). For recent developments in Europe, see, for example, Graeme B. Dinwoodie, *Federalized Functionalism: The Future of Design Protection in the European Union*, 24 AIPLA Q.J. 613 (1996). This problem, that only a low level of protection is available for incremental innovations, has complicated the development and marketing of computer programs.

excellence. Electronically compiled databases, for example, usually lack the attributes of creative achievement needed to qualify for traditional forms of intellectual property protection.⁴⁵ As a result, database producers cannot rely on existing laws to protect their investments against free riders who duplicate a loosely bundled collection of information without making any appreciable investment of their own.⁴⁶

As Professor Reichman has explained in previous articles, today's most commercially valuable information goods often fit imperfectly within the classical patent and copyright paradigms, a development that prods both courts and legislators to devise ad hoc means of avoiding a perceived threat of market failure.⁴⁷ One response is to tinker with the existing doctrinal structures of these paradigms to accommodate information goods that have little, or nothing, in common with "inventions" or "works of authorship" in the traditional and ordinary sense.⁴⁸ A second, and now, perhaps, dominant

⁴⁵ See COMM. ON ISSUES IN THE TRANSBORDER FLOW OF SCIENTIFIC DATA ET AL., BITS OF POWER: ISSUES IN GLOBAL ACCESS TO SCIENTIFIC DATA 139-45 (1997) [hereinafter BITS OF POWER] (describing the limits of legal protection for digital databases used in different scientific disciplines).

⁴⁶ See Reichman & Samuelson, *supra* note 20, at 64-66 (noting the impact of digital technology on the economics of database construction); see also Jane C. Ginsburg, *Copyright, Common Law, and Sui Generis Protection of Databases in the United States and Abroad*, 66 U. CIN. L. REV. 151, 153-57 (1997) (explaining the distinction between "soft ideas," which cannot receive copyright protection, and "hard ideas," which may be eligible for such protection). *But see* Reichman & Samuelson, *supra* note 20, at 70-72 (discussing relative invulnerability of many privately controlled databases owing to a combination of encryption devices and contracts). For different perspectives, see G.M. Hunsucker, *The European Database Directive: Regional Stepping Stone to an International Model?*, 7 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 697, 735-49 (1997), which examines the European Community's Database Directive and how it strikes a balance "between the public's need for information access and the database maker's need for production incentives;" and Mark Powell, *The European Union's Database Directive: An International Antidote to the Side Effects of Feist?*, 20 FORDHAM INT'L L.J. 1215, 1223-24 (1997), which discusses the European Community's justification for the Database Directive, which is focused on creating "a climate in which investment in data processing [is] stimulated and protected against misappropriation."

⁴⁷ See generally Reichman, *supra* note 32, at 2527-33; Reichman, *supra* note 35, at 512-20 ("The Competitive Ethos Under Attack"); Samuelson et al., *Manifesto*, *supra* note 44, at 2356-64 (discussing cycles of under- and overprotection).

⁴⁸ See Reichman & Samuelson, *supra* note 20, at 156 ("While database publishers contribute no intellectual achievement for which a reward is justifiable in terms of social costs, they have now staked a claim to subject matter that world intellectual property law had left unprotected as a building block of scientific and technological progress."); Rochelle Cooper Dreyfuss, *A Wiseguy's Approach to Information Products: Muscling Copyright and Patent into a Unitary Theory of Intellectual Property*, 1992 SUP. CT. REV. 195, 221 & n.105 (describing the intermediate level of protection granted to newly created intellectual property regimes). Thus, Congress lightheartedly absorbed industrial literature into the domestic copyright law when it recognized computer programs as eligible subject matter in 1980, while maintaining its historical resistance to copyright protection of industrial art. See Software Protection Act of 1980, Pub. L. No. 96-517, 94 Stat. 3015, 3028 (1980) (codified as amended

response is to enact new, hybrid intellectual property rights, based on modified patent and copyright principles, to protect deviant subject matter that cannot meet either the "nonobviousness" test of eligibility in patent law or the "originality" test of eligibility in copyright law.⁴⁹

These two responses introduce a powerful, high-protectionist tilt into the worldwide intellectual property system,⁵⁰ which threatens to undermine

at 17 U.S.C. §§ 101, 117 (1994)) (recognizing computer programs as eligible subject matter for copyright laws). For further detail, see Weinreb, *supra* note 41, at 1163-67, which discusses the legislative history of the 1980 Act.

Similarly, the Federal Circuit has recently accepted computer programs as patentable subject matter, *see In re Alappat*, 33 F.3d 1526, 1542 (Fed. Cir. 1994) (en banc) (stating that "it is improper to read into [35 U.S.C.] § 101 limitations as to the subject matter that may be patented where the legislative history does not indicate that Congress clearly intended such limitations"), despite the strong opposition of some government authorities to the patenting of computer programs in the 1980s. *Cf.* Dennis S. Karjala, *The Relative Roles of Patent and Copyright in the Protection of Computer Programs*, 17 J. MARSHALL J. COMPUTER & INFO. L. 41, 50-73 (1998) (describing the protection that copyright law should extend to computer programs).

The same court also has begun to reshape traditional patent law doctrines to accommodate the information designs underlying biogenetically engineered innovations. *See In re Deuel*, 51 F.3d 1552, 1553-54 (Fed. Cir. 1995) ("*Deuel II*") (reversing the U.S. Patent and Trademark Office Board of Patent Appeals and Interferences' rejection of protection for DNA purified molecules); *see also In re Bell*, 991 F.2d 781, 784-85 (Fed. Cir. 1993) (holding that molecules containing human gene sequences were not unpatentable on grounds of obviousness).

Along with federal patent and copyright law, the Supreme Court has also permitted states to protect smaller grain-size innovation, such as subpatentable trade secrets. *See Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 493 (1974) (asserting that "[s]tates should be free to grant protection to trade secrets").

⁴⁹ 17 U.S.C. § 102(a) (1994) (asserting that "[c]opyright protection subsists in original works of authorship"); 35 U.S.C. § 103 (1994 & Supp. II 1996) (codifying the nonobvious subject matter requirement of patent law). Thus, tool designs (utility models), *see* Jerome H. Reichman, *Electronic Information Tools—The Outer Edge of World Intellectual Property Law*, 24 INT'L REV. INDUS. PROP. & COPYRIGHT L. (IIC) 446, 451-55 (1993) (discussing protection of tool designs), semiconductor chip masks, *see* Semiconductor Chip Protection Act of 1984, Pub. L. No. 98-620, 98 Stat. 3347 (1984) (codified as amended at 17 U.S.C. §§ 901-14 (1994)), plant varieties, *see* *Imazio Nursery, Inc. v. Dania Greenhouses*, 69 F.3d 1560, 1564-68 (Fed. Cir. 1995) (interpreting the Plant Variety Protection Act (PVPA), 7 U.S.C. §§ 2321-583 (1994 & Supp. 1996)), boat hull designs, *see* Digital Millennium Copyright Act Title V, Vessel Hull Design Protection Act, Pub. L. No. 105-304, 112 Stat. 2860, 2905 (1998) (protecting boat hull design at the federal level), and most recently proposed, electronic databases and other collections of information, *see* H.R. 354, 106th Cong. (1999) (proposing the "Collection of Information Antipiracy Act" to prevent the misappropriation of collections of information); *see also* Reichman & Samuelson, *supra* note 20, at 137-39 (assessing the damage that an ill-considered database protection law could cause), have all attracted exclusive intellectual property rights that strike a different and more protectionist balance than that embodied in the classical patent and copyright paradigms.

⁵⁰ *See* Marrakesh Agreement Establishing the World Trade Organization [WTO Agreement], Apr. 15, 1994, Annex 1C: Agreement on Trade-Related Aspects of Intellectual Property Rights [TRIPS Agreement], reprinted in RESULTS OF THE URUGUAY ROUND OF MULTILATERAL TRADE NEGOTIATIONS—THE LEGAL TEXTS 365-403 (GATT Secretariat ed. 1994) (establishing the nature and scope of international obligations regarding intellectual

the balance between incentives to create and free competition that has traditionally governed investment and technical innovation in the U.S. economy. Whether the new balance will adequately stimulate the development of the information economy (as some contend),⁵¹ or merely substitute a chronic and socially costly state of overprotection for a perceived risk of chronic underprotection (as we fear) remains to be seen.

2. Islands of Competition in a Sea of Exclusive Property Rights?

The drafters of Article 2B not only endorse these high-protectionist trends, they want us to believe that “strong protection for published informational content”⁵² emerges logically and necessarily from the workings of the classical intellectual property system. To make their case, they paint a distorted picture of how that system actually operates.

For example, the notes and comments of the Drafting Committee responsible for successive iterations of Article 2B of the Uniform Commercial Code have nowhere recognized the public domain status of unbundled information under traditional intellectual property laws. On the contrary, the opening lines of the most recent introduction state a misleading proposition: “Article 2B deals with transactions in information; it focuses on a subgroup of transactions in the ‘copyright industries.’”⁵³ In reality, copyright law focuses on “original works of authorship”⁵⁴ and mandates that *information* as such should remain free of legal constraints.⁵⁵

property); J.H. Reichman, *From Free Riders to Fair Followers: Global Competition Under the TRIPS Agreement*, 29 N.Y.U. J. INT'L. L. & POL. 11, 24-28 (1997) (noting the high-protectionist slant of current intellectual property policies favored by many developed countries).

⁵¹ See, e.g., INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 2 (1995) (discussing the application of the existing copyright law and recommending changes “that are essential to adopt the law to the needs of the global information society”); Jane C. Ginsburg, *Putting Cars on the “Information Superhighway”: Authors, Exploiters, and Copyright in Cyberspace*, 95 COLUM. L. REV. 1466, 1468 (1995) (claiming that applying and adopting copyright law in cyberspace can foster the “digital creation and communication of works of authorship”); Trotter Hardy, *Property (and Copyright) in Cyberspace*, 1996 U. CHI. LEGAL. F. 217, 217 (putting forward a property-based view of intellectual property in an information economy).

⁵² U.C.C. art. 2B Preface: Information Age in Contracts, Introduction, Benefits and Positions in Draft Article 2B by Party, General Benefits (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft).

⁵³ *Id.* at Preface: Information Age in Contracts, Introduction (Proposed Official Draft Aug. 1999) (omitted in Feb. 1999 draft).

⁵⁴ 17 U.S.C. § 102(a) (1994).

⁵⁵ See *id.* § 102(b) (1994) (forbidding the extension of copyright protection to any “idea, procedure, process, system, method of operation, concept, principle, or discovery”); *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 350 (1991) (citing Harper & Row,

Moreover, the term "copyright industries" historically referred to the music, film, and book publishing sectors, which compete in the specialized market for literary and artistic works, where cultural policies often override considerations of economic efficiency.⁵⁶ The legal regulation of unbundled or loosely bundled information thus has little to do with copyright law in the historical or ordinary sense.⁵⁷ Many of today's commercially valuable information goods, especially computer programs, resemble products that historically were covered by the domestic industrial property laws and subject to their far more stringent, procompetitive eligibility requirements.

The drafters' opening gambit⁵⁸ thus posits a false picture of a world of copyright-based information transactions that has never existed precisely because the domestic copyright laws declined to protect facts, data, and most other forms of unbundled information as such.⁵⁹ The drafters have, in this way, conveniently ignored the balance between incentives to create and free competition that resides at the very core of the classical intellectual property system.⁶⁰ The importance of this balance, once the market-

Publishers, Inc. v. Nation Enters., 471 U.S. 539, 547-48 (1985) (holding that expressive portions of the copyrighted memoirs of President Ford fell within the Copyright Act, but that the factual matter was not itself copyrightable)).

⁵⁶ See Hugh C. Hansen, *International Copyright: An Unorthodox Analysis*, 29 VAND. J. TRANSNAT'L L. 579, 583 (1996) (explaining that the origin of copyright law was in the context of "publishing, theater, motion pictures, music, and art"); J.H. Reichman, *Goldstein on Copyright Law: A Realist's Approach to a Technological Age*, 43 STAN. L. REV. 943, 947-49 (1991) (describing tension between the utilitarian incentives and cultural policy).

Since 1879, the Supreme Court has tried to insulate the general products market from the potential anticompetitive effects of these same cultural policies that otherwise control the market for literary and artistic works. See, e.g., *Baker v. Selden*, 101 U.S. 99, 104 (1879) (holding that copyright subsists in the expression of a work and not the underlying function of its useful aspects).

⁵⁷ The few cases that deviated from this proposition by protecting facts as such were overruled by *Feist*, for the view that such protection should have continued, see Jane C. Ginsburg, *No "Sweat"?: Copyright and Other Protection of Works of Information After Feist v. Rural Telephone*, 92 COLUM. L. REV. 338, 343 (1992), which advocates a greater role for copyright law as a potential regulator of information in the modern period, and Robert C. Denicola, *Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works*, 81 COLUM. L. REV. 516, 516-17 (1981), which supports the proposition that the collection of facts should be protectable even when the arrangement does not meet the originality standard.

⁵⁸ See U.C.C. art. 2B Preface: *Information Age in Contracts, Introduction* (Proposed Official Draft Aug. 1998) (discussing the subgroup of transactions covered in article 2B) (omitted in Feb. 1999 draft); *supra* text accompanying notes 52-53.

⁵⁹ An exception was the copyright law of the United Kingdom, which does afford relatively strong copyright protection to uncreative information products. See, e.g., Geller, *supra* note 39, at 54 (noting the U.K. copyright protection of uncreative information products, a position that now conflicts with the E.U. Directive on Databases).

⁶⁰ See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (stating that the limited monopoly conferred by the Copyright Act "is intended to motivate creative activity of authors and inventors by the provision of a special reward, and to allow the

correcting role of intellectual property rights gained acceptance among economists,⁶¹ was conveyed in the conventional depiction of such rights as providing “islands of protection in a sea of competition.”⁶²

The drafters of Article 2B reinforce these fallacies by other statements that further mischaracterize the public domain status of information under preexisting intellectual property laws. For example, they affirm that “software and most other digital products are treated in law more like books and motion pictures, than television sets and cars.”⁶³ A related theme is that “[e]ven if a purchaser acquires a copy of information, the copyright holder retains control over various uses of the copy.”⁶⁴

It is worth pausing long enough to demonstrate why these statements are so misleading. Taken together, they erroneously suggest that copyright law is largely responsible for the predominance of the U.S. information and software industries, in the same way that the film, music, and traditional publishing sectors depend on that body of law.⁶⁵ In reality, even when expedience finally induced Congress to extend copyright protection to computer programs after 1980,⁶⁶ most federal courts declined to protect more than the outer, expressive shell of any given program against wholesale

public access to the products of their genius after the limited period of exclusive control has expired”).

⁶¹ See Gordon, *Asymmetric Market Failure*, *supra* note 6, at 855-56 n.13 (comparing the “costs of fencing” with “the costs of explicit legal protection of intellectual products”); Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 997-99 (1997) (stressing that a balance must be struck that protects existing property rights and encourages improvements while minimizing transaction costs).

⁶² Reichman, *supra* note 35, at 517 (charting the collapse of the patent-copyright dichotomy).

⁶³ U.C.C. art. 2B Preface: Information Age in Contracts, Pt. 1: Context: Law Reform and the UCC, Project Framework (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft).

⁶⁴ *Id.* In reality, the “first sale” doctrine liberates the purchaser of a copy from most restrictions on use, and the mature copyright paradigm does not protect against use, as such. See, e.g., Ralph S. Brown, *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 MINN. L. REV. 579, 588-89 (1985) (“The right to control the use of a work, although granted to inventors, has never been part of copyright except as performance may be considered ‘use.’ Indeed, the absence of a ‘use right’ helps justify the relatively casual approach to granting copyright . . .”).

⁶⁵ It is true of course that copyright protection of computer programs blurred the historical line of demarcation between artistic and industrial property embodied in the international intellectual property system that emerged from the nineteenth century. This follows because a computer program is “a machine whose medium of construction happens to be text,” and because ownership of a copyright in the text qua author might confer control over the functional behavior the program establishes, even though the legal control of functional behavior is nominally the exclusive province of the domestic patent laws. Samuelson et al., *Manifesto*, *supra* note 44, at 2320. In practice, however, the federal courts have usually avoided this risk.

⁶⁶ See Software Protection Act of 1980, Pub. L. No. 96-517, 94 Stat. 3015, 3028 (1980) (codified as amended at 17 U.S.C. §§ 101, 117 (1994)).

imitation.⁶⁷ This “thin” scope of protection ensures that neither information nor unpatentable technical solutions are removed from the public domain and free competition. The courts have further recognized user rights to reverse engineer unprotected technical ideas,⁶⁸ despite the need to make unauthorized intermediate copies for the purposes of analytical use,⁶⁹ and they have upheld the copying of interface specifications needed to achieve interoperability with other computer programs.⁷⁰

By such means, courts dealing with computer programs have converted the nominal exclusive rights of copyright law into a de facto liability regime under which liability attaches mainly for wholesale or slavish imitation without a corresponding personal investment.⁷¹ Because this approach fails

⁶⁷ See also *Sega Enters., Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1527-28 (9th Cir. 1992), amended by 1993 U.S. App. LEXIS 78 (9th Cir. Jan. 6, 1993) (holding that the practice of reverse engineering of software to gain understanding of unprotected functional elements was not an infringing use). Compare *Computer Assocs. Int'l, Inc. v. Altai, Inc.*, 982 F.2d 693, 712 (2d Cir. 1992) (holding that nonliteral elements of a computer program, which exist at a deeper level than the outer, expressive shell, were not infringed upon and may not even qualify for copyright protection), with *Whelan Assocs. v. Jaslow Dental Lab.*, 797 F.2d 1222, 1248 (3d Cir. 1986). The U.S. federal appellate courts thus continue to distinguish carefully between expression and functionally driven technical ideas or information by protecting only the expressive content.

⁶⁸ See, e.g., *Sega Enters., Ltd.*, 977 F.2d at 1527-28 (“[W]here disassembly is the only way to gain access to the ideas and functional elements embodied in a copyrighted computer program and where there is a legitimate reason for seeking such access, disassembly is a fair use of the copyrighted work . . .”); *Atari Games Corp. v. Nintendo of Am. Inc.*, 975 F.2d 832, 843 (Fed. Cir. 1992) (“Thus, reverse engineering object code to discern the unprotectable ideas in a computer program is a fair use.”); *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 261 (5th Cir. 1988) (holding that because the copy was “created as an essential step in the utilization of the computer program,” it did not infringe on the copyright (internal citation omitted)); see also Marshall Leaffer, *Engineering Competitive Policy and Copyright Misuse*, 19 U. DAYTON L. REV. 1087, 1087 (1994) (noting that after *Sega*, software owners may attempt to use contract law to deter reverse engineering and that this may give rise to a copyright misuse defense); John G. Mills, *Possible Defenses to Complaints for Copyright Infringement and Reverse Engineering of Computer Software: Implications for Antitrust and I.P. Law*, 80 J. PAT. & TRADEMARK OFF. SOC'Y 101, 107-28 (1998) (analyzing the unsuitability of copyright law for protection of computer software given the defense mechanisms available to those who reverse engineer a product).

⁶⁹ “When the nature of a work requires intermediate copying to understand the ideas and processes in a copyrighted work, that nature supports a fair use for intermediate copying.” *Atari*, 975 F.2d at 843. But see Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860, 2905 (1998) (permitting reverse engineering in part if “necessary to achieve interoperability of an independently created computer program with other programs”).

⁷⁰ See *Lotus Dev. Corp. v. Borland Int'l, Inc.*, 49 F.3d 807, 815 (1st Cir. 1995) (holding that the Lotus command hierarchy is not copyrightable subject matter), *aff'd by an equally divided court*, 516 U.S. 233 (1996); *Sega Enters., Ltd.*, 977 F.2d at 1527-28.

⁷¹ In contrast, literary and artistic works that are primarily expressive in character are protected at the broad or thick end of the copyright law spectrum. See *Atari, Inc. v. North Am. Philips Consumer Elecs. Corp.*, 672 F.2d 607, 614 (7th Cir. 1982) (declaring that “the

to prevent second comers from reimplementing the behavioral or functional features that are the real source of value in innovative software,⁷² pressures to recognize computer programs as patentable subject matter have recently succeeded in the United States and other developed countries.⁷³

Looking beyond the software sector, information industries that disseminate factual data traditionally only gained copyright protection of compilations and databases if the selection, coordination, or arrangement of the contents was sufficiently original.⁷⁴ Unless the courts agreed to invoke equitable doctrines, such as the "sweat of the brow" rationale, which partake more of unfair competition principles than of copyright law, these low-authorship, literary productions went unprotected.⁷⁵ Because the U.S. Supreme Court rejected these equitable claims on constitutional grounds in 1991, the domestic database sector has relied primarily on contract law, which in turn provides a substantial impetus for the drafting of Article 2B. Yet, this same industry already controls more than fifty percent of the world market for directories, databases, and other factual compilations.⁷⁶

In short, contrary to the drafters' misleading statements,⁷⁷ copyright protection, intended primarily for expressive works, does not account for the strength and dominance of the domestic software and information indus-

copyright laws preclude appropriation of only those elements of the work that are protected by the copyright," and evoking a spectrum approach that varies with the subject matter at issue).

⁷² See Samuelson et al., *Manifesto*, *supra* note 44, at 2429-30 (noting that the innovative aspects of computer programs are design features that produce functional behavior, rather than the code itself).

⁷³ *In re Alappat*, 33 F.3d 1526, 1542 (Fed. Cir. 1994) (en banc) (holding that computer operating software may be patentable subject matter). For a discussion of this perspective, see A. Samuel Oddi, *An Uneasier Case for Copyright than for Patent Protection of Computer Programs*, 72 NEB. L. REV. 351, 405-53 (1993), addressing the arguments advanced against patent protection for computer programs, and Samuelson et al., *Manifesto*, *supra* note 44, at 2356-64, discussing cycles of under- and overprotection.

⁷⁴ See 17 U.S.C. §§ 102(a), 103(b) (1994), construed in *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 345 (1991) ("The *sine qua non* of copyright is originality."); Ginsburg, *supra* note 57 (promoting the need for legislation to protect valuable low-authorship works that are currently unprotectable under the sweat of the brow rationale rejected in *Feist*); see also *Mid Am. Title Co. v. Kirk*, 59 F.3d 719, 721 (7th Cir. 1995) (citing *Feist* as supporting selection and arrangement doctrines).

⁷⁵ See *Feist Publications, Inc.*, 499 U.S. at 354 (quoting 1 MELVILLE B. NIMMER & DAVID NIMMER, *NIMMER ON COPYRIGHT* § 3.04, at 3-23 (1997) (discussing the history of the protection of facts and compilations of facts)); see also Ginsburg, *supra* note 57 at 341-52 (discussing pre-*Feist* history).

⁷⁶ See Proposal for a Council Directive on the Legal Protection of Databases, COM(92)24 final at 2 ("[A]t the present time one quarter of the world's accessible online databases are of European origin compared with the US share of the world market of 56%."). When hardcopy distribution is factored in, estimates of the U.S. market share run as high as 70%.

⁷⁷ See *supra* text accompanying notes 52-64 (noting the drafters' affirmation that information is protected under classical intellectual property laws).

tries. Rather, as courts have interpreted it, copyright law leaves information and software—unlike traditional literary and artistic works—almost entirely at the mercy of free competition (but not parasitical copying), and it is in this competitive state of affairs that U.S. industry has triumphed.⁷⁸

By lumping the “copyright industries” together with “digital industries,” the drafters convey the impression that software and digital information already are freighted heavily with exclusive rights to the same extent as novels and films, and that Article 2B merely complements that scheme. What the drafters really mean is that *they* prefer and endorse the high-protectionist trend we identified above to the competitive conditions of the past. Correctly understood, however, that trend has emerged from the breakdown of the classical intellectual property system, and not from the very different balance of exclusive rights and opportunities to compete that were embodied in (and progressively developed under) the Paris and Berne Conventions.⁷⁹

In the drafters’ eyes, a chief virtue of Article 2B is, accordingly, that it provides “strong protection for published informational content,”⁸⁰ which perfects this high-protectionist trend. Yet, Congress has not empowered the American Law Institute (“ALI”) or the National Conference of Commissioners on Uniform State Laws (“NCCUSL”) to promote strong protection of information goods, and all the empirical evidence shows that computer programs and factual databases benefited from weak protection in the past.⁸¹ These misconceptions, in turn, raise disturbing questions about the appro-

⁷⁸ See, e.g., *Gates Rubber Co. v. Bando Chem. Indus., Ltd.*, 9 F.3d 823, 839 (10th Cir. 1993) (“Copyright policy is meant to balance protection, which seeks to ensure a fair return to authors and inventors and thereby to establish incentives for development, with dissemination, which seeks to foster learning, progress and development.”); *Computer Assocs. Int’l, Inc. v. Altai, Inc.*, 982 F.2d 693, 696 (2d. Cir. 1992) (“[C]opyright law seeks to establish a delicate equilibrium. On the one hand, it affords protection to authors as an incentive to create, and, on the other, it must appropriately limit the extent of that protection so as to avoid the effects of monopolistic stagnation.”), modified, 61 F.3d 6 (2d Cir. 1995). See generally Samuelson et al., *Manifesto*, *supra* note 44, at 2371-78 (exploring the nature of the software market and its consequences).

⁷⁹ Paris Convention, *supra* note 40; Berne Convention, *supra* note 40; see *supra* text accompanying notes 30-43.

⁸⁰ U.C.C. art. 2B, Preface: Information Age in Contracts, Introduction, Benefits and Positions in Draft Article 2B by Party, General Benefits (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft).

⁸¹ See, e.g., Pamela Samuelson, Benson Revisited: *The Case Against Patent Protection for Algorithms and Other Computer Program-Related Inventions*, 39 EMORY L.J. 1025, 1026 (1990) (“[T]he computer software industry has grown significantly without patent protection.”); Samuelson et al., *Manifesto*, *supra* note 44, at 2343-64 (arguing that copyright law is ill suited to protect computer software). But see Donald S. Chisum, *The Patentability of Algorithms*, 47 U. PITT. L. REV. 959, 959 (1986) (“[P]atent protection for algorithms may be needed to provide incentive for innovation.”).

priate interface between contract law, as potentiated by Article 2B, and the goals and policies underlying the federal intellectual property system.

B. *The Restored Power of the Two-Party Deal*

The advent of the printing press ended the power of authors or publishers to control third-party uses of information goods by means of two-party contractual agreements.⁸² Since then, those who exploit printed literary and artistic works for private gain and public benefit have depended upon copyright laws for a set of standardized default provisions that bind everyone who gains access to published versions of the protected intangible creations. As the price for policing these state-guaranteed “portable fences” *erga omnes* (“against the world”), legislators enacting the domestic copyright laws gradually balanced incentives to create against the limitations and exceptions identified above, which promote free competition generally and access to the copyrighted culture for specific public-interest objectives in particular.⁸³

Recently, however, as publishers became more familiar with the networked environment that the convergence of digital and telecommunications technologies had made possible, they found ways to reacquire the power to market unpatentable information goods without necessarily succumbing to the state-imposed “cultural bargain” of the copyright laws. Telecommunications networks invite the creation of electronic gateways that block transmissions of information goods in digital form without the gatekeeper’s permission.⁸⁴ This gatekeeping function is reinforced by encryption devices,⁸⁵ digital watermarking,⁸⁶ and other self-help technical

⁸² See PAUL GOLDSTEIN, *COPYRIGHT’S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX* 27 (1994) (stating that “copyright was technology’s child from the start [because] [t]here was no need for copyright before the printing press”).

⁸³ See 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, 599-600 (1996) (emphasizing the “economic and cultural bargain between authors and users . . . at the heart of U.S. [copyright] law, as reflected in the Patent and Copyright Clause [of the Constitution], and a parade of Supreme Court precedents . . .”).

⁸⁴ See Perritt, *supra* note 5, at 308-12 (describing the role of the gatekeeper).

⁸⁵ See *id.* at 319-22 (describing how encryption devices can protect intellectual property by limiting divulcation, authenticating access permission, and detecting violations).

⁸⁶ A digital watermark has been described as an electronic code or unique identifier that becomes part of the document and cannot be removed by anyone except the person who set up the system. On the screen, the image or document may seem fine, but if the infringer tries to print or distribute the work, the watermark, whether a large message saying unauthorized copy or large image that conceals the document, will appear. Thus, a potential infringer will not be able to sell the work because the watermark will destroy the marketability of the

measures⁸⁷ that permit information providers contractually to impose their own terms and conditions on access to information goods stored at any given network site and on the uses to which end-users can put the information they access.

The new technologies thus increasingly restore the power of the two-party deal to regulate transactions in digitized information goods that was lost when the markets for virtually all literary productions depended on dissemination in print and other physical media.⁸⁸ The restored power of the two-party deal becomes, in turn, a potential vehicle for maximizing private benefits from the sale of information goods at the expense of the public-interest uses to which commercially exploited information goods were traditionally subjected.

Entrepreneurs who had to endure state-imposed limits on any residual contractual powers deriving from the grant of intellectual property rights⁸⁹ increasingly cease to fear the free-riding conduct of unbound third-party users. Instead, they can now seek to potentiate these same temporary legal monopolies by contractually mandating terms and conditions that override or disregard the constitutive elements of the state-imposed "cultural bargain."⁹⁰ Moreover, evolutionary changes that have saddled the world's intellectual property system with a proliferation of hybrid exclusive rights further undermine traditional public-interest uses of information and create new threats to the preservation of free competition in developed market economies.⁹¹

work. In addition, a digital watermark may include a code number so that every time a work is sold, the distributor will be able to track the misappropriation back to the original source.

DanThu Thi Phan, Note, *Will Fair Use Function on the Internet?*, 98 COLUM. L. REV. 169, 192 n.167 (1998). See generally NATIONAL RESEARCH COUNCIL, CRYPTOGRAPHY'S ROLE IN SECURING THE INFORMATION SOCIETY (Kenneth Dam & Herbert Lin eds., 1996).

⁸⁷ See, e.g., *American Computer Trust Leasing v. Jack Farrell Implement Co.*, 763 F. Supp. 1473, 1493-94 (D. Minn. 1991) (permitting remote deactivation of the computer program when the license was breached).

⁸⁸ See Reichman, *supra* note 49, at 461-67 (identifying restored power of two-party deal as key behavioral characteristic of electronic information tools and discussing implications for public-interest uses of such tools).

⁸⁹ See *supra* note 60 and accompanying text (discussing the balance between incentives to create and free competition in the classical intellectual property system); see also Reichman & Samuelson, *supra* note 20, at 156 (noting that in seeking increased state intervention, publishers should expect to "exchange a measure of support for the public good uses of scientific data for lessened risk aversion and for a measure of artificial lead time in which to recoup their investments and turn a profit").

⁹⁰ See Jaszi, *supra* note 83, at 599-600 (discussing the "cultural bargain").

⁹¹ This trend is epitomized by new forms of narrow *sui generis* legislation that cumulatively produce high-protectionist effects. See Reichman, *supra* note 32, at 2453-503 (developing an intellectual property paradigm for subpatentable innovation, built on modified liabil-

These threats are potentially aggravated by the restored power of the two-party deal in the online environment. To understand how these developments reciprocally reinforce each other, however, we must first explore the statutory framework that the drafters of Article 2B have prepared for the regulation of online and related transactions.

C. Privately Legislated Intellectual Property Rights

We shall find that the restored power of the two-party deal becomes greatly magnified by the licensor's power to impose standardized or non-negotiable terms on all comers, which Article 2B takes pains to validate. According to the Reporter, indeed, some of the principal benefits of Article 2B are that it "innovates [the] concept of mass market transaction[s],"⁹² that it "clarifies [the] enforceability of standard forms in commercial deals,"⁹³ and that it "settles [the] enforceability of mass market licenses."⁹⁴

1. The Statutory Framework

Section 2B-102 defines a "mass-market license" as "a standard form that is prepared for and used in a mass-market transaction."⁹⁵ This latter term signifies "a transaction within this article that is a consumer transaction or that is a transaction with an end-user license which transaction involves information or informational rights directed to the general public as a whole under substantially the same terms for the same information."⁹⁶ The definition thus contemplates "routine and anonymous transactions . . . that . . . occur[] in a retail market available to and used by the general public."⁹⁷

ity principles, that would encompass "legal hybrids" between patents and copyrights); *see also* Dreyfuss, *supra* note 48, at 221-29 (describing how *sui generis* laws have created "intermediate levels of protection for new (and some old) technologies").

⁹² U.C.C. art. 2B Preface: Information Age in Contracts, Introduction, Benefits and Positions in Draft Article 2B by Party, General Benefits (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft).

⁹³ *Id.* It also "sets performance standards for Internet contracts." *Id.*

⁹⁴ *Id.* A closely related licensor benefit is said to be that the Article "codifies contract treatment of electronic limiting devices." *Id.*

⁹⁵ *Id.* § 2B-102(32) ("Definitions").

⁹⁶ *Id.* § 2B-102(33) ("Definitions"); *see also id.* § 2B-102(16) ("Definitions") (defining "contractual use restrictions"). However, nonconsumer access contracts are not mass-market transactions for this purpose. *See id.* §§ 2B-102 (32)(E), 2B-615 ("Access Contracts").

⁹⁷ *Id.* § 2B-102, reporter's notes, no. 28.

a. *Licenses Define the Product*

Section 2B-207 then recognizes adoption of “the terms of a record, including a standard form . . . by manifesting assent or otherwise.”⁹⁸ Such “assent” is merely a legal conclusion in that no knowledge of the governing terms and conditions is actually required.⁹⁹ In an earlier draft, “initial performance or use of or access to the information or informational rights”¹⁰⁰ explicitly adopted the term of a record for this purpose.¹⁰¹ In the latest draft, the same result is achieved in a more roundabout fashion by resort to section 2B-111.

Under this last section, “a person or electronic agent manifests assent to a record or term in a record” if the person or agent confers an electronic signature or shows by conduct that assent is given.¹⁰² Section 2B-111(c) completes the circumvolution by affirming that conduct manifesting assent results from showing that the person or agent “must have engaged in the conduct or operations in order to obtain, or to proceed with use of the information or informational rights.”¹⁰³ Lest we miss the point, the reporter’s note confirms that in “many cases, of course, a single indication of assent by an electronic agent or by another act such as opening a container or commencing to use information suffices if it occurs under circumstances giving the actor reason to know that this signifies assent.”¹⁰⁴

In other words, once a party “agrees to a record” by using the information being disseminated or transmitted, “it adopts the terms of the record whether or not the record is a standard form.”¹⁰⁵ The fact that the terms thus validated may cause surprise is no defense because section 2B-207 “rejects decisions which hold that a term that is not unconscionable or induced by fraud may still be invalidated because a court holds, after the fact, that party could not have expected it to be in the contract.”¹⁰⁶

⁹⁸ *Id.* § 2B-207 (a).

⁹⁹ “This section rejects decisions which hold that a term that is not unconscionable or induced by fraud may still be invalidated because a court holds, after-the-fact, that a party could not have expected it to be in the contract.” *Id.* § 2B-207, reporter’s notes, no. 2.

¹⁰⁰ U.C.C. § 2B-207(a) (Proposed Official Draft Aug. 1998) (Adopting Terms of Records).

¹⁰¹ *Id.* § 2B-208(a) (Mass-Market Licenses).

¹⁰² U.C.C. §§ 2B-111(a) (1)-(3) (Proposed Official Draft Feb. 1999) (Manifesting Assent).

¹⁰³ *Id.* § 2B-111(c).

¹⁰⁴ *Id.* § 2B-111, reporter’s notes, no. 5; see also *id.* § 2B-207, reporter’s notes, no. 2(b) (stating that a party is bound by terms of a record if it authenticates (signs) that record or the “party’s conduct may indicate assent to a record or a contract”).

¹⁰⁵ *Id.* § 2B-207, reporter’s notes, no. 2 (Adopting Terms of Records).

¹⁰⁶ *Id.*

Section 2B-208, in conjunction with 2B-207(b), allows the standard terms of the standard form contract to be added *after* the so-called manifestation of assent has already occurred, say, by actually using the information good at issue.¹⁰⁷ In such a case, section 2B-208 facilitates adoption of “the terms of a mass-market license for purposes of section 2B-207” if the party “manifest[s] assent or otherwise, before or during the initial performance or use of or access to the information.”¹⁰⁸

This section places a time limit on when adoption of the terms must occur¹⁰⁹ and precludes the terms added later from altering terms that were expressly agreed to by the parties to the license.¹¹⁰ The subsequent addition of post-assent standardized terms that are not unconscionable or otherwise unenforceable on grounds of public policy¹¹¹ will thus enter and become part of the initial standard form contract, unless the party who did not previously have an opportunity to review the mass market license or copy signifies a timely lack of agreement once they are presented.¹¹² In that event, section 2B-208 creates a cost-free refund if the proposed terms are unacceptable to the receiving party, or, more generally, “a right to return to a situation generally equivalent to that which would have existed if the end user had reviewed and rejected the license at the time of the initial agreement.”¹¹³

¹⁰⁷ Section 2B-207(b) states that adoption of the terms of a record between parties “may occur after commencement of performance or use under their agreement if they had reason to know that their agreement would be represented in whole or in part by a later record to be agreed, but at the time performance or use commenced there was no opportunity to review the record or copy of it or it had not been completed.”

¹⁰⁸ *Id.* § 2B-208(a).

Section 2B-207(b) clarifies that contract terms can be proposed and agreed to as part of completing the initial contract even though proposed after the beginning of performance by one or both parties. Such terms are treated as part of the initial contracting process if . . . the parties had reason to know and, thus, expected that this would occur and that terms of a record to be agreed would provide elaboration of their contract.

Id. § 2B-207, reporter’s notes, no. 3.

¹⁰⁹ *See id.* § 2B-208(a) (stating that agreement is to occur “before or during the party’s initial performance or use of or access to the information”).

¹¹⁰ *See id.* § 2B-208(a)(2) (stating that a term is not adopted if it “conflicts with terms to which the parties to the license expressly agreed”).

¹¹¹ *See id.* § 2B-208(c); *id.* § 2B-110; *id.* § 2B-105 (a)-0(b); *see also* Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1240, 1255 (1995) (discussing “the theoretical arguments in favor of and against” enforcing unbargained agreements for customer software imposed on mass-market purchasers referred to as shrinkwrap license terms, and addressing how some state courts will invalidate shrinkwrap license terms based on public policy concerns).

¹¹² *See* U.C.C. § 2B-208(b) (Proposed Official Draft Feb. 1999) (stating that a party that was unable to review a license and subsequently does not agree to its terms is “entitled to a return”).

¹¹³ *Id.* § 2B-208, reporter’s notes, no. 4(c).

This scheme is further perfected by sections 2B-209 and 2B-615. Section 2B-209 allows the formation of contracts by conduct,¹¹⁴ ostensibly in the manner familiar from U.C.C. Articles 2-204, 2-206, and 2-207(3),¹¹⁵ but with a very different object in mind. In an earlier version, the drafters made no effort to disguise that, under their modified knock-out rule, the terms of the licensor's record would have governed the scope of the transaction because such terms "define the product being provided."¹¹⁶ Because this naked validation of a licensor's "last shot" rule elicited criticism, later drafts have hidden this goal behind more subtle, if not devious, language. Thus, section 2B-209(a), while still "reject[ing] the so-called 'knock-out' rule in Section 2-207(c)" requires that "the court define the terms by considering all commercial circumstances."¹¹⁷

In reality, the current version of section 2-209(a) stresses that courts should look to "the terms and conditions to which the parties agreed"¹¹⁸ (recall the curious meaning of "agreement" under section 2B-111)¹¹⁹ and "the records exchanged" when determining the terms of the contract formed by conduct.¹²⁰ To this end, conduct will not form the contract "if there is a material disagreement about . . . a material element of scope,"¹²¹ unlike 2-207(3), which substitutes the Code's own standards in precisely this situation.¹²² Moreover, conduct will not form the contract "if the parties authenticate a record of the agreement, a party adopts the record of the other party,

¹¹⁴ See *id.* § 2B-209(a) (noting that a contract may be formed "solely by conduct of the parties").

¹¹⁵ See U.C.C. §§ 2-204, 2-206, 2-207(3) (providing that the knock-out rule in battle of the forms substitutes balanced Code standards for self-serving, non-assented-to terms in standard form contracts); James J. WHITE & ROBERT S. SUMMERS, UNIFORM COMMERCIAL CODE 34-35 (4th ed. 1995) (noting that White and Summers disagree with one another on the implications of comment 6 of section 2-207 in the context of nonwritten confirmations).

¹¹⁶ U.C.C. § 2-209(d) (Proposed Official Draft Aug. 1998); reporter's notes, no. 6; WHITE & SUMMERS, *supra* note 115, § 1-6, at 44.

¹¹⁷ U.C.C. § 2B-209, reporter's notes (Proposed Official Draft Feb. 1999).

¹¹⁸ *Id.* § 2B-209(a).

¹¹⁹ See *supra* text accompanying notes 102-04 (interpreting an agreement as defined in the context of section 2B-111).

¹²⁰ U.C.C. § 2B-209(a) (Proposed Official Draft Feb. 1999).

¹²¹ *Id.* § 2B-209(b).

¹²² See U.C.C. § 2-207(3) (stating that conduct is sufficient to establish a contract even if the writings of the parties do not establish one, in which case the contract "consist[s] of those terms on which the writings of the parties agree, together with any supplementary terms" from the U.C.C.); *Ionics, Inc. v. Elmwood Sensors, Inc.*, 110 F.3d 184, 188 (1st Cir. 1997) (holding that an additional term proposed by a seller in acknowledgment of a purchase order conflicted with a seller's term and was not part of the contract) (overruling *Roto-Lith, Ltd. v. F.P. Barlett & Co.*, 297 F.2d 497 (1st Cir. 1962)). *But see* *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1148 (7th Cir. 1997) (coming to the same result as *Roto-Lith*). For an overview, see WHITE & SUMMERS, *supra* note 115, at 33-35.

or there was an effective conditional offer under Section 2B-203 to which the party to be bound agreed”¹²³

By these means, the drafters drastically seek to limit the opportunities for a court to find that conduct formed the contract, and they continue strongly to hint that even in such cases, any contract to be formed should reflect the licensor’s own terms and conditions. This follows because “[i]n information transactions, contract terms relating to scope define the product being licensed” and the “other party cannot ask a court to provide a product which a party failed to obtain by agreement.”¹²⁴ In short, as in earlier drafts, “scope terms define the product,”¹²⁵ and because “it is only the licensor who is aware of what can be granted,”¹²⁶ the contract must normally either be formed on the licensor’s terms and conditions, or not at all.

This theme culminates in section 2B-615, which ensures that, with regard to all mass-market contracts, standard form contracts, and non-negotiable terms that Article 2B routinely validates, even when a conflict exists between the parties’ forms concerning the scope of the contract itself, it is the licensor’s own “contractual use restriction in the access contract or in another license that will normally prevail.”¹²⁷ This policy also applies to publishers’ standard form contracts with distributors, which will bind end-users who had any opportunity to review the contracts in question unless the end-user returns the information good to the distributor and receives a refund.¹²⁸

b. *Perfecting the Pro-Licensor Tilt*

Exacerbating the problem of combining purely formalistic assent and non-negotiable licenses are two additional aspects of Article 2B that favor licensors in the context of mass-market clickwrap licenses, namely, the power to validate material post-purchase terms¹²⁹ and the power to impose restraints on alienation.¹³⁰ As previously indicated, Article 2B permits the

¹²³ U.C.C. § 2B-209(c) (Proposed Official Draft Feb. 1999).

¹²⁴ *Id.* § 2B-209, reporter’s notes, no. 5.

¹²⁵ *Id.*

¹²⁶ *Id.*

¹²⁷ U.C.C. § 2B-615(a)(2) (Proposed Official Draft Aug. 1998). This was stated more vaguely in subsequent drafts. *See also id.* at reporter’s notes, no. 4 (stating that “if the [access] agreement contains license restrictions on use of the articles, those [license] terms would be governed under Article 2B”).

¹²⁸ *See id.* § 2B-617(b) (“Contracts Involving Publishers, Dealers, and End Users”) (establishing rules that govern such a situation).

¹²⁹ *See id.* § 2B-502.

¹³⁰ *See id.* § 2B-207.

incorporation of material changes to a license after the purchase,¹³¹ a possibility that is not available in a sales transaction covered by the existing Article 2.¹³² In such a case, the drafters treat continued use as a manifestation of assent to the post-purchase terms. With regard to access services, moreover, if the original clickwrap license included a minimal notification scheme for changed terms,¹³³ then no more would be required of the licensor to make subsequent changes to the license; once again, continued use would signify a manifestation of assent.

This framework creates the potential for frequent material changes to the license, which would require the licensee constantly to monitor the license for relevant changes, particularly in cases where there was no opportunity to negotiate the method of notification. In the context of mass-market licenses, the sole recourse in the event of a disagreement about a materially changed term is withdrawal from the contract.¹³⁴

Finally, Article 2B appears to override or eliminate rights under the first sale doctrine of copyright law,¹³⁵ which permits alienation of the physical copy of the work by lending, sale, or donation.¹³⁶ In this respect, Article 2B diverges from Article 2A on leasing agreements.¹³⁷ With regard to information, licensing has no downside owing to the seller's ability concurrently to license the same information to other parties. When the transaction entails a sale of information, of course, there can be no subsequent restraints on resale; but when the computerized information is licensed within the purview of Article 2B, the licensor gains newfound control of the uses and reuses of the product at minimal cost. Although there may be competition concerning licensing terms in certain niche market segments, there is no

¹³¹ See *id.* § 2B-208(b) (determining that if a party cannot review a mass-market license before becoming obligated to pay, and does not agree to the license, then the party has a right to a refund, a reimbursement, or compensation for a foreseeable loss).

¹³² See U.C.C. § 2-207 (indicating when additional terms may become part of a contract and excluding unbargained for terms that "materially alter" the agreement).

¹³³ See U.C.C. § 2B-304(b) (Proposed Official Draft Feb. 1999) ("Continuing Contractual Terms") ("If a contract provides that its terms may be changed as to future performances by compliance with a described procedure, a change proposed in good faith pursuant to that procedure [may] becom[e] part of the contract . . .").

¹³⁴ See *id.* § 2B-304(b)(2) (noting that "the procedure permits the other party to terminate the contract").

¹³⁵ See 17 U.S.C. § 109(a) (1994) ("[T]he owner of a particular copy or phonorecord lawfully made under this title . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.").

¹³⁶ See U.C.C. § 2B-502(2) (Proposed Official Draft Feb. 1999) (mandating that a contractual "term prohibiting transfer of a party's interest is enforceable").

¹³⁷ See U.C.C. § 2A-403(c) (Proposed Official Draft Mar. 1999) ("In a consumer lease to prohibit the transfer of an interest of a party under the lease contract or to make a transfer an event of default, the language must be specific, be in record, and be conspicuous.").

benefit to sale that one cannot increase by licensing in sole source or monopolistic market segments. Given the non-fungible nature of information (and the widening range of statutory intellectual property rights, likely to cover information goods), these monopolistic niches are unlikely to shrink.

If licensors can readily limit the ability of licensees temporarily or permanently to alienate the information in question, there may be grave social costs due to the inability of researchers to otherwise gain access to basic information needed for scientific, medical, or other socially beneficial research. In an information environment where an upstream use does not alter the original owner's pool of information, strict limitations on alienation could block or reduce other upstream benefits that become impossible without the dissemination of these building blocks of knowledge. Libraries, research institutes, and educational institutions may all suffer if such restraints on alienation become the norm.

In response to the question of what the licensee's corresponding benefits might be under a set of default rules so heavily skewed toward licensors, the drafters lamely respond that Article 2B "creates procedural and substantive safeguards for mass-market contracts," "creates [a] cost free refund right on refusal of mass market license," confirms "a perfect tender rule in mass-market" transactions, "creates [a] right of quiet enjoyment of a license," and "presumes [a] perpetual term in some [software] licenses."¹³⁸

The one thing that proposed Article 2B probably will not do for licensees, however, is subject the non-negotiable terms that it routinely validates to objections based on the doctrine of unconscionability that applies expressly to mass-market licenses in section 2B-208.¹³⁹ On the contrary,

[t]he fact that license terms are non-negotiable or that the contract may constitute a "contract of adhesion" does not invalidate it under general contract law or this article. A conclusion that a contract is a contract of adhesion may, however, require that courts take a closer look at contract *terms* to prevent unconscionability. . . . Nevertheless, when applicable, the closer scrutiny followed in general commercial contract law may be appropriate here.¹⁴⁰

There is, indeed, a whiff of "caveat emptor" in such cases, despite the obvious objection that neither party bargained for terms. This follows, in the Reporter's mind at least, because "the vendor did not agree to sell under

¹³⁸ U.C.C. art. 2B Preface: Information Age in Contracts, Introduction, Some Issues Where No Material Change Occurs (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft).

¹³⁹ See *id.* § 2B-208(a)(1) (requiring that a term does not become part of the contract for a mass-market license if it is unconscionable); see also *id.* § 2B-110 (making the doctrine of unconscionability more generally available).

¹⁴⁰ U.C.C. § 2B-208, reporter's notes, no. 2 (Proposed Official Draft Feb. 1999).

any other terms than those set out in its contract and, as long as there is fairness, disclosure or notice to the other party, contract law does not vitiate those terms.”¹⁴¹

2. Non-negotiable Terms Valid Against the World

Standard form contracts reduce transaction costs and increase efficiency. Because we understand the critical role that they could play in constructing the digitized information economy, we remain wary of premature attempts to overregulate such contracts or that economy. Like the drafters of Article 2B, therefore, we reject the view that contract law “should mandate terms, conditions and risks under which information is distributed,”¹⁴² if only because we look to freedom of contract to reveal what the appropriate terms, risks, and conditions ought to be.

Unlike the drafters, however, we believe that the “anything goes” approach to non-negotiable terms summarized above would yield unacceptably high social costs and could suffocate, rather than promote, the long-term growth of the information economy. In this regard, we construe the notion of non-negotiable terms broadly, and would not view “click-on” access contracts or shrinkwrap software contracts as “manifestations of assent” within the meaning given that term in Article 2 of the U.C.C.¹⁴³ No one should equate a stoic willingness to endure tribulations and overreaching with the quantum of “mutual assent” that supposedly underlies classical contract theory. Merely because a depositor hypothetically can back out of a bank’s request to approve a two dollar charge for allowing one to withdraw one’s own funds via an automatic teller machine does not mean that the depositor meaningfully assents to that charge, especially when he or she needs money in a hurry and all banks levy the same charge.

¹⁴¹ U.C.C. § 2B-208, reporter’s notes, no. 3 (Proposed Official Draft Feb. 1998) (omitted in subsequent drafts). The Reporter added the following disclaimer somewhat defensively: “Some argue that law should preclude a vendor from defining the terms under which it markets its product or service. That viewpoint argues that law should mandate terms, conditions and risks under which information is distributed. *This regulatory structure is not accepted in Article 2B.*” *Id.* The omission of these statements in subsequent drafts does little to remove the “whiff” of caveat emptor noted in the text.

¹⁴² *Id.*

¹⁴³ See U.C.C. §§ 2-102, 2-204, 2-206 (1998) (defining the scope of transactions covered by Article 2, the formation of a sales contract, and the terms “offer” and “acceptance” in this context). See generally Michael M. Greenfield, *The Role of Assent in Article 2 and Article 9*, 75 WASH. U. L.Q. 289, 302-03 (1997) (discussing that actual assent is necessary for an apparent agreement to become binding in the context of Article 2 of the U.C.C.). For a specific discussion of assent and its relationship to copyright policy, see Elkin-Koren, *supra* note 4, at 108-13.

In other words, we reject the drafters' notion that one has assented to non-negotiable terms, especially one-sided, harsh or oppressive terms, merely because one has failed to exercise the nominal power to back out or to return an information product for a refund.¹⁴⁴ If, moreover, reasonably priced substitutes were unavailable because of actual and legal monopolies surrounding the delivery of digitized information products, or if all the suppliers of such products were to adopt similar terms and conditions despite nominal market advantages to the contrary, then the economic evils likely to result from a chronically diminished capacity to assent could become disproportionately magnified.

In our view, mutual assent, in the sense of the prototypical rules of Article 2, requires more than the mere ability to accept or decline the terms of an adhesion contract.¹⁴⁵ Here is where the goals of Article 2B differ profoundly from those of Article 2 as developed by Professor Karl Llewelyn.¹⁴⁶ In Article 2, the "bargain-in-fact" concept of "agreement" promulgates a methodology for ascertaining the true assent of the parties based on the larger context in which modern sales transactions occur.¹⁴⁷ This methodology prevents either a buyer or seller from using standard form contracts to impose terms and conditions to which neither one had actually agreed.¹⁴⁸

¹⁴⁴ The drafters support their view with a vague citation to a single European decision, *Beta Computers (Europe) Ltd. v. Adobe Systems (Europe) Ltd.*, 1[1996] FSR 367 (Sess. Outer House 1995). See U.C.C. § 2B-617, reporter's notes, no. 2(c) (explaining that *Beta Computer* supports the proposed U.C.C. sections 2B-617(b)(1)-(b)(2), which require that if an end-user's right to use information is subject to a license from the publisher, and there was no opportunity to review the license before payment, then the contract is conditioned upon the end-user's agreement; and if the end-user does not agree by assent or otherwise, the end-user has a right to a refund).

¹⁴⁵ True, courts remain willing to enforce contracts of adhesion as a necessary evil, and the drafters pointedly remind us of this practice. See § 2B-208, reporter's notes, no. 3, quoted *supra* text accompanying note 140 (citing authorities).

¹⁴⁶ For the role of Karl Llewelyn and the philosophical underpinnings of Article 2 of the U.C.C., see ROBERT J. NORDSTROM ET AL., PROBLEMS AND MATERIALS ON SALES 28 (1982); and GRANT GILMORE, THE AGES OF AMERICAN LAW 83-86 (1977).

¹⁴⁷ See U.C.C. § 1-201(3) (definition of agreement); *id.* § 2-105 (developing components of "bargain-in-fact"); *id.* § 2-208 (implementing "bargain-in-fact").

¹⁴⁸ See *id.* § 2-204 (defining the formation of a contract for sale); *id.* § 2-207 (stating additional terms in acceptance or confirmation). When the parties' conflicting forms otherwise fail to agree, but their conduct recognizes the existence of a contract, that contract consists of the standards embodied in Article 2 itself in addition to any genuinely agreed terms. See *id.* §§ 2-204, 2-207(3). These standards are thought to be those that most buyers and sellers would have negotiated in the absence of transaction costs. See Johnston, *supra* note 18, at 615-16 (defining a default contract term as "an implementation of a contract unless the contracting parties explicitly agree to reject it.").

In contrast, Article 2B introduces a methodology for manufacturing the appearance of assent¹⁴⁹ to standard form contracts that powerful licensors will routinely impose on the rest of the world. For example, as implemented in the current draft of Article 2B, licensors who combine adhesion contracts,¹⁵⁰ that is, online “click on” or product-based “shrinkwrap” licenses,¹⁵¹ with technical protection measures¹⁵² would enjoy a virtually unlimited and perpetual power to control access to, and use of, digitized information goods.¹⁵³ No third parties seeking entry to the proprietor’s electronic gateway¹⁵⁴ could legally obtain the desired information without accepting the terms and conditions of the latter’s standard form contract, and this same contract will likely prohibit further transfer or sale of the information once obtained.¹⁵⁵

Yet, the efficiency said to justify this unbalanced approach is nowhere demonstrated in either the Reporter’s Notes or the economic literature, and there is more than a hint of ideological bias surrounding the entire proj-

¹⁴⁹ See U.C.C. § 2B-111 (implementing the manifestation of assent doctrine) (Proposed Official Draft Feb. 1999).

¹⁵⁰ See Friedrich Kessler, *Contracts of Adhesion—Some Thoughts About Freedom of Contract*, 43 COLUM. L. REV. 629, 640-41 (1943) (discussing how the shift toward standard contracts has been aided by our society’s commitment to the notion of freedom); Lemley, *supra* note 111, at 1252 (discussing how courts have refused to enforce shrinkwrap license terms after deeming them contracts of adhesion). The first European comments on the draft Article 2B emphasize the extent to which they are industry-friendly rather than user-friendly by European standards. See François Dessemontet, *La Dématérialisation des Conventions*, in PRAXIS JURISTISCHE AKTUELLE 939 (St. Gallen, Switzerland, 1996).

¹⁵¹ See David A. Rice, *Digital Information As Property and Product: U.C.C. Article 2B*, 22 U. DAYTON L. REV. 621, 622 (1997) [hereinafter Rice, *Digital Information*] (discussing the legal issues raised by the “transfer of property rights in digital information”); David A. Rice, *Sega and Beyond: A Beacon for Fair Use Analysis . . . at Least As Far As It Goes*, 19 U. DAYTON L. REV. 1131, 1133-37 (1994) [hereinafter Rice, *Sega and Beyond*] (examining the evolution of computer program copyright law in America).

¹⁵² See Julie E. Cohen, *A Right to Read Anonymously: A Closer Look at “Copyright Management” in Cyberspace*, 28 CONN. L. REV. 981, 983-89 (1996) (discussing the technologies that copyright owners may utilize to monitor and control access to their information).

¹⁵³ See Jessica Litman, *The Tales That Article 2B Tells*, 13 BERKELEY TECH. L.J. 931, 937-38 (1998) (concluding that “the tales that Article 2B tells us about its relationship with copyright law are an unreliable guide to what that relationship is likely, or is intended, to be”).

¹⁵⁴ Cf. Digital Millennium Copyright Act, Pub. L. No. 105-304, § 403, 112 Stat. 2860, 2889 (1998) (implementing the World Intellectual Property Organization Copyright Treaty and Performances and Phonograms Treaty).

¹⁵⁵ See U.C.C. § 2B-502 (Proposed Official Draft Feb. 1998) (providing the rules for transfers of contractual interests); see also David A. Rice, *License with Contract and Precedent: Publisher-Licenser Protection Consequences and the Rationale Offered for the Non-transferability of Licenses Under Article 2B*, 13 BERKELEY TECH. L.J. 1239, 1246 (1998) (“Widespread use of standard forms, shrinkwrap or otherwise, . . . makes it a software or information copy from any person without the consent of the publisher-licensor.”).

ect.¹⁵⁶ As an empirical reality, meanwhile, the inferior status of licensees under Article 2B has discouraged even giant entertainment conglomerates from opting into the project, because most such enterprises will routinely need to license almost as many properties from suppliers as they themselves will license to investors and consumers.¹⁵⁷

The dangers of this unbalanced approach become even greater when the adhesion contracts in question routinely implement the legal monopolies of intellectual property rights. There is a risk, indeed, that this deadly combination will become the primary vehicle for determining the balance between private and public interests under the relevant intellectual property laws themselves.

Recall that, when conflicts arise between federal intellectual property laws and state contract laws covered by Article 2B, the only limits on freedom of contract that the drafters initially recognized were the doctrines of constitutional and statutory preemption mentioned above.¹⁵⁸ The preemp-

¹⁵⁶ Cf. Cohen, *supra* note 43, at 484 n.77 (noting that the “current draft of Article 2B is much less consumer-friendly than Article 2”).

¹⁵⁷ See, e.g., U.C.C. § 2B-104, reporter’s notes, nos. 2 & 3 (Proposed Official Draft Feb. 1999) (excluding core financial and entertainment industries); see also Kane, *supra* note 19, at 1017-18 (explaining the need for major corporations to opt out of Article 2B); Letter from Vans Stevenson, Senior Vice President, Motion Picture Association of America, to Carlyle C. Ring, Jr., Chair, Article 2B Drafting Committee (Nov. 9, 1998), available in *The 2B Guide* (last modified Nov. 10, 1998) <<http://www.2bguide.com/docs/mpaa1198.html>> (stating, in part, that “[w]e are convinced that exemptions cannot be drafted with enough precision to prevent the unintended application of Article 2B provisions to a multitude of transactions in our industries either directly or by analogy”).

The European Union has chosen to address the problem of consumer contracts, as distinct from supplier contracts, in the context of unfair competition. E.U. Council Directive on Unfair Terms in Consumer Contracts, 1993 O.J. (L95) 29. For a discussion of the Directive, see Stephen Weatherill, *Prospects for the Development of European Private Law Through “Europeanisation” in the European Court—the Case of the Directive on Unfair Terms in Consumer Contracts*, 3 EUR. REV. PRIVATE L. 307 (1995). For other examples of how the European Union is addressing subjects related to Article 2B, see European Directive on Distance Selling of 20 May 1997, no. 97/7/CE, 1997 OJ (L144) 19-27, and Commission Recommendation of 30 July 1997 on Digital Signatures, no. 97/489/CE, 1997 OJ (L208) 52.

¹⁵⁸ See *supra* notes 8, 26, 42 and accompanying text (discussing the constitutional grant of congressional authority to regulate copyright and patent protection). In the latest iteration of Article 2B, the drafters have also grudgingly been compelled to accept a “fundamental public policy” exception derived from the doctrinal approach that we launched in the earliest, unpublished version of this Article. See U.C.C. § 2B-105 (Proposed Official Draft Feb. 1999) (defining the relationship between federal and state law); Jerome H. Reichman & Jonathan A. Franklin, “Privately Legislated Intellectual Property Rights: The Limits of Article 2B and the U.C.C.,” paper presented to the Symposium on Intellectual Property & Contract Law in the Information Age: The Impact of Article 2B of the U.C.C. on the Future of Transactions in Information and Electronic Commerce, April 23-25, 1998 (Berkeley, CA). Because we discuss this response to our proposal below, see *infra* text accompanying notes 340-49, we focus only on the issue of preemption here.

tion doctrine is expressly carried into Article 2B by dint of section 2B-105, which declares that “[a] provision of this article which is preempted by federal law is unenforceable to the extent of such preemption.”¹⁵⁹

The drafters, however, hasten to add a disclaimer that overtly downplays the importance of this safeguard. They suggest that the preemption doctrine will seldom apply to “computer information” contracts in practice because “a contract deals with the relationship between parties to an agreement, while property law in the Copyright Act deals with property interests good against persons with whom the property owner has not dealt.”¹⁶⁰ By thus distinguishing “rights between *parties to the agreement*” from “rights against *all the world*,” the drafters conclude that “[t]hey are not equivalent.”¹⁶¹

We reject this sophistic conclusion with respect to non-negotiable terms in mass-market information contracts because, as validated by Article 2B, they will usually lack the mutual assent that is the typical attribute of an “agreement” within the prototypical meaning of that term, as set out in Article 2 itself.¹⁶² This subordination of qualitative assent, deriving from the bargain-in-fact concept of “agreement” under Article 2 of the U.C.C.,¹⁶³ to a mere acknowledgement of a willingness to endure non-negotiable terms by “manifesting assent” within the purview of Section 2B-111 would, in and of itself, tend to eliminate any meaningful distinction between “rights between parties to an agreement” and “rights against all the world.”

Moreover, one cannot isolate the indifference to real or qualitative assent that pervades Article 2B from the restored power of the two-party deal in the digital environment. This power makes it possible to condition access

¹⁵⁹ U.C.C. § 2B-105(a) (Proposed Official Draft Feb. 1999).

¹⁶⁰ U.C.C. § 2B-105, reporter’s notes, no. 2 (Proposed Official Draft Aug. 1998).

¹⁶¹ *Id.* at Preface: Information Age in Contracts, Pt. 2: Basic Themes, Intellectual Property Overlay (omitted in Feb. 1999 draft).

¹⁶² See John E. Murray, Jr., *The Standardized Agreement Phenomena in the Restatement (Second) of Contracts*, 67 CORNELL L. REV. 735, 741-42 (1982) (discussing the U.C.C. definitions of “contract” and “agreement”). This interpretation of U.C.C. section 2-207 was rejected by Judge Easterbrook in both *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1449 (7th Cir. 1996), holding that shrinkwrap licenses are enforceable unless their terms are objectionable on general contract grounds, and *Hill v. Gateway 2000, Inc.*, 105 F.3d 1147, 1148 (7th Cir. 1997), *cert. denied*, 118 S. Ct. 47 (1997), holding that contract terms, which were contained in the box along with the purchased computer, and which were said to govern unless the consumer returned the computer within 30 days, were binding on the buyer who did not return the computer. *But see* Alexander M. Meiklejohn, *Castles in the Air: Blanket Assent and the Revision of Article 2*, 51 WASH. & LEE L. REV. 599, 603 (1994) (arguing that the U.C.C. definition of the term “agreement” focuses the court’s inquiry on the actual, not the “deemed,” agreement). For an update on the revision process for U.C.C. section 2-207, see Greenfield, *supra* note 143, at 304-14, analyzing the approach of the proposed revisions to Article 2.

¹⁶³ See *supra* note 147.

to a growing number of today's most important information goods on acceptance of the electronic gatekeeper's terms.

If gatekeepers then combine this power with the power inherent in Article 2B to impose non-negotiable, standard terms and conditions on all those who seek access (or who otherwise must submit to variants of the electronic gatekeeper's control), the net effect is privately to impose "rights 'against the world-at-large.'"¹⁶⁴ In short, when the restored power of the two-party deal in the digital universe is combined with the power to impose non-negotiable terms, it produces contracts (not "agreements") that are roughly equivalent to private legislation that *is* valid against the world.

3. Changing the Balance of Public and Private Interests

This combination of powers makes a mockery of the drafters' pious claims that no material change occurs in the relationship between contract and intellectual property law,¹⁶⁵ and that Article 2B "takes no position"¹⁶⁶ concerning controversial issues pertaining to the interface between state and federal law. Whether intended or not, the opposite is true.

In practice, the drafters' primary goal is to ensure that Article 2B validates mass-market contracts and non-negotiable terms affecting access to, and user limitations on, all the information goods within the scope of Article 2B.¹⁶⁷ At the same time, they fail to build in adequate constraints either to defend public-interest uses of information goods covered by intellectual property rights from standardized overrides, or to limit anticompetitive restraints on access to, and use of, such information goods that may result from the dictates of sole-source providers and contracts of adhesion in general. The power of the two-party deal thus enables the licensor to override existing constraints derived from federal intellectual property policies in single contracts between the parties, and the licensors' standard form contracts ensure that the same override applies case by case to every purchaser or user who seeks access to the relevant information goods.

How the provisions of Article 2B interact with the power of the two-party deal will thus determine the extent to which that power can further distort and exaggerate the potential anticompetitive effects of absorbing

¹⁶⁴ U.C.C. § 2B-105, reporter's notes, no. 1 (Proposed Official Draft Aug. 1998).

¹⁶⁵ See U.C.C. art. 2B Preface: Information Age in Contracts, Introduction, Some Issues Where No Material Change Occurs (Proposed Official Draft Aug. 1998) (omitted in Feb. 1999 draft) ("[R]elationship between contract & intellectual property law").

¹⁶⁶ *Id.* at Introduction: Intellectual Property Overlay.

¹⁶⁷ See Raymond T. Nimmer, *Article 2B: An Introduction*, 16 J. MARSHALL J. COMPUTER AND INFO. L. 211, 251 (1997) (discussing Article 2B's effects on mass-market contracts and non-negotiated transactions).

marginal works—borderline functional and factual works—into a copyright law developed for true authors and artists. It will also determine the overall competitive or anticompetitive impact of the hybrid legal regimes proliferating in the penumbra between the patent and copyright paradigms.¹⁶⁸

With regard to copyright law, for example, software producers who use shrinkwrap licenses to bind purchasers one by one could neutralize the judicially imposed limits on the scope of protection described above, which have produced a delicate, pro-competitive balance.¹⁶⁹ Software vendors could also override the express exceptions and limitations of copyright law, including the negative rights of users codified in that law¹⁷⁰ and other elements of the statutory “cultural bargain.” Yet, these same exceptions and limitations, as heretofore embodied in a low-protectionist scheme, were at least partly responsible for U.S. dominance of today’s hightech industries in the global economy, and they play a critical role in fostering democratic discourse.¹⁷¹

Similarly, Article 2B eliminates rights accruing from the first-sale doctrine of copyright law,¹⁷² which permits alienation of the physical copy of a work by lending, sale, or donation.¹⁷³ Under that doctrine, libraries, research organizations, and educational institutions have reaped significant advantages. We are not suggesting that a first-sale doctrine should artificially be transposed to the digital environment.¹⁷⁴ But we do question the wisdom of leaving libraries, research organizations, and educational institutions at the mercy of the content providers’ extraordinary powers to impose

¹⁶⁸ See *supra* text accompanying notes 44-51 (“Collapse of the Patent-Copyright Dichotomy”).

¹⁶⁹ See 17 U.S.C. § 107 (1994) (expressing the fair use limitations on exclusive rights); see also *id.* § 102(b) (expressly excluding the extension of protection to any “idea, procedure, process, system, method of operation, concept, principle, or discovery”); *supra* text accompanying notes 54-57 (discussing § 102(b)).

¹⁷⁰ 17 U.S.C. § 102(b).

¹⁷¹ See MARCI A. HAMILTON, COPYRIGHT AND THE CONSTITUTION (forthcoming 1999) (discussing the constitutional aspects of copyright law and history); Netanel, *supra* note 35, at 285-88 (describing copyright law as democratic discourse).

¹⁷² See U.S.C. § 2B-502.

¹⁷³ See 17 U.S.C. § 109(a) (1994) (“[T]he owner . . . is entitled, without the authority of the copyright owner, to sell or otherwise dispose of the possession of that copy or phonorecord.”).

¹⁷⁴ Such proposals abound. See, e.g., Keith Kupferschmid, *Lost in Cyberspace: The Digital Demise of the First-Sale Doctrine*, 16 J. MARSHALL J. COMPUTER & INFO. L. 825, 855 (1997) (proposing that Congress consider a rental right in digitized copies of works); Mark Stefik, *Shifting the Possible: How Trusted Systems and Digital Property Rights Challenge Us to Rethink Digital Publishing*, 12 BERKELEY TECH. L.J. 137 (1997) (discussing the potential role of technology, particularly trusted systems, in preserving a first-sale right in a digital environment).

contracts of adhesion under Article 2B without any corresponding doctrinal tools with which to limit those powers and defend long-established public good uses of information.

The harmful social consequences likely to ensue from this combination of powers then is magnified further by the fact that many, if not most, of the licensors in question will already benefit from the ever stronger hybrid legal monopolies that intellectual property laws increasingly bestow in exchange for an ever decreasing quantum of creative achievement.¹⁷⁵ Unless otherwise restrained by the vague doctrines of “misuse”¹⁷⁶ or “antitrust,”¹⁷⁷ the power to impose privately legislated rights under Article 2B becomes a power to determine the competitive boundaries of the underlying intellectual property rights themselves.

We deplore this indifference to the fate of public good uses of information in the digital economy, even if we remain less certain than others about

¹⁷⁵ The currently proliferating hybrid intellectual property regimes, *see supra* text accompanying notes 44-51 (noting how the “classical system [of the patent-copyright dichotomy] was ill equipped to deal with commercially valuable bundles of information . . . available to the public under present day conditions”), intentionally deviate from the basic premises of the patent and copyright paradigms, without resting upon any solid conceptual or economic foundations, *see* Reichman, *supra* note 35, at 480-89, 505 (discussing “the bipolar structure of the international intellectual property system” and where deviant regimes fit empirically into more classical legal frameworks). They are ad hoc protectionist “epicycles” conjured up by legislative tinkerers to address the symptoms that accompany the collapse of the patent-copyright dichotomy. *Id.* At their best, they lack the kind of well-thought-out exceptions and limitations that defend the public-interest under the domestic patent and copyright laws. At their worst, they are mere products of special interest lobbies, who have increasingly persuaded legislators to auction off slices of the public domain to the highest bidders. The *sui generis* database laws recently enacted in the European Union, *see* E.U. Directive, *supra* note 38, at preamble (establishing legal protection for databases), and now pending before Congress illustrate this latter phenomenon. *See* Collections of Information Antipiracy Act, H.R. 354, 106th Cong. (1999) (proposing the creation of a new form of protection for databases).

¹⁷⁶ *Practice Management Info. Corp. v. American Med. Ass’n*, 121 F.3d 516, 520 (9th Cir. 1997), *cert. denied*, 118 S. Ct. 2367 (1998) (adopting the rule that misuse is a defense to copyright infringement); *Lasercomb Am., Inc. v. Reynolds*, 911 F.2d 970, 974-77 (4th Cir. 1990) (providing an overview of the misuse of the patent defense and concluding that an analogous misuse of the copyright defense should be recognized). For in-depth discussions of copyright misuse, *see* Mills, *supra* note 68, at 117-20, discussing the *Lasercomb* decision and the misuse defense generally, and Ramsey Hanna, *Misusing Antitrust: The Search for Functional Copyright Misuse Standards*, 46 STAN. L. REV. 401, 401 (1994), “challeng[ing] the wisdom of an antitrust-based approach to copyright misuse.” *See also* R. Nimmer, *supra* note 2, at 869 (stating that “[t]he role of copyright misuse theory in modern law is suspect”). For a perspective supporting the application of the misuse doctrine in the context of Article 2B, *see* Lemley, *supra* note 12, at 111; Rice, *supra* note 4, at 550-51 (noting the potentially expansive nature of the misuse doctrine).

¹⁷⁷ *Broadcast Music, Inc. v. CBS*, 441 U.S. 1, 4 (1979) (presenting the case as one concerning both copyright and antitrust laws).

the specific ways in which a rich public-interest heritage ought to be preserved within the evolving digital environment.¹⁷⁸ What seems clear is that, unless current proposals, like those embodied in the draft Article 2B of the U.C.C., are appropriately modified, the adhesion contracts that they routinely validate will tend to make data and information artificially scarce, even in sectors where such resources are currently plentiful. This phenomenon, in turn, will increase the costs of virtually all uses of information, including the most socially important public good uses, without necessarily producing any corresponding gains in efficiency or innovative outputs.

As matters stand, in short, Article 2B creates a basis for radically changing the existing intellectual property balance of public and private interests by broadly endorsing non-negotiable licenses that are the equivalent of private legislation. Besides the obvious risk of undue social costs likely to flow from such licenses, there is the further risk of misbundled property rights in the information economy, which new evidence suggests are likely to reduce downstream applications of promising scientific or theoretical breakthroughs.¹⁷⁹ The end result is a formula for an unbalanced economic system in which the mini-monopolies that seem destined to populate tomorrow's digital environment increasingly alter the statutory balance in a manner that is more consistent with the drafters' own high-protectionist bias, but arguably detrimental to U.S. industry based on past economic experience.

II. RECONCILING FREEDOM OF CONTRACT WITH PUBLIC GOOD USES OF INFORMATION

The foregoing criticism suggests that the drafters of Article 2B have taken a leap into the dark by abandoning the more pro-competitive policies

¹⁷⁸ See, e.g., McManis, *supra* note 1, at 184-85 (expressing the need for the preservation of the public-private balance in the information age); D. Nimmer, *supra* note 9, at 77 (stating that "tipping the balance too precipitously in one direction can be as baleful as tipping it in the other"). But see R. Nimmer, *supra* note 2, at 829-30 (stating that "Article 2B, therefore, is not a threat to intellectual property law concepts or to the established political and social importance of information in our culture[, . . . but i]n fact, it supports and promotes those concepts in a new field of commerce").

¹⁷⁹ See Heller & Eisenberg, *supra* note 20, at 699 (discussing how the Patent Office may create a biomedical anticommmons, which are situations in which resources are underused "by intellectual property rights in potential future products or by permitting too many upstream patent owners to stack licenses"); Glenn McGee, *Gene Patents Can Be Ethical*, 7 CAMBRIDGE Q. HEALTHCARE ETHICS 417, 420 (1998) (discussing one argument against gene patents that holds that such patents can create a "toll bridge" that will "clog" genetic research and create an anticompetitive environment that will stifle new developments). For a discussion of the anticommmons problem in other contexts, see Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621, 623, 627-42 (1998), illustrating an anticommmons problem in the former Soviet Union.

of the past, which ensured easy access to information in a broad public domain for value-adding users. How to reconcile freedom of contract with the functional preservation of public good uses of information instead ought to pose a crucial problem for any project to devise a comprehensive set of default rules governing "computer information transaction[s]."¹⁸⁰ Yet, the drafters fail to address these broader issues because of their obsession with the risks of market failure and of suboptimal investment that could arise if free riders used modern technology to appropriate information goods without contributing to the costs of production.¹⁸¹

A truly enlightened set of default rules would not just stimulate investment in new information goods, it would also chart appropriate limits to the contractual powers of information providers. The proper goal is to preserve both the competitive environment and the kind of public good uses of information that account for U.S. technological predominance in the global marketplace. In the rest of this Part, we attempt to correct this imbalance by proposing supplementary doctrinal tools, which, if incorporated into Article 2B, could better reconcile the drafters' quest for economic efficiency through freedom of contract with the preservation of public good uses of information that we deem indispensable for sound economic development.

A. *In Search of Existing Means to Redress the Statutory Imbalance*

Professor Samuelson, among others, has stressed the importance of formulating a national information policy that might free us from the grip of legal institutions handed down from the Industrial Revolution.¹⁸² However, the premises for such an ideal solution are nowhere in sight. The sad truth is, we do not know enough about the economics of information goods to measure the relative social costs of either a strong- or a weak-protectionist approach to digitized information goods against the expected social gains. We do not, for example, understand the economics of network externalities;¹⁸³ we know little about public-private initiatives that deviate from

¹⁸⁰ See U.C.C. §§ 2B-101, 2B-102(a)(9) (defining "computer information transactions").

¹⁸¹ See R. Nimmer, *supra* note 2, at 889 ("Commercialization is an affirmative and positive aspect of the intellectual property regime with which this country has thrived, and commercialization functions on the basis of contractual relationships that tailor to the everchanging marketplace.").

¹⁸² See Pamela Samuelson (1998) (unpublished and untitled draft) (on file with authors) (expressing the need for a national information policy); see also Litman, *supra* note 153, at 931 (criticizing Article 2B's preface for failing to outline Article 2B's potential effect on copyright law).

¹⁸³ See John H. Barton, *The Balance Between Intellectual Property Rights and Competition: Paradigms in the Information Sector*, 18 EUR. COMPETITION L. REV. 440, 442-43 (1997) (discussing the balance between intellectual property rights and competition in the

standard regulatory models;¹⁸⁴ and we have just begun to experiment with alternative approaches, such as electronic publishing, that make their own rules.¹⁸⁵

1. Lack of Guidance from a True Information Policy

Against this background, the drafters of Article 2B have properly sought to avoid premature overregulation that could inhibit entrepreneurs from devising innovative solutions to the challenges of an information-based economy.¹⁸⁶ We concede that legislators simply do not know enough to regulate wisely even if they were otherwise capable of enacting wise regulations,¹⁸⁷ and scholars do not really know the socially optimal balance between legal incentives to create or invest and free competition in the emerging digital environment. By the same token, the chances that good outcomes will emerge from deliberations heavily influenced by special interest lobbies seem even more remote.¹⁸⁸

context of industry standards); see also Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479, 591-608 (1995) (describing the economics of networks as "still under construction," without proposing guidelines for courts in evaluating related claims); Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 STAN. L. REV. 1045, 1066-71 (1989) (discussing the "dual and potentially conflicting concerns" involved in creating legal protection for computer-human interfaces in relation to the network externality problem).

¹⁸⁴ See J.H. Reichman & David Lange, *Bargaining Around the TRIPS Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions*, 9 DUKE J. COMP. & INT'L L. (forthcoming 1999) (analyzing the need for private-public initiatives to reduce transnational tensions case by case without litigation).

¹⁸⁵ See Joint ICSU Press/UNESCO Expert Conference: *Electronic Publishing in Science*, Proceedings of the Joint ICSU Press UNESCO Expert Conference, Paris, Fr. (Feb. 1996); Henry H. Perritt, Jr., *Market Structures for Electronic Publishing and Electronic Contracting on a National Research and Education Network: Defining Added Value*, in BUILDING INFORMATION INFRASTRUCTURE 344 (Brian Kahin ed., 1992) (providing a framework for thinking about electronic publishing and discussing issues of product characteristics, market structure, and government regulation); see also Keith Aoki, *(Intellectual) Property and Sovereignty: Notes Toward a Cultural Geography of Authorship*, 48 STAN. L. REV. 1293, 1333-38 (1996) (discussing digital technology and intellectual property rights).

¹⁸⁶ See R. Nimmer, *supra* note 167, at 222 (stating that "[p]arties should be able to enter into legitimate agreements to buy and sell products and services across the Internet with minimal government involvement or intervention" (quoting U.S. WHITE HOUSE REPORT, A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE (July 1, 1997))).

¹⁸⁷ See generally DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* (1991) (noting that legislation is often the result of powerful interest groups with narrow interests and that as such it may not be the product of perfect information or designed for a generalized public benefit).

¹⁸⁸ See Nicholas S. Zeppos, *Reforming a Private Legislature: The Maturation of the American Law Institute as a Legislative Body*, 23 L. & SOC. INQUIRY 657-66 (1998) (criticizing ALI's legislative process). See generally Symposium, *From the Trenches and Towers*, 23 L. & SOC. INQUIRY, Summer 1998, at 621 (exploring the role of ALI as a legislative

In the absence of an enlightened information policy to address these issues, one must acknowledge even the possibility that the balance of public and private interests under classical intellectual property laws might produce unexpected and socially undesirable results if transplanted badly into the information environment.¹⁸⁹ Yet, while questioning the existence of credible empirical evidence to map these alleged dysfunctions with any degree of certainty, we remain confident that the public interest in education, science, research, technical innovation, free speech, and the preservation of competition remains stronger than ever in the post-industrial economy.¹⁹⁰ If so, the drafters' tendency to focus only on the positive role of private decision making, while ignoring both old and new public-interest concerns, merely increases the difficulties of coordinating state contract law with federal intellectual property policies bearing on the legal control of information.

The federal appellate courts sometimes evince a similar tendency to oversimplify the task of reconciling competing state contract law and state and federal intellectual property law in the new information economy. For example, in the much discussed case of *ProCD, Inc. v. Zeidenberg*,¹⁹¹ a panel of the United States Court of Appeals for the Seventh Circuit favored

body). For a selective bibliography of further critiques and favorable views of the revision process, see Fred H. Miller, *Realism Not Idealism in Uniform Laws—Observations from the Revision of the U.C.C.*, 39 S. TEX. L. REV. 707, 708 n.5 (1998).

¹⁸⁹ Cf. Paul Edward Geller, *From Patchwork to Network: Strategies for International Intellectual Property in Flux*, 31 VAND. J. TRANSNAT'L. L. 553 (1998) (exploring how national methods of intellectual property protection can survive in an era of globalized transactions in intellectual property and posing problems of contract enforcement); Paul Edward Geller, *Legal Transplants in International Copyright: Some Problems of Method*, 13 UCLA PAC. BASIN L.J. 199, 218-29 (1994) (proposing criteria for acceptable transplants and highlighting the cultural specificity of many regimes).

¹⁹⁰ Indeed, one of our greatest fears is that new measures to increase incentives to invest will actually impede or diminish the upstream availability of ideas, facts, data, and other building blocks of knowledge. This would be to the detriment of our continued capacity to dominate the global market for downstream applications of technical advances. See, e.g., ICSU/CODATA Group on Data & Information, *Position Paper on Access to Databases*, Presentation before the World Intellectual Property Organization Information Meeting on Database Protection, Geneva, Switz. (Sept. 17-19, 1997), available at <http://www.codata.org/programs/codata/data_access/wipo.pdf> (arguing that *sui generis* database proposals will have a negative impact on scientific and technological advances and stressing the importance of access to information); Jerome H. Reichman, *Why Science Is Concerned About an Intellectual Property Right in Databases*, in AAAS SCIENCE AND TECHNOLOGY POLICY YEARBOOK 291-312 (Albert H. Tych et al. eds., 1998) (discussing "the need for vigilan[ce] lest special-interest legislation destabilize the basic scientific and educational enterprise on which the [national innovation] system firmly rests").

¹⁹¹ 86 F.3d 1447, 1447-48 (7th Cir. 1996) (holding that a shrinkwrap license included in the packaging of computer software was binding on the consumer, that enforcement of the license under state law did not create exclusive rights, and that enforcement was not preempted by the Federal Copyright Act).

the routine enforcement of shrinkwrap licenses, in part because of reduced transaction costs and the resulting gains in efficiency.¹⁹² We believe, in contrast, that courts need to distinguish socially beneficial shrinkwrap licenses, especially those likely to produce demonstrably pro-competitive effects, from those likely to reduce competition and to retard innovation. If the panel reached the right result on the facts put forward in *ProCD*, as we think it did, it is because the contractual modalities at issue favored pro-competitive forms of product differentiation and price discrimination that made the licensor's end-use restrictions and access restrictions appear reasonable.¹⁹³

There are no grounds for presuming that other *non-negotiable* restraints on access or end-use are equally pro-competitive, market enhancing, or otherwise favorable to public-interest uses of information. Conversely, there is little reason to presume—given our present state of empirical ignorance—that *negotiated* restraints on access or end-user rights are inherently anticompetitive or unfavorable to public-interest uses of information rather than market-enhancing solutions to valid business problems.

Until contradicted by new evidence, a working hypothesis we can endorse is that free competition and private decision making usually work better than heavy-handed regulation. In this uncertain context, private contract has a valuable role to play. It is the experimental means by which the new economics of information can and should be explored. Thus, measures to bolster and strengthen the institution of contract as applied to information goods are welcome, and Article 2B makes a contribution in this respect.

But case by case contractual decision making, as potentiated by the default rules of Article 2B, should not become a vehicle for private legislation that overrides the preexisting federal and constitutional balance, even if we concede that the old balance is under attack from many directions, irrespec-

¹⁹² See *id.* at 1452 (reasoning that the defendant's arguments "if taken seriously would drive prices through the ceiling or return transactions to the horse-and-buggy age"); cf. Maureen A. O'Rourke, *Copyright Preemption After the ProCD Case: A Market-Based Approach*, 12 BERKELEY TECH. L.J. 53, 77-87 (1997) (agreeing with *ProCD's* preemption holding and evaluating alternative views). But see Elkin-Koren, *supra* note 4, at 108-13 (1997) (disagreeing with the court's holding in the *ProCD* case); Mark A. Lemley, *Romantic Authorship and the Rhetoric of Property*, 75 TEX. L. REV. 873, 901-02 (1997) (reviewing JAMES BOYLE, *SHAMANS, SOFTWARE, AND SPLEENS: LAW AND THE CONSTRUCTION OF THE INFORMATION SOCIETY* (1996)) (disagreeing with *ProCD* as well).

¹⁹³ For a discussion of the general importance of price discrimination and product differentiation as regulatory tools in the information economy, see BITS OF POWER, *supra* note 45, at 110-29, which describes the economics of distributing data from publicly funded research. See also Michael J. Meurer, *Price Discrimination, Personal Use and Piracy: Copyright Protection of Digital Works*, 45 BUFF. L. REV. 845, 849 (1997) (arguing that proposed changes in copyright law will facilitate price discrimination and claiming that these changes are not necessary to maintain profit share).

tive of Article 2B. The proper role of contract law in the information age is not to set information policy, much less intellectual property policy or competition policy.¹⁹⁴ Its proper role is to permit entrepreneurs to move information goods to their highest values with limited interference from the State. Contracts covering computerized information goods thus become part of an experimental crucible from which information policy may one day emerge on a sounder empirical foundation than currently exists.

By the same token, if the governing set of default rules empowers licensors of information goods routinely to impose one-sided terms and conditions by combining standardized adhesion contracts with overwhelming bargaining power, it may well undermine the capacity of contracts as an institution to play their proper experimental role in the new information economy.¹⁹⁵ The extent to which useful empirical knowledge concerning relations between owners and users can emerge from a process in which the resolution of potential conflicts between them does not depend on manifestations of mutual assent remains to be evaluated in practice. This does not mean that mass-market contracts, standard form contracts, or even non-negotiable terms in contracts of adhesion should be struck down per se or considered preempted.¹⁹⁶

It does mean that Article 2B should validate only those mass-market contracts and contracts of adhesion that appear likely to produce positive social effects, especially pro-competitive effects.¹⁹⁷ The proposed uniform state law should accordingly empower courts to link the private benefits of

¹⁹⁴ See generally David McGowan, *Free Contracting, Fair Competition, and Article 2B: Some Reflections on Federal Competition Policy, Information Transactions, and "Aggressive Neutrality,"* 13 BERKELEY TECH. L.J. 1173 (1998) (arguing that the neutral stance that Article 2B attempts to take "between the potentially competing goals of state contract law and federal intellectual property and antitrust law . . . cannot be completely achieved where antitrust law and intellectual property doctrines intersect").

¹⁹⁵ The history of software protection to date indicates that when companies that possess market power resort to "shrinkwrap" or other mass-market licensing strategies, they are strongly tempted to impose anticompetitive conditions. See Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609, 689-90 (1998) (describing the growth of licenses at websites in the wake of *ProCD, Inc. v. Zeidenberg*); see also Samuelson et al., *Manifesto*, *supra* note 44, at 2373 & nn.260-61 ("The so-called shrink-wrap licenses attempted to combine a contractual mechanism with mass-market distribution, and their questionable legal status was the predictable result." (footnotes omitted)).

¹⁹⁶ *But see, e.g.,* *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 269-70 (5th Cir. 1988) (holding that a provision in a license agreement was unenforceable because federal copyright law preempted the state law upon which it was based).

¹⁹⁷ Moreover, the burden of proof—when challenged—properly falls on those licensors who opt to proceed without real assent to impose harsh or one-sided terms and conditions that appear likely to alter the preexisting balance of public and private interests. See *infra* text accompanying notes 322-23 (shifting the burden of proof to the licensor if the license was non-negotiable).

standardized terms with the risk of possible public-interest detriments when evaluating the validity and effects of specific mass-market contracts in actual cases.

2. Ineffectiveness of Traditional Doctrinal Constraints

Neither existing intellectual property law nor traditional contract law provides the needed evaluative tools.¹⁹⁸ To begin with, doctrines of preemption and misuse as derived from antitrust law have proved too blunt and cumbersome to advance our understanding of mainstream intellectual property issues. They seem unlikely to provide solutions to unfamiliar problems arising at the margins of the information economy. The common-law “public policy” exception to the enforceability of contracts would, of course, logically apply to digital transactions,¹⁹⁹ as would the doctrine of unconscionability codified in Article 2 of the U.C.C.²⁰⁰ In our view, however, these doctrines as currently administered give courts no solid foundation for coping with the downside social risks inherent in an unprecedented meshing of federal intellectual property policies with state-enforced contracts of adhesion.

a. Preemption

At first blush, the preemption doctrine looks promising, because it intrinsically poses thorny questions about the legitimacy of state action with regard to intellectual property matters of local interest.²⁰¹ Courts sometimes

¹⁹⁸ The federal appellate courts do take public-interest considerations into account when adjudicating present-day disputes about alleged violations of intellectual property rights. See Karjala, *supra* note 12, at 515 n.7 (citing numerous Supreme Court opinions supporting consideration of the public-interest aspect of intellectual property, most recently *Fogerty v. Fantasy, Inc.*, 510 U.S. 517, 524 (1994) (“The primary objective of the Copyright Act is to encourage the production of original literary, artistic, and musical expression for the good of the public.”)).

¹⁹⁹ See RESTATEMENT (SECOND) OF CONTRACTS §§ 178-96 (1981) (embodying the public policy exceptions).

²⁰⁰ See U.C.C. § 2-302. For discussions of unconscionability, see Richard Craswell, *Property Rules and Liability Rules in Unconscionability and Related Doctrines*, 60 U. CHI. L. REV. 1 (1993), which examines how the ideas of consent and voluntariness are relevant to whether or not a contract is unconscionable, Arthur Allen Leff, *Unconscionability and the Code—The Emperor’s New Clause*, 115 U. PA. L. REV. 485 (1967), which sets out ideas of procedural and substantive unconscionability, and John E. Murray, Jr., *The Neglect of CISG: A Workable Solution*, 17 J.L. & COM. 365 (1998), which compares Article 2’s unconscionability doctrine to the Convention on Contracts for the International Sale of Goods (CISG) approach.

²⁰¹ Cf. *Goldstein v. California*, 412 U.S. 546, 559 (1973) (explaining that state action is preserved for matters of local interest that Congress left unattended, if no conflict results with other federal intellectual property policies).

have invoked this doctrine when Congress has declined to exercise its full powers with respect to the same or closely related issues,²⁰² and when there are lingering questions about the capacity of some state action to undermine, displace or destabilize overriding federal policies. For example, several important preemption decisions have vindicated the rights of competitors generally to imitate subpatentable, noncopyrightable innovations against more-protectionist state initiatives.²⁰³

Because the preemption doctrine necessarily focuses on public law as it pertains to federalism, however, it often constitutes an imperfect or unreliable prism for evaluating private initiatives case by case, in which the tensions with federalism may be made to seem remote or tangential. In an ideal world, perhaps, an enlightened preemption doctrine might ask the right questions, even then. As a political matter, however, courts seldom interpose themselves between the federal and state spheres of action, and the rather wooden doctrinal tools they have forged seldom operate effectively in the absence of a conflict with express statutory intellectual property rights.

Standardized contractual provisions, although capable of yielding quasi-statutory effects if applied across all or most of the relevant licensing community, are unlikely to focus a state court's attention on issues of federalism unless some new doctrine specifically empowers the court to consider even indirect tensions with the traditional practices to which federal intellectual property policies have given rise. In this milieu, the search for preemptive doctrinal hooks with which to isolate some putative, technical interference with statutory intellectual property law tends to cloud other policy issues, and could make it harder for courts to evaluate the anticompetitive or anti-

²⁰² See, e.g., *id.* at 556-60 (upholding the residual power of states to protect sound recordings in the absence of federal copyright protection). The logic of *Goldstein* applies equally to post-1976 Copyright Act cases by analogy, although the space for applications remains controversial. See, e.g., *Bonito Boats, Inc., v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 168 (1989) (holding that a Florida statute that offered "patent-like protection for ideas deemed unprotected under the present federal scheme" is preempted by the Supremacy Clause); cf. Howard B. Abrams, *Copyright, Misappropriation, and Preemption: Constitutional and Statutory Limits of State Law Protection*, 1983 SUP. CT. REV. 509, 513-17 (discussing the connection between the unfair competition tort of misappropriation and copyright preemption).

²⁰³ See, e.g., *Bonito Boats*, 489 U.S. at 167-68 (striking down a Florida law that "represents a break with the tradition of peaceful coexistence between state market regulation and federal patent policy" since it sought to regulate subpatentable boat hull designs); *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237-38 (1964) (holding that a state order for an accounting for damages and an injunction were inconsistent with federal patent laws because a state may not forbid the copying of an unpatented lamp design); *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 231-32 (1964) (holding that a state law of unfair competition could not prevent Sears from marketing a copy of Stiffel's pole lamp, which was not protected by either a federal mechanical or design patent).

social effects of relevant private agreements from the perspective of a national information policy.

Moreover, the preemption doctrine naturally tends to paint with a broad brush that validates or invalidates whole classes of contracts, such as “shrinkwrap” contracts,²⁰⁴ on the basis of abstract concerns about the workings of the federal system.²⁰⁵ A court that posed the question this way, for example, might have rashly invalidated the shrinkwrap license at issue in *ProCD*, which we regard as pro-competitive and socially beneficial.²⁰⁶ The kind of doctrine we recommend,²⁰⁷ in contrast, should enable courts to detect and limit undue social harms arising from specific private acts that may pertain to federal intellectual property laws without necessarily implicating the limits of those laws (and the underlying federal policies) or of the corresponding state laws that are directly or indirectly called into play.

b. *Misuse*

Because statutory intellectual property rights confer legal monopolies on qualified creators and inventors, courts everywhere have developed doctrines of “misuse,” which sound in or near antitrust law, to prevent licensors from contractually imposing terms and conditions that unduly enlarge or distort the rights thus granted.²⁰⁸ Such doctrines are, however, still more

²⁰⁴ See Karjala, *supra* note 12, at 525 (discussing whether the enforcement of shrinkwrap or online licenses by the states is preempted by federal law).

²⁰⁵ Cf. Abrams, *supra* note 202, at 510-12 (explaining the development of federal copyright preemption arising from the tort of misappropriation).

²⁰⁶ See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447 (1996). In *ProCD*, the only way the licensor could open a useful subsidiary market, while avoiding massive appropriation of the fruits of his investment, was to forbid users who purchased the “home use” version of his national telephone directory from competing with his own efforts to license the same directory commercially. *Id.* at 1449. The decision did not prevent second comers from independently creating their own directory for competitive purposes, nor should a court necessarily have reached the same result if the second comer had combined the fruits of independent investment with portions of the existing directory to produce an innovative value-adding product. See *supra* text accompanying notes 36-39 (discussing the social and economic benefits of leaving small grain-sized information goods unprotected); cf. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 364 (1991) (holding that a simple alphabetical list of a firm’s customers with addresses and phone numbers could not be protected by copyright law).

²⁰⁷ See *infra* text accompanying notes 231-35 (proposing a public-interest unconscionability doctrine).

²⁰⁸ See, e.g., G.H.C. BODENHAUSEN, GUIDE TO THE APPLICATION OF THE PARIS CONVENTION FOR THE PROTECTION OF INDUSTRIAL PROPERTY AS REVISED AT STOCKHOLM IN 1967, at 71 (1968) (noting that, besides failure to work the patent locally, other examples of abuse may exist where the patent owner “refuses to grant licenses on reasonable terms and thereby hampers industrial development, or does not supply the national market with sufficient quantities of the patented product, or demands excessive prices for such product. The member States are free to define these, and other, abuses” (emphasis added)); JAY DRATLER,

difficult to apply than the doctrine of preemption.²⁰⁹ They tend to focus on consumers rather than the larger public-interest that intellectual property policies promote; and, as matters stand, they are necessarily rooted in congressional grants of exclusive property rights to eligible beneficiaries.²¹⁰ Hence, one cannot easily separate applications of the misuse doctrine from an analysis of the declared scope and limits of such entitlements.

More recently, the doctrine of misuse has cropped up with increasing frequency in areas where settled intellectual property rights have been extended uncritically to new subject matter for reasons of expedience. For example, the doctrine of misuse of copyrights, although long available to the courts in theory, was never actually applied until copyright law embraced computer programs.²¹¹ Since then, some courts have used it as a clumsy,

JR., LICENSING OF INTELLECTUAL PROPERTY § 5.04 (1995) (calling the misuse doctrine a "strange amalgam of legal principles" that courts have traditionally applied to patent licenses and recently to copyright licenses); *Joined Cases C-241/91 & C-242/91, RTE & ITP v. Commission (Magill)*, 1995 E.C.R. I-743, 4 C.M.L.R. 718 (1995) (imposing a pro-competitive compulsory licensing agreement for distribution of television listings).

²⁰⁹ See, e.g., DRATLER, *supra* note 208, §§ 5.04, 5.04[5] (distinguishing traditional judicial concerns about fraud, misrepresentation, and chicanery from concerns about competition, and criticizing application of misuse to the latter set of problems); Mark A. Lemley, Comment, *The Economic Irrationality of the Patent Misuse Doctrine*, 78 CAL. L. REV. 1599, 1610 (1990) (noting the problems with the codification of the patent misuse doctrine). *But see* Richard Calkins, *Patent Law: The Impact of the 1988 Patent Misuse Reform Act and Noerr-Pennington Doctrine on Misuse Defenses and Antitrust Counterclaims*, 38 DRAKE L. REV. 175 (1988) (expressing ambivalence toward Congress's shift in the "direction of laissez-faire application of patent laws," as manifested by the 1988 Patent Misuse Reform Act).

²¹⁰ See *supra* notes 208-09 and accompanying text (discussing ambiguities of the misuse doctrine).

²¹¹ See, e.g., *Lasercomb America, Inc. v. Reynolds*, 911 F.2d 970, 978 (4th Cir. 1990) (applying the misuse doctrine to copyright case, and holding that misuse occurs where the copyright is "used in a manner [that violates] the public policy embodied in the grant of a copyright"); see also *Alcatel USA, Inc., v. DGI Techs., Inc.* 166 F.3d 772 (5th Cir. 1999) (holding that a telecommunications switching device manufacturer may invoke the copyright misuse defense despite the jury's finding that it acted with "unclean hands"); *Practice Management Info. Corp. v. American Med. Ass'n*, 121 F.3d 516, 521 (9th Cir. 1997) (finding copyright misuse where a copyright owner entered into license agreements restricting licensees from competing with the owner), *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, 601 (5th Cir. 1996) (holding that copyright misuse defense prevents a plaintiff from using copyright to obtain a patent-like monopoly); *Supermarket of Homes, Inc. v. San Fernando Valley Bd. of Realtors*, 786 F.2d 1400, 1408 (9th Cir. 1986); *PRC Realty Sys., Inc. v. National Assoc. of Realtors*, 766 F. Supp. 453 (E.D. Va. 1991), *aff'd*, 972 F.2d 341 (4th Cir. 1992) (unpublished table decision) (stating that the offending provisions "would not only prevent the incorporation of the [licensed software] system into on-line publishing software, but would disallow the development of any online publishing systems by [the licensee], solely because of its license to use and enhance [the licensed software]"). *But see* *Saturday Evening Post Co. v. Rumbleseat Press, Inc.*, 816 F.2d 1191, 1198-99 (7th Cir. 1987) (criticizing application of the misuse doctrine to copyright law). The extent to which the misuse doctrine can be applied in the absence of a showing of market power is particularly controversial.

though not uninteresting, "gap filler" with which to address new problems for which there were few legal precedents. If Congress continues to flirt with enacting hybrid intellectual property rights that unsettle the prior balance between legal incentives to create and free competition, we may see greater resort to the misuse doctrine as an express or codified limitation on any new rights thus granted.²¹²

In cases of alleged misuse likely to arise under Article 2B, however, one would expect courts to find little or no guidance from the legislative history pertaining to relevant intellectual property rights, most of which arose in response to the historical limits of the two-party deal to regulate transactions in intangible creations.²¹³ Indeed, one expects the Article 2B cases to surface at the opposite end of the spectrum, as exercises of private contractual rights, ostensibly detached or removed from the exercise of intellectual property rights as such.²¹⁴ Although this alleged or apparent detachment need not, and should not, deter courts from examining true cases of misuse, our point is that the adverse consequences likely to arise under Article 2B may seldom present the characteristics of an abuse of a statutory right specifically granted.

Just as certain contracts of adhesion may not rise to the level of a preemptive conflict between state and federal laws, so such contracts may not amount to the misuse of any given statutory rights. Yet, courts may reasonably fear that contracts of adhesion, especially if multiplied many times over, could produce effects similar to those flowing from instances when statutory rights had truly been misused. The tensions such contracts are likely to generate with federal intellectual property policies, and their potentially negative impact on the balance of public and private interests, could properly incline a court to intervene in defense of the larger public-interest if a more appropriate, tailor-made doctrinal hook were available for this purpose.²¹⁵

The doctrine of misuse is further weakened by the controversies and lack of doctrinal cohesion that plague antitrust laws in general.²¹⁶ As an ab-

²¹² For example, in recent negotiations concerning a proposed intellectual property right in databases, the National Academy of Sciences proposed that specific criteria of misuse should be incorporated into the draft law itself, and high-level negotiations in the Senate produced a Discussion Draft that included such provisions. See, e.g., J.H. Reichman, *Database Protection at the Crossroads*, 14 BERKELEY TECH. L.J. (forthcoming 1999).

²¹³ See *supra* note 176 (citing recent cases and articles that discuss the misuse doctrine).

²¹⁴ See *supra* text accompanying notes 52-64.

²¹⁵ Judicial errors of judgment in such cases are, at least, not the product of special interest lobbying, and legislative action could cure them over time.

²¹⁶ See John H. Barton, *Patents and Antitrust: A Rethinking in Light of Patent Breadth and Sequential Innovation*, 65 ANTITRUST L.J. 449, 449-50 (1997) (discussing the weakness

stract proposition, this doctrine often makes the most sense when the relevant judicial or administrative inquiry focuses on exercises of market power that adversely affect consumers. Even then, we lack the empirical knowledge to apply the doctrine reliably to specific fact patterns. In addition, no domestic or international consensus as to the proper relations between intellectual property law and competition law is likely to illuminate hard cases for the foreseeable future.²¹⁷

In this vacuum, essentially consumer-driven doctrines of misuse (unless otherwise reinforced) would not adequately sensitize courts to the kind of public-interest concerns familiar from classical intellectual property laws—including concerns about the ability of the educational, scientific, research, and library communities to access the building blocks of knowledge at affordable prices—that mass contractual transactions in information goods under Article 2B seem likely to raise. As the new frontiers of intellectual property law become more clearly defined, moreover, we should strive to build pro-competitive solutions into legislatively enacted templates of limited, minimalist rights,²¹⁸ rather than allowing Congress to foster chronic states of overprotection and then pretending that antitrust law can overcome the results of an aggressively lobbied-for skewing of the public interest.²¹⁹

c. *The “Public Policy” Exception*

By the same token, the long-established power of courts to invalidate certain contractual provisions that impermissibly contravene public policy will not give them all the tools they need to adapt Article 2B to the evolving conditions of the information economy. The “public policy” doctrine only

of antitrust laws and the strength of patent laws, which allow broad patents, which, in turn, foster cross-licensing); Maureen O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479, 550 (1995) (describing how copyright misuse doctrine was historically used as an infringement defense).

²¹⁷ Cf. Eleanor M. Fox, *Trade, Competition and Intellectual Property—TRIPS and Its Antitrust Counterparts*, 29 VAND. J. TRANSNAT'L L. 481, 499 (1996) (contrasting the limited view of “efficiency policy advocates” of antitrust regulation in the present-day United States with American policies of the 1960s, which sought to protect against “power, exploitation, and exclusion of the weak” even at some cost in efficiency).

²¹⁸ See, e.g., Reichman, *supra* note 32, at 2553-57 (discussing the advantages and disadvantages of pro-competitive ground rules and an “off-the-rack liability regime” that would benefit both innovators and borrowers and encourage collective action of technical communities).

²¹⁹ See Note, *Is the Patent Misuse Doctrine Obsolete?*, 110 HARV. L. REV. 1922, 1937 n.93 (1997) (“The antitrust injury requirement considers, in part, whether parties that allege an antitrust violation have incentives that coincide with the public-interest of maximizing welfare.”); see also Troy Paredes, Comment, *Copyright Misuse and Tying: Will Courts Stop Misusing Misuse?*, 9 HIGH TECH. L.J. 271, 275 (1994) (defining the objective of the public policy of both antitrust and copyright law as the promotion of consumer welfare).

works when the overriding statutory policy has become crystal clear and restraints on private agreements follow as a logical, self-evident consequence of prior legislative action.²²⁰ Absent these criteria, the doctrine tempts courts to overstep their limits and to superimpose their views of statutory policies on those of the legislatures, at the expense of freedom of contract.²²¹

Even when courts correctly apply the public policy doctrine, they can logically invalidate whole swaths of contracts or classes of contractual terms in a quasi-legislative manner. Evaluating the impact of specific agreements on the evolving public interest in case by case exercises of otherwise valid intellectual property rights is a big step away from the practices we associate with the "public policy" exception, which suffers from its origins in the old doctrine of "illegality." An even bigger step is for courts to apply this doctrine to the gray areas in which adhesion contracts seem to conflict with long-standing (but not expressly codified) federal and state intellectual property policies and practices.²²²

Here the problem is not some subtle shading of illegality rooted in clear statutory proscriptions of certain conduct. It is, rather, a probability that widely used contracts of adhesion containing non-negotiable terms and conditions will progressively distort federal policies and practices in ways that could not have been foreseen at the time that the underlying federal laws were enacted. Of course, courts could use the public policy exception to

²²⁰ See RESTATEMENT (SECOND) OF CONTRACTS ch. 8 introductory note; *id.* § 178 & reporter's note (explaining that courts are inclined to decide that the freedom to contract is outweighed by an overriding societal interest and may thus refuse to enforce promises on public policy grounds); E. ALLAN FARNSWORTH, FARNSWORTH ON CONTRACTS §§ 5.1-5.9, at 1-92 (2d ed. 1998) (discussing the unenforceability of contracts on grounds of public policy). The North Carolina Supreme Court observed that a medical malpractice insurer, in advancing its "public policy" argument, seems to ignore the proposition that the concept of "public policy" involves not one simplistic rule, but various competing doctrines. In this case, the law of contracts and the "public policy" doctrines encompassing that body of law, compete with the defendant's tort related "public policy" argument.

Mazza v. Medical Mut. Ins. Co., 319 S.E.2d 217, 221 (N.C. 1984).

²²¹ In *Stonewall Surplus Lines Insurance Co. v. Johnson Controls, Inc.*, 17 Cal. Rptr. 2d 713 (Ct. App. 1993), for example, the court, after noting that "the Wisconsin Supreme Court found that public policy did not prevent indemnity for punitive damages," observed:

This state has more than one public policy. Another and countervailing public policy favors freedom of contract, in the absence of overriding reasons for depriving the parties of that freedom. Still another public policy favors the enforcement of insurance contracts according to their terms, where the insurance company accepts the premium and reasonably represents or implies that coverage is provided.

Id. at 717 (internal quotations omitted).

²²² State intellectual property concerns include trade secret laws, trademark laws, and unfair competition laws.

address some of these concerns and, to this end, the drafters could incorporate appropriate policy variables into Article 2B itself. Recently, indeed, they have felt compelled to adopt a new section 2B-105, which moves in this direction.²²³

While this initiative is welcome, we think it less promising than the tailor-made doctrinal tools we propose later in this Article. At best, the public policy exception of state contract law would incline courts to become too interventionist if they detected conflicts with some specific provision of federal law and to remain too passive in the presence of tensions stemming from more nuanced conflicts with federal intellectual property policies.²²⁴ Like the preemption doctrine derived from federal law, the public policy exception in state law would thus tend to skew judicial decision making by haphazard reference to the presence or absence of external doctrinal hooks in single cases, without endowing courts with that minimum amount of autonomy we think the radical proposals of Article 2B make necessary.²²⁵

d. *Unconscionability*

Conversely, the unconscionability doctrine, while proceeding case by case, is too consumer-driven to play the mediatory role between private and public interests that we envision. As formulated in Article 2 of the U.C.C., unconscionability directs judicial attention to surprising or oppressive terms in the context of specific transactions.²²⁶ In this format, the doctrine has

²²³ See U.C.C. § 2B-105(b) (Proposed Official Draft Feb. 1999) ("A contract term that violates a fundamental public policy is unenforceable to the extent that the term is invalid under that policy."); *infra* text accompanying notes 340-52 (discussing events that have occurred since dissemination of the first draft of this Article).

²²⁴ Cf. Lemley, *supra* note 209, at 1610 (criticizing this doctrine because of its practical limitations).

²²⁵ For what makes Article 2B truly radical, see *infra* text accompanying note 313 (noting the non-assent based paradigm of contract formation).

²²⁶ See U.C.C. § 2-302. For analyses of the unconscionability doctrine, see *supra* note 200, M.P. Ellinghaus, *In Defense of Unconscionability*, 78 YALE L.J. 757 (1969), John E. Murray, Jr., *Unconscionability: Etcetera*, 31 U. PITT. L. REV. 1 (1969), and John A. Spanogle, Jr., *Analyzing Unconscionability Problems*, 117 U. PA. L. REV. 931 (1969).

For comparative applications of the unconscionability doctrine, see generally UNIDROIT Principles of International Commercial Contracts art. 3.10 (stating that a contract term may be avoided if it gives the party an unjustified excessive advantage); A.H. Angelo & E.P. Ellinger, *Unconscionable Contracts: A Comparative Study of the Approaches in England, France, Germany, and the United States*, 14 LOY. L.A. INT'L & COMP. L.J. 455 (1992); Michael Joachim Bonell, *Policing the International Commercial Contract Against Unfairness Under the UNIDROIT Principles*, 3 TUL. J. INT'L & COMP. L. 73 (1995); Murray, *supra* note 200. For a discussion of the CISG approach to unconscionability, see Helen Elizabeth Hartnell, *Rousing the Sleeping Dog: The Validity Exception to the Convention on Contracts for the International Sale of Goods*, 18 YALE J. INT'L L. 1, 80-87 (1993).

proved its worth as a roving consumer protection measure, but it has yielded less satisfactory and more controversial results in other settings, especially as regards transactions between merchants. Reformers currently at work on Article 2 may, therefore, adopt a new, but related, provision, which looks to a commercially reasonable standard of fair dealing in contract formation.²²⁷

While proposed reforms of the unconscionability doctrine applicable to sales of goods merit careful attention, we doubt they would provide the kind of doctrinal tool needed to help courts preserve the dialogue between public and private interests in the digital environment that Article 2B is supposed to govern. At its best, the doctrine of unconscionability empowers courts to deal with pronounced asymmetries of information and the abuses to which they may lead,²²⁸ which is not the kind of problem we are most concerned about here. When, indeed, such problems do arise, Articles 2B-110 and 2B-208²²⁹ seem as adequate a means of dealing with them as any available from Article 2 itself.

In contrast, the problems we address stem from the inability of *informed* users or of *informed* customers seeking access to online transmissions of information goods to bargain around the non-negotiable terms and conditions that Article 2B might otherwise validate. In this milieu, licensees need a doctrine that focuses judicial attention on the need to preserve free competition or to promote traditional public-interest goals, which mass-market contracts or other standard form licenses imposing non-negotiable terms might compromise. We advocate especially strict scrutiny of socially questionable terms and conditions that result when licensors combine the enhanced power of standard form contracts with the exercise of federally created exclusive property rights in information goods.

²²⁷ See U.C.C. § 2-105 (Proposed Official Draft Feb. 1999) (deciding implicitly not to amend U.C.C. section 2-302 to include a commercially reasonable standard of fair dealing in contract formation within unconscionability); *id.* § 2-206 (creating a new section titled “Unenforceable Terms in Consumer Contracts”).

²²⁸ This is the realm of common law scrutiny to avoid abuse. It is not to sustain a call for detailed regulation or for doctrines that make contract choices inherently uncertain of ultimate enforcement in court. Article 2B expressly preserves the general concepts that courts sometimes employ for this over-view function, but goes no further to intrude on contract choices.

R. Nimmer, *supra* note 167, at 224. For another perspective, see Richard A. Epstein, *Unconscionability: A Critical Reappraisal*, 18 J.L. & ECON. 293, 315 (1975), who concludes that the substantive use of the doctrine of unconscionability is likely to have socially undesirable effects.

²²⁹ See U.C.C. § 2B-208(a)(1) (Proposed Official Draft Feb. 1999) (eliminating unconscionable terms from mass-market licenses); see also *id.* § 2B-110(a) (allowing courts to refuse to enforce unconscionable contracts or to excise any unconscionable terms from an otherwise enforceable contract).

B. *Validating Non-negotiable Terms That Respect the Balance of Public and Private Interests*

In the emerging information-based economy, state contract laws emanating from Article 2B will become part of a larger, complex regulatory framework, in which they supplement federal intellectual property laws and policies in ways that one can only guess at in the light of our present knowledge. We perceive the balance of public and private interests underlying that complex whole to constitute a kind of ongoing relationship or dialogue that courts should strive to preserve and maintain, despite all the uncertainties of the information-based economy.²³⁰ Because sound congressional action in this regard remains both premature and unduly susceptible to special-interest lobbying, we propose a new doctrine to empower courts to challenge standard form contracts of adhesion, which, if multiplied across the field of potential licensors, could undermine the integrity of that ongoing relationship, whose future contours will need to be worked out as we go.

1. A Doctrine of “Public-Interest Unconscionability”

In the digital environment, we perceive the inability of either licensor or licensee to negotiate terms that respond to their actual needs as a type of capability problem.²³¹ The cumulative harm likely to result from a chronic failure to address this problem could exceed any benefits, in the form of lowered transaction costs, that statutory validation of mass-market contracts and other standard form transactions are expected to yield.

To maximize these benefits without the offsetting social costs, lawmakers will need to combine the concept of unconscionability, as applied to standard form contracts in general, with the abiding concern for public-interest objectives that characterizes domestic intellectual property policy. We, therefore, propose to add a minimalist, open-ended doctrine of “public-interest unconscionability” to Article 2B, which would empower courts to control non-negotiable terms concerning access to, and use of, computerized information that either party—licensors or licensees—seek to impose on the other without any true manifestation of assent.

²³⁰ Cf. *Parev Prod. Co. v. I. Rokeach & Sons*, 124 F.2d 147 (2d Cir. 1941) (holding that when the parties inadvertently leave a gap in their carefully negotiated long-term contract, the court should opt for a solution that would preserve the status of the parties to a relational contract over time).

²³¹ See RICHARD DANZIG, *THE CAPABILITY PROBLEM IN CONTRACT LAW* 2-3 (1978) (explaining that “capability problems” include lack of knowledge of the law and the inability of the judiciary to understand and resolve issues).

In so doing, we do not aim to discourage the use of standard form contracts, with all the well-known efficiencies they entail, or to encourage resort to negotiated contracts when this would produce inefficient results. There is no intrinsic merit or demerit in one mode or the other. Rather, we seek to ensure:

First, that a uniform state contract law governing computerized information transactions should not unduly thwart the parties' opportunities to bargain for solutions that express real needs as revealed by the emerging information economy; and

Second, that when parties to computerized information transactions resort to standard form contracts, they should not expect routinely to enforce non-negotiable, controversial terms or conditions that impede competition or that undermine present or future public-interest uses of information goods.

We accordingly propose that Article 2B state the following general norm:

(1) All mass-market contracts, non-negotiable access contracts, and contracts imposing non-negotiable restrictions on uses of computerized information goods must be made on fair and reasonable terms and conditions, with due regard for the public interest in education, science, research, technological innovation, freedom of speech, and the preservation of competition.

Although this basic norm is cast in the open-ended form of a broad standard rather than a narrow rule, courts that apply it cautiously can respond to particularly egregious uses of non-negotiable terms or conditions without fostering a destabilizing climate of uncertainty. The level of judicial scrutiny under this clause may thus vary appropriately with such factors as the market power of the party imposing the terms in question, the extent to which the specific contractual transaction is associated with the exercise of intellectual property rights, the extent to which a party's standard form contract fairly and reasonably attempts to differentiate between specific classes of users and their respective needs, and the potential harm to public-interest uses of information that seems likely to ensue from widespread resort to the terms or practices in question.²³²

²³² Cf. John J. Flynn, *Antitrust Policy and the Concept of a Competitive Process*, 35 N.Y.L. SCH. L. REV. 893, 910-15 (1990) (stressing the goals underlying antitrust policy of cultivating equality of market access; guaranteeing due process for distributors; limiting private power to set prices or determine access to markets; reducing imbalances in bargaining power; forestalling undue wealth transfers from consumers to producers; and preserving rights of labor, property, and free exchange).

The merit of our basic norm is the positive validating impact it should exert on the great bulk of standard form contracts whose drafters choose to avoid using terms and conditions that palpably seek to change the long-established balance of public and private interests. Because most licensors will also play the role of licensees at different intervals, our proposal provides an incentive for devising standard form contracts that would pass muster in either situation.

In this respect, our basic norm would operate as a “sword of Damocles” clause that licensors (and licensees) always have the power to avoid.²³³ So long as the parties employ standard form contracts to pursue commercially reasonable goals by means that do not excessively or unreasonably deviate from accepted practices and standards under existing intellectual property laws and policies, they should expect our proposed norm to validate the end result. It tends, indeed, to create a “safe harbor” for future uses of the same terms in a similar context.²³⁴ This tendency, in turn, should remove much of the instability that characterizes present-day use of standard form contracts in digital information transactions.

At the margins, nonetheless, we recognize that judicial resort to considerations of fairness inherent in the proposed norm, if incautiously applied, could sometimes increase prices, trigger unwarranted regulation, and diminish producers’ incentives to invest.²³⁵ Accordingly, we would condition any judicial exercise of the basic doctrine of “public-interest unconscionability” on the following additional tests and terms:

(2) Affirmatively negotiated terms falling within paragraph (1) as set out above shall enjoy a presumption of validity; however, this presumption may be rebutted whenever the cumulative harm to the public interest from use, including repeated use, of the term or terms in question seems likely to outweigh the private and public benefits flowing from the specific transaction.

²³³ A distinguished Italian scholar, Professor Gustavo Ghidini, was probably the first to use this “sword of Damocles” nomenclature in connection with similar clauses derived from Professor Reichman’s early proposals concerning the regulation of transfer of technology contracts by developing countries. See Reichman, *supra* note 50, at 67-74 (discussing the need for legal protection for subpatentable innovation in developing countries). As always, we are grateful for Professor Ghidini’s inestimable collaboration.

²³⁴ By “existing intellectual property laws and policies,” we include such state laws as trade secret, trademark and unfair competition laws, as well as those emanating from the federal system.

²³⁵ Cf. Fox, *supra* note 217 (noting efficiency costs of a fairness approach to competition law); A.E. Rodriguez & Malcolm B. Coate, *Limits to Antitrust Policy for Reforming Economies*, 18 HOUS. J. INT’L L. 311, 316-38 (1996) (stressing the difficulties of distinguishing between a clear abuse of market power and a reasonable self-help corrective to risk aversion in the application of competition laws to transfers of technology).

(3) *Whenever non-negotiable terms are challenged on any of the grounds set out in this provision, the party proposing the form or record in question bears the burden of establishing that the private benefits accruing to him or her from the use of such terms should justifiably outweigh the actual or potential social harm demonstrated by the complainant.*

(4) *Invalidation of a term under this provision does not necessarily invalidate the agreement as a whole if the offending term can reasonably be excised or modified to avoid undue harm to the public interest.*

2. Further Reflections on the Proposed Amendment

The basic requirement of “fair and reasonable” terms is relatively familiar in intellectual property circles,²³⁶ and such language has cropped up in several relevant contexts.²³⁷ From a comparative perspective, many

²³⁶ See, e.g., International Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations [Rome Convention], Oct. 26, 1961, art. 12, 496 U.N.T.S. 43. The United States is not a party to the Rome Convention. Article 12 provides for “a single equitable remuneration . . . [to] be paid by the user to the performers, or to the producers of the phonograms, or to both” whenever phonograms “made for commercial purposes are utilized for public communication.” *Id.* Similarly, recent amendments to the U.S. Copyright Act of 1976, which restored copyrights to foreign works that had suffered technical forfeiture under prior law (now inconsistent with international law), allow a reliance party to exploit a derivative work based on a restored work for the duration of the restored copyright if “[he or she] pays to the owner of the restored copyright reasonable compensation for conduct which would be subject to a remedy for infringement but for the provisions of this paragraph.” 17 U.S.C. § 104A(d)(3)(A) (1994) (“Existing Derivative Works”). This “reasonable compensation” principle eluded the drafters of both the termination right and the automatic renewal right under the 1976 Act, as amended, which, with one exception, immunizes the derivative work holder from demands for adjusted compensation by the underlying work owner. See, e.g., 17 U.S.C. §§ 203, 302, 304(b)(c) (1994) (as subsequently amended) (delineating, respectively, the conditions for termination of transfers and licenses, the duration of renewal terms, and the conditions for termination of transfers and licenses of renewal copyrights).

²³⁷ Even more closely analogous to the proposed requirement of “fair and reasonable” terms, “licenses issued pursuant to federal laws governing private remote sensing satellite systems require that system operators make their commercially obsolete data available to the National Data Archive on ‘reasonable terms and conditions.’” Reichman & Samuelson, *supra* note 20, at 159 n.475 (quoting Letter from Joanne Irene Gabrynowicz to Comm. on Issues in the Transborder Flow of Scientific Data (June 25, 1996)). One of us also has proposed that Congress incorporate the language of the basic norm as set out above into pending legislative proposals to protect noncopyrightable databases under a *sui generis* intellectual property regime. See Letter from J.H. Reichman to Chairman Coble (Mar. 16, 1998) (on file with authors). In that context, a primary objective is to “induce [database] publishers to develop favorable subscription rates for academic and research institutions rather than insisting on per use (or per access) charges” that might otherwise apply. Reichman & Samuelson, *supra* note 20, at 159. Bodenhausen noted that the doctrine of abuse may be applicable if a patentee fails to work the patent locally in due course or “refuses to grant licenses on reasonable terms and thereby hampers industrial development, or does not supply the national market with suffi-

countries apply similar language to control abusive contractual exercises of statutory intellectual property rights,²³⁸ and its importance for transfer of technology agreements seems evident.²³⁹

We do not intend to neglect certain objective difficulties of implementing our proposed "public-interest unconscionability" doctrine.²⁴⁰ We plan to show, however, that coping with these difficulties is worth the effort and that the philosophy underlying our proposal is consonant with both general principles of intellectual property law and general principles of contract law after the adoption of U.C.C. sections 2-204 and 2-208.

a. *Supplementary Tenets*

At the outset, we aim to limit ambiguities and to render the general doctrine more workable by means of some supplementary tenets. First, courts applying the doctrine should conservatively approach the quest for "negotiable terms," which should not be found in the absence of a relatively high quantum of mutual assent.²⁴¹ Many standard form contracts used in segments of today's market for noncustomized information goods would not satisfy this higher standard of assent. But that is precisely the point. Absent the relatively high quantum of mutual assent we associate with the concept of "affirmatively negotiated" terms, we invite courts to subject such terms to the tests of public-interest unconscionability outlined above.

In another connection, Professor J.J. White notes that such a "surprising terms" clause would "not merely cause greater disclosure to the signer, it will outlaw certain clauses in form contracts."²⁴² Although the resulting

cient quantities of the patented product, or demands excessive prices for such products." BODENHAUSEN, *supra* note 208, at 71; *see also* UNIDROIT Principles of International Commercial Contracts art. 3.10 (attempting to limit unjustified economic advantage through contract reformation); *supra* note 226 (citing numerous articles exploring the comparative aspects of contract formation).

²³⁸ *See* BODENHAUSEN, *supra* note 208, at 70 (distinguishing measures required by the public interest from measures to prevent abuse and contending that legislation pertaining to the public interest was not subject to Article 5A(3), (4) of the Paris Convention).

²³⁹ *See, e.g.,* Reichman, *supra* note 50, at 52-58 (discussing the role of domestic contract law in international technology transfers).

²⁴⁰ *See infra* text accompanying notes 318-36 (The Social Costs of Accessing Information Under State-Enforced Contracts of Adhesion).

²⁴¹ This proscription may or may not deviate from the approach of section 211 of the Restatement (Second) of Contracts, which tends to validate standard form contracts that do not contain surprising or unusual terms and conditions. *See* RESTATEMENT (SECOND) OF CONTRACTS § 211 (1981) (stating that in the context of most standardized agreements, "where a party to an agreement . . . manifests assent to a writing . . . he adopts the writing as an integrated agreement with respect to the terms included in the writing").

²⁴² James J. White, *Form Contracts Under Revised Article 2*, 75 WASH. U. L.Q. 315, 355 (1997).

lack of certainty may perhaps disrupt the enforcement or performance of that particular contract, there would be cumulative benefits in that future contracts would likely not include those impermissible clauses. The process leads to the formulation of acceptable norms that would, in most cases, withstand summary judgment claims, and which should gradually lessen concerns about increased transactional inefficiency and increased burdens on the courts.²⁴³

We, therefore, reiterate that “assent” in this context requires more than “click-on” affirmation or the retention of a product after glancing at a “shrinkwrap” license.²⁴⁴ Because “assent” thus implies more than the ability to accept or decline the terms of an adhesion contract, we treat such contracts as “not affirmatively negotiated” and, consequently, subject them to the strictest standards of public-interest scrutiny. This treatment complements the basic principle that vendors should not use standard forms to force controversial issues bearing on the interface between state contract laws and federal or state intellectual property laws, and especially those affecting the balance between incentives to invest (or to create) and opportunities to compete.²⁴⁵ Conversely, the proposed norm invites licensors (and licensees) to make use of standard form contracts for less controversial purposes.²⁴⁶

In construing the language in which our general norm is couched, moreover, we believe that courts can usefully identify specific subtests to apply to the particular parties at issue and their roles in the information economy. Thus, we understand that “fair and reasonable terms” bear on relations between the actual parties to the contract; that reference to “the preservation of competition” concerns relations between industries operating in the relevant market or market segments; and that reference to “education, science, research, technological innovation, and ‘freedom of speech’” invokes broad social needs attendant upon present and future public-interest uses of information as such.

These subtests necessarily overlap and blend into one another. Matters adversely affecting the specific parties to a deal may also relate to other tests bearing on the state of competition or the need to promote public-interest uses of information. A sole-source provider whose standard form

²⁴³ See *id.* (concluding that the proposed revisions to U.C.C. section 2-206(d) would “set[] a minimal though unpredictable level of liability”).

²⁴⁴ But see U.C.C. section 2B-111 (Proposed Official Draft Feb. 1999) for a discussion of manifestation of assent that pulls in the opposite direction and would be overridden by the proposed amendment.

²⁴⁵ Cf. Murray, *supra* note 162, at 739 (noting that certain types of standard forms “cannot reasonably be viewed as contractual”).

²⁴⁶ See *infra* text accompanying notes 321-30 (Basketing Transaction Costs Over Time).

contracts impose exorbitant prices on nonprofit users, for example, could run afoul of all three prongs.

When, instead, courts perceive that affirmatively negotiated terms are at issue, the attendant presumption of validity remains subject to the same outer limits that the doctrine of public-interest unconscionability applies to non-negotiable terms. The difference is that courts should not set aside negotiated terms in the absence of a positive showing of real antisocial or anti-competitive effects. The presence of suspected or possible, but uncertain, adverse effects would not overcome the presumptive validity of negotiated terms, even if the potential adverse effects might otherwise suffice to vitiate a clause imposing non-negotiable terms and conditions.

We assume in this connection that the existence of “affirmatively negotiated terms” should logically reveal the underlying experiential need for them. When licensors negotiate for terms that raise potential conflicts with the policies underlying federal or state intellectual property laws, for example, we would expect the negotiations and the larger course of dealing to justify the need for such terms in the face of actual business conditions.²⁴⁷ This kind of factual demonstration should normally suffice to clear the “public-interest unconscionability” hurdle, even if it raised additional, independent issues of preemption.²⁴⁸ The technical disposition of those issues is not within the scope of this Article, although we do expect to alleviate significantly current pressures on the doctrine of preemption.²⁴⁹ In any event, our primary concern here is to establish thresholds of validity and invalidity that would become inherently more germane to the everyday practices of the information industries than the legal tests likely to crop up under the doctrine of preemption.

If, however, a licensor who negotiated terms that forced a possible conflict between state contract law and federal or state intellectual property policies could not demonstrate the existence of actual business conditions justifying the use of the terms in question, then the offending clause might succumb to a licensee’s efforts to rebut the presumption of validity otherwise available under the doctrine of public-interest unconscionability. In such a case, licensors might face twin challenges, sounding respectively in public-interest unconscionability *and* the doctrine of preemption, without a

²⁴⁷ For a discussion of negotiated terms limiting the reverse engineering of computer programs, see *infra* text accompanying notes 262-75.

²⁴⁸ See *infra* text accompanying notes 250-56 (arguing that a showing of need for negotiated terms under the proposed amendment, regardless of preemption issues, would seldom violate the public-interest unconscionability doctrine).

²⁴⁹ See *infra* text accompanying notes 257-61 (discussing the expected judicial preference for the public-interest unconscionability doctrine over the preemption doctrine).

finding under one rubric necessarily controlling the outcome under the other.

b. *A Minimalist Approach*

The doctrine of public-interest unconscionability thus leaves plenty of room for a "rule of reason" type of analysis.²⁵⁰ When the facts at hand justify the effort, courts may have to weigh the private gains and public benefits of the challenged terms and conditions against, say, the alleged harm to the public interest or the threat to competition likely to ensue from repeated use of the same terms and conditions. We do not, however, encourage courts to indulge in deep rule of reason analysis when there is a prima facie showing that a standard form contract has been used to address controversial issues affecting the uneasy equilibrium between state and federal laws, because we think it seldom appropriate for parties to employ standard form contracts to change that equilibrium.²⁵¹

We also expect our proposed amendment to stimulate the formation of extended licensing agencies or consortiums capable of collectively bargaining around the default rules on behalf of public-interest users.²⁵² The initial but necessary degree of uncertainty built into the doctrine, and the latitude it gives to genuinely negotiated terms, should encourage content providers and public-interest users to seek a negotiated middle ground either

²⁵⁰ Cf. U.S. DEPARTMENT OF JUSTICE & THE FEDERAL TRADE COMMISSION, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY 1 (1995) (stipulating intellectual property guidelines and cautioning that the guidelines are to be applied flexibly and should not inhibit the use of discretion in antitrust law enforcement).

²⁵¹ At the margins, of course, a given licensor may possess so little market power as to render his or her use of even a controversial standard form solution apparently innocuous. But this should not be allowed to obscure the consequences that might follow if other firms with greater market power resort to the same tactic.

²⁵² See Stanley M. Besen et al., *An Economic Analysis of Copyright Collectives*, 78 VA. L. REV. 383, 385 (1992) (providing information about the major U.S. performing rights organizations that license their respective members' works); Robert P. Merges, *Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations*, 84 CAL. L. REV. 1293, 1296-97 (1996) (arguing that the transaction costs of property rule entitlements lead to the formation of collective rights organizations); see also Reichman, *supra* note 32, at 2555-57 (stressing the importance of collective action in implementing proposals for general purpose innovation laws on modified liability principles to preserve competition). *But see* JoAnn Lucanik, *Direct Broadcast Satellites: Protecting Rights of Contributing Artists and Broadcasting Organizations*, 12 CAL. W. INT'L L.J. 204, 211-23 (1982) (discussing the inability of several collective organizations to legally protect direct broadcast satellite transmissions). Lucanik reported that authors in several European countries were able to forestall the imposition of nonvoluntary licenses by joining collection societies. *See id.*

directly or by resort to arbitration,²⁵³ rather than by post-transaction judicial determinations of “fair and reasonable terms and conditions,” which may disappoint either side.

Over time, it will become clear that certain terms are almost always acceptable and others are virtually certain to be held unacceptable.²⁵⁴ Moreover, by joining forces and combining their purchasing powers, public-interest users should better wield the bargaining clout they need to obtain differentiated products and favorably discriminated prices.²⁵⁵ Some statutory guidance to relax potential antitrust constraints on collective action by public-interest users may, however, be needed.²⁵⁶

In summary, the overall goal is to give the courts a tool to limit private legislative attempts to alter radically the existing public-private balance with respect to the protection and distribution of digitized information goods by means of non-negotiable contracts of adhesion. Our proposed amendment represents a minimalist approach because it carries a built-in presumption favoring both the validity of *negotiated* terms and the enforcement of *uncontroversial, nonnegotiable terms or conditions*. In this sense, it produces a “sword of Damocles” effect that parties who resort to standard form contracts can readily avoid. The doctrine would, however, subject *nonnegotiable* terms to a stricter standard of review, and the sword is likely to strike any such clause having potentially anticompetitive effects or having a propensity to disrupt the balance between private incentives and traditionally privileged uses that promote the public interest.

The proposed doctrine of public-interest unconscionability is opened because it states a general set of policy objectives against which courts may test the validity of non-negotiable terms and conditions. The primary effect is to require licensors to demonstrate that challenged non-negotiable terms are pro-competitive (rather than anticompetitive) and that they do not radically undermine the existing balance of intellectual property laws by private legislative fiat.

²⁵³ See Ann Okerson, *Who Owns Digital Works?*, SCI. AM., July 1996, at 80, 84 (emphasizing the detriment that may come from privatized access to all information and advocating a consortium approach for nonprofit users).

²⁵⁴ See *infra* text accompanying notes 321-30 (“Basketing Transaction Costs Over Time”).

²⁵⁵ See Okerson, *supra* note 253, at 80 (advocating the creation of a consortium approach for nonprofit users).

²⁵⁶ See *Broadcast Music, Inc. v. CBS, Inc.*, 441 U.S. 1, 10-12 (1979) (describing ASCAP and BMI consent decrees that imposed restrictions on the respective organizations). For a discussion of private antitrust actions involving copyright law in the music arena, see Simon H. Rifkind, *Music Copyrights and Antitrust: A Turbulent Courtship*, 4 CARDOZO ARTS & ENT. L. J. 1 (1985).

Conversely, licensors whose standard form contracts contain unexceptionable terms that do not force these issues would continue to experience no difficulty whatsoever within the general framework of Article 2B as amended by the inclusion of our proposed safeguard. Moreover, when licensors affirmatively negotiate the terms and conditions governing transactions in digitized information goods, either by single agreements or through collective bargaining, courts should presume the end results to be inherently pro-competitive and likely to promote the long-term public interest, unless licensees sustain the burden of rebutting this presumption by a showing of solid evidence to the contrary.

C. Relations Between "Public Interest Unconscionability" and the Doctrine of Preemption

We departed from a basic premise that the traditional doctrine of preemption was too concerned with the proper meshing of state and federal powers to address the different kinds of questions that routine use of standard form contracts to license computerized information goods seems likely to raise under Article 2B. Moreover, the preemption doctrine necessarily looks backward to the purposes and policies underlying the codification of existing intellectual property rights.²⁵⁷ In contrast, Article 2B must necessarily operate on the frontiers of the emerging information economy, where those same general purposes and policies may shed insufficient light on the social costs and benefits of particular transactions.²⁵⁸

As noted earlier, we think the preemption doctrine,²⁵⁹ if left to correct the defects of Article 2B as it stands, would become either too weak or too

²⁵⁷ See Karjala, *supra* note 12, at 525-26 (noting that analysis of preemption under § 301 of the 1976 Copyright Act requires asking whether any state rights in copyright are equivalent to the exclusive rights protected by the Act). This inherently involves looking at the reasons those rights were included.

²⁵⁸ See R. Nimmer, *supra* note 167, at 213-16 (emphasizing the differences between transactions in information and traditional transactions in goods, and highlighting the crucial importance of contract law in establishing rights when information is "transferred").

²⁵⁹ For an exposition of the role of constitutional preemption under the Supremacy Clause, which may apply in cases that may not meet the threshold requirements of statutory preemption, see Karjala, *supra* note 12, at 533-34, 539-41, discussing copyright preemption under the Supremacy Clause, particularly in light of the Supreme Court's decision in *Goldstein v. California*, 412 U.S. 546 (1973). See also PAUL GOLDSTEIN, COPYRIGHT § 15.3.3 (2d ed. 1996) (discussing the role of section 301 of the Copyright Act in displacing the preemption doctrine and the continuing relevance of constitutional preemption in both checking state protection of ideas or facts and allowing states to protect subject matter not intended by Congress to come under the Copyright Act); LEAFFER, *supra* note 12, at 356-63 (discussing the scope and requirements of § 301 of the 1976 Copyright Act, but noting that ambiguities in this section still force courts to turn to traditional preemption under the Supremacy Clause).

strong.²⁶⁰ If, for example, courts underused the doctrine to validate contractual transactions out of respect for private initiative, it could inadvertently appear to cast a rubber-stamped judicial seal of approval on new types of transactions that later turn out to hinder established public-interest uses of information goods. Conversely, if courts overused the doctrine of preemption because they lacked better tools, such overuse could twist that doctrine into a glorified “public policy” exception that would subject freedom of contract to unsystematic review by higher authorities that know little about efficient development of the information economy.

If, instead, Article 2B incorporated the proposed doctrine of public-interest unconscionability, it would alleviate much of the pressure currently put on the doctrine of preemption while providing courts with a minimalist basis for challenging controversial information-based transactions that lacked the fundamental requirement of mutual assent derived from the template of default rules established in Article 2.²⁶¹ Properly applied, the new doctrine should reinforce, rather than weaken, the older doctrine of preemption by allowing courts to focus the latter primarily on larger federalist concerns, in the knowledge that other tools were available for different regulatory goals.

We think it helpful to explore the relations between both doctrines as we envision them unfolding after the adoption of our proposed amendment. To this end, we briefly sketch the interrelations between the two doctrines as they might logically play out with respect to three types of contracts: (1) those bearing on the reverse engineering of computer programs, (2) those dealing with exceptions and limitations to exclusive rights as codified in statutory intellectual property laws, and (3) those bearing on licenses of noncopyrightable databases that a *sui generis* intellectual property regime may eventually protect.

1. Contracts Limiting the Reverse Engineering of Computer Programs

Because copyright law declines to protect ideas, methods, systems, and principles of knowledge,²⁶² the federal appellate courts have taken pains to ensure that owners of copyrighted computer programs cannot impede the

²⁶⁰ See *supra* text accompanying notes 201-06 (discussing the application of the preemption doctrine in resolving intellectual property matters and the possibility of the preemption doctrine being too broad to apply to specific disputes).

²⁶¹ For the template of assent built into Article 2, see *supra* text accompanying notes 146-48. See also Murray, *supra* note 162, at 740 (noting that most consumers and merchants do not read printed forms and, thus, are not always freely making the choice to enter into a contract, which puts the validity of such a “contract” in question).

²⁶² See 17 U.S.C. § 102(b) (1994); see also *supra* note 41 (quoting § 102(b)).

making of intermediate reproductions of functional content for analytical use by would-be competitors who could not otherwise reasonably extract technical ideas for use in independently created programs.²⁶³ In this respect, the courts have subordinated the copyright owner's exclusive reproduction right to the ability of second comers to compete by means of technically improved programs that are the product of reverse engineering by proper means.²⁶⁴ This result, which follows from the Supreme Court's decision in *Baker v. Selden*²⁶⁵ and is reinforced by a codified exception for analytical use of copyrighted works in general,²⁶⁶ prevents an overly broad interpretation of the exclusive reproduction right from indirectly inhibiting access to unpatentable, noncopyrightable ideas that constitute the building blocks of technical knowledge.²⁶⁷ It has also given rise to a major industry built around the principles of interoperability and incremental innovation that is the envy of the world.²⁶⁸

If software proprietors outlawed the making of such intermediate copies for purposes of analytical use by means of shrinkwrap licenses or standard form contracts under the current version of Article 2B, the would-be competitor's only recourse would lie beyond the Code in the doctrine of pre-

²⁶³ See, e.g., *Atari Games Corp. v. Nintendo of Am., Inc.*, 975 F.2d 832, 842-43 (Fed. Cir. 1992) (holding that the Copyright Act permits intermediate copying for research when the nature of the work requires such copying to understand the ideas and processes of a copyrighted work).

²⁶⁴ See *id.* at 843-44 ("Reverse engineering . . . is a fair use."); see also *Sega Enters., Ltd. v. Accolade, Inc.*, 977 F.2d 1510, 1527-28 (9th Cir. 1992), amended by 1993 U.S. App. LEXIS 78 (9th Cir. Jan. 6, 1993) (holding, in part, that disassembly or reverse engineering is a fair use of copyrighted material when necessary to gain access to the idea and functional elements of copyrighted programs).

²⁶⁵ 101 U.S. 99 (1879); see Reichman, *supra* note 44, at 693 n.288 (interpreting *Baker v. Selden*). But see Digital Millennium Copyright Act, Pub. L. No. 105-304, §§ 403, 1201(f), 112 Stat. 2860, 2889 (1998) (permitting decompilation in instances where interoperability is necessary).

²⁶⁶ See 17 U.S.C. § 107 (1994) (allowing the reproduction of copyrighted works for fair use); Christopher W. Hager, *Apples & Oranges: Reverse Engineering as a Fair Use After Atari v. Nintendo and Sega v. Accolade*, 20 RUTGERS COMPUTER & TECH. L.J. 259, 284-89 (1994) (discussing the copyright fair use doctrine and explaining the four factors generally used by courts in applying the doctrine); Rice, *Sega and Beyond*, *supra* note 151, at 1133-37 (discussing federal court decisions that recognize the exclusive copyright limitation of § 107 of the 1976 Copyright Act as it applies to intermediate copying of computer programs for research).

²⁶⁷ See Reichman, *supra* note 44, at 693 n.288 (discussing the detrimental effects of an overbroad reproduction right).

²⁶⁸ See Panel One: *Information Issues: Intellectual Property, Privacy, Integrity, Interoperability, and the Economics of Information*, 48 FED. COMM. L.J. 5, 7-10 (1995) (discussing the rapid growth of the online services industry and the different legal issues that may arise out of the ever-increasing presence of the Internet in our society).

emption.²⁶⁹ Here, however, there is a fundamental tension between those courts that view such licenses as an intolerable disruption of the federal purposes underlying copyright law, and those that view shrinkwrap licenses as unconditionally pro-competitive and therefore inherently in the public interest.²⁷⁰

We do not mean to suggest that the federal courts are incapable of ultimately resolving these tensions in a satisfactory manner. Rather, we suspect that the need to tie every decision for or against reverse engineering to some overriding federal purpose would skew the real world basis for decision making in single cases, with increasingly arbitrary or capricious results over time. Moreover, these very tensions might soon engulf Article 2B in a sea of preemption cases, which could frustrate its overall implementation for decades and thereby defeat the goal of decreased transaction costs—the main reason for enacting it in the first place.²⁷¹

Application of the proposed public-interest unconscionability doctrine would, instead, alleviate most of these pressures by focusing judicial attention initially on the means by which the impediments to reverse engineering were procured. If obtained by mass-market contracts or by other standard form licenses that imposed non-negotiable terms on users, our amendment to Article 2B would render the impediments vulnerable to claims of invalidity by would-be competitors whose business interests demonstrably suffered due to a change in the judicially devised status quo to which they had not affirmatively assented.²⁷²

²⁶⁹ Note the additional problems caused by the Digital Millennium Copyright Act, Pub. L. No. 105-304, §§ 403, 1201(f), 112 Stat. 2860, 2889 (1998), which limits disablement of technical devices for non-infringing uses and sanctions reverse engineering of software for interoperability without mentioning analytical use. See generally Frank J. Pita, *Reconciling Reverse Engineering and Conflicting Shrinkwrap License Terms Under U.C.C. Article 2B: A Patent Law Solution*, 14 SANTA CLARA COMPUTER & HIGH TECH. L.J. 465 (1998) (discussing U.C.C. Article 2B's effort to "standardize and legitimize software shrinkwrap licenses").

²⁷⁰ Compare *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 270 (5th Cir. 1988) (holding, in part, that a "provision in [plaintiff's] license agreement, which prohibit[ed] decompilation or disassembly of its program, [was] unenforceable"), with *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1452-53 (7th Cir. 1996) (holding that the shrinkwrap license included with software was binding on the buyer under the U.C.C., and noting that the efficiency afforded by these licenses may benefit consumers as a whole).

²⁷¹ See Michael L. Rustad, *Commercial Law Infrastructure for the Age of Information*, 16 J. MARSHALL J. COMPUTER & INFO. L. 255, 286 (1997) (noting that Article 2B adopts a very liberal standard of contract formation which allows statutorily defined defaults to fill in open terms, the underlying goal of which is "the greater efficiency and reduced transaction costs of relying upon default . . . terms rather than negotiat[ing] every term").

²⁷² Although, in principle, licensors could try to rebut the presumption of invalidity on these facts, they would not readily succeed without showing additional facts that bore on the relationship between a particular licensor and licensee that justified enforcement of the standardized terms notwithstanding the lack of formal assent. If, for example, the same software

Conversely, software licensors may reasonably fear that disclosure of valuable but vulnerable technical know-how to single licensees seeking to exploit that know-how in authorized commercial endeavors could unduly weaken their future competitive positions to the advantage of these same licensees. In such cases, licensors could extract affirmatively negotiated promises not to reverse-engineer the licensed technology for a reasonable period of time. The existence of mutual assent would clear the first hurdle of the public-interest unconscionability doctrine, and the objective vulnerability of the licensor should, by hypothesis, suffice to sustain the presumption of validity running in his or her favor. Because third parties not privy to this contract remain free to reverse-engineer the same technology by honest means, if it were released into the stream of commerce, the public interest in the reverse engineering of computer programs would not have been compromised.

Of course, the disappointed licensee could always attempt to fall back upon the doctrine of preemption. We believe, however, that the federal courts should and would defer to case by case decisions under Article 2B as amended by our proposal, unless a major conflict between state and federal powers preemptorily required their attention. The end result, moreover, would avoid the wholesale exodus of the reverse engineering industries to off-shore locations,²⁷³ as could occur under Article 2B in its present form.²⁷⁴

Finally, it seems likely that the use of diskettes, CD-ROMs, or other physical containers of software will soon give way to electronic delivery and network tracking of all software uses and transfers.²⁷⁵ If so, and if licensors obtain privity with all potential users, they could completely negate the benefits of the federal intellectual property law's pro-competitive balance in permitting reverse engineering. The public-interest unconscionabil-

is mass-market licensed in two versions, one costing \$50 without the right to reverse-engineer and the other costing \$75 with no reverse engineering restriction, then it would permit price discrimination, but not anticompetitiveness. However, attempts to use mass-market licenses to prevent reverse engineering certain specific portions of the program for particular reasons are marginally acceptable and may fall into a "yellow basket." See *infra* text accompanying notes 324-25. An exception to the acceptability of such a term would be if the price was so exorbitant that the effect was anticompetitive by making it realistically unavailable. In such cases, the licensor should not be using mass-market licenses in the first place.

²⁷³ See James H.A. Pooley et al., *Understanding the Economic Espionage Act of 1996*, 5 TEX. INTELL. PROP. L.J. 177, 196 (1997) (discussing the importance of reverse engineering to a competitive economy).

²⁷⁴ Such a result was predicted by David Ostfeld for the Institute of Electrical and Electronics Engineers, Inc. at a meeting of the American Intellectual Property Law Association in Washington D.C. in 1998.

²⁷⁵ See generally Stefik, *supra* note 174, at 138 (discussing the role of technology in publishing and ways that technology can preserve the first sale doctrine in a digital environment).

ity doctrine would then play an even greater role in helping to preserve that balance while allowing courts to address the true concerns of licensors and licensees.

2. Contracts Overriding Fair Use and Other Exceptions to Copyright Protection

The Copyright Act of 1976 recognizes numerous exceptions to the bundle of exclusive rights in favor of socially important classes of users, such as libraries and other institutions of education, science, and research.²⁷⁶ It does not, however, codify either the broad private use exemption or the set of compulsory licenses favoring privileged users that are widely available under the domestic copyright laws of the European Union's member states.²⁷⁷ Rather, U.S. law creates a flexible and sometimes surprisingly broad safety net, known as the fair use doctrine,²⁷⁸ which privileged users can invoke when other exceptions and limitations fail.²⁷⁹ Defendants who escape liability from otherwise infringing acts by recourse to this doctrine generally remain exempt from any duty to pay for the uses in question.²⁸⁰ To the extent that similar uses may be repeated by other similarly situated parties

²⁷⁶ See 17 U.S.C. §§ 107-21 (1994 & Supp. II 1996).

²⁷⁷ See European Commission Green Paper on Copyright and Related Rights in the Information Society, reprinted in 43 J. COPYRIGHT SOC'Y U.S.A. 50, 91 (1995) [hereinafter E.U. Green Paper] ("[M]ost Member states have introduced special legal arrangements for . . . private copying . . ."); see also Lucie Guibault, *Limitations Found Outside of Copyright Law* (Final Report for the ALAI Study Days, Cambridge, Mass. Sept. 14-17, 1998) (noting "the appropriateness of applying a private use exemption and several other . . . limitations to the digital networked environment currently under review in many jurisdictions, and particularly in Europe").

²⁷⁸ See 17 U.S.C. § 107 (1994) ("Fair use"). We are indebted to Professor Peter Jaszi for the "safety net" theory of fair use.

²⁷⁹ See generally GOLDSTEIN, *supra* note 259, §§ 10.1.4, 10.11 n.25 (recognizing the adaptability of the fair use doctrine to various situations); LEAFFER, *supra* note 12, at 319-28 (explaining the fair use doctrine and the criteria used to determine its applicability in a particular case).

²⁸⁰

Because the fair use enquiry often requires close questions of judgment as to the extent of permissible borrowing in cases involving parodies (or other critical works), courts may also wish to bear in mind that the goals of the copyright law, "to stimulate the creation and publication of edifying matter," are not always best served by automatically granting injunctive relief when parodists are found to have gone beyond the bounds of fair use.

Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 578 n.10 (1994) (internal citation omitted); see Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1124 n.85 (1990) (explaining that even a duty to pay for the uses would not likely increase the revenues of copyright holders because "many would simply forgo use of the primary material in favor of free substitutes"); see also *Campbell*, 510 U.S. at 585 n.18 ("[B]eing denied permission to use a work does not weigh against a finding of fair use.").

claiming the fair use defense, the net result arguably resembles a forced subsidy by owners and publishers of literary and artistic works in favor of certain privileged users.²⁸¹

This is not the place to explore the pros and cons of extending the “cultural bargain” underlying the fair use safety net, or any of the other limitations on the copyright owner’s exclusive rights that the “bargain” embodies,²⁸² to the digital environment.²⁸³ Indeed, we recognize that these safeguards are under attack from many directions. If, for example, fair use exceptions were primarily justified by high transaction costs in relation to the value of single licenses,²⁸⁴ digital technologies have increasingly eliminated these transaction costs and have created promising new secondary markets that were not previously amenable to private exploitation.²⁸⁵ If an important justification for the subsidy effect mentioned above was that publishers depended on the portable fences of copyright law to market their

²⁸¹ See Gordon, *Fair Use*, *supra* note 6 (arguing that fair use serves to “permit uncompensated transfers that are socially desirable”); Merges, *The End of Friction?*, *supra* note 7, at 134 (“Fair use [in the future] will revolve less around market failure, and more around the idea of favoring certain classes of users with a statutory privilege. In economic terms, the new foundation will represent a shift from emphasizing transaction costs to emphasizing redistribution, pure and simple.”); Reichman, *supra* note 49, at 464 (“To the extent that fair use rests on a market-failure rationale, . . . electronic information tools will reduce the kinds of transaction costs that have traditionally justified much privileged use in the past.”). However, it can be argued that these privileged uses lie outside the copyright owner’s baseline entitlements, in which case the subsidy argument falls flat. See Letter from Marci A. Hamilton, Professor of Law, Benjamin N. Cardozo School of Law, Yeshiva University, to Orrin G. Hatch, Chairman of the Committee on the Judiciary (Sept. 4, 1998), available in Letter to Senator Hatch (last modified Sept. 21, 1998) <<http://www.marcihamilton.com/ip/hatchdatabase.html>> [hereinafter Letter from Marci A. Hamilton, Professor of Law, to Orrin G. Hatch].

²⁸² See Jaszi, *supra* note 83, at 596 (arguing for the policy rationales for limitations on proprietary rights); see also Marci A. Hamilton, *The TRIPS Agreement: Imperialistic, Outdated and Overprotective*, 29 VAND. J. TRANSNAT’L L. 613, 623 (1996) (discussing the “cushion of ‘free use’ surrounding the author’s capacity to prohibit unauthorized or unpaid uses”). But see Hansen, *supra* note 56, at 592 (discussing the TRIPS regime as a “mechanism[] for both the United States and European Union to enforce provisions that increase protection [for intellectual property] in newly industrialized and developing nations”).

²⁸³ See World Intellectual Property Organization Copyright Treaty with Statements of the Diplomatic Conference That Adopted the Treaty, S. TREATY DOC. NO. 105-17, at 9 (1997) (authorizing the continuation of limitations on exclusivity, such as fair use, and the appropriate extension of such limitations into the digital environment); *id.* (Preamble) (recognizing the “need to maintain a balance between the rights of authors and the larger public-interest”); Pamela Samuelson, *The U.S. Digital Agenda at WIPO*, 37 VA. J. INT’L L. 369, 369-70 (1997) (listing various proposals to update world intellectual property law as considered at the December 1996 World Intellectual Property Organization diplomatic conference in Geneva).

²⁸⁴ See Gordon, *Fair Use*, *supra* note 6, at 1600 (examining reasons for fair use, including, *inter alia*, the absence of market formation due to various transaction cost barriers).

²⁸⁵ See Merges, *The End of Friction?*, *supra* note 7, at 116-17 (describing encryption and self-reporting content as examples of technology that lower the cost of enforcing deals).

works in the first instance, then digital technologies, including encryption and other self-help measures, increasingly free them from the need to rely on such portable legal fences.²⁸⁶

In this context, publishers increasingly seek the full benefit of their exclusive rights without statutory limitations.²⁸⁷ Those who would defend existing privileged users must find new justifications for measures that seem to make authors and artists, rather than taxpayers, a primary source of funding for activities that generally promote education, science, research, and the public welfare.²⁸⁸ Meanwhile, the trend in Europe and in the United States increasingly has been to attempt to reduce the scope of statutory exceptions and limitations that were once taken for granted.²⁸⁹

We concede that copyright law is undergoing a period of reorganization loosely associated with the digital transmission of creative works and with other technical inroads on prior means of dissemination. The legitimate aims of entrepreneurs to create new markets in the digital environment make it necessary to adjust the balance between public and private interests to fit today's technical and economic conditions. The technological progress of developed countries, however, rests in part on the balance of public and private interests that already exists under current intellectual property statutes. We fear that ill-advised measures that would alter this balance at the expense of the educational, scientific, research, and library communities could derail the production of knowledge goods on which the comparative

²⁸⁶ See *id.* at 132 ("If the market-making capacity of [centralized institutions] makes such a dent in market failure, digital technologies will obliterate the fair use defense entirely."). However, the publishers' reliance on government intervention in the global marketplace, see TRIPS Agreement, *supra* note 50, has arguably increased, not decreased, which helps to justify government defense of public-interest uses.

²⁸⁷ See generally Elkin-Koren, *supra* note 4, at 94 (examining efforts by copyright owners to expand their copyright protection through the use of contractual relationships).

²⁸⁸ See Litman, *supra* note 20, at 44-47; Merges, *The End of Friction?*, *supra* note 7, at 134 (quoted *supra* note 281).

²⁸⁹ See INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS 2, *supra* note 51, at 17 (noting that "[s]ome have argued that . . . the concept of fair use has no place in the [National Information Infrastructure] environment"); E.U. Green Paper, *supra* note 277, at 51-52 (arguing for greater copyright protection and international "harmonization" in the context of the digital environment); Charles R. McManis, *Taking TRIPS on the Information Superhighway: International Intellectual Property Protection and Emerging Computer Technology*, 41 VILL. L. REV. 207, 263-80 (1996) (criticizing the White Paper and the U.S. attempts to influence the WIPO proposals). *But see supra* note 283 (noting that the WIPO copyright treaty authorizes the continuation and extension to the digital environment of various limitations on exclusive rights).

advantage of all industrialized countries, and that of the United States in particular, currently depends.²⁹⁰

In this shifting environment, mass-market attempts to prevent slavish or parasitic copying may thus inhibit long-established socially beneficial uses of literary, artistic, and musical works,²⁹¹ and may even pose new restraints on freedom of speech.²⁹² Our main concern is to ensure that standardized information transactions covered by Article 2B do not become a substitute for, or an end run around, the legislative crucibles in which the solutions to these thorny problems ought to be forged. When licensors combine the restored power of the two-party deal in the digital environment with the power of standardized form contracts in order to override or diminish statutory exceptions and limitations, including those sounding in fair use, licensees should be able to challenge those clauses for unreasonably compromising the public interest whether or not the non-negotiable terms in question might also trigger a preemption defense.²⁹³ Licensors whose standard form contracts respected the statutory exceptions and limitations of copyright and related laws would, of course, encounter no enforcement difficulties whatsoever under the doctrine of public-interest unconscionability.

Conversely, the presumption of validity we bestow on negotiable terms in contracts that force controversial issues concerning the balance of public and private interests could have the salutary effect of prodding consortiums of licensors and privileged users to bargain around preexisting exceptions and limitations under statutory intellectual property laws. This practice

²⁹⁰ See Reichman, *supra* note 190, at 291 (stating that “the fruits of [scientific] enterprise are largely responsible for U.S. technological superiority”).

²⁹¹ For example, standard form contracts could limit existing doctrines that permit parody, criticism, comment, and other productive uses of expressive subject matter if other factors apply. See 17 U.S.C. § 107 (1994) (codifying reference to preambular uses that are especially likely to be exempted from the provisions of §§ 106 and 106A). The protection of expressive subject matter under Article 2B could thus become even stronger than it currently is under copyright law.

²⁹² For example, First Amendment concerns are raised by creators attempting to contractually limit the use of original subject matter in negative evaluations of the creator or his or her creations. See Netanel, *supra* note 35, at 306; see also James Raymond Davis, *On Self-Enforcing Contracts, the Right to Hack, and Willfully Ignorant Agents*, 13 BERKELEY TECH. L.J. 1145 (1998) (addressing fears about disabling encryption devices). But see Cohen, *supra* note 4, at 1134 (stating that while the First Amendment constrains the power of Congress and the states to recognize intellectual property rights by statute, “digital standard forms to enforce prohibitions on a broad range of speech activity” have the potential to “significantly undermine the First Amendment’s guarantees”).

²⁹³ Suspect mass-market contracts not challenged for lack of assent to terms that compromise the public-interest would, of course, remain enforceable against licensees who acquiesced to them. See *infra* text accompanying notes 320-21 (discussing grounds for challenging such contracts).

could foster the gradual creation of a new balance of public and private interests better suited to the needs of an information-based economy.

Rather than relying either on the blunderbuss of preemption or on the haphazard, all-or-nothing decisions of courts adjudicating disputes about so-called fair uses, we thus provide incentives for content providers and statutorily privileged classes of users to convert the uncertainties inherent in baseline entitlements that border on subsidies into negotiated agreements. These agreements might sanction experimental forms of product differentiation and price discrimination that permitted publishers to profit from new technological uses of information goods without imposing pay-per-use models and "one size fits all" solutions in contracts of adhesion that were routinely validated by Article 2B.²⁹⁴

We would thus expect to see substantial experimentation with need-based discounts, cost-plus formulas, and collective bargaining arrangements, all of which should usually pass muster under the principles outlined above. Taken together, these products of collective action could progressively represent a creative response to new ways of doing business that would benefit publishers without harming education, science, and research. This response would in turn discourage the federal courts from allowing the doctrine of preemption to curb or thwart the formation of such agreements.

3. Contracts Restricting the Use of Noncopyrightable Collections of Data

As the copyright and patent paradigms break down,²⁹⁵ and the tendency to multiply ad hoc, *sui generis* intellectual property rights based on modified patent and copyright principles grows disproportionately,²⁹⁶ there has been a gradual blurring of the underlying conceptual tenets that heretofore justified intellectual property protection in both legal and economic terms. Increasingly, the end result of any given legislative exercise is to endow certain industries or industrial sectors with legal monopolies shaped to meet the stakeholders' interests without any corresponding attention to the public interest or to the preservation of a public domain in which free competition would be rooted.²⁹⁷ Recently, this degenerative process reached a new low

²⁹⁴ Cf. BITS OF POWER, *supra* note 45, at 124-25 (discussing price and product differentiation in the context of scientific data).

²⁹⁵ See *supra* text accompanying notes 41-51 (discussing limits of the classical intellectual property system).

²⁹⁶ See *supra* note 49 and accompanying text (showing proliferation of hybrid intellectual property rights at home and abroad).

²⁹⁷ For the most recent example in U.S. law, see the Digital Millennium Copyright Act, Title V, Vessel Hull Design Protection Act, Pub. L. No. 105-304, § 403, 112 Stat. 2860, 2889 (1998). See also Jessica D. Litman, *Copyright Legislation and Technological Change*, 68 OR.

when the Commission of the European Union promulgated a directive that conferred strong and potentially perpetual protection on noncopyrightable collections of data and information, including electronic databases, that are updated at regular intervals.²⁹⁸ This law, which has spawned corresponding legislative initiatives in the United States,²⁹⁹ mandates no public-interest exceptions whatsoever.³⁰⁰ If the pending U.S. legislation moves forward in the form approved by the House of Representatives, it too could fail to recognize adequate exceptions for even the most severely affected public-interest users, including libraries and facilities for education, science, and research.³⁰¹

To understand just how radical these initiatives really are, one should recall that, under existing copyright laws, the bulk of all the material contained in any scientific book or article enters the public domain immediately upon publication. This occurs because copyright law protects only the expression of scientific facts, theories, data, and findings, but not the factual

L. REV. 275, 282-305 (1989) (detailing the history of copyright law revision efforts beginning in 1909 and explaining how a process of private negotiation came to dominate copyright revision); Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29, 32 (1994) ("The Draft Report [Information Infrastructure Task Force, Intellectual Property and the National Information Infrastructure: A Preliminary Draft of the Report of the Working Group on Intellectual Property Rights (July 1994),] . . . endorses the goal of enhanced copyright protection without acknowledging any countervailing concerns.").

²⁹⁸ See E.U. Directive, *supra* note 38, at art. 10(1)-(2), O.J. (L77), at 26; Hunsucker, *supra* note 46, at 731-32 (stating that "the [European Union Directive and proposed WIPO] regimes provide the database maker an opportunity to extend the toll fence in perpetuity").

²⁹⁹ See H.R. 354, 106th Cong. (1999) (Collections of Information Antipiracy Act); H.R. 2652, 105th Cong. (1998) (Collections of Information Antipiracy Act); H.R. 3531, 104th Cong. (1996) (Database Investment and Intellectual Property Antipiracy Act).

³⁰⁰ The Directive permits some public-interest exceptions, however:

[I]n the case of extraction for private purposes of the contents of a non-electronic database; in the case of extraction for the purposes of illustration for teaching or scientific research, as long as the source is indicated and to the extent justified by the non-commercial purpose to be achieved; in the case of extraction and/or re-utilization for the purposes of public security or an administrative or judicial procedure.

E.U. Directive, *supra* note 38, art. 9. Copying of insubstantial amounts is always allowed. See *id.* at art. 7.5.

³⁰¹ See *Collections of Information Antipiracy Act: Hearings on H.R. 2652 Before the Subcomm. on Courts and Intellectual Property of the House Comm. on the Judiciary*, 105th Cong., 1st Sess. (1997) (subjecting nonprofit educational and research entities to a test of harm to "actual markets"). But see H.R. 354, which now contains some proposed exceptions for nonprofit research uses, but could still disrupt customary or traditional scientific and educational activities. See generally Reichman, *supra* note 212 (discussing proposed amendments authored by the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, as well as negotiated proposals set out in the Hatch Database Discussion Draft of October 1998 (on file with authors)).

content itself.³⁰² In contrast, the *sui generis* database protection laws would wrap these very collections of data and information in stronger and longer lasting bundles of exclusive rights than copyright law itself affords.³⁰³

The pros and cons of database protection laws have been investigated elsewhere,³⁰⁴ and we do not intend to rehash those findings here. We do think courts should strictly scrutinize contractual agreements for the supply and distribution of noncopyrightable data and information that may arise within the framework of these untested *sui generis* rights.

Indeed, the restored power of the two-party deal to structure the delivery of data by online transmissions leads us to contend that courts should carefully scrutinize all contracts restricting access to and use of the contents of databases, even if the United States failed to adopt *sui generis* legislation on the European model. We reach this conclusion because nothing constrains private database producers operating outside of the copyright law to take public-interest uses of data into account, and also because the concentrated and often sole-source character of the database industries fosters barriers to entry and creates unusual opportunities for monopoly pricing.³⁰⁵ The prospect that producers of privately generated databases who are technically not subject to the cultural bargain of copyright law might thus be able to ignore the needs of educators, scientists, researchers, and other public-interest users of data or information raises profound policy concerns and constitutional issues that we can only hint at here.³⁰⁶

³⁰² See 17 U.S.C. §§ 102, 103(b) (1994) (providing that copyright protection extends only to original expression and limiting protection to the "material contributed by the author"); *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361 (1991) (noting that copyright protection applies only to an author's original and expressive contributions to his work); Reichman & Samuelson, *supra* note 20, at 62 (recognizing precedents that establish the "mature copyright paradigm," which claims to protect only the original expression that authors embody in information products).

³⁰³ See Reichman & Samuelson, *supra* note 20, at 94 ("It follows that, under the E.C. Directive, the most borderline and suspect of all the objects of protection ever to enter the universe of intellectual property discourse—raw data, scientific or otherwise—paradoxically obtains the strongest scope of protection available from any intellectual property regime except, perhaps, for the classical patent paradigm itself.").

³⁰⁴ See *supra* notes 45-46; see also Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1896-97 (1990) (discussing the pre-*Feist* "'sweat' test of authorship"); Ginsburg, *supra* note 57, at 341, 342-53 (addressing the "copyrightability of and scope of protection for works of information after *Feist*"). A new study by the National Research Council is nearing completion.

³⁰⁵ See BITS OF POWER, *supra* note 45, at 111-14 (describing the possibility that a private market would become a monopoly and harm the interests of science).

³⁰⁶ See Letter from Marci A. Hamilton, Professor of Law, to Orrin G. Hatch, *supra* note 281 (describing H.R. 2652, 105th Cong. (1998), the Collections of Information Antipiracy Act, as an "unconstitutional exercise of congressional power"); Memorandum from William Michael Treanor to William P. Marshall, Associate White House Counsel (July 28, 1998),

Our concern is not to solve the database problem, but rather to ensure that mass-market access contracts and other standard form agreements do not become the vehicle for imposing onerous restraints upon users of privately generated databases, without regard for the needs of educators and scientists to access and compile complete data sets in the course of their public-interest pursuits. Accordingly, we would expect courts assessing non-negotiable terms in such contracts to exercise the full invalidating weight of our proposed amendment in appropriate cases. We would also expect courts to subject database delivery contracts to the strictest tests of constitutionality, on both preemption and other grounds,³⁰⁷ even in the presence of affirmatively negotiated terms and conditions.

The public-interest unconscionability doctrine, with its willingness to enforce both affirmatively negotiated terms and noncontroversial standardized terms, would nonetheless play a positive role in the database milieu, even if it did not altogether avoid attacks sounding in preemption. The existence of such a doctrine should stimulate database producers and public-interest users to seek a bargained-for middle ground in which users obtained needed data at differentiated prices, while producers obtained cost-plus returns on all distributions of data, including those to relatively poor, but important, scientific and educational institutions.³⁰⁸ In effect, the public-interest unconscionability doctrine would help to eliminate both free-rider and subsidy problems by encouraging privileged users to pay reasonable prices and by encouraging database producers to practice price discrimination in favor of such users.

The doctrine thus provides some incentives for working through the problems of database protection on a case by case basis in a climate of relative contractual freedom without sacrificing public-interest concerns, even if it does not fully immunize licensors from other attacks on constitutional grounds. This positive result, however, could only occur if database producers remain unable to use Article 2B as it stands to privately legislate the

available in DOJ Memo on Constitutionality of HR 2652 7/28/98 (visited March 27, 1999) <<http://www.acm.org/usacm/copyright/doj-hr2652-memo.html>> (describing constitutional issues raised by H.R. 2652 (1998), the Collections of Information Antipiracy Act); see also Letter from Marci A. Hamilton to Curtis Reitz (Apr. 18, 1997) (on file with authors) (describing the constitutional problems contained in a draft of U.C.C. art. 2B).

³⁰⁷ See, e.g., Letter from Marci A. Hamilton to Curtis Reitz, *supra* note 306 (criticizing a draft of U.C.C. Article 2B because it treats intellectual property and data identically, even though the Supreme Court has held that the First Amendment implicitly prohibits this).

³⁰⁸ See Reichman & Samuelson, *supra* note 20, at 151-63 (discussing foreign legal structures that permit lower prices for socially beneficial scientific and educational uses); Letter from J.H. Reichman to Chairman Coble, *supra* note 237 (discussing how the research and library communities may gain access to data "at fair and equitable prices").

distribution of noncopyrightable databases under any non-negotiable terms and conditions they wish to impose.

III. A NON-ASSENT-DRIVEN PARADIGM OF CONTRACT FORMATION FOR THE DIGITAL AGE

The previously discussed doctrine of abuse or misuse of intellectual property rights already allows courts to question the propriety of certain contractual terms and conditions as unwarranted restraints on trade. Although the necessarily vague contours of this doctrine continue to attract criticism,³⁰⁹ U.S. courts have recently expanded the theory of misuse to new problems that copyright protection of computer programs has brought to light.³¹⁰

Conceptually, our proposed “public-interest unconscionability doctrine” supplies a functional equivalent in contract law of that same misuse doctrine, which courts can apply to standard form licenses of digitized information goods whether or not they also involve the exercise of intellectual property rights. It thus gives courts a tool with which to police the possible misuse of standard form contracts that *behave* like intellectual property rights in the digital environment.

A. *A Doctrine to Curb the Misuse of Standard Form Digital Information Contracts Is Not Radical*

Recall that the online distribution of encrypted information subject to electronically controlled gatekeeping devices potentially converts the licensor’s standardized terms governing access and use into a de facto or quasi-intellectual property right valid against the world.³¹¹ In this digital environment, standard form information licenses increasingly will resemble licenses supported by statutory legal monopolies, and the “restored power of the two-party deal,” when expressed through non-negotiable terms, will tend to re-create many of the same concerns that courts have addressed when applying the misuse doctrine to intellectual property licenses in general. The power to dictate non-negotiable licensing terms that unduly alter the balance of public and private interests inherited from statutory intellectual property law and policy thus amounts to a potential for abuse that the

³⁰⁹ See *supra* text accompanying notes 208-19 (discussing the problems of applying the misuse doctrine to intellectual property licenses).

³¹⁰ See *supra* note 211 and accompanying text (identifying cases where courts have applied the misuse doctrine to copyrights).

³¹¹ See *supra* Part I.C (discussing privately legislated intellectual property rights). “Shrinkwrap” licenses on hard copies of digitized productions can have the same effect.

“public-interest unconscionability doctrine” is specifically designed to regulate.

Viewed from this angle, it hardly seems radical to require licensors who routinely rely on electronic adhesion contracts that avoid the traditional requirements of mutual assent to submit to a test of “fair and reasonable terms . . . with due regard for the public interest in education, science, research, technological innovation, freedom of speech, and the preservation of competition.”³¹² What does seem radical, in contrast, is a project to replace the assent-based model of Article 2 with a model like that of Article 2B, which trivializes assent in order to validate routine formation and use of adhesion contracts at the center of the information economy.³¹³

A public-interest unconscionability doctrine serves little purpose so long as negotiable terms control contract formation under an assent-driven paradigm, such as that of Article 2 of the U.C.C. Because the default rules of Article 2 so carefully balance the interests of both buyers and sellers of tangible goods, it has even proved possible to stretch that paradigm to accommodate the efficiencies of standard form agreements without sacrificing the requirement of mutual assent.³¹⁴ We view our proposed doctrine of public-interest unconscionability as a tempered and restrained counterweight to the radical shift away from an assent-driven paradigm that underlies the philosophy of Article 2B. Such a doctrine should help courts bridge the gap between the older requirements of contract formation and the untried, experimental model that the drafters of Article 2B deem appropriate for computerized information transactions, despite the lack of any empirical evidence to illuminate its likely social impact.

One should not imagine that “click-on” and “shrinkwrap” licenses are some minor aberration that will soon vanish from the scene. Even though first-year contracts instructors continue to teach the assent-based model of contract formation, as refined by the bargain-in-fact methodology of Article 2,³¹⁵ there is every indication that the “no real assent needed” paradigm will

³¹² See *supra* text accompanying notes 231-35 (proposing the addition of the public-interest unconscionability doctrine to Article 2B).

³¹³ A non-assent-driven paradigm of contract formation, centered on the concept of a “non-negotiable middle ground,” could nonetheless become indispensable in the online environment. See *infra* text accompanying notes 338-39 (explaining this concept).

³¹⁴ See U.C.C. § 2-207 (battle of forms); Tentative Draft Article 2 (Feb. 1999) (deciding not to change existing section 2-302 (other than moving it to section 2-105), but to include a possible new provision, section 2-206, which points to a commercially reasonable standard of fair dealing in contract formation); Greenfield, *supra* note 143 (discussing the conceptions of assent raised in the ongoing revisions of Article 2 and Article 9).

³¹⁵ See, e.g., U.C.C. §§ 2-204 (contract formation), 2-206 (offer and acceptance), 2-207 (battle of forms), 2-208 (bargain in fact), 2-209 (contract modification); *supra* text accompa-

actually dominate the economic landscape of the Information Age. That conclusion would become inescapable if any version of Article 2B that resembles the current draft became uniform law in the fifty states of the Union and were further exported abroad (as the sponsoring organizations envision).³¹⁶

By proposing a doctrine to prevent the misuse of electronic adhesion contracts, we seek to encourage the formation of more socially productive standard form licensing agreements governing computerized information transactions. Precisely by facilitating public-interest challenges to contracts that push non-negotiable terms too far, we expect to trigger a process that would soon generate an abundance of standardized non-negotiable terms likely to withstand such assaults.³¹⁷ Repeated use of these terms should promote both public *and* private interests in the new electronic environment. The public-interest unconscionability doctrine thus represents a good-faith attempt to facilitate high-volume, low-cost transactions without undue social costs and without allowing overprotection of licensed matter to compromise the growth and development of the information economy.

B. *The Social Costs of Accessing Information Under State-Enforced Contracts of Adhesion*

There are additional benefits to be expected from the adoption of this clause beyond those already discussed in connection with its potential application to software, fair use, and noncopyrightable subject matter including databases.³¹⁸ Once a public-interest unconscionability clause was incorporated into the default rules of contract law applicable to digital transactions, for example, both licensors and licensees should expect to reduce their exposure to preemption and other destabilizing external doctrines.³¹⁹ Because this clause would first focus judicial attention on questionable terms as a matter of contract law, they would likely be reformed or exonerated prior to analysis under federal intellectual property or related antitrust doctrines.

Through this process of case by case judicial interpretation, a cohesive body of licensing law could quickly grow and evolve within the ambit of

nying notes 145-55 (comparing what constitutes assent in U.C.C. Article 2 and the proposed Article 2B).

³¹⁶ For the reaction of one European commentator to Draft Article 2B, see F. Dessemontet, *Contracting and Licensing on the Net*, in *FESTSCHRIFT FOR GUNNAR KARNELL* (forthcoming 1999, Stockholm, Sweden). See generally Dessemontet, *supra* note 150.

³¹⁷ See *infra* text accompanying notes 324-31 (devising techniques for reducing transaction costs over time).

³¹⁸ See *supra* Part II.C.

³¹⁹ See *supra* text accompanying notes 198-229 (explaining the disadvantages of existing doctrines, including preemption, misuse, "public policy," and unconscionability).

general contract law, once the parameters of the proposed doctrinal safeguards were judicially worked out. In contrast, resort to outside doctrines that may be changing in response to very different problems arising in other contexts will continue to disrupt the playing field of digital licensing transactions, often for all the wrong reasons, long after the internal scope of the public-interest unconscionability doctrine would have been settled.

Even though we have designed this “public-interest unconscionability” doctrine to counterbalance the licensors’ strengthened position under present or future versions of Article 2B, we expect courts to limit its reach to the most egregious cases, in much the same way that they have limited the scope of the general unconscionability doctrine under Article 2.³²⁰ Indeed, the mere existence of the unconscionability doctrine has likely chilled the use of potentially unconscionable terms in Article 2 contracts, and we would hope that the same chilling effect would follow from the adoption of the public-interest unconscionability doctrine. To this extent, the benefits of the doctrine might be felt even before the first case was brought to test its bite.

Concerns about excessive litigation under the public-interest unconscionability doctrine thus seem misplaced. In the absence of any cost-shifting structure for litigation, of an inexpensive arbitration procedure, or of substantial amounts appearing at risk (which is unlikely in most mass-market licensing transactions), few ordinary suits would actually be brought under this doctrine in which the burden of proof fell upon the licensor. Of course, class action suits challenging egregious constraints on access or use by nonprofit institutions remain a distinct possibility.

Even so, if the proposed clause minimized the need to invoke preemption and other blunt external legal tools, were limited in scope, and tended to increase support for the passage of Article 2B on an experimental basis, what reasons could there be for not including it? The two practical drawbacks to the public-interest unconscionability doctrine that seem worth mentioning here are higher initial transaction costs and possible difficulties of enforcement.

1. Basketing Transaction Costs over Time

Retail software and Internet transactions are mass transactions in which the use of standard forms and simplified negotiations should yield real gains

³²⁰ See Rustad, *supra* note 271, at 283 n.160 (noting that although section 2-302 “permits judges to strike unfair contract terms that are unconscionable,” judges seldom do so). However, the doctrine of unconscionability may benefit from a new section, to be added to Article 2, which would look beyond consumers to a standard of procedural unconscionability, regardless of whether the term is substantively unconscionable. See *supra* notes 227, 314.

in efficiency. Incentives that favored variants of face-to-face negotiations could lower the velocity of transactions and impose unwelcome monitoring costs, which might hypothetically look disproportionate to the social costs of laissez-faire economics. Moreover, the distinction between “negotiable” and “non-negotiable” terms is not sharp, but can be characterized as a set of weigh stations along a continuum. There are ways to make “click on assent” resemble “negotiated” terms, even when such terms are actually non-negotiable and a subtle form of private legislation to boot.

The simple answer to these objections is that we do not propose incentives to favor face-to-face negotiations. We do favor the creation of a safe haven for the use of tempered, even-handed, socially responsible terms and conditions in standard form electronic contracts. The availability of our safe haven should, in turn, discourage the use of standard form contracts to impose controversial, untested, harsh, or oppressive terms that utterly disregard the public interest as Congress or the courts have heretofore identified it.

The costs of managing our proposed doctrine seem not unreasonable in view of the overriding goal, namely, that one should not facilitate premature, radical change of the present intellectual property balance by routinely resorting to non-negotiable terms that obscure underlying empirical realities. Providers who want the benefits of frictionless mass transactions should not force the issues by adopting controversial access and user constraints in standard form contracts of adhesion. The more controversial the term, the more up-front negotiation is required, with the attendant justification of clauses likely to engender conflicts with intellectual property law and policy and to alter the preexisting public-private balance.³²¹

As we discuss more fully below, we do favor negotiations between providers and consortiums of users, when feasible, to develop the safe haven templates needed to reduce transaction costs over time. Regardless of whether such a consortium approach effectively reduces tensions, our point is that licensors cannot simply quash socially justified concerns about controversial terms by resorting to standard form, electronically imposed solutions of their own.

From this angle, requiring parties to negotiate around controversial public-interest constraints on the private allocation of information goods under our proposed amendment to Article 2B looks roughly analogous to

³²¹ See R. Nimmer, *supra* note 167, at 213-15 (stating that “digital information products require a contractual base that entails a greater degree of certainty and explication . . . than transactions in goods”).

the need to obtain real assent to non-dickered terms under Article 2.³²² In other words, we require real assent to substantial incursions on established intellectual property policies that favor public good uses of information, and even the negotiated terms that result from such an exercise remain open to challenge. In such cases, however, the negotiated terms benefit from a presumption of validity, and the burden of disestablishing them falls on the challenger.³²³ By the same token, subjecting non-negotiable terms to judicial scrutiny under a public-interest unconscionability clause creates an incentive not to force the solution to controversial issues by imposing standard or non-negotiable terms that undermine the public interest, despite the ability to do so that may result from market power, from the restored power of the two-party deal, or from a combination of the two.

Over time, we envision the use of three baskets to facilitate both the drafting and judicial scrutiny of non-negotiable terms: a red basket for terms that are almost always invalid, a green basket for terms that are almost always valid, and a yellow basket for terms of debatable validity due to judicial precedents or detrimental interactions with other terms.³²⁴ The producer or content provider who uses “yellow basket” clauses in non-

³²² For example, such assent can be obtained by insisting upon a true counteroffer under the “unless” clause of U.C.C. section 2-207(1). See U.C.C. § 2-207(1) (stating that acquiescence to additional or different terms of a form contract will not be implied by a general expression of acceptance “unless acceptance is expressly made conditional on assent to the additional or different terms” (emphasis added)); see also Greenfield, *supra* note 143, at 302-14 (describing Article 2 provisions that require real assent); Murray, *supra* note 162, at 740 (emphasizing that the “quintessential element of contract formation [is] volition, or true assent”). Alternatively, non-dickered, different or additional terms on the parties’ conflicting forms fall out, and the deal is formed around the dickered terms plus the default rules supplied by Article 2 of the Code itself. See U.C.C. §§ 2-207(1)-(3); see also WHITE & SUMMERS, *supra* note 115, § 1-3, at 10 (arguing that the comment to U.C.C. section 2-207 can be read as supporting the view that when the parties’ forms conflict, acceptance by one party only constitutes “an acceptance of the terms on which the two documents agree”); Douglas Baird & Robert Weisberg, *Rules, Standards, and the Battle of the Forms: A Reassessment of § 2-207*, 68 VA. L. REV. 1217, 1219-23 (1982) (“When the agreement leaves certain terms of the contract in dispute, courts supply the terms that the Code posits parties would have agreed to had they dickered over them.”).

³²³ See *supra* text accompanying notes 241-49 (discussing negotiable terms and the public-interest unconscionability doctrine).

³²⁴ For an analogous use of such baskets in international trade law, see WTO Agreement, *supra* note 50, Annex 1A: Multilateral Agreements on Trade in Goods, at 20-324. This Agreement contains the procedures for obtaining authorization for countermeasures against a prohibited subsidy, an actionable subsidy, and a nonactionable subsidy, in Parts II, III, and IV, respectively. Part II Prohibited Subsidies (also called “red light” subsidies) are those such as export subsidies, de facto export subsidies, and subsidies contingent upon the use of local content. See generally Terrence J. McCartin, *Red, Yellow or Green: GATT 1994’s Traffic Light Subsidies Categories*, in THE COMMERCE DEPARTMENT SPEAKS ON INTERNATIONAL TRADE AND INVESTMENT 611 (1994) (explaining the red, yellow, and green light system).

negotiable contracts proceeds at his or her own risk. If such a clause is needed, it should be brought conspicuously to the attention of the licensee; and licensors who are unable or unwilling to bargain electronically should be prepared to justify their need for the term, if challenged, on the basis of compelling business reasons that outweigh countervailing social costs.

Alternatively, licensors may wish to establish procedures by which disgruntled, would-be licensees could attempt to work out different terms from those in the yellow basket with the licensor's designated agent. Such procedures would avoid their simply thrusting or sneaking the clause into a contract of adhesion under a default rule that usually gave the licensor the last word concerning access and user restrictions. In such a case, a licensee's failure to make contact with the designated agent might estop him or her from raising the public-interest unconscionability defense later on.³²⁵

Our proposed amendment thus favors the formulation of standard terms consonant with public-interest uses of information,³²⁶ whose validity becomes increasingly well established over time. In the case of access contracts, for example, price discrimination and product differentiation that benefit privileged users should quickly gain respect and become routine, as these devices often produce pro-competitive effects.³²⁷ Questioning the so-

³²⁵ Cf. Digital Millennium Copyright Act, Pub. L. No. 105-304, § 403, 112 Stat. 2860, 2889 (1998) (allowing online service providers to limit liability for copyright infringement by establishing designated agents to receive notice of potential copyright violations). See generally Online Copyright Infringement Liability Limitation, Pub. L. No. 105-304, § 202, Limitation on Liability for Copyright Infringement, 112 Stat. 2860 (1998), amending 17 U.S.C. § 512 (1994).

³²⁶ Similarly, providers dealing with privileged users, such as research organizations, would have an additional incentive, lacking in ordinary commercial transactions, to avoid undue restrictions on noncommercial uses. For example, if either commercial or noncommercial science were unduly restrained by a non-negotiable clause, these privileged users might invoke public-interest concerns in this regard, without necessarily invalidating the use of an identical clause in a more typical commercial situation. Moreover, content providers operating under reasonable parameters of price discrimination might charge commercial science more than non-commercial science for access to or use of certain material, provided that sufficient access were guaranteed in both cases. See BITS OF POWER, *supra* note 45, at 124-26 (describing guidelines for price discrimination among the research community and commercial users); Julie E. Cohen, *Some Reflections on Copyright Management Systems and Laws Designed to Protect Them*, 12 BERKELEY TECH. L.J. 161, 162 (1997) (noting that "[s]oftware developers are testing prototype systems designed to detect, prevent, count, and levy precise charges for uses that range from downloading to excerpting to simply viewing or listening to digital works"). We recognize the existence of the problem of "leakage" between pricing tiers, but we believe that technical management devices, backed up by U.C.C. Article 2B, would solve this problem.

³²⁷ See, e.g., *ProCD v. Zeidenberg*, 86 F.3d 1447, 1454-55 (7th Cir. 1996) (facilitating product differentiation through different licenses for the same underlying data); BITS OF POWER, *supra* note 45, at 111-17 (approving of price differentiation and product discrimina-

cial impact of even these solutions in particular cases should remain a possibility, however.³²⁸ In this connection, the establishment of ombudsmen and of an efficient and balanced dispute resolution system premised on collective bargaining (where feasible) might reduce transaction costs for both licensors and licensees in situations where members of the affected body of users and producers shared congruent goals. If these approaches expedited the determination of satisfactory terms that could become reusable in future contracts, it would further minimize transaction costs.

As licensors who become familiar with the intricacies of Article 2B try to price discriminate to maximize profits, nonprofit organizations should benefit from forming the licensing consortiums mentioned above.³²⁹ These consortiums would have greater bargaining power than single nonprofit institutions, and thus could more effectively block the use of terms that were undesirable to the user group. By drafting responsive agreements, consortiums that represent particular types of heretofore privileged users could meet the licensing needs of that particular user group without an excessive increase in transaction costs.

Such initiatives would further stimulate product differentiation and price discrimination in favor of public good uses of information products.³³⁰ The standard form license agreements resulting from a collective bargaining process should also help to fill the "green basket" of presumptively valid contractual terms and conditions for the future.³³¹ However, courts must also watch for instances in which standard terms deemed acceptable in sin-

tion in private sector licenses of databases to nonprofit educational and scientific user entities).

³²⁸ For example, Professor Wendy Gordon has doubts about the *ProCD* case and notes a long history of price discrimination in copyrighted material, which she will explain in a forthcoming article. See Wendy Gordon, *Price Discrimination Redux: Of Copyright, Computers, and Plain Vanilla Copyright*, 74 CHI.-KENT L. REV. (forthcoming 1999) (proposing, in part, that copyright law itself is price discrimination, in that § 106 functions to give copyright owners the ability to distinguish among, and sell differently to, different classes of users; contracts that give more price-discrimination power than does § 106 of the Copyright Act may be inconsistent with that Act, as well as operating in a manner essentially "equivalent" to it).

³²⁹ See Meurer, *supra* note 193, at 877-80 (arguing that "copyright expansion and digital technology will create a windfall profit for copyright holders" and thus "facilitate more price discrimination"); see also BITS OF POWER, *supra* note 45, at 124-25 (discussing price discrimination as a way to achieve economic efficiency for regulated monopolies); Okerson, *supra* note 253 (proposing the use of consortiums of nonprofit licensees to balance the current negotiating strength of licensors). While the extent to which such consortiums might raise questions of antitrust law is beyond the scope of this Article, the nonprofits would likely obtain legislative exemptions from antitrust law for this purpose should the need arise.

³³⁰ See, e.g., BITS OF POWER, *supra* note 45, ch. 4 (discussing potential economic benefits of differential pricing and marketing strategies for scientific users of commercial databases).

³³¹ See *supra* text accompanying note 324 (discussing basketing).

gle cases could produce anticompetitive or antisocial effects when cumulatively employed across an entire market segment or industrial sector. This danger becomes particularly acute when sole-source providers of information goods are tempted to structure seemingly unexceptional constraints as de facto barriers to entry.

2. Antidotes to the Problems of Enforcement

Enforcement remains a substantial challenge because the language of our proposed amendment addresses not only the balance between the negotiating parties, but also affects industry and society at large.³³² Yet, one of the most attractive features of the networked digital environment is a built-in degree of transparency, which makes it easier to track licensed material and to enforce the licensing terms than in the physical world.³³³ While licensors are better able to minimize the chance of market failure through the use of technological tools,³³⁴ these same tools could also be used by scholars and courts to determine the long-term and widespread effects of the use of certain contractual terms. This knowledge, in turn, could lead to a more reasoned application of the public-interest unconscionability doctrine and could also provide empirical data for future information policy.

A second aspect of enforcement concerns the degree of judicial scrutiny that will be applied to the terms targeted by the doctrine. Some “sticker shock” might be avoided by disguising the proposed new doctrine behind a more neutral label that would not suffer from vicarious comparisons with either the “unconscionability” or the “public policy” defenses in state contract law.³³⁵ However, we prefer a tougher sounding nomenclature that en-

³³² In a world where keeping the terms of a license confidential is both technically feasible and one of the licensing terms itself, even discovering detrimental licenses to which one was not a party may sometimes prove difficult. Furthermore, with imperfect information on an industry-wide level, the anticompetitive aspects of various licensing agreements may not be evident from a single available contract.

³³³ Indeed this environment is so promising for tracking licensed goods and enforcing terms, *see* Cohen, *supra* note 152, at 983-89 (describing new digital monitoring technologies for protecting copyrighted material in the electronic environment), that it raises substantial privacy issues, *see id.* at 1031-39 (describing the inability of present privacy statutes to effectively protect online reader anonymity and proposing a more effective statute).

³³⁴ *See id.* at 983-89 (describing the various technologies available to copyright authors to monitor users and profile their customers). However, even if these technological tools offer new capabilities, the costs of monitoring and enforcement may not be lower than those of copyright infringement. *See* Paul Goldstein, *Copyright and Its Substitutes*, 1997 WISC. L. REV. 865, 870 (“An individual’s breach of contract will be at least as costly to monitor and enforce as infringement of copyright, and legal rules against disencryption will also be costly to enforce.”).

³³⁵ By building such narrowly tailored doctrinal tools into a uniform law, the tools will gain relatively consistent treatment by different state courts—unlike standard state-specific

courages courts to scrutinize claims brought under the public-interest unconscionability doctrine, with a view to developing a socially effective doctrinal tool.³³⁶

Nonetheless, the unpredictability of any new legal doctrine remains a substantial enforcement challenge. Viewing the public-interest unconscionability doctrine in this light, we think its minimalist form, burden shifting mechanism for negotiable terms, and narrowly tailored effect make it a far more precise tool for achieving its stated goals than do older doctrines sounding in preemption, misuse, or public policy.

C. *Final Reflections Concerning a Non-negotiable Middle Ground*

In drafting the assent-based paradigm of Article 2 of the U.C.C., Professor Karl Llewelyn took pride in establishing the concept of a “negotiated middle ground” with which to overcome unforeseen difficulties in relational contracts and to preserve the status of the parties over time.³³⁷ In the emerging information economy, however, the efficiencies of electronic transactions have led the drafters of Article 2B to break with the assent-

contract law—without losing the precision absent in doctrines such as preemption. This may not always be beneficial to the licensee, particularly where the court of first instance does not consider a particular term to be anticompetitive. The courts are, however, the best venue for such case by case determinations.

³³⁶ In cases in which both public-interest unconscionability and preemption claims are raised, courts will likely select the narrowly tailored public-interest unconscionability doctrine over the broader preemption doctrine. Courts could achieve this result by applying the “extra element” test in evaluating whether the contract is preempted, which typically triggers a finding that the added element of the contractual promise in a breach of contract claim prevents the invocation of preemption. Although *ProCD*’s application of the “extra element” test may not reflect accurately the statutory intent behind its creation, that approach tends to preserve pro-competitive contracts from preemption while permitting the judicious application of the public-interest unconscionability doctrine. See *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1454-55 (7th Cir. 1996) (suggesting that rights created by contract are not equivalent to any of the exclusive rights granted by copyright and, thus, generally are not preempted); H.R. REP. NO. 94-1476, at 132 (1976) (detailing federal preemption provisions of rights equivalent to copyright).

³³⁷ See, e.g., U.C.C. § 2-209 cmt. 1 (noting that the “parties themselves know best what they have meant by their words of agreement”); *Parev Prods. Co. v. I. Rokeach & Sons*, 124 F.2d 147, 150-51 (2d Cir. 1941) (preserving the status of the parties to an early relation contract); WHITE & SUMMERS, *supra* note 115, at 53-64 (discussing contract modification). For articles explaining relational contract theory, see, for example, Ian R. Macneil, *Relational Contract: What We Do and Do Not Know*, 1985 WIS. L. REV. 483, 487, observing that “discrete exchanges are always relatively rare compared to patterns of relational exchange,” Ian R. Macneil, *Values in Contract: Internal and External*, 78 NW. U. L. REV. 340, 342-44 (1983), arguing that comprehending the contract involves understanding the context, and Richard E. Speidel, *Article 2 and Relational Sales Contracts*, 26 LOY. L.A. L. REV. 789, 798-804 (1993), defining the characteristics of relational contracts.

driven model of contract formation altogether.³³⁸ Their goal is to promote the growth of a new kind of market in which information goods defined by standard form contracts of adhesion compete with other, similarly defined information products in a perfectly free market.

This project presents an array of new problems whose optimal solutions can only be surmised. That, indeed, is the best reason for preferring a contractual approach which, by proceeding case by case, can gradually reveal the empirical foundations for more refined legislative solutions later on. Yet, little is gained by pretending that Article 2B merely represents some logical extension of the assent-driven model of contract formation embodied in the provisions of Article 2 concerning sales of goods. Such disingenuous pretensions breed mistrust by appearing to cover up the truth in order to vindicate the exercise of naked market power.³³⁹

Critics and supporters alike should recognize that Article 2B presupposes a quest for a different model of contract formation better suited to the information economy. It then becomes possible to consider ways of replacing the “negotiated middle ground” philosophy that underlies Article 2 with a “non-negotiable middle ground,” capable of sustaining information transactions rooted in “click-on” and “shrinkwrap” licenses that suffer from a chronic lack of mutual assent.

Unlike the tenets of Article 2, however, the philosophical grounding of Article 2B affects the future development of core sectors of the information-based economy. It must, therefore, mesh with intellectual property laws and policies in a way that suitably accommodates the national system of innovation.

1. Distinguishing Public-Interest Unconscionability from “Impermissibility” and the Public Policy Exception

Responding to the need to preserve upstream flows of information for purposes of technical innovation in a non-assent driven contractual universe, Professor Harvey Perlman of the University of Nebraska³⁴⁰ asked us to let him recast a version of our proposal³⁴¹ in the guise of a doctrine of “imper-

³³⁸ See *supra* text accompanying notes 145-64.

³³⁹ See Cohen, *supra* note 43, at 485 n.77; *supra* note 156 (quoting Cohen); see also Litman, *supra* note 153, at 931 (finding that “[p]roposed article 2B’s description of its own relationship with copyright law is at best confused, and at worst disingenuous”).

³⁴⁰ Professor Perlman is the former Dean of the University of Nebraska Law School and the distinguished co-reporter for the *Restatement (Third) of Unfair Competition Law* (1995). He is also a member of the Uniform Law Commission and the American Law Institute.

³⁴¹ The version of our proposal in question was first presented to a Symposium in 1998. See generally Reichman & Franklin, *supra* note 158.

missibility,” rather than “public-interest unconscionability.”³⁴² He presented the end product to a meeting of the Uniform Law Commissioners in 1998. Professor Perlman’s elegant draftsmanship and stewardship succeeded, for a time at least, in persuading the Commissioners to approve the sense of our proposal. The Drafting Committee was duly instructed to embody a variant of the Perlman motion in the pending draft version of Article 2B.³⁴³

Although we endorsed Professor Perlman’s attempt to elaborate our proposal in the form of a doctrine of “impermissibility,” we wonder if the tougher-sounding, more iconoclastic nomenclature of “public-interest unconscionability,” however awkward, might not be better suited to accompany a paradigm shift away from the assent-based model of contract formation than the term “impermissibility.”³⁴⁴ For example, the use of stronger terminology might have made it harder for a recalcitrant Drafting Committee to backslide by encapsulating the proposed new doctrine in the language of the “public policy” exception, while systematically removing most of its teeth.

That, alas, is where matters stand at the moment, with the addition of section 2B-105(b) to the latest draft of Article 2B.³⁴⁵ The section establishes the following exception:

³⁴² See Harvey Perlman, *Amendment to Article 2B, Uniform Commercial Code* (last modified Oct. 1, 1998) <<http://www.2bguide.com/docs/2B-amend.html>>. The proposed amendment reads as follows:

SECTION 2B-110. IMPERMISSIBLE CONTRACT OR TERM.

(a) If a court as a matter of law finds the contract or any term of the contract to have been unconscionable or clearly contrary to public policy at the time it was made, the court may refuse to enforce the contract, or it may enforce the remainder of the contract without the impermissible term, or it may so limit the application of any impermissible term as to avoid any unconscionable or otherwise impermissible result.

(b) When it is claimed or appears to the court that the contract or any term thereof may be unconscionable or clearly contrary to public policy the parties shall be afforded a reasonable opportunity to present evidence as to the contract’s or term’s commercial setting, purpose and effect and the extent to which the contract or term resulted from the actual informed affirmative negotiations of the parties to aid the court in making the determination.

Id.

³⁴³ It was adopted (96 in favor and 64 opposed) as a “sense of the house” motion, meaning the drafters were not tied to the specific language of the motion. Carol A. Kunze, *Report on the NCCUSL Annual Meeting July 24-31, 1998* (last modified Sept. 29, 1998) <<http://www.2bguide.com/nmtgrpt8.html>>.

³⁴⁴ In one of his last articles, Thomas Kuhn stressed the important role that nomenclature has played in paradigm shifts within the natural sciences. See Thomas Kuhn, *Afterwords, in WORLD CHANGES: THOMAS KUHN AND THE NATURE OF SCIENCE* 311, 314-19 (Paul Horwich ed., 1993).

³⁴⁵ See U.C.C. § 2B-105(b) (Proposed Official Draft Feb. 1999).

*If the term of a contract violates a fundamental public policy, the court may refuse to enforce the contract, or it may enforce the remainder of the contract without the impermissible term, or it may so limit the application of any impermissible term as to avoid any result contrary to public policy, in each case, to the extent that the interest in enforcement is clearly outweighed by a public policy against enforcement of that term.*³⁴⁶

The Reporter's Notes then make it abundantly clear that courts should never need to apply the doctrine because "the fundamental policy of contract law is to enforce contractual agreements."³⁴⁷ Hence, the drafters stress that any "term or contract that results from an agreement between commercial parties should be presumed . . . valid and a heavy burden of proof should be imposed on the party seeking to escape the terms of the agreement under subsection [2B-105](b)."³⁴⁸ Similarly, the drafters declare that "[e]ven in mass market transactions, . . . limitations in a license for software or other information . . . are typically enforceable."³⁴⁹

This approach begs all the salient questions and cannot satisfy the needs identified in this Article. While it undoubtedly remains a "fundamental policy" of contract law to enforce assent-driven contractual agreements, the whole point of the exercise is to call that policy into question once standard form contracts of adhesion are routinely combined with the restored power of the two-party deal in the networked environment.³⁵⁰

Here the burden properly lies on licensors to choose between two socially acceptable options. One is to respect the traditional balance of public and private interests that underlies both the federal intellectual property system and the national system of innovation, as well as constitutional guarantees of free speech and free competition. The second option is to submit standard form electronic contracts of adhesion to the kind of judicial scrutiny implicit in the public-interest unconscionability doctrine proposed in this Article. In other words, a shift away from the assent-driven model of Article 2 logically requires state legislatures to empower courts with an affirmative duty to scrutinize the resulting contracts of adhesion for fair and reasonable terms that respect an acceptable balance of private and public interests.

We, therefore, mistrust the compromise solution currently set out in section 2B-105(b) as largely window-dressing that fundamentally dilutes the

³⁴⁶ *Id.* (emphasis added).

³⁴⁷ U.C.C. § 2B-105, reporter's notes, no. 1.

³⁴⁸ *Id.* at reporter's notes, no.3.

³⁴⁹ *Id.*

³⁵⁰ See *supra* text accompanying notes 82-91 (discussing the ability of licensors to condition access to electronic gateways on acceptance of adhesion contracts).

doctrine it was supposed to embody. We decline to endorse it, although we do accept the spirit behind the initial version that Professor Perlman put forward with our support.³⁵¹ On balance, and despite some predictable difficulties likely to attend a “public-interest unconscionability” doctrine during the phase-in period, we believe its social and economic benefits far outweigh the concerns addressed above, and that its potential contribution to the sound development of commerce in electronic information goods exceeds any benefits that could result from a watered down version of yesterday’s “public policy” exception as formulated in section 178 of the *Restatement (Second) of Contracts*.³⁵² By promoting the pro-competitive aspects of price discrimination and product differentiation where feasible, and by facilitating the use of standard form, mass-market licenses that deliberately avoid controversial or socially disruptive terms and conditions, the public-interest unconscionability doctrine contributes substantial balance to Article 2B at minimum cost.

2. Distinguishing Licenses from Sales

Another disturbing aspect of the drafting of Article 2B is its tendency to extend the scope of the term “license” to circumvent the legal effects of what courts and practitioners would normally have termed a “sale” in the past.³⁵³ If this sleight of hand succeeds, it further encourages licensors to circumvent both the carefully wrought default rules of Article 2 and the public-interest limitations embodied in federal intellectual property laws, while still affirming the exclusive rights embodied therein. Although some commentators have already proclaimed the death of copyright,³⁵⁴ there is still hope that courts will look beyond the label of the transaction, as some have already,³⁵⁵ to evaluate the nature of a license and, in appropriate cases, to treat it as a sale for the public policy purposes at issue.

³⁵¹ See *supra* notes 340-42 (detailing Professor Perlman’s suggestions to modify Article 2B).

³⁵² See RESTATEMENT (SECOND) OF CONTRACTS § 178 (1981).

³⁵³ See Rice, *Digital Information*, *supra* note 151, at 643 (arguing that Article 2B confounds “rights in intellectual property with transfer of rights in a product that embodies intellectual property”).

³⁵⁴ See Eric Schlachter, *The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet*, 12 BERKELEY TECH. L.J. 15, 38-40 (1997) (suggesting that the effect of copyright on the Internet will be minimized by contractual and technological restraints); see also Apik Minassian, *The Death of Copyright: Enforceability of Shrinkwrap Licensing Agreements*, 45 UCLA L. REV. 569, 601-02 (1997) (discussing that state contract law could possibly supplant federal copyright law).

³⁵⁵ See, e.g., *DSC Communications Corp. v. Pulse Communications Inc.*, 976 F. Supp. 359, 362-63 (E.D. Va. 1997) (piercing the label of the transaction to determine that, given the nature of the software “license,” the transaction was a sale), *aff’d in part, rev’d in part, va-*

Some of the cases falling within the purview of Article 2B also present particular combinations of terms that look especially troublesome in this regard. For example, Article 2B permits a license of unlimited duration.³⁵⁶ Combined with the ability to prohibit any transfer of the mass-market licensed good,³⁵⁷ a license that restrains alienation for an unlimited period of time produces a true white elephant.³⁵⁸ Even though enforcing such a license would prove difficult in a world where intellectual property was necessarily conveyed in physical containers, there is no escaping the detrimental effects of such a combination in the digitally networked environment.

3. Ironies of a Non-negotiable Middle Ground

Early in this Article, we pointed out that the convergence of digital and telecommunications technologies had restored the power of publishers to control online delivery of information goods by combining encryption devices with intellectual property rights and standard-form adhesion contracts.³⁵⁹ The possibilities inherent in this phenomenon have given rise to two conflicting philosophies. One wants strong intellectual property rights and unfettered contractual power to work things out in a Utopian, perfect market setting. The other, fearing market imperfections, wants strong regulatory measures to translate preexisting constraints on the exercise of

cated in part, and remanded, Nos. 98-1024, 98-1031, 1999 WL 126067, at *3-7 (Fed. Cir. Mar. 11, 1999) (rejecting this argument in cases in which the contract explicitly prohibits the copying of the software for use with equipment from another vendor, and rejecting the argument that when a copy of a software program is transferred for a single payment and for an unlimited term, the transferee should be considered an "owner" of the copy of the software program regardless of other restrictions on his use of the software); RAYMOND T. NIMMER, *THE LAW OF COMPUTER TECHNOLOGY*, § 1.24[1], at 1-143 to 1-144 (3d ed. 1997).

³⁵⁶ See Karjala, *supra* note 12, at 538 (describing how Judge Easterbrook distinguished rental of a copy from the time-unlimited licensing of a copy, which "in all practical aspects is indistinguishable from a sale").

³⁵⁷ See U.C.C. § 2B-502 (Proposed Official Draft Feb. 1999) (proposing rules which apply to transfers of digitized contractual interests). Economists would argue that licensors of a product that carries a transfer limitation clause would also offer to license the same product without the transfer limitation for a greater price. However, without either a reasonable cost structure for scientific and educational uses or an alternate source, such as a secondary market, sole-source content providers could injure society at large by inhibiting the creation of socially beneficial uses.

³⁵⁸ See, e.g., Rice, *Digital Information*, *supra* note 151, at 638-40 (describing the parameters of a "having your cake and eating it too" package, by which licensors retain their intellectual property rights through transfer of a copy, and a licensee may not further transfer a copy because her nonexclusive license is nonassignable); see also Rice, *supra* note 155, at 1257-61 (discussing the implications of Article 2B on information transactions).

³⁵⁹ See *supra* text accompanying notes 5-9 (asserting this shift in technologies as a reason to rethink proposals to validate all "clickwrap" licenses).

intellectual property rights into the digital environment, with a view to favoring specific public good uses by legislative prescriptions.

We remain skeptical of both philosophies, largely because of the risk that, under either approach, premature legislative action will be taken before we understand the empirical realities that need regulating. As matters stand, neither legislators nor scholars know what kind of property rights are needed at what levels of competition, and all are likely to be blinded by existing legal models, which we deem unsuited to vast segments of the information economy. Patents and copyrights, for example, work well to stimulate major creative achievements—large grain-size intellectual productions, known as “inventions,” and “works of authorship.” But they are relatively unsuited to small grain-size innovations that depend on mere investment and sweat-of-the-brow labor, without any corresponding intellectual achievement.³⁶⁰

At the level of mere investment and routine innovation, we do not need strong forms of protection—cast as either publicly or privately generated intellectual property rights—to overcome market failure because there is no shortage of investment in the information economy once the causes of that market failure are removed. We should not give entrepreneurs legal monopolies (or contractual equivalents) to undertake investments they would make anyway, in their own business interests, because the social costs of such monopolies in lessened competition and other negative collateral effects are almost certain to outweigh the benefits.³⁶¹

The drafters of Article 2B and their supporters proclaim that strong property rights, together with strongly enforced private contracts, can resolve all problems in a perfectly free market. But standard form adhesion contracts—click-on licenses—are not contracts in the usual sense; they are dictated, not negotiated, and certain sectors of the market for information goods are characterized by an abundance of natural monopolies. If we adopt unbalanced intellectual property laws or their contractual equivalents in order to provide unnecessary incentives for publishers to invest, but we discourage follow-on innovation and public good uses of the information products that are generated in response to these incentives, the end result

³⁶⁰ See J.H. Reichman, *Solving the Green Tulip Problem: Repackaging Rights in Subpatentable Innovation* 16 (paper presented to the N.Y. Univ. Conf. on Intellectual Products: Novel Claims to Protection and Their Boundaries, Engelberg Center on Innovation Law and Policy, La Pietra, Italy, June 25-28, 1998) (on file with authors) (arguing that a “new market-driven liability regime (or its equivalent)” is necessary to encourage investment in “incremental, small sized innovation” without incurring the social costs of exclusive property rights).

³⁶¹ See *id.* at 6-9 (criticizing the existing legal paradigm which overly protects investment in subpatentable innovation).

may be bad for the information industries and could undermine the preexisting technological superstructure, which depends on the unrestricted flow of upstream data and ideas.³⁶²

Instead, we endorse a regime that loosely preserves a balanced relationship between public and private interests, which courts can gradually reshape in response to the empirical conditions of the evolving information economy. Given this premise, a fallacy of most proposals concerning the protection of information goods is that they ignore the dual nature of data and information as such.³⁶³ On one level, information functions as the raw material of the new information economy, a basic ingredient of the public domain, from which scientists and entrepreneurs both draw to fashion their respective products. On a second level, data and information are bundled into downstream products that continue to attract traditional intellectual property rights and related contractual licenses.³⁶⁴ The mistake is to think that solutions that have proved empirically well-suited to downstream applications—mainly derived from the patent and copyright models—are equally well-suited to upstream regulation of information as an input into the process of innovation.

The opposite is true. If either state or federal legislators insist on placing strong rights too far upstream too soon, they may balkanize the public domain and make the transaction costs of re-creating it by contract prohibitively expensive and complex.³⁶⁵ This phenomenon could, in turn, impede the cumulative and sequential development of technical paradigms³⁶⁶ by depriving routine innovators of access to the building blocks of knowledge.

If the process of seeking a contracts regime suited to the networked information environment were just getting underway, one would want a different approach from that taken by the drafters of the proposed Article 2B. Because default rules are only thought to be efficient if the affected parties

³⁶² See, e.g., BITS OF POWER, *supra* note 45, at 133-40 (describing the trend toward strengthened intellectual property rights and its effect on the exchange of scientific data).

³⁶³ See *supra* text accompanying notes 30-43 (describing the dual nature of information).

³⁶⁴ See generally Reichman & Samuelson, *supra* note 20 (criticizing proposals for strong protection of noncopyrightable databases).

³⁶⁵ Cf. Heller, *Anticommons*, *supra* note 179, at 660-79 (describing the anticommons effect in general); Heller & Eisenberg, *supra* note 20, at 698 (analyzing the anticommons effects in biotechnology); Reichman, *supra* note 360, at 16 (discussing the problem of protecting subpatentable inventions).

³⁶⁶ Cf. Richard R. Nelson, *Intellectual Property Protection for Cumulative Systems Technology*, 94 COLUM. L. REV. 2674, 2676 (1994) (claiming that high-protectionist regimes may slow innovation in cumulative systems technology environments); Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, J. ECON. PERSP., Winter 1991, at 29. See generally Reichman, *supra* note 32, at 2557-58.

would bargain to obtain them in the absence of transaction costs,³⁶⁷ the quest for such rules ought to occur within a framework of disinterested scientific investigation. That is hardly the spirit that has so far characterized the drafting of Article 2B.

Despite the rich public-interest heritage deriving from statutory intellectual property law, and despite the warnings of numerous scholars along the way,³⁶⁸ the self-appointed task of an unbalanced drafting committee has been to subordinate that same public-interest heritage to the dictates of powerful special interests. The end result is an unbalanced set of proposals that so disfavors licensees at the expense of licensors that even the biggest entertainment conglomerates have opted out of the proposed regime, lest their costs of acquiring information products exceed the gains of licensing them under Article 2B.³⁶⁹

4. Non-negotiable Contracts as Stepping Stones to a Broader Information Policy

The costs of starting over again may nonetheless prove unacceptably high. With all its flaws, Article 2B represents a prodigious effort to address the problems of digitized information transactions at a time when too little is known about the market for information goods to make the kind of informed decisions we should most like to have. In the meanwhile, we concede that licensors need a high degree of contractual freedom if they are to identify, define, and solve the problems that lie ahead.

Precisely because there is no enlightened information policy to point the way, we prefer to err on the side of freedom of contract, even if that means experimenting with the non-assent-driven model that underlies Article 2B. To this end, we have proposed a modest doctrinal safeguard, rooted in contract law rather than in intellectual property law as such, that could help to reconcile that model with the need to preserve long-established public good uses of information.

The "public-interest unconscionability" doctrine, whose contours we have explored in this Article, would facilitate non-negotiable computerized information transactions without allowing content providers to disrupt the upstream operations of a research-based information economy. It would provide incentives from within the governing rules of contract law for licen-

³⁶⁷ See *supra* notes 17-20 and accompanying text (noting the benefits of default rules).

³⁶⁸ Notably David Rice, Charles McManis, and Elizabeth Braucher have warned against this possibility since the earliest times.

³⁶⁹ See U.C.C. § 2B-104, reporter's notes, nos. 2 & 3 (Proposed Official Draft Feb. 1999) (permitting the financial and entertainment industries to opt out of Article 2B); Kane, *supra* note 19, at 1013-16 (discussing, in part, the complexity of the broad scope of Article 2B).

sors to formulate standard form contracts that avoid undue conflicts with both state and federal intellectual property laws.

In this endeavor, we recognize that intellectual property policies tell only part of the story, because they look backwards to the needs of the industrial revolution. Today, instead, efforts to privatize information not covered by statutory intellectual property rights are at the forefront of attention,³⁷⁰ and the possibilities for entrepreneurs to generate an endless stream of new products raise searching questions about how and when to protect investment as such.³⁷¹ Under these conditions, traditional intellectual property policies convey mixed messages because, as previously observed, traditional legal monopolies were meant to stimulate investment in large grain-sized creations, while leaving investment in lesser ones to the discipline of free competition.

Striking a middle ground between rules that overprotect and those that underprotect investment in digitized information goods is thus a hard task, indeed, under present-day conditions. On the one hand, by allowing licensors wide leeway in the name of freedom of contract, we remain confident that market forces will generate an abundance of information goods and drive them to their highest values. Erecting obstacles that dam this flow in the name of past intellectual property policies or related public-interest concerns could result in needless inefficiencies that skew the pace or direction of that potential economic growth.

On the other hand, mindlessly tolerating abuses of that freedom to contract under a model of formation that dispenses with the requirement of mutual assent could produce unprecedented anticompetitive effects and thus could foster an environment in which unfettered contractual exercises of market power stifle value-adding uses of information and impede research and technical innovation in general. We should not forget that information remains a public good, and that every decision that overprotects public goods in order to stimulate investment also creates disincentives to use those same public goods owing to rising costs, especially transaction costs.³⁷² Allowing licensors unlimited powers to impose non-negotiable terms and conditions in contracts of adhesion could produce anti-commons

³⁷⁰ See *supra* text accompanying notes 44-51 (discussing the breakdown of the patent-copyright dichotomy)

³⁷¹ See *supra* text accompanying notes 82-91 (detailing the impact of new technologies on the interface between copyright law and intellectual property law); cf. Digital Millennium Copyright Act, Pub. L. No. 105-304, § 403, 112 Stat. 2860, 2889 (1998) (implementing the World Intellectual Property Organization Copyright Treaty and Performances and Phonograms Treaty).

³⁷² Pamela Samuelson, *Modifying Copyrighted Software: Adjusting Copyright Doctrine to Accommodate a Technology*, 28 JURIMETRICS J. 179, 221 (1988).

effects that might retard growth and innovation more in the long term than the evils of premature regulation.³⁷³

At bottom, our proposed doctrinal safeguard allows licensees to challenge only those non-negotiable terms that could unduly disrupt the pre-existing balance of public and private interests, and it tends to validate all standard form licenses that do not cross that line. Moreover, such challenges are unlikely to succeed without some demonstration that the social costs of the licensor's solution outweigh the expected private and public gains. Even then, the Uniform Law Commissioners, the state legislatures, and the U.S. Congress retain the power to correct questionable judicial decisions once they gain a clearer understanding of the kind of legal tools that the information economy really needs.

The long-term objective is to achieve a new balance between public and private interests in a properly formulated information policy³⁷⁴ that encompasses intellectual property rights, but that also molds these rights to meet the evolving conditions likely to characterize the information-based economy of the future. We propose to channel the entrepreneurial energies that freedom of contract is certain to unleash into socially productive standard form contracts. We look, in short, to establish a non-negotiable middle ground in which to validate desirable transactions in digital information goods that do not depend on mutual assent, and we provide a workable tool for restraining misuse of those clickwrap licenses that are likely to become omnipresent in the brave new world of cyberspace transactions.

³⁷³ See *supra* notes 22, 179 (discussing Heller and Eisenberg's work and Heller's anti-commons theory).

³⁷⁴ Cf. Samuelson, *supra* note 182 (stressing the need for a national information policy to supercede obsolete intellectual property policies).