WHAT CONTRACTS CANNOT DO: THE LIMITS OF PRIVATE ORDERING IN FACILITATING A CREATIVE COMMONS

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INTRODUCTION

Let’s say you are worried about the rapid expansion of intellectual property rights in recent years. You are enthusiastic about open competition and free culture, and very much concerned with the shrinkage of the public domain. You worry about the inefficiencies created by expansive copyrights, by limited access to resources, and by restraints on the ability to create. You wish to safeguard the public domain and encourage the sharing and reusing of creative works by individual creators. It seems that many of the new opportunities that were made possible by digital technology are increasingly enjoyed by the massive enclosure of the public domain and the increasing commodification of information.

There seems to be no way out. The legislative process is captured by the content industries. Apparently this is not a coincidence. As public choice theorists have shown, small homogenous groups that have a lot to gain, such as the content industries, have persistently pressured for even stronger proprietary rights.1 Courts seem to be shorthanded, failing to set constitutional limits to extensive intellectual property rights.2 Finally,
international pressure on national governments makes it difficult to rely on the global arena for remedying the deficiencies of intellectual property laws at the domestic level.\(^3\)

Given this background, private ordering—self-regulation voluntarily undertaken by private parties—turns out to be an attractive option. It promises to allow individuals and communities to figure out, on their own, a way to bypass the increasingly protectionist global intellectual property regime. Can contracts do the work? In recent years, many scholars have identified the dangers of private ordering for the public domain, and warned against further propertization of information and stronger rights that are made available by contracts.\(^4\) Could, however, the copyright opposition use contracts for strengthening the public domain?

Creative Commons seeks to do exactly that. Creative Commons is a nonprofit U.S. based organization that operates a licensing platform promoting free use of creative works.\(^5\) The idea is to facilitate the release of creative works under generous license terms that would make works available for sharing and reuse. Creative Commons advocates the use of copyrights in a rather subversive way that would ultimately change their meaning. It introduces an innovative way of exercising legal rights to bring about social change.

Creative Commons’ strategy is not only innovative at the practical level, but also original at the normative level. In recent years, legal commentary related to intellectual property focused on the continuous expansion of proprietary rights and the consequential shrinkage of the public domain. The copyright/public domain dichotomy emphasizes copyrights as a key factor in allocating informational resources. It assumes that the scope of copyright as defined by law, whether it is widened or narrowed, will ultimately determine the way information resources are produced, distributed, and reused. Copyright protectionists believe that expansive copyright protection is mandatory in the digital environment, which makes informational goods an essential asset and at the same time increasingly difficult to exclude. Public domain advocates, by contrast, perceive the expanded copyright regime as a growing threat to academic freedom, free speech, and cultural autonomy, which will compromise efficiency and stifle

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innovation. Creative Commons’ strategy deviates from the current copyright/public domain dichotomy. First, it does not aim at creating a public domain, at least not in the strict legal sense of a regime with no exclusive proprietary rights. Second, Creative Commons’ strategy is entirely dependent upon a proprietary regime, and derives its legal force from the regime’s existence. The normative framework assumes the possibility of replacing the common practices of producing and distributing creative works without changing the proprietary regime. Social change, it is believed, would emerge from simply exercising these rights differently.

This Article expresses a skeptical view of this worthy pursuit. While I share Creative Commons’ concern with copyright fundamentalism, which inevitably leads to the propertization of everything of value, I am more skeptical of its strategy. This Article explores the legal strategy of Creative Commons and analyzes its potential for enhancing the sharing, distribution, and reuse of creative works. It identifies the limits of a licensing platform, which heavily relies on property and on viral contracts, arguing that the platform may lead to some unintended consequences.

Creative Commons as a social movement creates a platform for a wide range of ideologies that share an interest in enhancing access to works. This turns out to be a great advantage for a social movement seeking to gain wider public support. The legal strategy, which empowers owners to govern their creative works, facilitates a far-reaching coalition among libertarians and anarchists, antimarket activists and free-market advocates. At the same time, however, Creative Commons lacks a comprehensive vision of the information society and a clear definition of the prerequisites for open access to creative works. The end result is ideological fuzziness. This fuzziness may impair the advent of a workable and sustainable alternative to copyright through grassroots activism facilitated by contracts. Analyzing the legal strategy of Creative Commons reveals the shortcomings of implementing an incoherent ideology through a proactive strategy of a licensing platform.

Creative Commons’ strategy presupposes that minimizing external information costs is critical for enhancing access to creative works. It seeks to reduce these costs by offering a licensing platform. Yet, facilitating an alternative to copyright through contracts requires that licenses be made enforceable against third parties. Such licenses may increase the external information cost carried by those seeking to avoid copyright infringement. The lack of standardization further increases the cost of determining the duties and privileges related to any specific work. Each licensing format, which binds third parties, would dramatically increase the cost of avoidance, thus enhancing the chilling effect of copyright law.

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Lack of standardization may reflect the absence of ideological cohesion and the urgent need for a shared notion of free access. The proliferation of licensing formats may also echo a libertarian sentiment, advocating the freedom of owners to govern their own property. This Article examines the strategic choice of Creative Commons to rely on property rights in its effort to subvert the meaning of copyright. The analysis shows that in the absence of a shared sense of free access, reliance on property rights may strengthen the proprietary regime in creative works. It may actually reinforce the property discourse as a conceptual framework and a regulatory scheme for creative works. The analysis further suggests that creating an alternative to copyright requires standardization. Creative Commons would have to trade the sovereignty of owners for the reduction of transaction costs in order to enhance access to creative works.

Part I describes Creative Commons as a social movement and explores its ideology and legal strategy. Part II analyzes Creative Commons' legal strategy, which makes use of property and contract to subvert the proprietary regime. It argues that letting authors govern their works, by simply making copyright user-friendly, will not necessarily promote access to creative works.

Part III addresses the limits of contracts as a mechanism for creating an alternative to copyright law. It explores the increase in external information costs created by licenses that are enforceable against third parties. The analysis demonstrates that while ideological diversity may be crucial for the successes of a social movement, it may impair attempts to increase the accessibility of creative works. The analysis further shows that while some issues, such as external information cost, could be mitigated by Creative Commons' licensing platform, other issues, such as the stability and sustainability of the contractual regime, are more difficult to address.

I. CREATIVE COMMONS AS A SOCIAL MOVEMENT: ON LAW AND SOCIAL CHANGE

A. Vision and Ideology

Creative Commons is a social movement that was founded in 2001 as a nonprofit organization, seeking to expand "the range of creative work available for others to legally build upon and share." In essence, Creative Commons' ideology could be summarized as follows: (1) Creativity relies on access and use of preexisting works; (2) copyright law creates new barriers on access to works, becoming an obstacle for sharing and reusing creative works; (3) the high costs associated with the copyright regime limit

the ability of individuals to access and reuse creative works; and (4) copyrights should be exercised in a way that promotes sharing and reusing.

1. Barriers to Access Created by Copyright

Creative Commons perceives the current copyright regime as the major obstacle to creative activity. The creation of informational works typically involves two types of resources—prior works and human capital—the quality of which may depend upon sufficient exposure to prior creation. Copyright law creates barriers to the access to creative works. For example, it provides owners with a set of exclusive rights in their creative works, thereby imposing correlative duties on nonowners. Nonowners are required to obtain a license for every use of a work that is covered by these rights (with the exception of fair use). The barriers on access are thus effectuated by two separate aspects of copyright law: (1) the legal right to restrict access and to seek an injunction in cases of unauthorized use and (2) the information costs associated with securing a license. Creative Commons’ strategy accepts the first and focuses on the latter.

Due to the nature of copyright subject matter, namely non-tangible assets, copyright law creates relatively high information costs. Every property right imposes information costs related to ascertaining the contours of legal relationships pertaining to the owned asset and determining the boundaries of the goods to which the right applies.

In the case of copyright, these costs tend to be prohibitively high for several reasons. First, rights in creative works are not intuitive. Copyright law has been around for almost 300 years, but has yet to become a familiar concept. Creative works are abstract assets and often lack physical boundaries. For example, a novel may be printed in a book, but the physical printed format that embodies the novel does not indicate the entire set of rights associated with the copyrighted work and the corresponding obligations it imposes on its readers. The owner of a copy of the book may read it or use its pages as wrapping paper, but he or she may not reproduce the novel. The absence of physical boundaries makes it difficult to determine in advance when a property right is being invaded. The more


10. A property rule requires authorization prior to use. A license to use creative works may not always be available, and even when owners are willing to license their works, they may charge royalties for their use.

11. This was long recognized by Wendy J. Gordon. See Wendy J. Gordon, An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory, 41 Stan. L. Rev. 1343 (1989); see also Clarisa Long, Information Costs in Patent and Copyright, 90 Va. L. Rev. 465, 482-83 (2004) (arguing that intellectual property presents information costs higher than those presented by real property because trespassing on real property involves physical intrusion and does not require an understanding of the attributes and qualities of the protected asset).
abstract the asset, the higher the costs of gathering information regarding the scope of rights in that asset.

Second, the cost of ascertaining the scope of the copyrighted subject matter is relatively high.\textsuperscript{12} Copyright law protects expressions, not ideas. While some ideas may be extracted, the legality of copying the plot or characters of a novel would require an elaborate legal analysis.\textsuperscript{13} The scope of copyright protection is not evident, and the average user would hardly know what aspects of the work are protected (expression, but not ideas) and what uses are prohibited without a license (copying, but not reading). Consequently, people would often find it too burdensome to define the exact scope of protection and would simply assume that the entire work is protected. This would further strengthen copyright's chilling effect.

In some cases, transaction costs related to copyright would constitute a high portion of the total cost of using works. Consider for instance a public school teacher seeking to license materials for distribution in her class. Individual authors of poems or articles, if they own the rights, would tend to authorize such use of their works free of charge. Yet, identifying and locating the rights holder, and then negotiating a license with her is likely to be prohibitively expensive. If a public school teacher seeks to use the work once, she may not find it worthwhile to incur the information cost and may give up the use altogether.

From the perspective of rights holders, authorizing uses may also be expensive. It may require legal counseling regarding the scope of copyright protection, the legal definition of authorized uses, and the legal language used to describe them. Rights holders are more likely to incur the cost of licensing when they expect to benefit (i.e., when they license the work for commercial use). They may be reluctant, however, to incur the high cost of licensing for noncommercial uses. Consequently, licensing costs may prevent the use of works that would otherwise become available, thus impeding access and subsequent creation. Thus, the high transaction cost associated with the copyright system may create a chilling effect and reduce the level of desirable uses.

\textsuperscript{12} Long, supra note 11, at 485-86 (arguing that the different structure of patent and copyright reflects the demands that different kinds of protected goods place on our ability to process information, and seeks to promote efficiency, by minimizing the information costs presented by intellectual goods).

\textsuperscript{13} See Nichols v. Universal Pictures Corp., 45 F.2d 119, 122-23 (2d Cir. 1930).
2. The New Copyright Regime and Creative Activity

The cost associated with licensing copyrighted materials has increased exponentially in recent years. This can be attributed to two developments: one substantive and the other procedural. The substantive element concerns the expanded scope of copyright protection, and the procedural one the removal of formal requirements. The expansion of copyright protection to cover more subject matters,\(^{14}\) extended duration,\(^{15}\) and additional rights\(^{16}\) reduced the volume of works that are freely available to build upon.\(^{17}\) Furthermore, in addition to the expansion of copyrights, the characteristics of the digital environment also make informational works less available. For instance, overlapping rights\(^{18}\)—held by different rights holders—make it more costly to secure a license to use a copyrighted work. Another example is the use of digital rights management ("DRM") to govern the use of works and physically limit access and use, coupled with anti-circumvention legislation.\(^{19}\) Overall, expansive copyrights, supplemented by extra protection under other bodies of law,\(^{20}\) create new barriers to access to preexisting materials.\(^{21}\)

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14. The proprietary regime in recent years covers more informational works. It affords protection to types or new aspects of works that used to be in the public domain. For instance, copyright and neighboring rights afford protection for facts and mere data. See ProCD Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996) (protecting mere data by enforcing a shrink-wrap license); Council Directive 96/9, 1996 O.J. (L 077) 20-28 (EC); see also J.H. Reichman & Paul F. Uhlir, A Contractually Reconstructed Research Commons for Scientific Data in a Highly Protectionist Intellectual Property Environment, Law & Contemp. Probs., Winter/Spring 2003, at 315.

15. Duration of copyright protection in the United States used to be shorter and was recently extended to life plus seventy years for noncorporate works. For works owned by corporations (works for hire) copyright duration is ninety-five years from publication or 120 years from creation, whichever is shorter. 17 U.S.C. § 302 (2000).


18. See Mark A. Lemley,Dealing with Overlapping Copyrights on the Internet, 22 U. Dayton L. Rev. 547, 549, 567-72 (1997) (describing the problems for users that result when the multiple copyrights of a work overlap and are not owned by a single user).


20. Examples of other laws include misappropriation, the right of publicity, and breach of contract. The misappropriation cause of action was first recognized by the U.S. Supreme Court in International News Service v. Associated Press, 248 U.S. 215, 240-42 (1918) (holding that copying breaking news is a misappropriation and therefore illegal, even though news is not a copyrighted subject matter); see also Nat'l Basketball Ass'n v. Motorola, Inc., 105 F.3d 841, 844-45 (2d Cir. 1997) (narrowing down the misappropriation claim to
Another reason for the increase in transaction costs related to the licensed use of copyrighted works is procedural. Lifting the formalities requirements under U.S. copyright law has turned copyright protection into the default rule, making it necessary to secure permission for each and every use of every work. U.S. copyright law used to condition copyright protection upon the satisfaction of certain formalities. For copies distributed to the public, a copyright notice was required, including the symbol "©," the name of the author, and the date of first publication. From the perspective of the public domain, the formalities requirement in that copyright protection was not automatic. Formalities filtered out some works from the protected reservoir. Works distributed without a proper copyright notice fell into the public domain. Copyright protection required undertaking certain action. Only those interested, who took the necessary steps in meeting the formalities requirements, were afforded copyright protection, and those who did not renew their copyright were afforded a shorter period.

In the absence of notice and registration requirements, copyright becomes the default rule. A new work is copyrighted from the moment it is created. Consequently, in addition to commercial works, every original work of authorship is automatically covered by copyright. Because expiration dates are not marked on works, it is difficult to tell whether a work is still protected. Consequently, it becomes more expensive to identify works that are in the public domain and are available for reuse and free of any legal restrictions.

The absence of formalities as a precondition for copyright protection shifts more works into the proprietary regime and significantly reduces the

circumstances concerning "hot news" (i.e. time sensitive), where parties are competing with one another, and where absent court intervention there will be free riding). The right of publicity protects individuals against unauthorized appropriation of their identity for commercial purposes. Courts recognized the right of publicity as a property right, and its infringement as a commercial tort. See Midler v. Ford Motor Co., 849 F.2d 460, 463-64 (9th Cir. 1988). Breach of contract related to copyrighted materials was not considered to be preempted if the alleged contractual breach involves an extra element, other than an infringement of any of the exclusive rights under section 106 of the 1976 Copyright Act. See Vault Corp. v. Quaid Software Ltd., 847 F.2d 255 (5th Cir. 1988).

23. The 1976 Copyright Act, which took effect January 1, 1978, amended the copyright law to make the use of a copyright notice optional on copies of works published on and after March 1, 1989. See 17 U.S.C. § 101 (2000). Works published before January 1, 1978, are governed by the previous copyright law (1909 Copyright Act). See 1909 Copyright Act, ch. 320, § 10, 35 Stat. 1075 (1909). Under that law, if a work was published without a proper notice of copyright, all copyright protection for that work was permanently lost in the United States. See id., 35 Stat. at 1077-78.
24. See 1909 Copyright Act, ch. 320, § 10; see also Litman, supra note 22, at 13-23.
number of works in the public domain. When copyrightable works are automatically covered by copyright, opting out requires an affirmative action. It involves awareness of the advantages and disadvantages of copyright protection, and often prohibitively high transaction costs (such as the cost of studying the legal status of the work, exploring the legal options, and drafting the opt out). Consequently, even if some creators wish to make their work freely available, the default copyright regime serves as an obstacle.

The need to secure permission prior to any use makes it very expensive, and often impossible, to use other people's works for further creation and distribution. The process of identifying the owners, determining the legal status of the work, and negotiating the terms of its use, often involves prohibitively high transaction costs.

Creative Commons attempts to remedy this deficiency of current copyright law by designing an innovative licensing scheme. It provides a legal and technological infrastructure that arguably overcomes the impediments to access of informational works. Additionally, it assumes that people want to share their work on generous terms. It further assumes people want to share the power to reuse, modify, and distribute their works to others. The goal is to help people express this preference for sharing, by offering a set of licenses at no charge. The licensing platform allows users to easily identify and locate creative works available for reuse.

The proclaimed goal of Creative Commons is to change the default rule created by copyright law. In a world consisting of only copyright law, the default is that every work is protected under the banner “All Rights Reserved.” Consequently, permission is necessary prior to each use. Creative Commons seeks to expand the variety of defaults by facilitating new options for releasing works under less restrictive terms: “Some Rights Reserved” or sometimes “No Rights Reserved.”

27. Formality requirements, however, could actually discriminate against individual creators who are unable to carry the burden of legal counseling and registration. Corporations are more likely to acquire copyrights in the works they produce and thereby enjoy the state subsidy of their enforcement efforts. On the other hand, individuals under a formalistic regime might unintentionally lose their copyrights and have their works placed in the public domain without even getting a chance to seriously consider it.
28. While there seems to be a powerful desire among authors of all kinds to share their works with others as a form of communicating and expressing their ideas, some authors might be reluctant to let others change their expression and might feel violated if this is done.
29. See Creative Commons, supra note 5.
30. "No rights reserved" is a dedication to the public domain. See Creative Commons, Creative Commons Public Domain Dedication, http://creativecommons.org/licenses/publicdomain/ (last visited Sept. 1, 2005). A license tailored for this is “Founders’ Copyright,” which allows authors to shorten the duration of a copyright to fourteen or twenty-eight years. See Creative Commons, The Founders’ Copyright, http://creativecommons.org/projects/founderscopyright/ (last visited Sept. 1, 2005).
3. The Normative Framework

The high costs associated with clearing rights and securing a license increase the price of access to preexisting materials. These costs affect mostly individual creators. For the content industry, creative works are simply another means of production, and therefore, transaction costs related to licensing are included in the cost of production. When a producer considers producing a movie based on a novel, the novel is simply another resource accounted for in the production process. Individual creators, however, are not producing creative works in the same way that industries produce artifacts. They engage in creative activity. They communicate their thoughts and feelings, using images, symbols, plots, and expressions that they internalized in their cultural environment. They may speak, play music at a bar, or discuss a poem with their students in class. While firms that produce content could easily carry the transaction costs involved in securing a license, high legal costs create a barrier on innovation by individuals. Thus, copyright has a distributive effect, which hinders individuals engaging in creative activity.

Although copyright theory and copyright discourse have always emphasized authors’ rights, copyright law is designed to serve the needs of the content industry. It provides a mechanism for securing monetary incentives to those who invest in the creative process, in the form of a set of exclusive rights to exploit the work. The standard economic rationale for copyright law presumes that creative works are public goods, and that copyright law is necessary to secure incentives for further investment in creation and distribution of works. While a passionate poet is likely to write her poems even if she lacks financial incentives, the book and music publishing industry would undersupply her works. Without these industries, passionate creators would be unable to disseminate their artifacts to the public. The publishing industry relies on numerous sales of a work to create its revenue stream, and copyright law is designed to protect this business model by granting owners a set of exclusive rights.

Industries producing mass content are relatively new and were significantly strengthened during the twentieth century.\(^{31}\) This model involves the production of a single prototype organized by firms and the distribution of mass copies to consumers.

The digital environment, which significantly reduced the cost of communicating and sharing works, enabled new modes of production\(^{32}\) and distribution\(^{33}\) of information. Digital networks allow dissemination of works to a wide range of users at a very low cost, thereby reducing the role of some traditional intermediaries (such as the recording industry), while

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introducing new intermediaries (such as search engines) into the dissemination process. Digital networks further enable the development of content, such as text and software, through collaborative efforts by individuals interacting and communicating with one another, often without any claim for exclusive rights.\(^\text{34}\)

Copyright law makes it difficult to take advantage of the new opportunities offered by digital networks. If licensing costs and legal exposure to copyright liability remain the same, creating and distributing online becomes expensive, notwithstanding the low cost of production and distribution. Furthermore, the proprietary regime has a tendency to further colonize other ways of producing content.\(^\text{35}\) If one has to purchase a license to use another’s work, the licensor is more likely to release her output under restrictive terms, either to comply with the license of the underlying work, or to recover the cost of creation. This makes it difficult to create outside the proprietary model and thereby forces that model into the copyright regime. The result is a chilling effect on individual creation. The legal complexity created by the copyright regime gives businesses an advantage over individual creators because legal counseling and licenses are more affordable and accessible to businesses.

While the current copyright regime serves the needs of intermediaries, Creative Commons focuses on the needs of individual creators. Creative Commons’ slogan—“no friction, no legal doubt, no middleman”\(^\text{36}\)—is telling. Rights reside with individual creators. There is emphasis on

\(\text{\textsuperscript{34}}\) Take software as an example. Microsoft Windows was written by Microsoft’s employees. Microsoft’s financial investment was secured by copyright, patent, and trademark laws, which prohibited unauthorized copying, redistribution, and modification of software. Linux, on the other hand, was created by a community of users, who volunteered to make a contribution to a grand project. Open source projects, such as Linux, are comprised of the contributions of thousands of unorganized developers, located in different places around the globe, who voluntarily contribute to a common project without direct compensation. The GNU/Linux operating system and Apache server software, which were developed in a common nonproprietary regime, are increasingly gaining popularity and are considered more stable than comparable commercial programs. See Al Gillen, Five Pros and Five Cons: A Look at Changing User Perceptions on Linux, Int’l Data Corp., July 2003, http://www.mindbranch.com/catalog/product.jsp?display=brief&code=R104-13062&bundle =\&partner=0. The extraordinary success of colossal collaborative projects such as Linux and Apache demonstrate that a large-scale complex system could be designed and maintained by a sizeable group of unorganized collaborators in a nonproprietary setting. The development of such powerful software, which is non-rival and non-excludable without any apparent monetary compensation or any guaranteed return for financial investment, seriously challenges the incentives paradigm. Indeed, Peter Kollock called Linux “the impossible public good.” Peter Kollock, The Economies of Online Cooperation: Gifts and Public Goods in Cyberspace, in Communities in Cyberspace 230 (Mark Smith & Peter Kollock eds., 1999).


\(\text{\textsuperscript{36}}\) See Creative Commons, Reticulum Rex, http://creativecommons.org/learnmore (last visited Sept. 1, 2005).
creation by individuals without intermediaries, which coordinates production or manages large-scale distribution of copies. Creative Commons’ agenda focuses on empowering individual authors and small groups who wish to actively participate in creative processes and face high transaction costs due to copyrights.

The high cost associated with securing a license to use works becomes a serious obstacle for use and reuse of works created by others. By reducing the legal costs associated with the use of creative content, hopefully it will be easier for individuals to engage in creative enterprises. The licensing platform aims at lowering the transaction costs of both licensing and acquiring licenses for reuse. Authors are offered a licensing scheme for distributing their works for noncommercial use while simultaneously safeguarding their works against abuse and misappropriation through the assertion of copyrights. It is hoped that the platform will make it easier for prospective creators to identify works that are available for subsequent creation under generous terms. In this sense, Creative Commons offers a legal infrastructure that seeks to facilitate creation by individuals who are held back by the current copyright regime.

However, facilitating creation by individual authors may carry some political ramifications. It reinstates the role of individual authors in the production of creative works that were recently marginalized by the hegemony of the content industry. If successful, it could redistribute creative power by empowering individual creators to independently exercise their rights and control. The use of their creative works may remedy some of the evils associated with mass-produced markets for creative works, such as biases produced by profit maximizers in a highly concentrated media market.

These two modes of production differ greatly. Corporations, either for production, distribution, or both, often mediate the production of content through market mechanisms. Consequently, key decisions regarding what content to produce and when and how to distribute it, are made by profit-maximizing corporations. The market, as a decision-making process, is likely to produce different content than grassroots creation generated by individual creators, who are motivated by a wide range of idiosyncratic factors and are voluntarily engaging in communicative actions, self-expression, and social protest.

Overall, content created through nonmarket mechanisms is a valuable form of self-expression and community building. It is likely to be driven by a wide range of motivations, and not merely maximizing profits. It is therefore likely to be free of market biases. That is not to say that content must only be created by individual actors in nonmarket settings. The argument is that this type of creation is worth pursuing and must be
preserved. Thus, the ideology of Creative Commons reveals a deep sense of social order and allocation of power.

Creative Commons’ focus on individual creators does not imply a return of the romantic author. Rather, individual creations are understood within a cultural context that gives them meaning and value. The licensing scheme is designed to promote self-interest while at the same time facilitating community building. Creative Commons advocates creative activity by individuals within a creative community, encouraging collaboration among creators. Creative Commons’ agenda and policies imply that the creation process, though made by individual human beings, is not secluded. Interaction with others is assumed to be the natural way to create. Slogans such as “remix,” or “standing on the shoulders of your peers” reflect the sense that creation, at its highest level, should be interactive and collaborative. Creation is part of a social dialogue, a public discourse that lies at the foundation of our shared language and culture.

4. Ideological Fuzziness

Creative Commons is a form of political activism and is best understood as a social movement seeking to bring about social change. It responds to proposals calling for political activism against the enclosure of intellectual property. Like its predecessors, the open source movement and free


38. See Peter Jaszi, Toward a Theory of Copyright: The Metamorphoses of “Authorship,” 41 Duke L.J. 455, 455 (1991); see also James Boyle, A Theory of Law and Information: Copyright, Spleens, Blackmail, and Insider Trading, 80 Cal. L. Rev. 1413, 1418-23 (1992) (discussing the metaphor of the romantic author as inventor and creator, someone with a right to make a property claim because of the original contribution she has made to general knowledge, as a way to underline the tension between the “private” and “public” stereotypes of information). The romantic author ethos emerged during the eighteenth century, when the law shifted from a publisher’s copyright to an author’s copyright. The ethos of romanticism perceives authorship as the manifestation of isolated individuals rather than the by-product of transforming ideas in the public domain. See Megan M. Carpenter, Intellectual Property Law and Indigenous People: Adapting Copyright Law to the Needs of a Global Community, 7 Yale Hum. Rts. & Dev. L.J. 51, 59-63 (2004). The myth of the romantic author influenced court decisions and is often used to advance stronger, longer, and broader copyright protection. See Stewart E. Sterk, Rhetoric and Reality in Copyright Law, 94 Mich. L. Rev. 1197, 1199-1204 (1996).

39. As Lessig explains, referring to Disney’s animated films that are based on the Grimm Brothers’ fairy tales, “Disney ripped creativity from the culture around him, mixed that creativity with his own extraordinary talent, and then burned that mix into the soul of his culture.” Lessig, supra note 17, at 24.

40. “Copy Me/Remix Me” is the second CD assembled and released by Creative Commons. The songs are available for direct download and feature embedded metadata, following (cc) guidelines for placing license information into files. See Creative Commons, Copy Me Remix Me CD, http://creativecommons.org/extras/copyremix (last visited Sept. 1, 2005).

software,\textsuperscript{42} it seeks to change the social consequences of copyright law by instantiating an alternative. Unlike its predecessors, which focused on software and addressed a rather small and homogenous community of professionals, Creative Commons seeks to become a popular movement that addresses the public at large. A key to its success is its ability to convince as many people as possible that Creative Commons is the best method for using creative works.

Lawrence Lessig's trilogy, \textit{Code and Other Laws of Cyberspace, The Future of Ideas}, and \textit{Free Culture},\textsuperscript{43} set the ideological foundation of Creative Commons, and \textit{Free Culture} could be thought of as its manifesto.\textsuperscript{44} But Creative Commons as a social movement has now gained a life of its own. It is a dynamic movement, consisting of many distinct players, motivated by different goals, but still in the process of defining its political agenda. This makes it difficult to accurately define the core principles of Creative Commons' ideology and the tenets of its reform plan.

Creative Commons' ideology, as expressed in its publications and practices, reflects a minimalist approach, seeking to enhance access to creative works. Copyright law is clearly identified as an obstacle to achieving this goal; however, Creative Commons' vision of what would happen when copyright law is removed is less coherent. Creative Commons' mission is to develop a rich repository of high-quality works in a variety of media and to promote an ethos of sharing, public education, and creative interactivity.\textsuperscript{45} It seeks to expand "the range of creative work available for others to legally build upon and share."\textsuperscript{46} It aims at building an "intellectual property conservancy"\textsuperscript{47} that will serve to protect works of special public value from exclusionary private ownership and from

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\textsuperscript{42} The free-software movement, started in 1983 by Richard Stallman, announced the GNU project. The goal of the movement is to promote freedom by replacing proprietary software, which is distributed subject to restrictive licensing terms with free software. Some believe that all software should be free, claiming it is immoral to prevent people from using software, and that control over the use of a computer is necessary to safeguard other freedoms. Others do not rule out copyright protection under all circumstances. See Wikipedia, GNU, \url{http://en.wikipedia.org/wiki/GNU} (last visited Sept. 1, 2005).

\textsuperscript{43} Lawrence Lessig, Code and Other Laws of Cyberspace (1999); Lessig, \textit{supra} note 17; Lawrence Lessig, The Future of Ideas: The Fate of the Commons in a Connected World (2001).

\textsuperscript{44} See Lessig, \textit{supra} note 17, at 275-304.

\textsuperscript{45} See Creative Commons, Creative Commons FAQ, http://creativecommons.org/faq (last visited Sept. 1, 2005).

\textsuperscript{46} See Wikipedia, \textit{supra} note 7.

\textsuperscript{47} Creative Commons, Legal Concepts—Intellectual Property Conservancies, http://creativecommons.org/about/legal (last visited Sept. 1, 2005).
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obsolescence due to neglect or technological change. It is believed that this would "cultivate a commons in which people can feel free to reuse not only ideas, but also words, images, and music without asking permission because permission has already been granted to everyone."48

Creative Commons' ideology echoes a libertarian sentiment: What if we can take the law into our own hands? What if we can make our own rules? It offers authors/owners a chance to govern the use of their own works. Authors/owners are presented with a wide range of options regarding the exploitation of their creative works: "between full copyright—all rights reserved—and the public domain—no rights reserved. Our licenses help you keep your copyright while inviting certain uses of your work—a ‘some rights reserved’ copyright."49 While "©" stands for all rights reserved, like a stop sign that requires authorization for each and every use, "(cc)" stands for "some rights reserved" and automatically permits certain uses.

While authors' rights are clearly defined, the notion of the commons remains vague. The term "Creative Commons" communicates a powerful message. It celebrates a "commons" as a key for enhancing creativity. But what does a "commons" mean?

Strictly defined, a commons is a legal regime, in which "multiple owners are each endowed with the privilege to use a given resource, and no one has the right to exclude another."50 Yet, the notion of the commons may refer to a wide range of situations.51 The lack of a clear definition of the commons reflects a profound disagreement regarding the meaning of the public domain. Does a commons include works with expired copyrights, or only works that have ended their productive life?52 Does it only cover unprotected aspects of copyrighted works or does it also include any type of exploitation of works that fall outside the scope of copyright?53 Is it free of any legal restraints,54 or simply accessible free of charge?55 Creative Commons' slogans emphasize access—"[c]reativity always builds on the

52. See Landes & Posner, supra note 1 (arguing that works fall into the public domain when they reach the end of their productive life).
55. See Richard M. Stallman, Free Software, Free Societies: Selected Essays of Richard M. Stallman 41 (Joshua Gay ed., 2002) (arguing that for creativity to flourish, software must be free of inappropriate and overly broad legal constraints). "‘Free software’ is a matter of liberty, not price. To understand the concept, you should think of ‘free’ as in ‘free speech,’ not as in ‘free beer.’ Free software is a matter of the users' freedom to run, copy, distribute, study, change, and improve the software." Id.
past—56—but what kind of access to preexisting works is necessary to facilitate creativity? What makes a work accessible? Does it have to be free of any legal restraints? Is it enough that works would be widely disseminated? Could some restrictions apply and the work still be considered free?

In sum, Creative Commons’ ideology communicates a strong proprietary message: Authors should be free to govern their own works. The sovereignty of authors inevitably leads Creative Commons to promote a whole range of licensing schemes and different agendas pulling in different directions. At the same time, however, Creative Commons lacks a comprehensive vision of the information society and a clear definition of the prerequisites for open access to creative works. The end result is ideological fuzziness. The fuzziness of ideology and the broadly defined agenda would normally serve the purpose of a social movement. It may help to expand public support and facilitate alliances among different social actors: Non-governmental organizations (“NGOs”) promoting a wide range of political agendas and corporate players motivated by self-interest. While this could strengthen the effectiveness of social movements that focus on protest and resistance, it could be detrimental to one with a proactive agenda.

B. Legal Strategy: A Licensing Platform

Creative Commons offers to mitigate the chilling effect on creativity caused by the high cost of licensing by introducing an automated and standardized licensing platform that allows authors to retain copyright in their respective works and authorizes as many uses of the work as they choose. The hope is that such a mechanism would make it easier for right holders to share their works under more generous terms.

The licensing process is standardized and automated at both the drafting and licensing ends. Drafting a license on Creative Commons’ website is a user-friendly automated process explained in plain language. 57 It involves a choice among modular contractual terms designed to meet the diverse preferences of authors, while at the same time keeping it simple and easy to employ. Right holders can choose any combination of the following standardized terms: Attribution (requiring credit to the author), Noncommercial (authorizing all uses for noncommercial purposes), No Derivative Works (authorizing the use of verbatim copies and prohibiting the creation of derivatives), and, finally, Perpetuity. The Share Alike license creates a viral licensing scheme, 58 requiring creators of derivative

56. Cone, supra note 9.
57. See Creative Commons, Licenses Explained—Choosing a License, http://creativecommons.org/about/licenses (last visited Sept. 1, 2005).
58. Margaret Jane Radin defines “viral contract” as a contract in which restrictions on use are built directly into the digitized information content, thereby purporting to bind all subsequent users. The terms of a viral contract are purported to run with an object regardless
works to subject subsequent users of their derivatives to the same license that governs the original. For instance, a flash movie posted on Creative Commons’ website, “Get Creative,” is licensed under a license combination of Attribution, Noncommercial, and the Share Alike types. Under this license, a user is authorized to copy, distribute, display and perform the work, and also make derivative works based on it, under the following conditions: (1) The user must give the original author credit, (2) the user cannot use the work for commercial purposes, and (3) in case the user alters, transforms, or builds upon the work, he or she must distribute the resulting work under a license identical to the original.

Once the choice is made, the version of the license is released in three layers: first, a legal enforceable format, Legal Code license, which intends to ensure the license will stand up in court; second, human readable language, which explains in plain language the key issues addressed by the license; finally, the license is distributed in a machine-readable format. The Digital Code makes it possible to automate the licensing process. Search engines would presumably be able to run searches to retrieve and locate works that are available for use under a Creative Commons license and thus automatically determine authorized usage.

The licensing platform is based on the experience accumulated by the open source initiative and the free software movement. There is a whole range of free software licenses as well as licenses for other types of content—such as software documentation. The Free Software Foundation promotes the GNU General Public License (“GPL”) for software and the GNU Free Documentation License (“GFDL”) for software documentation and other reference and instructional materials. To be considered Free
Software, all licenses must comply with the definitional requirements of Free Software. They must secure four kinds of freedoms for the users of the software: (1) the freedom to run the program, for any purpose; (2) the freedom to study how the program works and adapt it to the user’s needs; (3) the freedom to redistribute copies; and (4) the freedom to improve the program and release updated versions to the public. Access to the source code is a precondition for exercising these freedoms.\(^6\)

The Creative Commons licensing scheme, by contrast, offers a wide variety of licenses without any definitive core. Every license that goes beyond absolute exclusion is considered sufficient as an instrument for promoting, sharing, and reusing works. The licensing scheme is designed to enable the licensing of works under a wide range of terms: from minimalist authorization, such as sampling a musical composition, to a broad waiver of all rights.\(^7\) It is exactly this diversity of licensing options that makes Creative Commons’ licensing scheme less effective for promoting access by individuals to creative works.

\section*{C. Law and Social Reform}

Exploring Creative Commons as a social movement reveals the dynamic intersection of law, social norms, and technology.

\subsection*{1. The Law}

Social movements typically focus on law as an instrument for bringing about the desired social change. The social reform prescribed by Lessig in \textit{Free Culture} takes a different route. It proposes starting with a grassroots social change that would modify the way we treat creative works and the social relationships pertaining thereto. Lessig describes the two stages of the envisioned social reform. The first stage focuses on redefining social norms, while the second focuses on legal reforms. Defining the role of Creative Commons’ movement as a crucial bottom-up effort for initiating social change, Lessig wrote, “Once the movement has its effect in the streets, it has some hope of having an effect in Washington.”\(^8\) Only when the new social norms have gained significant public support, would the second stage, a legislative reform, be launched.\(^9\)

Copyright law is located at the heart of Creative Commons’ agenda and is viewed as the main obstacle for what is perceived as an ideal world of

\footnotesize{adding any additional restrictions when they redistribute or modify the software. This requirement guarantees that every copy of the software and every derivative work will be free software.}


\(^7\) For instance, choosing the option of Founders Copyright would render a copyright expiration date of fourteen or twenty-eight years.

\(^8\) See Lessig, supra note 17, at 257-305.

\(^9\) Id. at 275.
creating and sharing creative works. Yet, Creative Commons is not a social movement that primarily lobbies for legislative amendments and copyright reform. At its current stage, it does not seek to change the law at all. In fact, its strategy relies upon strong copyrights. It advocates what is believed to be the "original meaning" of the current copyright regime. In this sense, the ideology of Creative Commons is reactionary.

Copyright law plays an interesting role in Creative Commons' regime, which distinguishes it from other social movements that identify law as a central arena for bringing about social change. The law is usually perceived as the ultimate mechanism for accomplishing any desirable social change. The designed social reform would be implemented through existing legal institutions—the judiciary and the legislature. For instance, the American civil rights movement struggled to achieve equality and fought against discrimination of African-Americans through legislation and litigation. Similarly, the feminist movement focused on promoting gender equality and women's rights, by pushing for specific legislation and litigating strategic lawsuits.

70. Of course, some social movements challenged the existing legal structure. The strategic choice to use existing legal infrastructure echoes the old debate within the socialist movement on the best way to achieve social reform. While the revolutionaries (Marxists) argued that socialism could only be achieved through the self-emancipation of the working class, the revisionists (reformists) believed that capitalism had reached a stage in which it was no longer necessary to call for revolution, and socialism would evolve over time through legal reforms (social welfare programs, equal rights).


The legal strategy of Creative Commons, by contrast, is not to lobby for new legislation or file strategic lawsuits to reinterpret existing rights in a way that would promote the public domain.\textsuperscript{73} Instead it focuses on social practices related to exercising legal rights, i.e., property rights. Other NGOs have attempted to use the property system for promoting socially desirable goals. The Wilderness Land Trust, for instance, purchases private lands in federally designated wilderness areas and places restraints on their use, so that future generations will enjoy an enduring resource of wilderness. While the wilderness movement is using property rights as the means for preserving the environment, the property rule is not perceived as an obstacle and there is no attempt to change its meaning. The case of Creative Commons is a little more complex, since current copyright law is perceived as the main obstacle to promoting a creative environment and is therefore the ultimate target of reform.

2. Social Norms

Creative Commons situates its activism in civil society. It aims to transform the information environment by changing social practices and norms. It simply advocates exercising copyright in a way that would enhance sharing and reuse. It neither calls for diminishing copyright protection entirely, nor for abandoning rights. Instead, Creative Commons advocates a use of these rights in a way that is likely to change their meaning. Creators are called to voluntarily restrain the legal power they were granted under copyright law, and place either no restrictions, or only a few restrictions, on the use of their creative works. Ultimately, the purpose is to redefine social norms and promote values of sharing and reusing.

Creative Commons fits nicely within the theoretical paradigm of the New Social Movement theory. Social movements of the post-industrial era are described as a form of collective action based in civil society that focuses on struggles for control over the production of meaning and the creation of new collective identities.\textsuperscript{74}

The focus on the meaning of rights, rather than on the scope of legal rights, is particularly interesting from a legal standpoint. It presupposes that the meaning of legal rules is shaped by social norms and institutional structures. Social norms are particularly important for property rules.

\textsuperscript{73} Even though litigation is currently not the legal strategy of the social movement, several activists, most prominently Professor Lawrence Lessig, have led some recent strategic litigation on an individual basis. See Eldred v. Ashcroft, 537 U.S. 186 (2003); Kahle v. Ashcroft, No. C-04-1127, 2004 WL 2663157 (N.D. Cal. Nov. 19, 2004); Golan v. Ashcroft, 310 F. Supp. 2d 1215 (D. Col. 2004).

Property rules create duties that are binding on the public at large. A shared understanding of the meaning of a property rule may assist the general public in comprehending the rights and duties it entails. A convention regarding the meaning of property may lower enforcement costs by encouraging compliance. A shared understanding of the scope of property rights may further incorporate nonowners in enforcement efforts, thereby further lowering the cost of enforcing property rights. Thus, if Creative Commons succeeds in introducing an alternative convention, it may subsequently change the meaning of the property rule through social norms.

In light of the struggle over the meaning of property rules, Creative Commons' strategy is subversive. Introducing new practices of exercising copyrights could ultimately undermine the signaling power of copyright. The current meaning of © as a stop sign or an abstract barrier that requires a license before use, is the result of recent large-scale efforts of the content industry to promote this meaning through public campaigns. If (cc) becomes prevalent, it may subvert the social meaning associated with copyrighted works, signaling a new bundle of rights associated with the symbol. It may actually help to develop a new meaning of rights in creative works that does not involve exclusion, but rather sharing and reuse. If the competing symbol of (cc) becomes familiar alongside the ©, it may create a competing meaning, thereby weakening the stop-sign meaning attached to ©, which allegedly causes the chilling effect. Thus, it is hoped that the practice of using rights in a certain way would ultimately constitute a new meaning to copyright.

As the analysis in Part II demonstrates, reliance on a property regime may undermine Creative Commons' agenda by further strengthening the regulatory power of property rights. Part III illustrates how the potential for subverting the meaning of copyright and for introducing new signaling may not be fulfilled by the current licensing scheme. This is partly related to the ideological diversity and lack of consensus regarding the tenets of free access and the necessary conditions to achieve it. The potential for an alternative meaning is diluted by the proliferation of licensing arrangements. Creative Commons' licensing scheme, however, could still subvert the meaning of copyright, weakening its original gist and therefore functioning usually as a form of protest. Yet, it cannot provide an alternative mechanism that would enable easy access to works.

75. Clarisa Long describes the effect of social norms as the "thingness" of property. See Long, supra note 11, at 472. The naïve notion of property—how lay people think of property—treats property as related to "things that are owned by persons." Id.; see also Michael Heller, Three Faces of Private Property, 79 Or. L. Rev. 417, 417 (2000) (explaining that while everyone knows the meaning of something being mine or yours, legal theorists get confused when they try to define the term "private property").

3. Technology

Social determinists argue that technology is a by-product of social change. If law is the engine of social change, the new law facilitates the introduction of new technologies. Creative Commons’ strategy somewhat reverses this order, seeking to use technology over social engineering and subsequently changing the legal regime. Technology (the automated licensing platform and the search engines, which locate works available for use) is utilized to enable new social practices related to creative works. These new practices would ultimately change how we understand the creative process and reconstruct social relations related to creative works. By using new technologies, Creative Commons’ strategy expands the horizon of potential measures for provoking a change. It reflects the view that legal rules do not dominate behavior, but rather constitute one factor in a complex matrix of human activity.

In many respects, Creative Commons’ licensing scheme offers an alternative to DRM systems. Such systems constrain the use of creative works by restricting access to passwords, preventing some exploitation of works (i.e., printing, copying, or redistribution of files), or simply monitoring use and introducing fees. Creative Commons’ license prohibits the use of technological measures that control access or use of the licensed work in a way that interferes with the terms of the license.

The licensing platform used by Creative Commons does not digitally enforce restraints. It simply allows users to automatically prepare a license and efficiently search for works that are available for use. The licensing platform embodies a high level of choice—choice that resides with the owners. One of the unintended consequences of such choice is the dilution of the signaling effect of a licensing scheme.

77. The FAQ section on Creative Commons’ official website explains that (cc) does not involve digital rights management (“DRM”):
[We prefer to describe the technical aspect of our work as digital rights description. Whereas digital rights management tools try to prevent certain uses of copyright works and restrict your rights, we’re trying to promote certain uses and grant you rights. . . . While the tools are similar, our goals are different. Instead of using one of the many DRM formats, we’ve chosen to go with the W3C’s RDF/XML format. Instead of saying “We’re not placing these restrictions,” we say “We grant you these permissions,” so that search engines and other applications can easily find generously licensed works and sort them.]
See Creative Commons, supra note 45. Moreover, using DRM systems to restrict any of the rights granted under a Creative Commons’ license would constitute a breach of the license agreement. ld.

78. See Creative Commons, Creative Commons Legal Code, version 2.0, § 4(a), http://creativecommons.org/licenses/by-nc-sa/2.0/legalcode (last visited Sept. 1, 2005).
II. EXPLORING CREATIVE COMMONS’ LEGAL STRATEGY

The strategy of Creative Commons for promoting the sharing and reuse of informational works makes an innovative use of two traditional common law concepts: property and contracts.

A. Asserting Property Rights

Creative Commons’ strategy is completely dependent upon a proprietary regime and derives its force from its existence. Asserting property rights in creative works has several advantages: It preserves the right of owners to exercise control over some uses of the work and collect royalties when they see appropriate. It leaves the door open for collaboration with market players as well as for some commercial uses.

Furthermore, claiming property rights may allow authors to safeguard their creative contributions against capture and abuse. Maintaining the enthusiasm and the sense of trust among potential contributors could be crucial for the success of Creative Commons. Social motivation is a major force that inspires thousands of volunteers around the world to contribute their talent and time to create free online informational tools (homepages, blogs, computer programs, or reported news) in the absence of any direct monetary compensation.\(^{79}\) The use of works for commercial purposes, without rewarding the original author, may impair the willingness of individual authors to share their works.\(^{80}\) Therefore, any attempt to create a commons would seek to prevent potential abuse by parties who did not

\(^{79}\) Few explanations were offered by the emerging literature for the high volume of information that is created by volunteers and is made available online free of charge. Some explanations stick to ordinary economic reasoning, arguing that even though there is no direct monetary reward for contributing to the Linux project or similar endeavors, there are side benefits. These include showing off or building a reputation, as well as learning and gaining experience that will later be valuable in the job market. Josh Lerner & Jean Tirole, The Simple Economics of Open Source 26-28 (2000), http://www.people.hbs.edu/jlerner/simple.pdf. Others emphasize social motivations, such as adhering to cultural norms connected to positive network externalities. This may be related to software, see Steven Weber, The Success of Open Source (2004), to hacker culture, Eric S. Raymond, The Cathedral and the Bazaar, at xi-xiv (1999), or to gaining status in a gift culture, see Kim Veltman, On the Links Between Open Source and Culture, March 27, 2002, http://erste.oekonux-konferenz.de/dokumentation/texte/veltman.html. Indeed, the online environment revives some old schemes of creating cultural objects of human workmanship, such as folklore, dances, melodies, legends, and artifacts, prior to the introduction of mass-produced culture. It spreads norms of collaborative research that were previously prevalent only in intimate academic settings to the general public.

\(^{80}\) The study of publishing agreements in nineteenth-century England reinforces this observation. See Diane Leenheer Zimmerman, Authorship Without Ownership: Reconsidering Incentives in a Digital Age, 52 DePaul L. Rev. 1121, 1137-43 (2003). Zimmerman suggests that authors were more concerned with unjust enrichment than with compensations. \textit{Id.} They were willing to transfer their rights for a preset price, as long as they did not feel cheated. \textit{Id.} Concerns regarding economic rights were raised when works turned out to be economically successful, and authors were distressed given the disparity between the price they were paid and the profits earned by publishers. \textit{Id.}
contribute to the community effort and were taking advantage of efforts made by others.

Preventing capture by third parties is another concern. The fear is that market players would incorporate public domain materials into a proprietary artifact and make them available, subject to restrictive terms. Subsequently, works which were made available under (cc) licenses would be locked under a restrictive licensing scheme. Preventing capture by commercial players is important not merely for securing continuous motivation of collaborating authors, but also to guard against fencing off the public domain. The use of copyright to prevent capture relies heavily on the experience of free software. The Copyleft licensing scheme asserts copyright in the code, thereby allowing the licensor to stop others from capturing source code and making it proprietary.

Reliance on copyrights may also carry, however, some serious disadvantages. Creative Commons’ strategic choice to rely on copyright for promoting access to works may shape social practices related to information. Copyright may shape our attitudes towards creative works and creative processes and may subsequently affect our choices regarding rights and duties in informational works.

The notion of property is rather intuitive. When something is owned by someone else we know we must ask for permission to use it. We normally do not think the same way of stories, images, or music. Sometimes we might not even be aware that we were using them in creating our own work. When we use such creative works we usually do not have to cross any physical barriers. The barriers are abstract restrictions imposed by social norms. Social norms are therefore particularly significant with respect to informational works that lack physical boundaries. These norms turn songs and stories into commodities. The commodity metaphor creates an abstract “fence” around (abstract) informational goods. While we may easily build a fence to keep others off our land, we cannot keep others from playing a musical composition hundreds of miles away. We must convince potential users that they should exercise self-restraint and respect the legal restrictions we place on the use of our works. Achieving compliance with copyright laws by the general public therefore relies upon internalizing the commodity metaphor. When creative works are treated simply as

81. The content industry is likely to compete with Creative Commons and similar alternatives that are challenging its traditional business models. These business models, which are based on selling copies and fared use, are threatened not only by unauthorized copying and pirating, but also by free content. Jessica Litman, Electronic Commerce and Free Speech, in The Commodification of Information 23 (Niva Elkin-Koren & Neil Weinstock Netanel eds., 2002). One cannot sell what others are giving for free, and to the extent that some content in the public domain substitutes proprietary content, there is certainly a competition between the two. Consider, for instance, the competition between Microsoft and open source software over government procurement around the world. Businesses are often motivated to fight against free content that is directly competing with their own works. A threat on the hegemony of the content industry might lead to litigation, in which the lack of copyright may become a serious disadvantage.
commodities, we may assume that the basic property intuitions would apply to them.

Treating creative works as commodities protected by property rights strengthens the perception of informational works as commodities: Once we realize that everything we write, draw, or play could be licensed, we may start conceiving of our own self-expressions as commodities. Our email correspondence, a picture we took of a newsworthy event, and commentary we posted online are all subject to exclusive rights. They all may be viewed as separate, identifiable pieces which are subject to exclusion. We may think of our writings as economic assets, and view our own expression as chips to be traded, rather than ideas to be shared.

Reliance on property rights may weaken the dialogic virtue of information that is a key to individuals’ participation in the creation of culture. The creation process is a complex social phenomenon with conflicting features: Works of art are autonomous, on the one hand, but are communal on the other. The creation of creative works at a specific time and place, using existing artistic language and skills, is part of our social dialogue and the process of socialization. It reflects a shared artistic language, an artistic canon. It makes use of existing building blocks and state of the art technologies. When a work is created it becomes part of our cultural language. Communicating works contribute to their internalization by integrating them into our social code. Creative expression is shaped by the various audiences and the different generations of creators. For creativity to thrive, creative works must be shared and individuals must be able to freely engage with them, to create new meanings. Those are the dialogic virtues of information. Engaging with creative works does not consume them. Exchanging ideas is not a transaction. The conceptual framework of property does not capture this complexity. Property rules do not merely define rights and duties. They further carry a normative message, announcing which values deserve protection and how. Therefore, reliance on property rights in creative works is likely to reinforce the belief that sharing these works is always prohibited unless authorized. To the extent this normative framework affects our behavior, it may distort our natural practices related to information.

Creative works are, indeed, copyrighted. Copyright law protects original works of authorship, and Creative Commons’ licensing scheme does not change this. It changes, however, the pervasiveness of copyright. Licensing copyrighted materials used to be the domain of corporations. Individual creators were always the owners of their creative works, and

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82. Creative expression receives its meaning through interaction with other social agents and, therefore, individual authors have no privileged status in determining its meaning. See Roland Barthes, *The Death of the Author*, in Image, Music, Text 145-48 (Stephen Heath ed., Stephen Heath trans., 1977).

83. See Norbert Elias, On Civilization, Power and Knowledge 95-105 (1998). Artistic expression does not simply happen. It is the by-product of existing culture and economic structures, but, at the same time, individual artistic impression shapes culture.
works which were not intended for commercial use remained the sole property of the author even after they were made available to the public online. Many works were posted online without any restrictions, on the implicit presumption that reuse is permissible for noncommercial purposes. It was this thriving environment of information, produced and shared by peers, that drove the Internet to its colossal success. Individuals never bothered to assert their rights or engage in licensing. Licensing was either too complicated or too expensive. On the whole, individuals did not expect any revenues from sharing their creative works, and normally avoided the legal cost of licensing. By reducing the cost of licensing, Creative Commons makes licensing more accessible to individual users, thereby strengthening the hold of copyright in our everyday life. Now that individual authors are not only aware of the proprietary regime but are also armed with an efficient mechanism to execute their intellectual property rights, they may use the mechanism to set limits on the exploitation of their works.

How are people likely to use the system? A few characteristics of the proprietary regime are likely to shape individuals’ choices regarding their works. The continuous reliance on the proprietary regime may reinforce social practices that are associated with consumption and production of informational goods. The more we engage in securing a license to use the works of others, the stronger we may feel about licensing our own works. The creation process may increasingly resemble commercial production, seeking to minimize the cost of input and inevitably striving to increase the commercial value of the output. This commercial setting, supported by the property system, makes it easier for industries to produce works and trade them in the marketplace. It seemingly empowers individuals with legal powers that were once available only to industry. It makes copyright accessible to all. Yet, leveling rights in this way may put individuals at a disadvantage. Copyright to all may simply make property in information prevalent. Individual users, who never intended to make copyright their business, may find it difficult to compete with industries that specialize in commercializing copyrighted materials.

The metaphor of property is rather powerful. Intellectual property, however, is not merely a metaphor. It constitutes an effective legal mechanism that allows exclusion. The need to secure permission prior to the use of any creative work is the main barrier for sharing and collaborating among individual creators. It is the main cause of transaction costs that Creative Commons seeks to reduce.

It remains to be seen whether individual authors, armed with user-friendly licensing schemes, will exercise their legal power with self-restraint, authorizing free access to their creative works. Creative Commons stands for open culture, and its impressive popularity suggests that the ideology of sharing still enjoys high ratings. Yet, the only practice

84. See Litman, supra note 22.
Creative Commons persistently promotes is letting individuals govern their works. It does not provide much in terms of guidance or restraints on how these rights should be exercised. At the end of the day authors are left to decide on their own. In this sense, Creative Commons’ licensing scheme allows subscribers to have their cake and eat it too.

Letting authors govern their works will not necessarily promote public access to informational materials. Data collected so far on the actual use of Creative Commons’ licensing scheme suggests that over fifty percent of all licensors chose to use Attribution-Share Alike, about sixty percent of whom prohibited commercial use. The most popular license among the many schemes facilitated by Creative Commons’ platform is the Attribution-Noncommercial-Share Alike license. Under this license users are allowed to use the work for noncommercial purposes only, provided that they give appropriate credit to the original author and her work, and as long as any derivative work is subject to an identical license. Authors using this license opt to restrict the freedom of all subsequent creators to make any commercial use of their own derivates work, if it is based on, or incorporates, the licensed work. Almost a third of all authors using Creative Commons’ license, the vast majority of whom license their works under Attribution-Noncommercial-No Derivative license, chose to prohibit the preparation of any derivative work based on their work. This license explicitly restricts reuse of works, and only permits use as is.

When Creative Commons relies on property rights to advance its strategy, it reinforces the proprietary regime. Making copyright user-friendly is likely to bring more prevalence to property. This outcome, however, will not necessarily promote access to works. If the purpose of

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85. Twenty-three percent of all version 2.0 and 2.5 licenses are Attribution-Share Alike and thirty-three percent are Attribution-Noncommercial-Share Alike. See Creative Commons, Initial Data on Creative Commons’s License Distribution, http://creativecommons.org/weblog/entry/5293 (last visited Aug. 31, 2005). The figures provided on Creative Commons’ website are somewhat confusing. Information that is crucial for analyzing the data is missing, such as the methodology used for collecting the data, the date on which the survey was made, and the total size of the population. According to a Creative Commons official, the data is based on the number of search results using Yahoo! Search for link:{license url} queries. See E-mail from Mike Linksvayer, Creative Commons Official to Niva Elkin-Koren, Professor, University of Haifa School of Law (July 1, 2005, 11:00:46 PDT) (on file with author). Using the same methodology on July 1, 2005, searching for versions 2.0 and 2.5 of Creative Commons’ license, the total number of links was 12,725,340. The total figures provided by conducting this search query are not stable, yet the general trends remain the same. This methodology suffers from serious deficiencies, as it includes all sorts of links to Creative Commons’ licenses, including links for the purposes of reference and discussion. The number of links may also include several links for the same work when a work is posted on different websites, duplicated links to different versions of the license, etc.

86. Attribution-Noncommercial-Share Alike licenses are thirty-three percent of all licenses. See supra note 85.

87. Attribution-Noncommercial-No Derivative licenses were twenty-three percent of all licenses and Attribution-No Derivative licenses were three percent of all version 2.0 and 2.5 licenses. See supra note 85.
Creative Commons is to encourage sharing and collaboration in creative processes, it has to offer an alternative regime. Simply letting authors govern their own work may turn out to be self-defeating.

B. Subverting Property by Contracts

Can contracts alone change social norms? Yes, they can. Many of our social practices are rooted in basic voluntary agreements. Yet, to be successful, this strategy requires that contracts will be made enforceable against third parties. The use of contracts for changing the consequences of copyright law raises some interesting questions regarding the boundaries of property and contracts as well as the interface between them.

The reliance on contracts is particularly intriguing as commentators around the world were alerted by the increasing use of contracts to restrict access to creative works; they were concerned with its potential ramifications for the public domain. Could contracts be recruited for strengthening the public domain? Is it possible to change relationships regarding the use of information within a society simply through contractual transactions? This would constitute an attractive alternative given the total failure on behalf of public domain advocates to stop the enclosure of intellectual property, either at the legislature or in court. Could contract law alone offer a way of resisting and subverting the default property rule?

1. Enforceability Against Third Parties

Enforcement against third parties is central for the long-term goals of Creative Commons. To be effective, new social practices related to creative works must be widespread. Changing social norms requires a pervasive shift in the mindset of authors and users alike. The legal mechanism that seeks to establish rights against third parties is the Share Alike provision. Its purpose is to guarantee that creators of any subsequent work, based on the original licensed work, would be subject to the same contractual terms.

The first major challenge for Creative Commons is therefore to ensure that license provisions, and particularly Share Alike provisions, would be enforceable against third parties. The fact that licenses are enforceable against their immediate contracting parties is simply insufficient. This is because creative works tend to be used and reused over and over again, changing formats while being molded into new forms of expressions.

If subsequent users of the original work were not subject to the terms of the original license, the licensing scheme would shortly become meaningless. Third parties, who gained access to the work without directly contracting with the right holders, would be able to use the work against the will of the original owner. Consequently, an author who released her work for promoting the commons may find it appropriated by third parties for commercial purposes.
If a noncommercial covenant were unenforceable against third parties, a license to make noncommercial use would last no longer than a brief moment in the lifetime of a creative work. Shortly after the work is incorporated into a new derivative, a third party could incorporate it into a new product and commercialize the contribution of the original author.

Putting ideology aside for a moment, many authors simply do not want to feel cheated. If one of their works that was released for noncommercial purposes is generating profits, they want a share. If licenses are held unenforceable against third parties, it could seriously undermine the motivation of authors to release works under more generous terms. Furthermore, if a license is not enforced against third parties, right holders may have to contract with each subsequent user of their work. Users of derivative works, which are based on several preexisting materials, would have to contract with the right holders of each work included thereunder, separately. This would not serve the ultimate goal of promoting sharing and reuse.

2. Standard Legal Analysis

What types of legal claims does a right holder have against third parties who failed to comply with the terms of the license? The simplest case concerns a third party who appropriated the work in a way that is covered by copyright. In such a case, copyright owners would have a copyright (property) claim against infringing third parties.

Consider the following example: Artist A is a composer of a musical composition. The composition is subject to a license that authorizes any modification of the original composition for noncommercial purposes. It is a Share Alike license and therefore requires that all derivative works based on the music composition be subject to an identical license. Artist B creates a rap version of Artist A’s composition but fails to post any license. Artist C combines the rap version with a short cartoon that is incorporated by D, a filmmaker, into a documentary film describing web artists. The film becomes very successful and copies are sold at video stores. Can Artist A sue D? If the rap version by Artist B constitutes a copy or a derivative work based on the original composition, then D must acquire a license to use it. Since the original license authorized noncommercial uses, the use for commercial purposes was not covered by the license, and, unless otherwise permissible under copyright law, it would amount to copyright infringement. The claim that Artist A has against D is not a breach of contract but a property claim, i.e., copyright infringement. Under copyright law, Artist A holds the exclusive right to create derivative works, such as the rap version that accompanied the cartoon. He also holds the exclusive right to create copies of the work and publicly distribute and perform it. As this analysis shows, all these legal claims fall within the domain of property law.
The situation is different, however, when the licensor seeks to create new rights, not enumerated under copyright law. Should such licenses be enforceable against third parties? Consider the following example: A photograph is released by Artist A under the Share Alike88 and Attribution license,89 authorizing copying and distribution for noncommercial purposes, provided that A is properly credited. The photograph is published in B’s newsletter. Although the newsletter must be distributed subject to the same terms governing the original work (namely Attribution and Share Alike), B fails to comply. T, a public schoolteacher, copies the photograph and makes it available to her students without giving any credit. Does A have a claim against T? Under copyright law, T could be covered by fair use. Creative Commons’ license clearly states that it does not limit any fair use rights.90 Does the failure to give credit or to comply with the Share Alike provisions give rise to any legal claim? Can the contract between A and B also be binding for T?

Artist A sought to license noncommercial uses as long as her work was acknowledged and promoted her artistic reputation. The use by the schoolteacher is certainly against her will and may defeat the purpose of licensing the work in the first place. Can A sue T for posting the photograph online without credit? What is the source of the legal obligation to credit the original author in such a case in the absence of any obligation to do so under federal copyright law? Standard legal analysis would regard these cases as either pertaining to property licenses or to simple contracts.

3. Property License

The view that a license could bind third parties is based on the notion of a property license. To the extent that copyright empowers owners to exclude others from certain uses, a license to use the work permits what the law otherwise prohibits. Permission to use the work could be subject to various restrictions. Under this view, the burden of proof rests on the user, who must show that the use was properly authorized by the right holder.

A property license91 is not a contract. It is a unilateral legal action, through which a property owner can exercise her rights, and it defines the

88. The Share Alike option seeks to facilitate this. The Share Alike license purports to bind subsequent users of any derivative work that is based on the original work.

89. The explanation for the attribution terms, provided by Creative Commons’ license, states as follows: “You let others copy, distribute, display, and perform your copyrighted work—and derivative works based upon it—but only if they give you credit.” Creative Commons, Choosing a License, http://creativecommons.org/about/licenses/ (last visited Aug. 31, 2005).

90. See Creative Commons, supra note 78, § 2.

boundaries of legitimate use. Its binding force does not derive from exercising autonomous will. The restrictions imposed by the license are enforceable because of property rules, and they do not require voluntary consent.

But the property license analysis does not explain why a license that purports to expand rights beyond the scope of copyright law should be enforceable as a property right. For instance, the right of attribution is not listed under U.S. copyright law, and users are under no obligation to credit the author. One could argue that the authorization to use any of the exclusive rights of the right holder is contingent upon giving appropriate credit. If the owner of the copyright can authorize the reproduction of the work for paying customers, why could he not simply limit authorization to users who give him appropriate credit? Imposing a duty on third parties to acknowledge the original author is particularly interesting since it is a positive duty, normally not associated with property rights. Property rights are typically negative rights that allow owners to legally stop potential users from engaging in a particular use.92

It is arguable that copyright owners have the legal power to restrict the use of their works indefinitely. Yet, enforcing legal obligations outside the scope of the property right against third parties could subsequently lead to new forms of property. Owners could precondition the license upon behaviors that are neither related to the use of the work, nor to the use of copyright. Owners may wish to condition a license upon the purchase of another product, or license the work for noncompeting uses only, or license a work provided that users would refrain from criticizing the work or exploring its innovative secrets. Should such restrictions hold against third parties? We may of course distinguish between different types of license provisions, based on their constitutionality or the antitrust issues they provoke. Yet, if such restrictions are treated as a property license, the grounds for legal intervention in the sovereignty of the property owner are likely to be limited.

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the debtor may reject, but the non-debtor-licensee has an election very similar to that of the tenant in possession of real property, namely, to treat the contract as terminated, giving rise to a breach of contract claim, or to elect to retain its existing rights without interference from the debtor or the trustee in bankruptcy. . . . The debtor or trustee on its part cannot be compelled to perform affirmative post-petition obligations, such as warranty obligations, defending patent infringement suits or writing updates to programs and similar matters.


92. See Merrill & Smith, supra note 76, at 788-89 (noting that rights in rem are always negative in nature, and normally require that people abstain from certain types of interference with a thing or status, rather than requiring a person to perform an action).
4. Contracts

Typically, rights and duties created by contracts are rights in personam; namely, they bind only the parties to any given contract. Contracts create rights against parties to the contract who undertook an obligation by consenting to the terms of the agreement. Holding parties legally obliged to keep their promises is not only considered morally justifiable but also efficient. The parties are thought to be in the best position to ascertain the costs and benefits associated with the rights and obligations designed by the contract. Therefore, from an economic standpoint, a contract is considered efficient only if it reflects the free will of consenting parties. That is why contracts typically do not impose duties on third parties who do not accept their terms.

What makes one a party to a binding agreement? Would simply using a copyrighted work constitute acceptance by behavior of the license’s terms? Though it remains unclear what makes an online contract binding, some courts have held online contracts enforceable based on very minimal evidence of assent. Shrink-wrap licenses, for instance, were enforced even when the licensee became aware of the license’s terms only after the computer program was purchased. Similarly, in some cases the court held browse-wrap licenses enforceable, where the license was simply posted online stating that the use of the product or website would constitute acceptance of the terms by the user. When access to the work constitutes a legally binding consent, all access to the work is in fact governed by the contract. The terms of use thus become effective against all. Minimizing the legal requirements for online contract formation and enforcing licenses even without an explicit indication of consent on the part of the licensee may give rise to contracts that run with the asset.

Both the property license analysis and contractual analysis require further consideration. The property license analysis assumes a rather expansive interpretation of the legal powers vested with copyright owners. If copyright owners are able to create indefinite restrictions on the use of their works, beyond the bundle of rights defined by the property rule, they could unilaterally constitute new types of property forms. This analysis entails an understanding of copyrights as absolute property rights. Such interpretation may be inconsistent with the common understanding of copyright law. The delicately balanced regulatory regime is fundamental to enabling a copyright regime within the U.S. constitutional framework. Is this broad interpretation of copyright justifiable? Lowering the requirements

94. See, e.g., ProCD Inc. v. Zeidenberg, 86 F.3d 1447 (7th Cir. 1996).
95. Id. Shrink-wrap licenses used to be distributed in a printed format within the plastic wrap of a hard copy of a computer program. The printed text constituted an offer, and tearing the plastic wrap before using the program was considered acceptance.
necessary for establishing consent by contracting parties would further allow content providers to enforce contractual restrictions against third parties. Such standard licenses that "come with" each work would define its terms of use. The ramifications of this practice are further analyzed in the following sections.

III. THE LIMITS OF CONTRACTS

A. Information Costs

We often think of property and contracts as two distinct legal mechanisms that together constitute the market. There seems to be a division of labor between the two: Copyright law is responsible for allocating the initial entitlements, while contract law governs their transfer; copyright law creates rights against the world (in rem), whereas contract law applies only to the parties (in personam). Property rights differ from contract rights in that a property right "runs with the asset," namely, it can be enforced against subsequent transferees of the asset.97 Enforcing standard licenses against third parties blurs the distinction between property and contracts. It allows distributors, right holders, and possibly others to establish rights in rem through contracts.98

Typically, the law does not enforce contracts that run with the asset, and claims against third parties are normally denied. Merrill and Smith99 explain the objection to the creation of new forms of rights in rem as an attempt to reduce information costs.100 Property rights, they argue, communicate a bundle of rights that apply to a certain asset, thereby reducing transaction costs involved in determining the type of rights and obligations that are associated with the asset. Property rules reflect an exclusion strategy for regulating the use of resources: They restrict access rather than specify the permitted or prohibited uses of a particular resource.101 "In rem rights offer standardized packages of negative duties

99. Merrill & Smith, supra note 76.
100. A few other explanations are offered by the literature. Hansmann and Kraakman, for instance, argue that limitations on property serve to facilitate verification of ownership. See Hansmann & Kraakman, supra note 97. Property law addresses the problem of verification by presuming that all property rights in any given asset are owned by a single owner unless there was an adequate notice to persons whom it might affect. Id. Therefore, as long as transferees are able to verify the rights offered to be transferred, the creation of new types of rights should be allowed. Id.
101. Merrill and Smith perceive rights in personam and rights in rem as two distinct strategies for regulating the use of resources: In personam rights are instances of governance strategy, in which rights regarding resources are defined in terms of permitted and restricted use, while governance rules specify particular uses in some detail, and sometimes identify the rights holder and the duty holder, and in rem rights are instances of an exclusion strategy
of abstention that apply automatically to all persons in the society when they encounter resources that are marked in the conventional manner as being 'owned.' "102 The exclusion strategy conserves information, "by making the duties uniform; by restricting the duties to a short list of negative obligations, easily defined and understood by all; and by marking boundaries using easily observed proxies." 103

To preserve the communicative function of property rights it is necessary to restrict the creation of additional rights. Standardization of rights may lower the "unit costs" of processing information regarding the content of rights. 104 If free customization of property forms is allowed, it may prohibitively increase information cost by requiring the parties to explore a variety of options. Standardization achieved by limiting new types of property may thus serve to conserve the information value of property rights.

The effect on licensors and potential transactors, who may wish to negotiate a license, is arguably negligible. Indeed, a variety of licensing options may require the transacting parties to study the different licensing options that are available and determine the suitability to their needs. The multiplicity of license forms might be time-consuming and expensive for licensors and licensees. An individual right holder faced with various contractual options may be required to make choices regarding the scope of authorization that would be best for her work. This would require an understanding of the background copyright rules and a study of the various contractual options. Individual users would have to determine which license is necessary for the intended use, something that would often be difficult to predict. 105 Yet, as suggested by Henry Hansmann and Reinier Kraakman, the "increase in the available menu of property rights" does not generate significant confusion, which justifies restraining the creation of new types of property. 106 The reason is that "so long as there are clear

for determining use rights, restricting access to a particular resource. See Merrill & Smith, supra note 76.

102. Id. at 794.

103. Id.

104. See id. at 795 ("In rem rights can only work if they are highly standardized and rely on relatively crude proxies to identify the resources that are subject to such rights.").

Copyright law does not fully comply with this definition. It offers protection to abstract, and often vague, subject matters (e.g., expression in computer programs, fictional characters in novels). Therefore, the symbol ©, which marks ownership in creative works, often restricts uses of both copyrighted and non-copiedrighted subject matters.

105. It is conceivable that a user may use a Creative Commons' license for noncommercial use and, thereafter, if the work becomes successful, secure a commercial license. At that stage, however, the bargaining position of the licensee would be a lot weaker, since he already invested in creating a new work.

106. Hansmann & Kraakman, supra note 97, at 380. Hansmann and Kraakman challenge the analysis offered by Merrill and Smith, arguing that the numeros clausus doctrine does not seek to facilitate standardization of property rights, but rather verification of property rights. See generally id. They find three basic problems in the standardization explanation: First, the optimal standardization view fails to explain why property law is more restrictive than contract law. Id. at 320. If both contract law and property law offer a variety of standard
definitions and labels for the forms needed, the ability of parties to transact in those forms will not be compromised by the availability of additional forms. Nobody need ever use those additional forms, after all, or even utter their names. 107

Though this might be true for potential transacting parties who seek a licensing agreement, it does not apply to third parties who simply seek to avoid inadvertent interference with copyright. Hansmann and Kraakman’s critique overlooks a crucial cost factor created by property rights: costs incurred by third parties, i.e., nonowners who seek to avoid copyright infringement (external information costs). 108 Indeed, the virtues of standardization are striking in the context of external information costs. Mandatory standardization of in rem rights would substantially reduce external information cost. 109 Rights in rem bind third parties. 110 Consequently, third parties “must incur additional costs of gathering information in order to avoid violating novel property rights or to decide whether to seek to acquire these rights.” 111 Such an inquiry may even be required just to ensure that one does not inadvertently interfere with someone else’s property rights. After all, property rights would typically impose strict liability. Free customization of property forms is likely to

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terms and default rules to facilitate communication, why does contract law allow customization and property law does not? It is arguable that Merrill and Smith’s analysis addresses this type of criticism. The difference between contract and property is that contracts require consent of the contracting parties, which assumes that they are aware of the duties imposed by the contract. In other words, a contract does not impose the same information costs, since contract formation involves shared information (“meeting of the minds”) regarding rights and duties by the parties. A second critique against the optimal standardization theory is that “it is not in fact plausible that an increase in the available menu of property rights generates a meaningful degree of confusion that in turn provides a rationale for limiting the size of menu.” Id. at 380-81. Third, Hansmann and Kraakman point out that property law does not offer a fixed set of standard forms of property but only regulates the available categories of property rights, leaving it to the authorizing parties to shape them. Id. at 382. Thus, much of the costs associated with uncertainty are not mitigated by property law. Id.

107. Id. at 381.

108. Property rules create two types of costs: costs incurred by transacting parties, i.e., rights holders and potential licensees, and costs incurred by third parties, i.e., nonowners, who seek to avoid copyright infringement (external information costs). Long identifies three types of information cost bearers: avoiders, builders, and transactors, each affected differently by information costs related to intellectual property rights. See Long, supra note 11, at 491-92. This typology of information cost is useful for understanding the broader context of intellectual property rights related to industrial production. Id.

109. Property regimes, it is argued, should seek “optimal standardization” by balancing the loss of utility from the inability to customize rights with the reduction of information-processing costs.

110. For Merrill and Smith the difference between contract rules and property rules is explained by the different costs and benefits associated with different types of rights. Contracts create rights in personam, which affect only their parties and typically would not affect third parties. See Merrill & Smith, supra note 76, at 800. Therefore, contracts would be governed by rules that allow customization, while property rules would restrict such freedom.

111. Id. at 777.
create an information cost externality by imposing information costs on an indefinite group of third parties. Each new property form may subject third parties to novel duties, thereby dramatically increasing their avoidance costs. The more diversity of terms we allow, the higher the cost of avoidance born by third parties. Avoiders must determine whether they invaded any rights of right holders. If a work is copyrighted, the symbol © would indicate that a license is necessary. A work marked by (cc) would indicate that some uses are authorized but others require a license. Each version of license may impose new duties and require new investigations, and therefore is likely to increase external information costs.

Creative Commons' strategy presupposes that minimizing external information costs is critical for enhancing access to creative works. It seeks to reduce these costs by offering a licensing platform. Yet, the lack of standardization in the licenses supported by this licensing scheme further increases the cost of determining the duties and privileges related to any specific work. This could add force to the chilling effect of copyrights.

B. Multiplicity of Licensing Options

Should the law enforce in rem copyrights that were created by contracts? Should it enforce the licensing scheme of Creative Commons against third parties? For Thomas W. Merrill and Henry E. Smith the question is simply a matter of information costs. Property rights in creative works are superior to contracts when it is cost-effective to impose a small informational burden on a large and indefinite number of people. By contrast, rights created by contracts are superior when imposing a relatively large information burden on a small number of identified people is cost-effective. From this perspective, rights related to creative works would tilt toward a property rule. The need to convey sophisticated legal relationships pertaining to an indefinite group of people suggests that property rights are likely to be more cost effective. The information costs associated with governing all uses of creative works through contracts would typically be prohibitive.

On this background, Creative Commons' strategy is puzzling. On the one hand, advocating a variety of licensing schemes encourages authors to take advantage of contracts, announcing that the more options authors have

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112. Id.

113. Applying these criteria to copyright protection is challenging. On the one hand, the lack of noticeable physical boundaries or any other crude proxy that allows users to identify the resource would normally suggest that a resource be governed by contracts. See Merrill & Smith, supra note 76, at 798. On the other hand, the number of people who might use creative works and whose actions might impact such works is indefinite. The need to convey sophisticated legal relationships to a large group of people increases the significance of standard definitions. Overall, the large indefinite group of people affected by these rights would mandate protection of a resource by a property right. See id. at 798 ("As the number of affected persons increases, we expect the content of rights over the resource to move in the direction of exclusion, with a designated gatekeeper. The result will commonly take the form of an in rem right.").
to get their works out in the public sphere, the better.\textsuperscript{114} Contracts allow for fine-tuning of rights that are tailored to address the particular needs of right holders and users. Furthermore, not all copyrighted materials are alike. There is a wide variety of copyrightable subject matters, such as music, text, computer programs, scientific research, and films. Each is produced in a different creative process, each generates a different creative culture, each is exploited and consumed differently, and each is governed by distinct business models that involve different market players. Thus, the concerns of a documentary filmmaker could be remotely different from those of a software designer or law professor.

On the other hand, the licensing strategy does not facilitate a simple fixed license. Seeking to reduce the high information costs associated with the copyright system, Creative Commons’ strategy offers to license works upfront. Yet, the variety of customized licenses is likely to increase costs. For musical works, for instance, there exists a whole range of licenses, including any combination of Creative Commons’ standard license provisions: Noncommercial, Attribution, No Derivative Works, and Share Alike. Alternatively, one can choose any of the following sampling licenses: Sampling (authorizing sampling for any purpose except advertising, but prohibiting any copying or distribution of the entire work), Sampling Plus (authorizing sampling for any purpose except advertising and allowing copying and distribution of the entire work for noncommercial purposes), or Noncommercial Sampling Plus (authorizing noncommercial use as well as noncommercial copying and distribution of the entire work).\textsuperscript{115}

The high information cost created by this licensing strategy is also related to the complexity of overlapping rights and new costs of coordination. There are already a large variety of licenses available to creators who wish to share their works on more generous terms,\textsuperscript{116} such as GPL,\textsuperscript{117} Choral

\textsuperscript{114} See Creative Commons, \textit{supra} note 47. There seems to be, however, some tendency toward uniformity. The Electronic Frontier Foundation (“EFF”) recommended the Creative Commons’ license over the EFF’s Audio license, since they “believe that consistency in licensing and the CC licenses’ machine-readable code will help both listeners and creators to find and combine works more easily.” See EFF, Open Licenses, http://www.eff.org/IP/Open_licenses/ (last visited Sept. 1, 2005). Also, Creative Commons itself recommends the use of the licenses of the Free Software Foundation and the open source initiative for software and software documentation. See Creative Commons, \textit{supra} note 45.

\textsuperscript{115} See Creative Commons, Creative Commons—Choose Your Sampling License Options, http://creativecommons.org/license/sampling (last visited Sept. 1, 2005).

\textsuperscript{116} Reichmann and Uhrl, for instance, propose to establish a zone of conditionally available scientific data to reconstruct and artificially preserve functional equivalents of a public domain. See Reichman & Uhrl, \textit{supra} note 14, at 315. This strategy entails using property rights and contracts to reinforce the sharing norms of science in the nonprofit, trans-institutional dimension, without unduly disrupting the commercial interests of those entities that choose to operate in the private dimension. \textit{Ibid.} To this end, the universities and nonprofit research institutions that depend on the sharing ethos, together with the government science-funding agencies, should consider stipulating suitable “treaties” and
Public Domain Library,\textsuperscript{118} GeoFrame Developer's Kit,\textsuperscript{119} Online Gaming League,\textsuperscript{120} Object Oriented Graphics Library,\textsuperscript{121} EABA,\textsuperscript{122} or any type of combination offered by Creative Commons.\textsuperscript{123}

The absence of standardization may lead to inconsistencies and incompatibilities between different free-content contracts.\textsuperscript{124} Consequently, creators who wish to share their works may not be able to use each other's content. Some of these issues are demonstrated in the case of Wikitravel.\textsuperscript{125}

other contractual arrangements to ensure unimpeded access to commonly needed raw materials in a public or quasi-public space. \textit{Id.}

\textsuperscript{117} GNU, GNU General Public License, Version 2 (June 1991), http://www.gnu.org/licenses/gpl.txt (providing terms and conditions).

\textsuperscript{118} Choral Public Domain Library ("CPDL") is an Internet-based free sheet music website that specializes in choral music. Most of the scores are in the public domain, while some are newly composed. The CPDL Copyright is a type of open-source license that allows the end user to use a score freely. The license provides that if any changes are made to the original, the subsequent version would still fall under the CPDL Copyright. The license is based on the GNU General Public License ("GPL") that is very common in software development. The terms of the CDPL license can be found at http://www.cpdl.org/modules.php?op=modload&name=Sections&file=index&req=viewarticle&artid=1&page=1 (last visited Sept. 1, 2005).

\textsuperscript{119} GeoFrame Developer's Kit ("GDFK") incorporates the application program interfaces of the Charisma DK and the IESX DK, so that a developer can integrate with all GeoFrame applications. \textit{See} Open Systems, http://64.233.161.104/search?q=cache:NmnIMRA3QHQJ:www.sis.slb.com/content/software/opensystems/index.asp+GFDK+&hl=en (last visited Sept. 1, 2005).

\textsuperscript{120} The Online Gaming League ("OGL") is a gaming community website maintained by a dedicated staff of volunteer gamers. \textit{See} Online Gaming League, http://www.worldogl.com/main.php (last visited Sept. 1, 2005).

\textsuperscript{121} Object Oriented Graphics Library ("OOGL") is the library upon which Geomview is built. \textit{See} Tutorial: The OOGL Geom File Formats, http://www.geomview.org/docs/oooglTour.html (last visited Sept. 1, 2005).

\textsuperscript{122} EABA is an Open Game License drafted by game designers who were not satisfied with the insufficient level of openness, in their opinion, of the OGL. \textit{See} Wikipedia, Open Gaming, http://en.wikipedia.org/wiki/Open_gameing (last visited Sept. 1, 2005).

\textsuperscript{123} For instance, while Creative Commons is promoting one set of licenses, the Free Software Foundation promotes the GNU GPL for software, and the so-called GNU Free Documentation License ("GFDL") for documentation. Therefore, some content providers, who wish to release their works under a less restrictive license, may choose (cc), while others may be using GFDL. Creative Commons is offering the CC-GNU GPL, which adds the Creative Commons' metadata and Commons Deed to the Free Software Foundation's GNU GPL. \textit{See} Creative Commons, Creative Commons GNU GPL, http://creativecommons.org/license/cc-gpl (last visited Sept. 1, 2005). Similarly, the CC-GNU Lesser General Public License ("LGPL") adds the Creative Commons' metadata and Commons Deed to the Free Software Foundation's GNU LGPL. It is important to note, however, that "no Creative Commons license has been certified as open source by the Open Source Initiative, and any license containing the Non Commercial or No Derivatives properties does not qualify as open source, as they violate the Open Source Definition's No Discrimination Against Endeavor and Derived Works criteria respectively." Creative Commons, supra note 45.

\textsuperscript{124} The open source initiative created a set of guidelines for a license to be considered open source. \textit{See} The Open Source Definition, http://www.opensource.org/docs/definition_plain.html (last visited Sept. 1, 2005).

Wikitravel is a free travel guide built through collaboration with Wikitravellers from around the globe. Contrary to other Wiki sites that use the GFDL, Wikitravel content is licensed under (cc) Share Alike license.\textsuperscript{126} Wikitravel content is relatively short and is used by small publishers. The GFDL requires distributing a large legalese text and the full Wiki markup to allow the editing of the content as required by the license. It was developed to cover software manuals, textbooks, and other large references. Every document distributed under the GFDL must include a copy of the GFDL and a change log.\textsuperscript{127} Since Wikitravel content is short and often written while on the road, requiring contributors to distribute their short reports with another ten pages of added legal text makes little sense. Therefore, for practical reasons, Wikitravel decided to use the (cc) Attribution-Share Alike license.

Creative Commons' licensing scheme introduced new problems of compatibility. The GFDL is fairly strict about the reuse of content, providing that every type of content distributed under GFDL, such as Wikipedia, cannot be incorporated into works that are not subject to the same license terms. Wikipedia is probably the largest documentation project using GFDL, with over 600,000 articles in fifty languages and 6000 active contributors around the world.\textsuperscript{128} Due to incompatibility in the licensing terms, contributions made to Wikitravel can no longer be reused in Wikipedia.\textsuperscript{129} Compatibility with other free licenses would allow

\textsuperscript{126}http://wikitravel.org/en/article/Wikitravel:About (last visited Sept. 1, 2005). Wikitravel is aware of the problems caused by using different licenses:

The big downside of not using the GFDL is that GFDL content—like Wikipedia articles—cannot be included in Wikitravel articles. This is a restriction of the GFDL—you're not allowed to change the license for the content, unless you're the original copyright holder. This is kind of a pain for contributors, but we figured it was better to make it easy for users and distributors to comply with our license.


\textsuperscript{126} See id.

\textsuperscript{127} If more than 100 copies are distributed, it is required to distribute the source versions.

\textsuperscript{128} Wikipedia is an open content encyclopedia that is collaboratively developed using Wiki software. Wikipedia was started on January 15, 2001, by founders Jimmy Wales and Larry Sanger. In March 2004, it included 600,000 articles in fifty languages, and the participation of 6000 active contributors from all over the world. The content of Wikipedia is entirely created by its users, and no single person owns the content. All articles in Wikipedia, and most images and other content, is covered by the GFDL, which is intended to ensure that everyone who can accept that license has the right to use and improve an article. For further information, visit the Wikipedia website at http://en.wikipedia.org/wiki/Wikipedia.

\textsuperscript{129} Similar issues were raised in the transition from the October Open Game License to the Creative Commons Attribution-Share Alike License on June 13, 2003. The October Open Game License was a Copyright license published by Brandon Blackmoor of the Role Playing Games ("RPG") Library. Since the October Open Game License is irrevocable, games that were published under the October Open Game License were still subject to it. See Wikipedia, supra note 122.
authors, who released their works on one platform, to make their works available for reuse with content subject to another licensing scheme. Compatibility is thus crucial for facilitating collaboration and reuse.\textsuperscript{130} The proliferation of licenses increasingly creates a problem even within the relatively homogeneous open source community.\textsuperscript{131}

The Wikitriavle example demonstrates some of the barriers to achieving compatibility: One is transaction cost. Another barrier relates to ideology. Often, the licensing scheme is not simply a business matter or a legal issue, but constitutes the normative framework of free content communities. For instance, for some activists in the open source movement, transparency and release of source code are fundamental norms. Changing the license is not simply a formalistic legal step, but involves a deeper change in community values and priorities. Reaching consensus on such issues could be cumbersome and requires a more thorough deliberation.\textsuperscript{132}

C. Automated Licensing and Transaction Costs

From the perspective of information costs, a variety of customized terms would be desirable, as long as information costs could be kept down. Proliferation of licensing schemes may increase costs and create new barriers on accessing creative works. Can technology address this problem?

The licensing platform established by Creative Commons provides an automated mechanism that may significantly reduce transaction costs. Since licenses are distributed in machine-readable format they are identifiable by search engines and can be processed by crawlers. The infrastructure creates a mechanism that can automatically signal and search for certain authorizations. The use of the licensing platform could reduce the cost of retrieving works that are available for use, and determine the terms to which they are subject. For instance, a search engine could identify the works that permit derivative use, or in other cases those that

\textsuperscript{130} Another example of conflicts between different licensing schemes is provided by Debian-Legal analysis of Creative Commons' licenses, listing the inconsistencies between these licenses and Debian Free Software Guidelines. See Debian-Legal Summary of Creative Commons 2.0 Licenses, http://people.debian.org/~evan/ccsummary.html (last visited Sept. 1, 2005).


\textsuperscript{132} Difficulties in agreeing on a standard licensing scheme for the role-playing gaming community highlight similar issues. The Open Gaming Movement started in 2000 when a popular gaming system (Dungeons & Dragons) was resealed under the Open Gaming License (d20 System). The license was criticized for not being sufficiently open and for being controlled by the RPG market led by Wizards of the Coast. Subsequently alternative open licenses were published: EABA Open Supplement License, October Open Game License, and GFDL. A fascinating dispute developed when Richard Stallman of the Free Software Foundation requested that the RPG Library cease publication of the October Open Game License, claiming that it was an unauthorized modification of the GFDL. See Wikipedia, \textit{supra} note 122.
permit identical reuse only. Computer programs may also reduce costs related to the complexity of rights and resolve conflicting authorizations.

The automated system may actually weaken the need to internalize the property rules and rely on social norms for enhancing compliance. One may no longer need to be aware of the scope of protection and the scope of rights. Conceivably, people may rely on a system that would make the selection and determine authorization for them.

Automated systems, however, are restricted to the online environment, and cannot provide a solution for content that is distributed in physical media (such as print). Furthermore, information processing systems cannot take away all information costs associated with licensing. Standardization and automation may assist in retrieving information regarding the rules governing the work, but they may not reduce the mental processing costs associated with choice. The idiosyncratic nature of rights is likely to increase the costs associated with selection and compliance. Nevertheless, as long as the transaction costs are being taken care of, the effect of a standardized, automated system on information costs is inconclusive.

It is arguable that even if a licensing scheme does not lower information costs, it lifts a major barrier on access by authorizing the use of works that would otherwise not be licensed. Yet, it is fair to assume that right holders, who licensed their works using Creative Commons' licensing scheme, would not have chosen to enforce their rights against end users who exploited the work for noncommercial purposes. In other words, the potential contribution of Creative Commons' licensing platform is in increasing the level of certainty and decreasing the information costs. As the analysis has demonstrated so far, it is unclear whether Creative Commons' strategy can serve this purpose. In the absence of efficient automated search capabilities, artifacts that come with specific restrictions will likely create a chilling effect on the use of creative works.

D. External Information Cost and Externalities

Exploring the licensing schemes of Creative Commons in the broad context of licenses employed by other players in the market for content reveals some of the problems associated with a private-ordering regime in creative works.

Licenses have been increasingly employed in recent years for restricting (or prohibiting altogether) certain uses of works that are otherwise permissible under copyright law, such as reverse engineering or the redistribution of

133. See, e.g., Yahoo!, supra note 63.
134. To the extent that rights would be automatically enforced, enabling some uses and preventing others, it may resemble DRM systems.
135. To the extent that the volume of a transaction increases due to the decrease of transaction costs, costs associated with choice may increase. See Niva Elkin-Koren & Eli M. Salzberger, Law, Economics and Cyberspace 94-96 (2004).
Such restrictions arguably compromise copyright fair use and first-sale privileges, and challenge free-speech liberties.

Whereas Merrill and Smith focus on external information costs, there are also direct costs associated with the enforceability of unilaterally drafted rules on third parties. One of the problems associated with a private ordering regime stems from the fact that those affected by the rights and duties are not represented in the transactions pertaining to their interests. These are the consequences of imposing terms of license that prohibit reverse engineering of computer programs or ban the reselling of a creative work. The question becomes, who defines the standard bundle of rights and duties that covers the works? Creative Commons’ licenses and corporate licenses/DRM systems are standard contracts drafted by proprietary owners, which may affect third parties who did not take part in the initial bargain. There are good reasons to allow a public school teacher to use copyrighted materials in her class, regardless of whether the right holder sought to license this use. We simply do not want to protect the owner’s copyright to the extent that it limits the use by the public school teacher. We would like to enable teaching in public schools and learning by students, and we may wish to exempt such use notwithstanding any contractual restrictions. We are concerned with the high information costs imposed on the public school teacher in her quest to use creative works in class. We are, however, no less concerned that she may not use those works at all, since maximizing the use of creative works is the ultimate goal of copyright law. These externalities make private-ordering regimes less attractive in the context of informational works.

Such considerations make us generally more skeptical of the ability of markets to regulate the use of information and to produce (through contracts) efficient rules of use. Enforcing contracts that run with the assets has an effect on decisions regarding the use of information on the market. And markets are incapable of making such choices.

This observation has both theoretical and practical ramifications. At the theoretical level, Creative Commons reveals the weaknesses of the information cost analysis and the limits of the information cost theory. It challenges the view that the structure of rights, which governs a certain


138. Why can we not say that the effect on third parties is taken into consideration when they agree to a contract? There are three main reasons for this. First, it is unclear whether the parties reached the agreement. Second, it would often be for the transacting parties to conceptualize and take into account this type of remote consequence. Third, and most important, these are not the immediate interests of any of the parties. For instance, though society at large and students’ parents could benefit from the use of copyright materials as teaching materials, the owner and the teacher who must secure a license may not necessarily take this interest into consideration when tailoring (or most likely selecting) a standard license.

139. See Elkin-Koren, supra note 4.
resource, is simply a function of the costs created by these rights. The distinction between property and contracts is defined by Merrill and Smith in terms of "information-processing costs."\textsuperscript{140} Though admitting that the distinction between property and contract may have important legal consequences,\textsuperscript{141} they tend to view property and contracts as legal institutions located on the same scale. Property is perceived as a type of contractual arrangement that reflects "optimal standardization," whereas contracts allow the parties to freely design their own contractual arrangement. This view of contracts and property as legal institutions that differ from one another only at the level of standardization is misleading. Property and contracts constitute different types of rights, originating from different sources of obligation, and they invoke different rationales for enforcement.

From a practical standpoint, enhancing the legal validity of private ordering could work both ways: It could certainly facilitate licensing platforms such as (cc) and GPL, but at the same time would make restrictive terms enforceable. Information cost analysis does not provide a sound basis for distinguishing between the two. If there is no reason to object to the creation of a new type of property rights through private ordering, this line of argument would equally apply to restricting licensing schemes, which are enforceable through DRM systems.\textsuperscript{142} The same rules that would make Creative Commons licenses enforceable would equally make enforceable corporate licensing practices, which override users' privileges under copyright law.

E. Sustainability and Stability of the Contractual Regime

Reliance on contracts to substitute for what is believed to be a deficient property regime may further lead to instability.

One set of issues is related to the revocable nature of contracts. Creative Commons' licensing scheme invites creators to rely on a Creative Commons' license as an authorization to reuse and share the work for noncommercial purposes. When subsequent authors incorporate pre-existing works into their new derivatives, they face a legal risk. What would guarantee that content released under Creative Commons' licenses would remain free of legal restrictions? What if the owners change their minds?


\textsuperscript{141} Merrill & Smith, \textit{supra} note 76, at 775.

\textsuperscript{142} One example is the licensing platform provided by Windows Media Player. A license defining the terms of use is issued to subscribers and enforced through the DRM. \textit{See} Microsoft, \textit{Using Protected Files (DRM)}, http://www.microsoft.com/windows/windowsmedia/mp10/faq.aspx#11_1 (last visited Sept. 1, 2005).
Creative Commons' licenses provide that the license is perpetual, for the duration of copyright. It is unclear, however, to what extent this license binds successors of the copyrights in the licensed works. Reliance on revocable licenses is particularly acute when ownership changes hands, as in bankruptcy,\textsuperscript{143} death, or transfer as part of a settlement dispute.\textsuperscript{144} When Commerce One, a provider of Web services, filed a voluntary petition for relief under Chapter 11 of the U.S. Bankruptcy Code\textsuperscript{145} in October 2004, there were concerns regarding the prospective purchase of the patents sold in the bankruptcy auction. It was feared that a licensing broker would acquire the patents, and then assert rights against companies that already integrated these technologies into their systems. Those patents cover a wide range of popular methods for exchanging business documents over the Internet, and were licensed prior to the bankruptcy procedures under an open source license.

Similar issues may arise when rights are purchased and voluntarily transferred to someone else.\textsuperscript{146} The new right holder could deny access to works that were previously authorized and incorporated into derivative works. In some cases, revoking a license to use a work may constitute a breach of contract, or invoke a reliance interest, entitling the immediate licensee to damages. Revoking the contract may allow the right holder to enforce the copyright against third parties. Since her copyrights did not expire, she may choose to enforce her rights at any time. Creative Commons' license provides that the license will be automatically terminated upon any breach of its term, but termination will not affect the rights of those who received derivative works or collective works from the licensee, as long as they comply with the license. Consider, for instance, the case of a Share Alike license that was breached by the licensee: The license granted to the immediate licensee would subsequently expire. It would probably also expire for any subsequent users who were unaware of the Share Alike provisions, and therefore failed to comply.

\textsuperscript{143} See John Markoff, \textit{Auction of Internet Commerce Patents Draws Concerns}, N.Y. Times, Nov. 16, 2004, at C4.

\textsuperscript{144} For a discussion of transfer as part of a dispute settlement, see David McGowan, \textit{SCO What? Rhetoric, Law, and the Future of FLOSS Production} (Minn. Legal Studies, Research Paper No. 04-9, 2004).


\textsuperscript{146} Take for instance the mechanism of Founders' Copyright. Most countries accord authors with a copyright duration of the author's life plus seventy years. Founders 'Copyright allows authors to assert copyright protection for a shorter period of time than the standard copyright duration, and dedicate their works to the public domain after fourteen years. However, it also allows the author the option of extending the protection for another fourteen years. To facilitate this, (cc) would purchase the copyright from the author for one dollar, and would grant the author an exclusive license to use the work for fourteen or twenty-eight years. What if there is a nonvoluntary transfer of ownership of this content to someone else? How does one guarantee control over the reservoir of works dedicated to the public domain? Are these rights subject to the termination provisions under the 1976 Copyright Act?
Another issue relates to the verification of rights and protection against conflicting claims. The *SCO Group v. IBM* case demonstrates the increased concern related to conflicting claims, and the difficulty of verifying rights. SCO Group acquired the rights to the UNIX operating system, which was originally developed by Bell Labs, owned by AT&T, and then sold by AT&T to Novell and subsequently purchased by Caldera Systems (now SCO Group) in 1995. IBM was licensed by AT&T to use UNIX, but SCO Group argued that IBM exceeded the terms of the license in developing the UNIX code and inserting it into Linux. SCO Group filed a lawsuit against IBM, claiming that Linux is an unauthorized derivative work of UNIX, and IBM "contributed," without authorization, SCO Group's intellectual property to the code base of the open source. SCO Group claimed that by virtue of its intellectual property rights, end users of Linux and open source programs based on UNIX should pay a license fee for their use.

The potential legal exposure related to unverified ownership in computer programs is becoming a serious concern for software companies. Microsoft recently began offering its customers "uncapped protection for legal costs associated with a patent, copyright, trademark or trade secret claim alleging infringement by a Microsoft product." The open source community sought to address these concerns by offering Open Source Risk Management ("OSRM"). Uncertainty related to ownership and the difficulty in verifying the rights proclaimed by licensors are likely to increase the costs of using creative works.

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147. Hansmann & Kraakman, *supra* note 97, at 381. Hansmann and Kraakman explain the restraints on the creation of new property rights that deviate from the set of well-recognized forms of property rights, by the function of verification. For Hansmann and Kraakman, the limitations on property serve to facilitate verification of ownership of the rights offered to be transferred. Property law addresses the problem of verification by assuming that a single owner owns all property rights in any given asset unless there is an adequate notice to persons who might be affected. Limitations on property rights, according to Hansmann and Kraakman, intend to define the type and degree of notice that is necessary for establishing different types of property rights.


149. See *SCO Group*, No. 2:03CV294DAK, at 2-6.
150. *Id.* at 4-5.
151. *Id.*
Overall, these concerns call into question the sustainability of a contractual regime for coordinating rights over time among different generations of owners and users, where rights may be divided and held by different holders and consequently raise conflicting claims.

CONCLUSION

The colossal success of the open source movement is proof of a working system that is based on a licensing platform. Could this success be duplicated by Creative Commons and applied to new types of informational works? The open source/free software movement addressed a relatively homogenous group of elite programmers, who share a set of well-established social norms. This substantially reduced the need for legal enforcement. Furthermore, open source projects are collaborative, concrete efforts. This creates a sense of community that not only motivates contribution to the communal effort, but also reduces attempts at abuse (such as vandalism and intentional errors) and encourages collaboration in enforcement efforts (reporting infringements of the GPL). Enforcement of GPL, if it were ever to become necessary, would address a relatively small group of infringers.  

Creative Commons is far more ambitious. It seeks to address the needs of a diverse group of users, exploiters, and creators of very different backgrounds (musicians, filmmakers, photographers, and writers) and countries. Its agenda covers a wide range of needs for right holders of various kinds. The most striking difference between the Free Software movement and Creative Commons seems to be strategic: The GPL created a standard for licensing free software while Creative Commons facilitated the proliferation of different licenses. Yet, these different strategies reflect a fundamental difference in ideology. The GPL's provisions reflect a shared definition of free software that was intensively negotiated by the community. Creative Commons still lacks such consensus.

One question that arises is to what extent the licensing strategy could work in the absence of social cohesion. What are the prospects of subverting copyright by a strategy that tolerates diversity and difference? Is it likely to have a positive effect on the creation process? In the absence of an alternative set of rules which reflect a shared sense of free access, the answer is possibly not. The lack of a clear alternative may simply strengthen the proprietary regime in creative works. In fact, it may actually

155. Most people lack the necessary skills to incorporate open source programs into commercial products, and hackers would be subject to social sanctions. Enforcement efforts are therefore likely to target commercial companies that are relatively easy to identify and monitor. In other types of content, the ability and temptation to infringe the license seems higher.

reinforce the property discourse as a conceptual framework and a regulatory scheme for creative works.

The analysis suggests that creating an alternative to copyright requires standardization. At the ideological level, this would involve relaxing the libertarian sentiment of letting owners rule their property. It would further require efforts to define and agree upon the necessary preconditions of free access. Creative Commons would have to trade the sovereignty of owners for the reduction of transaction costs that would enhance access. At the practical level, it would require drafting a license that would include a predictable set of authorization.

The analysis further suggests that reliance on contracts alone is risky. It entails support of strong copyrights and freedom of contract. It requires adjusting the law of contract, allowing enforcement against third parties. The legal regime that would validate Creative Commons’ licenses would also enforce contracts that restrict access to creative works.

The actual use of Creative Commons’ licensing platform suggests that simply making copyright user-friendly would not necessarily promote access to creative works. Individual authors tend to prefer rather restrictive licenses, and it is arguable that we should respect the authors’ wills. If authors want to govern their works and restrict their various exploitations, let them. Yet, the preferences of authors when licensing their work may not reflect the interests of all members of the creative society. As users of preexisting materials, we all tend to advocate free access and warn against the detrimental consequences of excessive restrictions. Authors who are ready to release their works, however, may focus on protecting their narrow interests. In fact, the interests of each individual author may shift between free access and overprotection depending on where in the process of creation the author is situated.

Governing the use of creative works is likely to suffer from the shortcomings of collective action. It may require us to return to mechanisms that force us to make choices behind a veil of ignorance. Simply allowing authors to rule their own works may not produce the desirable social outcome of securing public access to creative works. The political process, aimed at designing a public law, may be invoked as a last resort. The protest reflected and reinforced by Creative Commons could become useful in this process; it would safeguard against capture by interest groups that have caused the current failure of copyright law and it would advance the public good.

It may well be that there is nothing wrong with copyright per se, but only with the way these rights were exploited in recent years by copyright owners. Changing social practices may have a powerful and highly important signaling effect. Creative Commons may gain a powerful symbolic presence in the copyright arena, turning individual protest against the fundamentalist copyright regime into a social statement. If successful, it could also demonstrate how communities could implement the sharing and reuse of creative works. Yet, establishing a workable and sustainable
alternative to the current copyright regime would require enforceable legal measures that would restrain the power of copyright owners to govern their works. To achieve that goal, it would not be sufficient to facilitate self-restraint and encourage copyright owners to treat their copyright as guardians, by protecting it from any attempt to restrict access and reuse. Conceptualizing an alternative to the current regime may require an option of opting out of the proprietary system, and at the same time safeguard against capture and abuse. In the long run, creating an alternative to copyright will require copyright reform.