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A Panoptic Approach to Information Policy: Utilizing a more Balanced Theory of Property in Order to Ensure the Existence of a Prodigious Public Domain

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ARTICLES

**A PANOPTIC APPROACH TO INFORMATION
POLICY: UTILIZING A MORE BALANCED
THEORY OF PROPERTY IN ORDER TO ENSURE
THE EXISTENCE OF A PRODIGIOUS PUBLIC
DOMAIN**

*Christine D. Galbraith**

TABLE OF CONTENTS

I. INTRODUCTION	3
II. FORMULATING AN INFORMATION RIGHTS POLICY: THE CONSTITUTIONAL AND LEGISLATIVE BACKDROP	8
III. OVERPROPERTIZATION	11
A. CONVENTIONAL CONCEPTIONS OF TANGIBLE PROPERTY RIGHTS	13

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B. CONVENTIONAL THEORIES OF TANGIBLE PROPERTY IN THE INTANGIBLE WORLD	16
1. <i>Online Trespass</i>	19
2. <i>Digital Millennium Copyright Act</i>	21
3. <i>Contracts</i>	23
C. OWNERSHIP INTERESTS IN THE PUBLIC DOMAIN	25
IV. ENTITLEMENT APPROACH	27
V. PANOPTIC APPROACH	30
A. ADDRESSING THE LIMITATIONS OF TANGIBLE PROPERTY ANALOGIES	30
B. DELINEATING A MORE APPROPRIATE BASELINE	32
C. EVALUATING THE INTERESTS	34
1. <i>Content</i>	35
2. <i>Context</i>	35
D. PUTTING THE PANOPTIC APPROACH IN PERSPECTIVE	37
VI. CONCLUSION	38

I. INTRODUCTION

Panoptic. (1) Considering all parts or elements
(2) Broad in scope or content¹

The ability to access and utilize ideas and information is critically important to creativity, innovation, competition, and a democratic culture.² New works are produced by authors and artists drawing on earlier masterpieces for inspiration. Scientific breakthroughs occur in such fields as medicine and engineering as researchers further advance the pioneering discoveries of their predecessors. Industry leaders, as well as recent entrants to the trade, improve upon existing products and develop new ones as a result of data obtained from the marketplace. Citizens equipped with the appropriate knowledge have the necessary tools to actively participate in civic and cultural affairs.

Ingenuity and social progress clearly do not take place in a vacuum, but are cumulative in nature. In fact, "[n]othing today, likely nothing since we tamed fire, is genuinely new: Culture, like science and technology, grows by accretion, each new creator building on the works of those who came before."³ A prodigious public domain⁴ is therefore essential as it contains the foundational materials necessary for societal advancement.⁵

¹ See Dictionary.com Unabridged (vol. 1) (2006), <http://dictionary.reference.com/browse/panoptic> (last visited Nov. 4, 2007); WordNet Search 3.0, <http://wordnet.princeton.edu/perl/webwn> (enter "panoptic" in "word to search for").

² Pamela Samuelson, *Mapping the Digital Public Domain: Threats and Opportunities*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 170.

³ *White v. Samsung Elecs. Am., Inc.*, 989 F.2d 1512, 1513 (9th Cir. 1993) (Kozinski, J., dissenting).

⁴ Attempts to define the term "public domain" have been the topic of considerable academic debate as well as the subject of numerous scholarly articles. See, e.g., Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354, 361-62 (1999) ("The public domain is the range of uses of information that any person is privileged to make absent individualized facts that make a particular use by a particular person unprivileged."); James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, LAW & CONTEMP. PROBS. Winter/Spring 2003, at 33-74; Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 968 (1990) (defining the public domain as a "commons that includes those aspects of copyrighted works which copyright does not protect"); Tyler T. Ochoa, *Origins and Meanings of the Public Domain*, 28 U. DAYTON L. REV. 215, 256 (2002); Samuelson, *supra* note 2, at 148. The term "public domain" as used in this article consists of all non-copyrightable information, as well as the unprotected components of copyrighted works. Such a definition would necessarily comprise specific limitations articulated in the Copyright Act in addition to uses that would qualify as fair use. For further discussion concerning the conceptualization of ownership interests in the public domain, see *infra* Part III.C.

⁵ See *White*, 989 F.2d at 1513 (Kozinski, J., dissenting) ("Creativity is impossible without a rich

Unfortunately, the public domain appears to be diminishing as the recent trend in formulating information policy is to utilize an organizing concept of private property ownership.⁶ Increasingly, all unremunerated uses of ideas and

public domain.”); LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* 250 (2001) (“Creation is always the building upon something else.”); William Patry, *The Enumerated Powers Doctrine and Intellectual Property: An Imminent Constitutional Collision*, 67 GEO. WASH. L. REV. 359, 381 (1999) (“With unfettered access to facts, the public may gain valuable information necessary for an enlightened citizenry, while later authors are free to create subsequent works utilizing those facts.”); Margaret Jane Radin, *Property Evolving in Cyberspace*, 15 J.L. & COM. 509, 510 (1996) (“We cannot be creators without a robust public domain—a rich tradition and culture to draw upon freely.”).

Despite the significant body of literature that recognizes the importance of access to an ever-expanding public domain, this belief is far from universal. See, e.g., Frank H. Easterbrook, *Contract and Copyright*, 42 HOUS. L. REV. 953 (2005) (advocating for the use of property rights and private ordering through contracts as the ideal mechanisms for picking up where intellectual property protection leaves off). Such a perspective arguably provides part of the undercurrent of support for the increasing proprietization of information. See discussion *infra* Part III. Such a viewpoint is further evaluated in Part V of this Article, which ultimately refutes the advantages of a model that makes economic efficiency the central goal. A detailed debate on this topic, however, is beyond the scope of this Article.

⁶ See *infra* Part III; see also Boyle, *supra* note 4, at 39 (“That baseline—intellectual property rights are the exception rather than the norm; ideas and facts must always remain in the public domain—is still supposed to be our starting point. It is, however, under attack. Both overtly and covertly, the commons of facts and ideas is being enclosed.”); Maureen Ryan, *Cyberspace as Public Space: A Public Trust Paradigm for Copyright in a Digital World*, 79 OR. L. REV. 647, 692 (2000) (“The prevailing proprietary attitude toward cyberspace vests control in private interests that are free to exclude whomever they choose.”).

Although a detailed discussion on the topic is beyond the scope of this Article, it is worth noting that a body of scholarly literature has developed that supports expanded intellectual property rights as a method for increasing the public domain. See, e.g., Frank H. Easterbrook, *Contract and Copyright*, 42 HOUS. L. REV. 953 (2005) (advocating for the use of property rights and private ordering through contracts as the ideal mechanisms for picking up where intellectual property protection leaves off); R. Polk Wagner, *Information Wants to Be Free: Intellectual Property and the Mythologies of Control*, 103 COLUM. L. REV. 995 (2003) (arguing that increasing the control of information goods through property rights is likely to enlarge, rather than diminish, the quantity of “open” information in the public domain). These scholars argue that society benefits from additional intellectual property rights as they provide further incentives for artists and innovators. They contend that without strong property rights, many works would not be generated and eventually become part of the public domain upon expiration of their term of protection, as these producers would not be able to restrict the dissemination of their works and hence recover the total costs associated with their creation. Furthermore, this increased appropriability of information allows the owners through contracts to engage in price discrimination, ultimately leading to a vastly greater universe of potential users. Additionally, as perfect control of intangible, nonrivalrous goods is impossible, the resulting spillover from this incomplete capture leads to a direct contribution of public knowledge. Wagner, *supra*, at 1010.

There are a number of significant deficiencies associated with such a line of reasoning. First, it is not at all clear that additional property rights will even encourage the further production and

information are perceived as unacceptable.⁷ This is attributable in significant part to the fact that lawmakers and adjudicators have failed to account for the multi-dimensional problems involved in controversies concerning access to or the use of knowledge resources.

Legislators and judges have instead taken a remarkably myopic view of property rights. Rather than recognizing the competing interests implicated in conflicts involving data-related materials, the focus invariably turns to ascertaining the owner of any easily identifiable tangible property, such as a computer system or website server.⁸ In cases where this is not present, the original producer of information contained within tangible property, often in the form of computer software, is ordinarily viewed as possessing predominant proprietary rights.⁹ Furthermore, once these "owners"¹⁰ are recognized, they are generally granted all of the rights traditionally associated with ownership, including the right to exclude.¹¹ Additionally, all other claims are typically viewed as irrelevant.¹²

exchange of works. More importantly, these arguments fail to account for the likely impact significant enclosure of raw materials will have on the ability of future artists and innovators to create new works. While scholars point to price discrimination as a means of increasing transfer of information, there is no guarantee the purported owners of these resources will make them available at reasonable prices or that transaction costs will not inhibit such exchanges. Furthermore, relying upon the purported spillover from imperfect control of such works to expand the public domain seems imprudent, particularly in light of the proliferation of contracts and technological measures now increasingly employed to cure any such perceived inadequacies. See *infra* Part III.

⁷ See generally Jessica Litman, *Copyright and Information Policy*, 55 LAW & CONTEMP. PROBS. Spring 1992, at 206 ("Courts increasingly see uncompensated uses of copyrighted works as invasions of the rights in the copyright bundle."); see also Ryan, *supra* note 6, at 647, 661. It does not seem as though this development is directly attributable to legislators and judges adopting an incentive-based theoretical ideology in order to further expand the public domain. See *supra* note 6 (discussing scholarship advocating for increased private property rights as a means for enlarging the public domain). Instead, this state of affairs can be much more readily ascribed to the significant lobbying activities of intellectual property rights holders and the resultant legislation that has expanded such rights. See Brian M. Hoffstadt, *Dispossession, Intellectual Property, and the Sin of Theoretical Homogeneity*, 80 S. CAL. L. REV. 909, 912 (2007).

⁸ See *infra* Part III; see also *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

⁹ See *infra* Part III (discussing the possible rationale for this predilection).

¹⁰ See *infra* Part III (discussing whether a private individual should be able to own factual information, either by conferring such rights directly or indirectly by granting the means by which to exercise complete control of access to and the use of such information).

¹¹ See *infra* Part III.

¹² See JOSEPH WILLIAM SINGER, *ENTITLEMENT: THE PARADOXES OF PROPERTY* 189 (2000) ("This either/or reasoning misconstrues the character of property rights. It presumes that the relevant question is 'Who is the owner?' and that once that owner is identified, others' claims have no legal standing."); see also *infra* Part III.

Consequently, this allows for tight control of the information contained on or within the tangible property. Although in limited circumstances generally unrestricted power may seem reasonable, usually it is not.¹³ Moreover, such an approach permits the carefully balanced provisions of copyright to be displaced, typically to the detriment of the public.¹⁴ As a result, data that was once freely available has increasingly become inaccessible as a result of legislatively and judicially sanctioned contractual and technological constraints.¹⁵ Furthermore, these impediments to public access to ideas and information are particularly troublesome in light of the fact that "[p]reventing access is now often tantamount to preventing use."¹⁶

These legislative and judicial decisions generally fail to acknowledge the benefits that inure from a diverse, open exchange of information.¹⁷ This is due in large part to the fact that the traditional conception of tangible property ownership is usually centered on determining a solitary owner.¹⁸ As such, the inquiry employed generally lacks the capacity to envisage the existence of multiple owners or non-owners with legitimate interests that at times should take priority.¹⁹ Moreover, this analysis fails to adequately acknowledge that the way in which we structure property rights is reflective of the type of society we wish to create and

¹³ See *infra* Part III.

¹⁴ See generally Keith Aoki, *(Intellectual) Property and Sovereignty: Notes Toward a Cultural Geography of Authority*, 48 STAN. L. REV. 1293, 1295-99 (1996) ("[T]he deeply embedded image of original authorship in our intellectual property law has now come to justify ever-increasing property rights in information itself—a result directly counter to understandings of early English and American copyright law, which prohibited unauthorized copying of texts precisely to promote wider circulation of the ideas, knowledge, and information contained within such literary works.").

¹⁵ See *infra* Part III; see also Jacqueline Lipton, *Information Property: Rights and Responsibilities*, 56 FLA. L. REV. 135, 145 (2004) ("Courts and legislatures have played a significant role in over-propertyizing information. . .").

¹⁶ Jacqueline Lipton, *A Framework for Information Law and Policy*, 82 OR. L. REV. 695, 762 (2003).

¹⁷ See *infra* Part III; see also Mark A. Lemley, *Place and Cyberspace*, 91 CAL L. REV. 521, 532-33 (2003) ("Courts have assumed not only that cyberspace is a place akin to the physical world, but further that any such place must be privately owned by someone who has total control over the property. This is a common assumption these days; it sometimes seems as though our legal system is obsessed with the idea that anything with value must be owned by someone."); see also SINGER, *supra* note 12, at 26. Although not in the context of information or intellectual property, Singer's remarks with regard to recent trends in both politics and law concerning property generally are particularly relevant: "In thinking about property, our organizing concept is *ownership*. We want to identify a person or entity as the owner of every resource, and our assumption is that the owner has a full bundle of powers over the property and that those powers are close to absolute." *Id.* (emphasis in original).

¹⁸ See *infra* Part III.A; see also SINGER, *supra* note 12, at 189.

¹⁹ Such parties arguably include the public. See *infra* Part III.C (discussing the possibility that the public could be considered the affirmative owner of materials in the public domain).

the values we find important.²⁰ We therefore need to adopt a more appropriate theoretical framework to evaluate conflicts which may result in the contraction of the public domain.

Despite the arguable incongruity associated with applying traditional models of tangible property rights to controversies concerning intangible resources,²¹ the foundation of the panoptic approach draws on the work of several leading academic writers who have proposed alternative conceptions of tangible property rights.²² The panoptic approach begins by focusing on the identification of all relevant parties and societal values at issue in a given controversy, as opposed to searching for a solitary entity upon which to confer the label of "owner."²³ Building on this baseline, the analysis next turns to the prospect of balancing all of these interests, which necessarily includes an examination of the content involved and the context within which the information controversy occurs.²⁴ By utilizing this framework, judges and policy makers would be compelled to confront the value choices they are making in fashioning information rights policies, while also recognizing the role that property law plays in shaping social relations as well as the marketplace.²⁵ As a result, the panoptic approach more

²⁰ See Laura S. Underkuffler-Freund, *Property: A Special Right*, 71 NOTRE DAME L. REV. 1033, 1046 (1996) ("Questions about the kind of society that we are, and the kind of society that we wish to become, must be inherent parts of the interpretation of [property rights]."); see also STEPHEN R. MUNZER, *A THEORY OF PROPERTY* 149 (Jules Coleman ed., 1990) ("Property discloses much about societies and persons. . . . First, for all societies, if one describes the institution of property as it exists in a society, the description reveals something important about that society."); JEDEDIAH PURDY, *FOR COMMON THINGS: IRONY, TRUST, AND COMMITMENT IN AMERICA TODAY* 131 (1999) ("Every law and every political choice, is in part a judgment about the sort of country we will inhabit and the sorts of lives we will live."); JOSEPH WILLIAM SINGER, *THE EDGES OF THE FIELD: LESSONS ON THE OBLIGATIONS OF OWNERSHIP* 91 (2000) ("[Property] is about creating the ground rules for fair social relationships."); SINGER, *supra* note 12, at 155; Lipton, *supra* note 15, at 173 ("Property ownership, like information property ownership, has powerful social consequences."); Ryan, *supra* note 6, at 647 ("[I]t is important to identify the values we are promoting when resolving current issues regarding information as property.").

²¹ See *infra* Part V (summarizing briefly the arguments for and against the use of a tangible property model in the intangible property context).

²² This foundation is heavily influenced by the entitlement theory proposed by Joseph William Singer, most notably in his book *ENTITLEMENT: THE PARADOXES OF PROPERTY*, *supra* note 12. It bears mentioning, however, that other property theorists, in particular Laura Underkuffler, have also advocated for the utilization of a more comprehensive method of conceptualizing property rights. See *infra* Part IV.

²³ See *infra* Part V.B.

²⁴ See *infra* Part V.C.

²⁵ See *infra* Part V; see also SINGER, *supra* note 12, at 154–56. Singer briefly mentions intellectual property and competition, focusing much of his discussion on Apple Computer's claim that the Microsoft Corporation had infringed its icon-based user interface. Commenting on the case, he states as follows: "The case revolves around a conflict between property and competition. . . . The

accurately portrays the effects that decisions concerning knowledge resources have on the continued existence of a prodigious public domain.

This Article begins in Part II by examining the constitutional and legislative backdrop pertaining to content protection. The treatment of facts and ideas under the basic principles of copyright law are briefly reviewed. Part III analyzes the causes of the increased propertization of knowledge resources and the effects on the public domain. This Part begins by reviewing the inherent deficiencies of conventional models of tangible property rights. Next, it discusses the substantial complications that have arisen as a result of lawmakers and adjudicators utilizing absolute conceptions of tangible property ownership in formulating information policy. In connection with this analysis, the resurgence of the common law claim of trespass in cyberspace, the heightened use of digital rights management systems, and the proliferation of contracts that effectively displace rights afforded by copyright law are examined. Lastly, this Part seeks to conceptualize ownership of materials that are part of the public domain. Specifically, it reflects on whether these resources are defined by a complete absence of ownership or, alternatively, whether the public as a whole should be deemed the owner of such materials.

Part IV reviews the entitlement model articulated by Joseph William Singer and supplements this discussion with the work of other leading tangible property theorists who have advocated a more comprehensive approach to conceptualizing tangible property rights. Part V first contends with the arguments against drawing on tangible property theories to resolve controversies involving information, but ultimately concludes that the considered utilization of such analogies may sometimes be appropriate. Next, this Part describes in detail the contours of the panoptic approach. Additionally, it includes a review of representative data-related disputes, illustrating how the panoptic approach provides an analytical framework that more readily takes into account the multi-dimensional nature of conflicts concerning knowledge resources.

II. FORMULATING AN INFORMATION RIGHTS POLICY: THE CONSTITUTIONAL AND LEGISLATIVE BACKDROP

Until recently, copyright law²⁶ has generally served as the initial starting point from which issues relating to the production, use, and ownership of information

court's decision in disputes like this will have an enormous impact on the structure of the marketplace and on social relations. . . . The conflict between property and competition can be understood as a conflict between property rights." *Id.*

²⁶ This is not to suggest that other intellectual property regimes such as patent law are not concerned with issues involving the free flow of information. Copyright law, however, tends to deal most directly with the tension between private protection and public access to information resources.

resources are decided.²⁷ The carefully considered constitutional and statutory limitations on protection are designed to strike an appropriate balance between the rights of creators and the competing interests of the public.²⁸ However, in resolving these tensions, the U.S. Supreme Court has repeatedly stated that the primary objective of such intellectual property rights is not to provide a private gain. Instead, the principal goal is to ensure that the public benefits.²⁹ In particular, this includes preserving society's substantial "interest in the free flow of ideas, information, and commerce."³⁰

In order to accomplish these goals, the Copyright Act provides protection only to "original works of authorship."³¹ However, originality is not merely a statutory requirement but also a constitutional prerequisite for the benefits of the Act to attach to any given work.³² For a work to be deemed "original," it must be "independently created."³³ Generally this necessitates a finding that the work has not been copied from another work and that it also possesses "at least some

²⁷ Nonetheless, copyright law clearly does not provide answers to all of the complicated questions regarding information policy. Instead a much more sophisticated analytic framework is needed to take account of overlapping issues related to property rights, contracts, and First Amendment concerns, to name just a few. See discussion *infra* Part II regarding the limitations of copyright law.

²⁸ See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) ("[D]efining the scope of the limited monopoly that should be granted . . . involves a difficult balance between the interests of authors and [society]."); see also Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 33 (1994) ("For much of this country's history, public dissemination was, except in very limited circumstances, a condition of copyright protection. While no longer a condition, it is still fair to describe it as a goal of copyright protection.").

²⁹ See *Eldred v. Ashcroft*, 537 U.S. 186, 227 (2003) (citing *Fox Film Corp. v. Doyal*, 286 U.S. 123, 127 (1932) ("The sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors.")); *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349–50 (1991) ("The primary objective of copyright is not to reward the labor of authors, but to promote the progress of science and useful arts."); *Sony Corp.*, 464 U.S. at 429 ("The monopoly privileges that Congress may authorize are neither unlimited nor primarily designed to provide a special private benefit. Rather, the limited grant is a means by which an important public purpose may be achieved."); *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) ("The limited scope of the copyright holder's statutory monopoly, like the limited copyright duration required by the Constitution, reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts.").

³⁰ *Sony Corp.*, 464 U.S. at 429.

³¹ 17 U.S.C. § 102 (2000).

³² U.S. CONST. art. I, § 8, cl. 8 (authorizing Congress to "secure for limited Times to Authors . . . the exclusive Right to their respective Writings"); see also *Feist*, 499 U.S. at 346 (declaring that "[o]riginality is a constitutional requirement").

³³ *Feist*, 499 U.S. at 345.

minimal degree of creativity.”³⁴ These requirements do not usually pose a considerable obstacle, particularly since a relatively low level of creativity will usually suffice.³⁵

Nonetheless, facts do not meet this modest threshold. One of the “most fundamental axiom[s] of copyright law” is that “[n]o author may copyright . . . the facts he [or she] narrates.”³⁶ This is because one who reports a particular fact has not created it but has merely discovered its existence.³⁷ Since factual data is not “original” in the constitutional sense, it is not entitled to protection but may instead be copied at will.³⁸ As the Supreme Court has explained, “[t]his result is neither unfair nor unfortunate[; but] is the means by which copyright advances the progress of science and art.”³⁹

Similarly, ideas also are not subject to copyright protection. A basic principle of copyright law, the “idea/expression” dichotomy, allows copyright protection to attach to the expression of an idea, but not the idea itself.⁴⁰ Consequently, one may utilize the ideas contained within another’s copyrighted work without seeking the creator’s permission.⁴¹ Accordingly, this provides “authors the right to their original expression, but encourages others to build freely upon the ideas . . . conveyed by a work.”⁴² This balance of rights between authors and the public is rooted in the belief that society is best served by the unrestricted flow of such resources.⁴³

Furthermore, depending on the circumstances, all or part of the protected portions of a copyrighted work may be used without the consent of the copyright holder. The Copyright Act contains a number of provisions that expressly restrict the exclusive rights granted by the statute to the owner of the copyright.⁴⁴ Many of these limitations pertain only to particular types of uses by certain categories of individuals in specific situations;⁴⁵ however, not all of the exceptions are so

³⁴ *Id.* (citing 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 2.01 [A]–[B] (1997)).

³⁵ *Id.*

³⁶ *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 556 (1985).

³⁷ *See Feist*, 499 U.S. at 347–48 (“No one may claim originality as to facts . . . because facts do not owe their origin to an act of authorship.”) (citing 1 NIMMER & NIMMER, *supra* note 34, § 2.01[A]–[B], and *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1369 (5th Cir. 1981)).

³⁸ *Feist*, 499 U.S. at 347.

³⁹ *Id.* at 350.

⁴⁰ *Id.*

⁴¹ *Id.* at 350–51.

⁴² *Id.* at 349–50.

⁴³ *Id.*

⁴⁴ *See* 17 U.S.C. §§ 107–122 (2000).

⁴⁵ *See, e.g., id.* § 110 (“Notwithstanding the provisions of section 106, the following are not infringements of copyright: . . . (6) performance of a nondramatic musical work by a governmental

specialized. For example, the doctrine of fair use is much more far-reaching, often allowing the use of excerpts from a work for such purposes as teaching, news reporting, and criticism without compensating or seeking the permission of the copyright holder.⁴⁶

By providing adequate protection for authors so that they have an incentive to create, but precluding a copyright owner's ability to control all uses of such works, the Constitution and the Copyright Act ensure that prospective creators, innovators, and participants in democratic culture have the necessary raw materials to draw upon in the future. The public domain therefore serves as an invaluable communal asset.

Nevertheless, to view this as the public domain's exclusive role would be to understate its significance. As one leading commentator explains,

To characterize the public domain as a quid pro quo for copyright . . . is to neglect its central importance in promoting the enterprise of authorship. The public domain should be understood not as the realm of material that is undeserving of protection, but as a device that permits the rest of the system to work. . . .⁴⁷

The various functions the public domain performs can therefore be described as nothing less than pivotal. However, this essential commons of information is presently under considerable threat as the ability to access and use its resources has become progressively more difficult and in many instances entirely impossible.

III. OVERPROPERTIZATION

Material that used to reside in the public domain is steadily being transformed into private property.⁴⁸ Facts and ideas, once viewed as fundamental components

body or a nonprofit agricultural or horticultural organization, in the course of an annual agricultural or horticultural fair or exhibition conducted by such body or organization. . . .").

⁴⁶ *Id.* § 107.

⁴⁷ Litman, *supra* note 4, at 968; see also Jack M. Balkin, *Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society*, 79 N.Y.U. L. REV. 1, 53 (2004) ("To make intellectual property consistent with the idea of free speech as democratic culture, there must be a robust and ever expanding public domain with generous fair use rights.").

⁴⁸ See Boyle, *supra* note 4, at 39 ("That baseline—intellectual property rights are the exception rather than the norm; ideas and facts must always remain in the public domain—is still supposed to be our starting point. It is, however, under attack. Both overtly and covertly, the commons of facts and ideas is being enclosed."); Ryan, *supra* note 6, at 692 ("The prevailing proprietary attitude toward cyberspace vests control in private interests that are free to exclude whomever they choose.").

of the public domain, are now seen as "valuable commodities in the contemporary marketplace."⁴⁹ Unprotectable portions of copyrighted works are increasingly looked upon as being within a content producer's purview of control. Fair use and other similar limitations articulated in the Copyright Act are perceived as unwarranted subsidies.⁵⁰ Uncompensated uses of information are continually regarded as intolerable.⁵¹

Such rapid privatization has occurred as a result of judges and lawmakers willingly acceding to the vociferous demands of content producers without fully appreciating the impact of such decisions.⁵² This is attributable in large part to the fact that the contemporary trend in fashioning information rights policy is to employ an organizing concept of private property ownership heavily influenced by conventional tangible property theories.⁵³ As discussed in Part III.B, application of these traditional theories to disputes concerning tangible property

⁴⁹ Ryan, *supra* note 6, at 669-70 ("Recently, the basic principle that copyright protects neither ideas nor information has eroded, as copyright owners have found strategies to prevent the disclosure and dissemination of ideas and information that have become valuable commodities in the contemporary marketplace." (quoting Litman, *supra* note 7, at 187)); see also Lipton, *supra* note 16, at 738; Litman, *supra*, at 1294-95; Patry, *supra* note 5, at 368 ("Copying such material promotes the progress of science by keeping the basic building blocks of knowledge free for all to use.").

⁵⁰ See Jane C. Ginsburg, *Authors and Users in Copyright*, 45 J. COPYRIGHT SOC'Y U.S.A. 1, 15 (1997); Robert P. Merges, *The End of Friction? Property Rights and Contract in the 'Newtonian' World of On-line Commerce*, 12 BERKELEY TECH. L.J. 115, 134-35 (1997); see also Ryan, *supra* note 6, at 687 (discussing why viewing fair use as a subsidy is misguided).

⁵¹ Litman, *supra* note 7, at 206; Ryan, *supra* note 6, at 661 ("[T]he neoclassical economic theory shaping current doctrine has consistently and drastically cut back on limitations in copyrights, while at the same time expanding an author's proprietary rights to creative works. Increasingly, the courts and Congress view all uncompensated uses of copyrighted works as intolerable 'invasions of the rights in the copyright bundle.' . . . Despite a broad rhetorical recognition of a societal claim to access to information, the application of copyright doctrine to the digital environment is unmistakably focused on the privatization of electronic-mediated information." (footnote omitted)).

⁵² See *infra* Part III (discussing trespass actions, the Digital Millennium Copyright Act, as well as breach of contract claims for examples of this tendency); see also LESSIG, *supra* note 5, at 180 ("[T]he real danger . . . is not that copyrighted material would be uncontrolled: the real danger is that copyrighted material would be *too perfectly* controlled. That the technologies that were possible and that were being deployed would give content owners more control over copyrighted material than the law of copyright ever intended. . . . But now, not only Congress but also the courts have been doubly eager to back up their protections with law." (emphasis in original)); James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L.J. 87, 115 (1997) (asserting that intellectual property rights are expanding without public analysis of checks).

⁵³ See SINGER, *supra* note 12, at 26 ("In thinking about property, our organizing concept is *ownership*. We want to identify a person or entity as the owner of every resource, and our assumption is that the owner has a full bundle of powers over the property and that those powers are close to absolute." (emphasis in original)). Although Singer does not discuss this idea within the context of information, such an application seems to be particularly appropriate. See *infra* Part V.

is problematic. However, when utilized in connection with the resolution of controversies or the development of policies that implicate information resources, such problems are altogether magnified.

A. CONVENTIONAL CONCEPTIONS OF TANGIBLE PROPERTY RIGHTS

The dominant modern idea of tangible property ownership "is understood as [a right] to possess [property] as an exclusively private thing."⁵⁴ The oft-quoted, quintessential definition of property rights is Blackstone's characterization as "that sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe."⁵⁵ Concededly, even Blackstone recognized that such an extreme view did not adequately describe reality.⁵⁶ Nonetheless, such a theory of property rights has pervaded our view of tangible property through the ages and, as detailed below, continues to impede clear thinking on the matter with regard to information-based resources.⁵⁷

Traditional models of property ownership confer rights within delineated boundaries, dividing the area from which an "owner rules from the space where the owner's rights cease and non-owners take over."⁵⁸ Additionally, these formulations of ownership generally assume that an owner possesses virtually complete control over the property within its designated borders.⁵⁹ The

⁵⁴ JOSEPH L. SAX, *PLAYING DARTS WITH A REMBRANDT* 3 (1999); see also LESSIG, *supra* note 5, at 86 ("[W]e live in a time when the dominant view is that 'the whole world is best managed when divided among private owners.'") (quoting Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 712 (1986)). But see Ryan, *supra* note 6, at 648-49 (disagreeing with Sax's further characterization of copyright law as being "parsimonious in granting property rights").

⁵⁵ Michael A. Heller, *The Dynamic Analytics of Property Law*, 2 THEORETICAL INQUIRIES L. 79, 83 (2001) (quoting WILLIAM BLACKSTONE, 2 COMMENTARIES *2).

⁵⁶ See *id.* (citing ROBERT W. GORDON, *Paradoxical Property*, in *EARLY MODERN CONCEPTIONS OF PROPERTY* 96 (John Brewer & Susan Staves eds., 1996) (discussing restrictions recognized by Blackstone)).

⁵⁷ See *id.* ("While the image of sole dominion has never adequately described any real world property ownership, as even Blackstone recognized, the idea rings through the ages and continues to block clear thinking about private property." (footnote omitted)). Although Heller's analysis is in the context of tangible property, an analogy to intangible property would appear to be fitting.

⁵⁸ SINGER, *supra* note 12, at 90. Singer insightfully describes and analyzes these conventional property conceptions in this book, and his arguments are set forth in this Part of the Article.

⁵⁹ *Id.*; see also LAURA UNDERKUFFLER, *THE IDEA OF PROPERTY* 40 (2003) ("The core idea of property, under this [common] conception, is property as a 'bounded sphere' which represents and protects an area of individual autonomy. Once triggered, the idea of autonomy is—by its very nature—absolute. Indeed, the very notion of rights being granted varying degrees of protection is intuitively inconsistent with the idea that those rights exist within a bounded sphere of individual

"underlying premise is that [an owner] is by and large free 'to use [its] property as [it] wish[es].'"⁶⁰ Accordingly, such absolute conceptions of property "advance[] a clear case for the supremacy of individual interests by defining property to be that which describes and protects the individual's autonomous sphere."⁶¹

Consequently, the central question in most tangible property disputes becomes "Who is the owner?"⁶² In attempting to resolve this issue, "unconscious presumptions about who" should be deemed the owner often come into play, and not surprisingly, these presumptions "tend to come from conventional understandings of ownership."⁶³ Furthermore, once an entity has been designated the "owner," all other claims generally become irrelevant.⁶⁴ As a result, almost insurmountable obstacles are faced by any other party whose rights are affected.⁶⁵ "The burden is [almost] always on [other parties] to explain why the [previously identified] owner's rights should be limited. . . ."⁶⁶ Accordingly, the ability to justify the redistribution of any attendant rights of ownership becomes exceptionally difficult, if not impossible.

Traditional conceptions of tangible property ownership unfortunately fail to fully account for the inherent complexities associated with determining ownership. It is imperative that we avoid "adjudicat[ing] property dispute[s] by [simply] making a rule that the owner wins."⁶⁷ Merely holding that the owner is the one who should prevail "is circular because the meaning of ownership" is what actually is at issue.⁶⁸

The customary ownership inquiry in tangible property controversies is often far too narrow, as it generally neglects to make allowances for the existence of multiple owners or nonowners with interests that should take precedence over the

autonomy and individual control.").

⁶⁰ SINGER, *supra* note 12, at 27.

⁶¹ Laura Underkuffler, *On Property: An Essay*, 100 YALE L.J. 127, 141 (1990).

⁶² See SINGER, *supra* note 12, at 189.

⁶³ *Id.* at 10.

⁶⁴ *Id.* at 189.

⁶⁵ See *id.* at 83 ("We should recognize that property concepts perform a number of rhetorical functions. First, by identifying a particular person as the owner, we commonly presume that that person wins disputes about the property. As we analyze choices among alternative property law rules, it is important to be sensitive to the persistent influence of the ownership concept in the assignment of the burden of persuasion.").

⁶⁶ *Id.* at 3 ("When ownership rights are limited, we imagine those limits to be exceptions to the general rule that owners can do whatever they want with their property. The burden is always on others (meaning nonowners or the state) to explain why the owner's rights should be limited, and in today's political climate that burden is quite heavy.").

⁶⁷ *Id.* at 114-15.

⁶⁸ *Id.* (questioning whether or not there could be "two owners here, with property rights divided between the parties, as they are in the case of landlords and tenants").

one who may be traditionally thought of as having the superior property claim.⁶⁹ Oftentimes the entity which has been designated the "owner" may not be "the one who, in all justice and fairness should have formal title or [all] the stick[s] in the bundle of rights encompassed by full ownership."⁷⁰

Moreover, the conventional view of tangible property ownership severely underestimates the degree "to which the exercise of property rights affects the legitimate interests of other owners and non-owners" beyond the sphere of the individual or entity traditionally thought of as the property owner.⁷¹ The recognition of property rights does not concern the identified owner alone but often imposes vulnerabilities on others by limiting their rights.⁷² It is therefore "irrational to define the extent of [one party's] property rights without reference to whether their exercise impinges on the rights of others," as the granting of property rights clearly has consequences.⁷³ Limitations on property rights are therefore sometimes necessary to safeguard the legitimate claims of other possible owners or nonowners with compelling needs.

Likewise, restrictions on tangible property rights are at times required to protect important societal interests.⁷⁴ As one court aptly stated, "[p]roperty rights serve human values. They are recognized to that end, and are limited by it."⁷⁵ The resolution of tangible property disputes therefore calls for "the exercise of judgment and the application of social norms."⁷⁶ It is imperative that we not overlook the fact that the ideals we choose to promote are revealed in the way in which these conflicts are resolved.⁷⁷

⁶⁹ *Id.* at 91 ("We presume that only one person has title to a piece of property, while several people may have entitlements of various kinds in that property."); see also Ryan, *supra* note 6, at 706-07 (arguing that decisions in copyright cases undervalue the public's property interests in information for the sake of minority interests and industries).

⁷⁰ SINGER, *supra* note 12, at 114.

⁷¹ *Id.* at 173; see also Underkuffler, *supra* note 61, at 141 ("The absolute conception, however, advances a clear case for the supremacy of individual interests by defining property to be that which describes and protects the individual's autonomous sphere.").

⁷² SINGER, *supra* note 20, at 20.

⁷³ SINGER, *supra* note 12, at 173.

⁷⁴ *Id.* at 31.

⁷⁵ *State v. Shack*, 277 A.2d 369, 372 (N.J. 1971).

⁷⁶ SINGER, *supra* note 12, at 37.

⁷⁷ Underkuffler-Freund, *supra* note 20, at 1046; see also MUNZER, *supra* note 20, at 149; PURDY, *supra* note 20, at 131; SINGER, *supra* note 20, at 25 ("[P]roperty is a social institution and [the] law regarding the prerogatives of owners has significant effects on the shape and character of social relationships and the life of the community. The establishment of a property system affects human relationships. It is imperative that the law of property take into account the effect of alternative constructions of property rights on those relationships."); Elizabeth S. Anderson & Richard H. Pildes, *Expressive Theories of Law: A General Restatement*, 148 U. PA. L. REV. 1503, 1564 (2000) ("[T]he underlying values that the law seeks to protect, in both constitutional law and elsewhere, require for

B. CONVENTIONAL THEORIES OF TANGIBLE PROPERTY IN THE INTANGIBLE WORLD

The present method by which we evaluate data-related disputes and craft information rights policies grossly undervalues the public domain.⁷⁸ Judges resolving controversies and lawmakers promulgating legislation have failed to adequately take into account the multidimensional problems involved in claims concerning access to ideas and information. Instead, adjudicators and legislators have taken a remarkably myopic view of information rights policy, one that is heavily influenced by traditional tangible property conceptions. The complications associated with such tangible theories unfortunately become even more amplified in the intangible property context.

As with controversies concerning tangible property, the initial focus commonly turns to the issue of ownership. While the general notion of private property rights in connection with real or personal property is not inherently problematic, the situation with regard to knowledge resources is quite different. Not only is copyright law implicated,⁷⁹ but questions regarding free speech are raised as well.⁸⁰ Furthermore, concerns relating to self-government and societal advancement also invariably emerge. The recognition of private property rights in any sort of information, whether granting such rights directly or indirectly by providing the legal means by which complete control can be effectuated, presents significant policy issues.⁸¹

Nonetheless, the various competing interests in disputes concerning knowledge resources are not ordinarily considered. Judges and lawmakers often appear to have as their main objective the identification of a solitary private owner of every knowledge resource.⁸² In doing so, these decisionmakers generally take a very narrow view of ownership.

their protection that actions be taken in ways that express respect for those values.”); *infra* Part V (discussing such issues in the context of intangible property).

⁷⁸ Boyle, *supra* note 52, at 112–13.

⁷⁹ See *supra* Part II.

⁸⁰ Litman, *supra* note 49, at 1294–95; see also Yochai Benkler, *Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information*, 15 BERKELEY TECH. L.J. 535 (2000).

⁸¹ Litman, *supra* note 49, at 1294–95.

⁸² See Lemley, *supra* note 17, at 532–33; see also SINGER, *supra* note 12, at 26. Although Singer’s argument is not made in the context of information or intellectual property, his remarks with regard to recent trends in both politics and law concerning property generally are particularly relevant: “In thinking about property, our organizing concept is *ownership*. We want to identify a person or entity as the owner of every resource, and our assumption is that the owner has a full bundle of powers over the property and that those powers are close to absolute.” *Id.* (emphasis in original).

Adjudicators and policy makers have demonstrated a marked proclivity toward inappropriately focusing on the proprietary rights to any readily identifiable tangible property that may be implicated in the controversy. This tangible property may include, for example, a computer system or a website server.⁸³ To the extent no comparable tangible property is involved, the content producer of intangible information contained within tangible property, such as computer software, is generally viewed as having the dominant claim. This predilection may be attributable to a perception that the content producer is the "original owner" of the tangible property or similarly may be explained by an intrinsic belief that the putative author of such works should be deemed the "true owner."⁸⁴

The significance of this initial determination of ownership should not be overlooked. The party who starts out holding the rights generally ends up retaining the rights.⁸⁵ As a result, the application of the label "owner" radically impacts any further decisions about the property at issue.⁸⁶ Just as in the tangible property context, the end result in most controversies becomes rather predictable. This is due to the fact that the traditional method of property analysis places considerable impediments before the party perceived as lacking any preliminary ownership interests.⁸⁷ Consequently, reallocation of such ownership rights is for all practical purposes highly unlikely.

Furthermore, the rights granted are generally quite broad. Typically included within such powers of private property ownership in the tangible property context is the right to exclude.⁸⁸ In fact, the right to exclude is often characterized as the

⁸³ See *eBay, Inc. v. Bidder's Edge, Inc.*, 100 F. Supp. 2d 1058 (N.D. Cal. 2000).

⁸⁴ See, e.g., Keith Aoki, *Authors, Inventors and Trademark Owners: Private Intellectual Property and the Public Domain--Part I*, 18 COLUM.-VLA J.L. & ARTS 1, 2 (1993) ("[T]here has been a recent and unfortunate tendency to reconceive of these items in ways which remove them from the intellectual 'common.' These materials are transmuted into 'private' intellectual property, justified in part by our unquestioning valorization of a particular kind of creative human agency, whether through authorship, inventorship or the use of a trademark."); see also Boyle, *supra* note 52, at 106 ("[T]he 'original author' vision downplays the importance of fair use and thus encourages an absolutist rather than a functional idea of intellectual property.").

⁸⁵ See Clarisa Long, *Proprietary Rights and Why Initial Allocations Matter*, 49 EMORY L.J. 823 (2000) (discussing the issue of determining rights in the context of patent licensing); see also SINGER, *supra* note 12, at 3 (discussing the topic of initial allocations of property rights in the context of property theory generally). Singer states that "[t]he burden is always on others (meaning nonowners or the state) to explain why the owner's rights should be limited, and in today's political climate that burden is quite heavy." *Id.* (citing Thomas C. Grey, *Property and Need: The Welfare State and Theories of Distributive Justice*, 28 STAN. L. REV. 877, 877 (1976) ("In questions of ethics and public policy as in questions of law, it is always important—and surprisingly often determinative—which way the presumption lies, who has the burden of proof.")).

⁸⁶ See *supra* note 65.

⁸⁷ SINGER, *supra* note 12, at 3.

⁸⁸ See *Kaiser Aetna v. United States*, 444 U.S. 164, 179–80 (1979); see also SINGER, *supra* note 12,

defining attribute of private property.⁸⁹ As the Supreme Court stated in *Loretto v. Teleprompter Manhattan CATV Corp.*, the "power to exclude has traditionally been considered one of the most treasured strands in an owner's bundle of property rights."⁹⁰ Nevertheless, in the tangible property context, this fundamental right is not entirely absolute.⁹¹ For example, "once an owner opens her property to the public for business purposes, the law requires the property to remain for the public uses to which she has dedicated it."⁹² In such circumstances, the right of access takes precedence over the right to exclude.⁹³

However, in the intangible context, the right to exclude is typically not similarly qualified. Instead, once an "owner" is identified, full support is normally given to any sort of contractual⁹⁴ or technological⁹⁵ restraint the newly

at 40; Colin Crawford, *Cyberplace: Defining a Right to Internet Access Through Public Accommodation Law*, 76 TEMP. L. REV. 225, 249 (2003) ("[T]he right to hold property can be conceptualized as a 'bundle of sticks' of which the 'biggest stick' in the bundle is the right to exclude."); Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L.J. 1163, 1212 (1999) (discussing *Kaiser Aetna* case).

⁸⁹ See, e.g., Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 753 (1998) ("[T]o the extent one has the right to exclude, then one has property; conversely, to the extent one does not have exclusion rights, one does not have property."). But see Heller, *supra* note 88, at 1212 ("[*Kaiser Aetna*] is often cited for the proposition that 'the "right to exclude," so universally held to be a fundamental element of the property right, falls within this category of interests that the Government cannot take without compensation.' This is an odd statement, relying on questionable authority. . . . Private property undeniably exists when some of the standard incidents are missing, even the 'right to exclude.' (citations omitted)).

⁹⁰ 458 U.S. 419, 435 (1982).

⁹¹ See, e.g., Curtis J. Berger, *Pruneyard Revisted: Political Activity on Private Lands*, 66 N.Y.U. L. REV. 633, 667 (1991) ("The owner of real property has never enjoyed an absolute right to exclude strangers or to regulate activity upon its premises. Instead, the common law historically has shaped and refined the network of relationships between landowners and those seeking entry to or already present upon the land."); Morton J. Horowitz, *Conceptualizing the Right of Access to Technology*, 79 WASH. L. REV. 105, 115 (2004) ("[E]ven the most absolute-sounding subject of trespass to land can be shown to be riddled with exceptions. From the Supreme Court's reluctance during the Civil Rights Era to enforce the trespass laws against civil rights demonstrators engaged in sit-ins at segregated private facilities to state courts entertaining the defense of necessity put forth by activists protesting against the dangers from nuclear power facilities, we see the malleability of property rights when defenses of necessity or of an implied public easement are used to limit the absolutist sound of trespass.").

⁹² SINGER, *supra* note 12, at 44.

⁹³ *Id.*

⁹⁴ See *infra* Part III.B.3 (highlighting the various types of contractual methods often utilized, including contracts in the form of shrinkwrap, clickwrap, or browsewrap licenses).

⁹⁵ See *infra* Part III.B.2 (noting the increasing use of digital rights management systems by copyright proprietors).

acknowledged individual or entity has employed.⁹⁶ This allows these “owners” to tightly control who or what⁹⁷ may access and consequently use such works.

As a result, “[c]ontrary to the spirit of asserted copyright philosophy, such [factual data] and ‘unprotectable’ attributes of creative works are left entirely to the dominion of the owner, with no duty to make them accessible to the public.”⁹⁸ The extent to which the purported owner’s exercise of its rights, particularly the right to exclude, affects others is given short shrift, if it is even considered at all. Instead, anyone who wishes to utilize the ideas, data, or other material disseminated, for example, through an Internet site or by means of computer software faces an exceptionally heavy burden of justification for limiting the website owner’s or content producer’s rights.⁹⁹

The model used by the adjudicators and legislators in such controversies generally does not allow for any serious consideration to be given to the impact on the public domain. Although a thorough discussion of decisions and policies illustrating the increasing utilization of a nearly absolute conception of tangible property ownership and resultant propertization in the information context is beyond the scope of this Article, brief examination of a few representative examples is warranted. The successful utilization in the digital world of the common law claim of trespass, the passage of the Digital Millennium Copyright Act, and the enforcement of contracts that arguably reallocate rights granted by the Copyright Act demonstrate an inadequate appreciation of the multidimensional nature of these controversies and the attendant effects on the public domain.

1. *Online Trespass.* Modern Internet cases have given the venerable doctrine of trespass new life. Judges have not only treated cyberspace as though it were virtually equivalent to a place in the physical world, but seem to believe that all of its constituent parts must be privately owned by someone or something that has total control over the property.¹⁰⁰ In analyzing controversies involving a party seeking to access computer technology and the data contained therein, the issue

⁹⁶ See *infra* Part III.B.2 (noting that to the extent the work in question contains copyrightable material, the Digital Millennium Copyright Act provides further assistance to these “owners” seeking to control all access and utilization of any information at issue).

⁹⁷ See *infra* Part III.B.1 (describing how the court in *eBay* denied access to software robots).

⁹⁸ Ryan, *supra* note 6, at 670.

⁹⁹ See LESSIG, *supra* note 5, at 11, 169–71 (articulating the arguments on both sides of the *eBay* case); Morton J. Horwitz, *Conceptualizing the Right of Access to Technology*, 79 WASH. L. REV. 105, 116 (2004); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439, 508 (2003).

¹⁰⁰ See Lemley, *supra* note 17, at 532–33.

is generally framed analogously to real property, with its fairly well delineated boundaries.¹⁰¹ However, things usually are not so clear in cyberspace.

Illustrative of this proclivity toward privatization and adoption of a tangible model of property ownership in the information resources context is *eBay, Inc. v. Bidder's Edge, Inc.*¹⁰² In that case, eBay brought suit against Bidder's Edge for using an electronic software robot¹⁰³ to access and gather factual data contained on eBay's publicly accessible Internet site.¹⁰⁴ eBay's computer system had not been harmed in any way by Bidder's Edge's robotic activity.¹⁰⁵ There was no evidence that eBay had suffered any loss of data or that it had experienced any system crashes or slowdowns.¹⁰⁶ Nonetheless, the court granted a preliminary injunction against Bidder's Edge on a trespass claim on the grounds that Bidder's Edge had intentionally interfered with eBay's possessory interest in the computer system.¹⁰⁷ In so doing, the court ruled that eBay had a "fundamental property right to exclude others from its computer system. . . ."¹⁰⁸

¹⁰¹ See Horwitz, *supra* note 99, at 116 ("It appears that whenever a court analyzes a denial of access to computer technology in terms of trespass, by framing the issue as analogous to real property containing more or less clearly defined boundaries, the court is already predisposed to adopt a mental picture of boundary-crossing defendants who are prima facie guilty of trespass onto plaintiff's fee simple.").

¹⁰² 100 F. Supp. 2d 1058 (N.D. Cal. 2000); *see also* Oyster Software, Inc. v. Forms Processing, Inc., No. C-00-0724, 2001 WL 1736382 (N.D. Cal. 2001) (deciding not to dismiss plaintiff's claim of trespass to chattels where defendant allegedly used a software robot to copy metatag information); CompuServe Inc. v. Cyber Promotions, Inc., 962 F. Supp. 1015 (S.D. Ohio 1997) (finding that sending unsolicited bulk email constituted trespass to chattels); Register.com, Inc. v. Verio, Inc., 126 F. Supp. 2d 238 (S.D.N.Y. 2000), *aff'd as modified*, 356 F.3d 393 (2d Cir. 2004) (upholding district court's issuance of a preliminary injunction on a trespass to chattels theory).

¹⁰³ A software robot is a computer program that can perform tasks on the Internet without human supervision. Some of the more typical functions include compiling results for search engines, filtering for inappropriate content, or obtaining information made publicly accessible on the web sites of others. Software robots are capable of executing these tasks at speeds far in excess of what a human can accomplish. *See, e.g.*, EF Cultural Travel BV v. Explorica, Inc., 274 F.3d 577 (1st Cir. 2001); *eBay*, 100 F. Supp. 2d at 1060-61.

¹⁰⁴ *eBay*, 100 F. Supp. 2d at 1060-63.

¹⁰⁵ *Id.* at 1064-65.

¹⁰⁶ *Id.* The court reasoned that if Bidder's Edge's "activity is allowed to continue unchecked, it would encourage other auction aggregators to engage in similar recursive searching of the eBay system such that eBay would suffer irreparable harm from reduced system performance, system unavailability, or data losses." *Id.* at 1066. Therefore, based on the mere possibility of future harm by unidentified third parties, the court enjoined Bidder's Edge's robots from crawling eBay's publicly accessible website. *Id.* at 1069, 1073.

¹⁰⁷ *Id.* at 1069-70.

¹⁰⁸ *Id.* at 1067.

In cases like *eBay*, courts appear to be predisposed to designate the publicly accessible website operator as the one true "owner."¹⁰⁹ Once such a label is applied, the end result in most disputes is predetermined.¹¹⁰ This is due to the fact that the party seeking to use information is viewed as a border-crossing defendant who is *prima facie* guilty.¹¹¹ But particularly in the case of data published on a publicly available website, why should control over access to the facts and ideas be treated as part of the website owner's exclusive domain?¹¹² By choosing to post the uncopyrightable data to an Internet site that can be viewed by virtually anyone with an Internet connection, the purported owner has already opened its "land" to the general public.¹¹³ As such, it should be expected that by doing so, the publicly accessible website operator relinquishes some of the autonomy owners of private property might traditionally enjoy.¹¹⁴ Furthermore, the public arguably has superior rights to the uncopyrightable information contained therein, even if it is not traditionally thought of as an owner.¹¹⁵ Nonetheless, resorting to an absolute conception of tangible property rights fails to take into account that there can be more than one owner or non-owners with significant interests whose rights at times should take precedence.

2. *Digital Millennium Copyright Act.* Increasingly, content producers have turned to technological measures, such as digital rights management systems (DRMs), to strictly regulate access to their works.¹¹⁶ This technology "can be

¹⁰⁹ See Horwitz, *supra* note 99, at 116 (discussing a case in which an ex-employee was denied access to the company's email server based on the court's analogies to real property theories).

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² See Christine D. Galbraith, *Access Denied: Improper Use of the Computer Fraud and Abuse Act to Control Information on Publicly Accessible Internet Websites*, 63 MD. L. REV. 320, 361-63 (2001) (discussing the ability of website operators to control uncopyrightable information on publicly accessible websites); Litman, *supra* note 7, at 206 (discussing the consequences of reducing the idea-expression distinction); Ryan, *supra* note 6, at 693 (discussing why substantial public access to copyrighted works is essential).

¹¹³ See Curtis J. Berger, *Pruneyard Revisited: Political Activity on Private Lands*, 66 N.Y.U. L. REV. 633, 652-57 (1991) (distinguishing between truly private places, such as the home, and public spaces, like shopping centers). But see *Lloyd Corp. v. Tanner*, 407 U.S. 551, 569 (1972) (declaring that property does not "lose its private character merely because the public is generally invited to use it for designated purposes"). However, an argument can be made that the holding of this case should be narrowly construed. See Galbraith, *supra* note 112, at 364-65.

¹¹⁴ Galbraith, *supra* note 112, at 362; see also Berger, *supra* note 113, at 636 (discussing the relinquishment of autonomy in regards to real property made public).

¹¹⁵ See *infra* Part III (addressing ownership of materials in the public domain).

¹¹⁶ See generally Stefan Bechtold, *Digital Rights Management in the United States and Europe*, 52 AM. J. COMP. L. 323 (2004) (providing an overview of DRM systems and the legal framework surrounding them); Julie E. Cohen, *Some Reflections on Copyright Management Systems and Laws Designed to Protect Them*, 12 BERKELEY TECH. L.J. 161, 183 (1997) (discussing the restriction of digital information through

used to lock up information that should be freely accessible for public benefit pursuant to copyright law.”¹¹⁷ Such efforts were bolstered in 1998 by the passage of the Digital Millennium Copyright Act (DMCA).¹¹⁸ The DMCA imposes liability for acts of circumvention and proscribes technologies that could be employed to defeat DRMs.¹¹⁹

The DMCA theoretically attempts to strike a balance by providing that its provisions do not affect fair use.¹²⁰ However, by prohibiting all acts of circumvention, as well as all the tools that can be used for such circumvention, “the DMCA [effectively] grants to copyright owners the power to unilaterally eliminate the public’s fair use rights.”¹²¹ Furthermore, courts interpreting the DMCA have reinforced the copyright holder’s ability to control access by ruling that fair use cannot be raised as a defense.¹²²

As a result, the DMCA essentially renders the Copyright Act’s fair use provisions and other related limitations meaningless. This is due to the fact that even if in principle the public still has the right to utilize such copyrighted works, the right becomes worthless if it is impossible to access these materials in the first place. By adopting a virtually absolute conception of ownership, the DMCA “potentially allow[s] copyright owners control over every use of digital technology

the use of copyright management systems); Stephen M. Kramarsky, *Copyright Enforcement in the Internet Age: The Law and Technology of Digital Rights Management*, 11 DEPAUL-LCA J. ART & ENT. L. & POL’Y 1, 10 (2001) (discussing encryption technology for DVDs); *Edited & Excerpted Transcript of the Symposium on The Law & Technology of Digital Rights Management*, 18 BERKELEY TECH. L.J. 697, 736 (2003) (discussing congressional proposals that would strengthen protections for digital media rights holders).

¹¹⁷ Ryan, *supra* note 6, at 670.

¹¹⁸ Digital Millennium Copyright Act of 1998, Pub. L. No. 105-304, 112 Stat. 2860 (codified as amended in various sections of 17 U.S.C.).

¹¹⁹ For further discussion of the Digital Millennium Copyright Act, see Orin S. Kerr, *A Lukewarm Defense of the Digital Millennium Copyright Act*, in COPYRIGHTS: THE FUTURE OF INTELLECTUAL PROPERTY IN THE INFORMATION AGE (Adam Thierer & Wayne Crews eds., 2002); Matt Jackson, *Using Technology to Circumvent the Law: The DMCA’s Push to Privatize Copyright*, 23 HASTINGS COMM. & ENT. L.J. 607 (2001); Craig Allen Nard, *The DMCA’s Anti-Device Provisions: Impeding the Progress of the Useful Arts?*, 8 WASH. U. J.L. & POL’Y 19 (2002); David Nimmer, *Appreciating Legislative History: The Sweet and Sour Spots of the DMCA’s Commentary*, 23 CARDOZO L. REV. 909 (2002); Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to be Revised*, 14 BERKELEY TECH. L.J. 519 (1999).

¹²⁰ 17 U.S.C. § 1201(c)(1) (2000) (“Nothing in this section shall affect rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.”).

¹²¹ Electronic Frontier Foundation, *Unintended Consequences: Seven Years under the DMCA*, available at <http://www EFF.org/wp/unintended-consequences-seven-years-under-dmca> (last visited Nov. 4, 2007).

¹²² See Lipton, *supra* note 16, at 761 (citing *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 321, 321–24 (S.D.N.Y. 2000) (holding that the fair use defense cannot be raised in an action for trafficking in technology that circumvents a technological measure)).

in connection with their protected works.”¹²³ Such a myopic view of property rights unfortunately disregards the considerable harm to the public domain.

3. *Contracts.* Recently, there has been an extraordinary proliferation of contracts utilized in connection with information resources. Content producers now frequently place contractual restrictions on access to and use of their works in an attempt to prevent all unauthorized and uncompensated applications of their works. Standard form contracts, often in the form of shrinkwrap,¹²⁴ clickwrap,¹²⁵ or browsewrap¹²⁶ licenses are commonly employed. These “agreements”¹²⁷ often contain harsh provisions that seek to prohibit actions that are clearly allowed under the Copyright Act, such as conduct that would undoubtedly qualify as fair use. Additionally, the use of facts and ideas contained in such materials is often heavily regulated, even though they constitute the building blocks of knowledge and are supposed to remain within the public domain.¹²⁸ Nonetheless,

¹²³ Ryan, *supra* note 6, at 673 (citing Litman, *supra* note 28, at 37).

¹²⁴ See, e.g., *Register.com, Inc. v. Verio, Inc.*, 356 F.3d 393, 428 (2d Cir. 2004) (“A shrinkwrap license typically involves (1) notice of a license agreement on product packaging (i.e., the shrinkwrap), (2) presentation of the full license on documents inside the package, and (3) prohibited access to the product without an express indication of acceptance. Generally, in the shrinkwrap context, the consumer does not manifest assent to the shrinkwrap terms at the time of purchase; instead, the consumer manifests assent to the terms by later actions.”).

¹²⁵ See, e.g., *id.* at 429 (defining a “clickwrap license” as one which “presents the potential licensee (i.e., the end-user) with a message on his or her computer screen, requiring that the user manifest his or her assent to the terms of the license agreement by clicking on an icon” (quoting *Specht v. Netscape Comm’ns Corp.*, 150 F. Supp. 2d 585, 593–94 (S.D.N.Y. 2001))).

¹²⁶ See, e.g., *Recursion Software, Inc. v. Interactive Intelligence, Inc.*, 425 F. Supp. 2d 756, 782 n.14 (N.D. Tex. 2006) (defining a “browsewrap license” as a license that is “typically part of a web site—its terms may be posted on the site’s home page or may otherwise be accessible via a hyperlink” and explaining that “[i]n contrast to clickwrap licenses, a user may download software under a browsewrap license prior to manifesting assent to its terms”).

¹²⁷ The validity of these agreements has been the subject of extensive scholarly discussion. See generally Benkler, *supra* note 4, at 354 (discussing copyright law and the scope of the public domain); Niva Elkin-Koren, *Copyright Policy and the Limits of Freedom of Contract*, 12 BERKELEY TECH. L.J. 93 (1997) (arguing that courts should not enforce contracts that seek to expand copyright protection); Raymond T. Nimmer, *Breaking Barriers: The Relation Between Contract and Intellectual Property Law*, 13 BERKELEY TECH. L.J. 827 (1998) (exploring the relationship between contract and copyright law); Maureen A. O’Rourke, *Copyright Preemption After the ProCD Case: A Market-Based Approach*, 12 BERKELEY TECH. L.J. 53 (1997) (discussing the competing interests involved in freedom of contract and preservation of the public domain); J.H. Reichman & Jonathan A. Franklin, *Privately Legislated Intellectual Property Rights: Reconciling Freedom of Contract with Public Good Uses of Information*, 147 U. PA. L. REV. 875 (1999) (examining the practice of contracting around federal intellectual property law).

¹²⁸ Litman, *supra* note 7, at 187; Patry, *supra* note 5, at 368–69 (“Copying such material promotes the progress of science by keeping the basic building blocks of knowledge free for all to use. . . .”); Ryan, *supra* note 6, at 661, 669–70; see also Lipton, *supra* note 16, at 695, 738; Litman, *supra* note 49, at 1283, 1294–95.

adjudicators have been quick to support these restraints despite the fact that they undeniably alter the delicate balance that the Copyright Act strikes.

For example, in *Register.com, Inc. v. Verio, Inc.*,¹²⁹ the plaintiff was required to provide to the public an online, interactive database containing the names, addresses, and phone numbers of all customers who registered domain names through its services as part of its obligation as an accredited domain name registrar.¹³⁰ Because the data contained therein consisted solely of facts, the information was not protectable under copyright law.¹³¹ Normally, this would allow a party to freely copy, utilize, and distribute this data.

However, Register.com published terms and conditions governing the use of its domain name registrant database on the home page of its publicly accessible Internet site.¹³² These provisions prohibited a party from using the contact information to engage in any commercial advertising or solicitations via direct mail, electronic mail, or telephone.¹³³ Additionally, the terms provided that by submitting a request for information from the database, the user agreed to be bound by the terms and conditions of use.¹³⁴ Verio conceded that its use of the contact information for marketing purposes conflicted with Register.com's posted restrictions.¹³⁵ However, Verio claimed that the terms and conditions were unenforceable.¹³⁶

The court disagreed, finding that Verio was in fact bound by the limitations posted by Register.com on its Internet site.¹³⁷ The court ruled that since Verio had retrieved contact information with an intent to engage in solicitation in violation of Register.com's posted policies, Verio had breached the contract.¹³⁸

¹²⁹ 126 F. Supp. 2d 238 (S.D.N.Y. 2000), *aff'd*, 356 F.3d 393 (2004).

¹³⁰ *Id.* at 241-43.

¹³¹ *Id.* at 241-42; *see also supra* Part II.

¹³² 126 F. Supp. 2d at 245.

¹³³ *Id.* at 242-43. The terms and conditions read as follows:

By submitting a [query], you agree that you will use this data only for lawful purposes and that, under no circumstances will you use this data to: (1) allow, enable, or otherwise support the transmission of mass unsolicited, commercial advertising or solicitations via direct mail, electronic mail, or by telephone; or (2) enable high volume, automated, electronic processes that apply to Register.com (or its systems). The compilation, repackaging, dissemination or other use of this data is expressly prohibited without the prior written consent of Register.com. Register.com reserves the right to modify these terms at any time. By submitting this query, you agree to abide by these terms.

Id.

¹³⁴ *Id.*

¹³⁵ *Id.* at 245.

¹³⁶ *Id.* at 246.

¹³⁷ *Id.* at 248.

¹³⁸ *Id.* at 245-48.

The court held that even if Verio's initial access to the contact information database could be classified as "authorized," such access would still be rendered "unauthorized" by virtue of the fact that prior to entry Verio knew that the data it obtained would be used later for a purpose prohibited by the terms and conditions of Register.com's Internet site.¹³⁹ Therefore, the court found that Register.com was entitled to a preliminary injunction based upon its breach of contract claim and ordered Verio to comply with all of Register.com's website policies.¹⁴⁰

As is characteristic in controversies of this type, the district court in the *Register.com* case never discussed the fact that the information at issue was uncopyrightable or that it had been made publicly available by Register.com. Instead, Register.com was essentially considered the owner of the information and as such was entitled to completely supplant the carefully balanced provisions of the Copyright Act with its own privately legislated intellectual property laws.¹⁴¹ The utilization of traditional conceptualizations of ownership generally leads to wholesale enforcement of restrictions on access to and use of data-related resources. This failure to reconcile the varying interests at stake in disputes of this nature seriously discounts the considerable consequences to the public domain specifically and society generally.

C. OWNERSHIP INTERESTS IN THE PUBLIC DOMAIN

The private ownership of information is arguably even more problematic when we begin to consider a somewhat unconventional conceptualization of the public domain. The public domain is typically characterized as consisting of material not subject to any intellectual property protection.¹⁴² Nonetheless, a strong argument can be made that the public domain is not defined by a complete absence of ownership, but rather a more appropriate conceptualization is one in which the materials contained therein are actually owned by the public.¹⁴³

Historically, the term "public domain" was used synonymously with the phrases "public property" and "common property."¹⁴⁴ These expressions call to mind a much different rhetorical image, namely one in which "the entire public

¹³⁹ *Id.* at 253.

¹⁴⁰ *Id.* at 252-53.

¹⁴¹ See Maureen A. O'Rourke, *Fencing Cyberspace: Drawing Borders in a Virtual World*, 82 MINN. L. REV. 609 (1998); Elkin-Koren, *supra* note 127.

¹⁴² Ochoa, *supra* note 4, at 215, 256; see also James Boyle, *Foreword: The Opposite of Property?*, LAW & CONTEMP. PROBS. Winter/Spring 2003, at 30 (2003); Litman, *supra* note 4, at 1010-11.

¹⁴³ See Ochoa, *supra* note 4, at 256.

¹⁴⁴ *Id.* at 257.

owns a property interest in the public domain."¹⁴⁵ As one commentator explains, the adjective "public" or "common" does not signify a lack of ownership but instead simply eliminates the "exclusive" nature of such ownership.¹⁴⁶ Similarly, this reasoning would appear to apply to the term "public domain" as well.¹⁴⁷ In fact, the word "domain" has been defined as "[t]he complete and absolute ownership of land."¹⁴⁸ Consequently, the phrase "public domain" would seem to imply that "the public has an [affirmative] ownership interest in the material" at issue.¹⁴⁹

Furthermore, a number of recent intellectual property cases also lend support to the position that "the public domain is owned by everyone, rather than by no one."¹⁵⁰ For example, in *Tastefully Simple, Inc. v. Two Sisters Gourmet*, the Sixth Circuit stated "a document or publication that is in the public domain is one that is owned by the public and thus not subject to copyright protection."¹⁵¹ Similarly, in *Comedy III Productions, Inc. v. New Line Cinema*, the Ninth Circuit, in discussing whether the plaintiff could raise a copyright claim, held that "Comedy III could not do so even if it wanted to because any copyright has long expired and the film at issue is in the public domain. We all own it now."¹⁵²

Regardless, however, of whether we view the public as owning the material in the public domain, or as simply having an important non-owner interest in its protection and continued growth, we need a better method of analysis to make certain that such claims are taken into account in disputes involving access to and the use of information. Rights related to the control of knowledge resources "are expanding by the moment, unchecked by public scrutiny of sophisticated analysis."¹⁵³ It is therefore imperative in evaluating controversies and

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.* (citing BLACK'S LAW DICTIONARY 385 (1st ed. West 1891) (defining demesne as "domain" or "held in one's own right")).

¹⁴⁹ *Id.* at 257, 259.

¹⁵⁰ *Id.* at 260.

¹⁵¹ 134 F. App'x 1, 5 (6th Cir. 2005).

¹⁵² 200 F.3d 593, 595 (9th Cir. 2000); see also *Cable News Network, Inc. v. Video Monitoring Servs. of Am.*, 940 F.2d 1471, 1478 (11th Cir. 1991), *vacated on other grounds* ("This quid pro quo reflects a fundamental fairness to both the public, the 'owner' of the public domain, and the author who takes from the public domain the ideas which are the substance of such author's protected original expression."); *Mayer v. Josiah Wedgwood & Sons, Ltd.*, 601 F. Supp. 1523, 1536 (S.D.N.Y. 1985) ("In this case, the fact that Mayer permitted her design to enter the public domain is fatal to any claim she can assert. . . . [I]t is elementary that once copyrightable material is published without the author's first securing federal copyright protection, the author loses his property interest in the material. The material becomes public property. In this case, Mayer no longer owned her design. The public did." (citations omitted)).

¹⁵³ Boyle, *supra* note 52, at 115.

promulgating policies concerning knowledge resources that we adopt an analytical framework which ensures the decisionmaking process reveals the true costs involved.¹⁵⁴

IV. ENTITLEMENT APPROACH

Leading tangible property theorist Joseph Singer has advocated the use of an alternative construction of property for defining and allocating property rights.¹⁵⁵ This model, which he refers to as an "entitlement approach," shifts the focus from merely determining the owner to identifying the interests of all of the parties with legitimate claims to rights in the particular resource at issue.¹⁵⁶ An "entitlement" in contemporary legal discourse is usually defined as encompassing "any legal right or protected interest."¹⁵⁷

According to Singer, "property is best understood as comprising limited and conflicting entitlements rather than absolute powers in title holders."¹⁵⁸ Several individuals may have "entitlements of various kinds" in a particular piece of property.¹⁵⁹ "Although entitlements are strongly protected legal rights, they are nonetheless subject to limitations to protect the entitlements of others."¹⁶⁰ Entitlements therefore go both ways in the sense that they entitle as well as

¹⁵⁴ *Id.* at 110.

¹⁵⁵ See SINGER, *supra* note 12. Other leading tangible property theorists have also recommended a more broad-based method for analyzing property disputes. In particular, Laura Underkuffler has analyzed the numerous deficiencies of an absolute approach to property and has highlighted the necessity of utilizing a somewhat related method of conceptualizing property rights. See Underkuffler, *supra* note 61, at 127; Underkuffler-Freund, *supra* note 20, at 1033. Underkuffler argues that property has historically been viewed as "something that is objectively definable or identifiable, apart from social context, and that it represents and protects the sphere of legitimate, absolute individual autonomy." Underkuffler, *supra* note 61, at 133. However, "property rights, like all individual rights, are rarely absolute in any society." *Id.* Therefore, she advocates for the use of a "comprehensive approach" that explicitly acknowledges the tensions between the interests of the individual and the collective of which the individual is a part. *Id.* at 129. Underkuffler further explores many of these issues in much more detail in her groundbreaking book, *THE IDEA OF PROPERTY: ITS MEANING AND POWER* (2003).

¹⁵⁶ SINGER, *supra* note 12, at 91.

¹⁵⁷ *Id.*; see also Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972) (providing integrative framework for analyzing entitlement issues and applying framework to pollution problem); Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1 (2002) (extending Calabresi-Melamed framework to pliable rules).

¹⁵⁸ SINGER, *supra* note 12, at 209.

¹⁵⁹ *Id.* at 91-92.

¹⁶⁰ *Id.*

obligate.¹⁶¹ As such, property claims are not only assertions of entitlement, “but claims that it is fair to impose obligations on others to respect those entitlements.”¹⁶² Thus under the entitlement model, the predominant concern becomes the relationships between the parties, “including the effects of each party’s exercise of its entitlement on others.”¹⁶³ This approach suggests a thinner bundle of rights than full absolute ownership assumes, and as a result, provides a more accurate assessment of contextually defined property rights.¹⁶⁴

Additionally, this type of analytical framework would force judges and lawmakers to alter their image of the relationships between individual right holders and the society of which they are a part.¹⁶⁵ This is due to the fact that in order to choose between conflicting interests, controversial value judgments will have to be made.¹⁶⁶ Furthermore, the way in which such property rights are defined reveals a great deal about the values society finds important.¹⁶⁷ The goals and ideals to be served by property rights and the property system must be determined in order to decide what kind of policies to promulgate or which property interests should prevail in any given dispute.¹⁶⁸ These rights, although individual in nature, must therefore be understood and informed not only by what kind of society we have, but more importantly by the type of society that we wish to become.¹⁶⁹

¹⁶¹ *Id.* at 210.

¹⁶² *Id.* at 211.

¹⁶³ *Id.* at 94.

¹⁶⁴ *Id.* at 91.

¹⁶⁵ Underkuffler, *supra* note 61, at 129; *see also* SINGER, *supra* note 12, at 106 (“I will argue for a new normative framework that considers the role that property law plays in shaping the contours of social relationships. This relational approach will broaden the considerations relevant to law making and will better allow us both to express and to critically analyze our deepest values and commitments.”).

¹⁶⁶ SINGER, *supra* note 12, at 7.

¹⁶⁷ *See* MUNZER, *supra* note 20, at 149 (further citing works that draw on Hegel); *see also* UNDERKUFFLER, *supra* note 59, at 54 (“Property is, under *any* conception, quintessentially and absolutely a social institution. Every conception of property reflects, through its constituent dimensions, those choices that we—as a society—have made.” (emphasis in original)); Underkuffler-Freund, *supra* note 20, at 146.

¹⁶⁸ SINGER, *supra* note 12, at 37; *see also* Anderson & Pildes, *supra* note 77, at 1503, 1564; Ryan, *supra* note 6, at 651 (“[I]t is important to identify the values we are promoting when resolving current issues regarding information as property.”).

¹⁶⁹ Underkuffler-Freund, *supra* note 20, at 1033, 1045; *see also* SINGER, *supra* note 12, at 146 (“Because they shape the contours of relationships, property rules should be conceptualized not only as protecting individual rights (moral claims of individuals) but also as establishing property systems. Property systems form the overall social context in which individuals live.”); Dan Hunter, *Cyberspace as Place and the Tragedy of the Digital Anticommons*, 91 CAL. L. REV. 439, 518 (2003) (“The kind of property that we have determines much of the society that we will have; therefore the social life that we want should determine the type of property that we allow.”).

Such an approach therefore provides an enhanced analytical structure for developing policies and deciding cases that more readily ensures the concerns of all relevant parties are taken into account.¹⁷⁰ It requires lawmakers and adjudicators to explicitly face all of the issues involved in any property dispute and necessitates the exercise of judgment to adequately balance the various interests that exist.¹⁷¹ Although it requires that difficult questions be answered when presented with such conflicts, "[t]he law of property already addresses them by default, if not otherwise. The only question is whether they should be decided with or without explicit examination."¹⁷²

¹⁷⁰ As Singer explains, the entitlement approach is quite unlike other solutions that have been proposed to combat the problems inherent in an absolutist conception of property. These other strategies tend to fall within three general categories:

One approach is to argue for regulation of property in the public interest. This strategy accepts the core image of property as ownership but defends limitations on property rights to promote interests such as a fair distribution of wealth, prevention of environmental harms, or protection from unequal bargaining power. A second strategy, adopted by the legal realists in the first half of the twentieth century, is to conceptualize property as a bundle of distinct entitlements and then to ignore the property concept as outdated. This approach does not get rid of ownership as a concept; it merely asks us to talk about ownership of particular entitlements rather than ownership of the entire bundle. Although it helps in disentangling the ownership bundle, it does not free us from its sway, and it does nothing to alter the conscious or unconscious burdens of persuasion comprised by the traditional ownership concept.

A third strategy, championed by Margaret Jane Radin, distinguishes between types of property that are legitimately commodified and those that should not be commodified at all, such as body parts, or which should be only incompletely commodified, such as the family home. . . .

These critical approaches to property limit the effect of the traditional model either by identifying limits to ownership rights or by referring to alternative conceptions of property that may compete with the commodity concept. . . . They are compatible with the social relations model I have developed here. There are, however, two major shifts in emphasis in my approach.

First, rather than understanding these tensions as external to the traditional model of property, I see them as contained *within* the traditional model. . . . Second, rather than focusing on different types of property (personal versus fungible), limiting the realm of commodification, or accepting a role for property in establishing the just social order, I have focused on the quality, character, and diversity of social relations.

SINGER, *supra* note 12, at 207–08 (emphasis in original).

¹⁷¹ See *id.* at 91 ("When we adopt this new model, our focus shifts from identifying the owner to identifying the conflicting interests of everyone with legitimate claims to rights in the property in question."); Underkuffler, *supra* note 61, at 127, 142.

¹⁷² Underkuffler, *supra* note 61, at 146; see also SINGER, *supra* note 12, at 95 ("If we approach property rights as one of the most important vehicles for structuring relations of power in our society and as a means of expressing the relations of responsibility we want to encourage, we will

V. PANOPTIC APPROACH

The panoptic approach begins by rejecting the absolute conception of tangible property that judges and lawmakers generally resort to in disputes affecting the public domain. In moving away from such a traditional view of property rights, the proposed model creates a more appropriate heuristic from which controversies involving knowledge resources can be reviewed and decided. The panoptic approach takes account of the fact that information property ownership has significant social consequences.¹⁷³ As a result, the proposed model more accurately portrays the true impact from private control of information resources.

The foundation of the panoptic approach is significantly influenced by the alternative construction of tangible property set forth in the entitlement model. However, before discussing the various contours of the panoptic approach, it is worth examining the congruity of drawing upon a tangible theory of property. While the indiscriminate use of such theories in connection with data-related disputes is problematic, a complete prohibition seems equally improvident.

A. ADDRESSING THE LIMITATIONS OF TANGIBLE PROPERTY ANALOGIES

Recently, much has been written about the appropriateness of applying tangible property theories to controversies concerning intangible resources.¹⁷⁴ In the opinion of many academic writers, the failure to account for the significant distinctions between the two has led to inappropriate judicial decisions and the promulgation of legislation that is objectionable on the grounds of public policy.¹⁷⁵ For example, information is unlike land or tangible goods in the sense

start off the debate in a useful way.'") (quoting Jennifer Nedelsy, *Reconceiving Rights as Relationships*, 1 REV. CONST. STUD./REVUE D'ETUDES CONSTITUTIONNELLES 1, 16 (1993)).

¹⁷³ See Lipton, *supra* note 15, at 173-74; see also Balkin, *supra* note 47, at 53 (noting that "[i]ntellectual property rights exist to promote the spread of culture and possibilities for cultural innovation and transformation").

¹⁷⁴ See, e.g., LESSIG, *supra* note 5, at 95 ("The system of control that we erect for rivalrous resources (land, cars, computers) is not necessarily appropriate for nonrivalrous resources (ideas, music, expression). Indeed, the same system for both kinds of resources may do real harm. Thus a legal system, or a society generally, must be careful to tailor the kind of control to the kind of resource. One size won't fit all." (emphasis added)).

¹⁷⁵ See, e.g., *id.* at 237 ("By simplifying the nature of the rights that IP law protects, by speaking of it as property, just like the ordinary property of cars and homes, thinking is guided in a very particular way. When it is viewed as property, we see endless arguments for strengthening IP and few for resisting that increase."); Hunter, *supra* note 169, at 499-500 (arguing that use of a real property metaphor "is leading us inexorably towards an undesirable policy outcome: the staking out of private claims in cyberspace and concomitant reductions in the public 'ownership' of the space"); Lemley, *supra* note 17, at 522 ("[R]eliance on the cyberspace as place metaphor is leading courts to

that it is non-rivalrous. In other words, multiple individuals can utilize the same data without interfering with one another.¹⁷⁶ Furthermore, the cost of providing information generally does not increase with consumption, unlike tangible property.¹⁷⁷

This predilection for resorting to tangible property metaphors has been especially pervasive in connection with cyberspace-related disputes where adjudicators and policy makers often apply real property theories. Many academic commentators have cautioned that by conceptualizing the Internet as if it were a physical space, judges and lawmakers frequently disregard the significant differences between tangible and intangible resources, which results in an increased tendency toward propertization in cyberspace.¹⁷⁸ Nonetheless, as other writers have pointed out, utilizing a tangible property metaphor is not entirely problematic.¹⁷⁹ Oftentimes it can be helpful to utilize familiar concepts to contend with novel issues.¹⁸⁰ Furthermore, particularly in the cyberspace context, it is unlikely that judges and legislators will adopt a cognitive metaphor that is not physical as this method of analysis has now become so entrenched in our legal vernacular.¹⁸¹

results that are nothing short of disastrous as a matter of public policy.”); Carol M. Rose, *The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems*, 83 MINN. L. REV. 129, 153 (1998) (“The normal rationing function of property and pricing would be out of place [on the Internet], because ideas are not scarce goods in the same sense as, say, coffee beans. Intellectual activities are rather goods whose number and value is enhanced with more entry, more use; if particular innovations are walled off and payment is required for access, the sum of innovation will decline.”).

¹⁷⁶ See, e.g., LESSIG, *supra* note 5, at 58–59 (“[I]nformation is natural nonrivalrous. . . . In Jefferson’s poetry, ‘[H]e who receives an idea from me, receives instruction himself without lessening mine; as he who lites his taper at mine, receives light without darkening me.’”).

¹⁷⁷ See, e.g., Lipton, *supra* note 15, at 140–41 (“[I]nformation cannot be property in the same sense that land and other tangible items can be property. This limitation follows because information is a ‘public good’; that is, ‘the cost of providing the good does not increase with consumption, and . . . it is generally infeasible to exclude others from consuming the good.’” (citations omitted)).

¹⁷⁸ See *supra* note 172.

¹⁷⁹ See, e.g., Lipton, *supra* note 15, at 142 (“‘Property’ terminology need not be avoided, provided that we are clear about what is meant when the term is used in the context of information. There may, in fact, be some distinct advantages in utilizing the term.”); Lipton, *supra* note 16, at 711 (stating that familiar terminology may be helpful); Alfred C. Yen, *Western Frontier or Feudal Society?: Metaphors and Perceptions of Cyberspace*, 17 BERKELEY TECH. L.J. 1207, 1209, 1214 (2002) (arguing that developing a balanced set of metaphors is a productive way to study an innovation like the Internet).

¹⁸⁰ Lipton, *supra* note 16, at 719 (“The use of familiar ‘property’ and ‘privacy’ terminology should also not be objectionable for the reasons set out in the Introduction. These terms may, in fact, be more useful and helpful organizing tools for a new field of law and policy than would the creation of wholly novel concepts in this context.”).

¹⁸¹ See Hunter, *supra* note 169, at 516 (stating that the understanding of cyberspace as a physical place has become central to our discussion of this topic).

The key, therefore, is not necessarily avoiding analogies to tangible property altogether. Instead, the use of simplistic, absolute conceptions of property that underestimate the true consequences of such decisions must be abandoned. In their place, a theoretical framework that requires decisionmakers to adequately assess all of the relevant issues and interests should be substituted.

B. DELINEATING A MORE APPROPRIATE BASELINE

In formulating policies and adjudicating conflicts that involve information, it is imperative that we acknowledge the complexity of these controversies. The panoptic approach therefore begins by shifting the inquiry away from determining a solitary, absolute owner. Instead, the focus of the panoptic approach initially turns to recognizing all of the various ownership and societal interests involved in any dispute that concerns data-related materials.

This would first include the identification of any individual or entity with legitimate claims to the knowledge resource itself or the means by which access to and use of the information may be effectuated. However, the inquiry is not limited merely to recognizing content producers or other parties customarily thought of as having ownership rights. The panoptic approach would also require that non-owners who would be considerably impacted by a decision concerning the materials in question be taken into account.

Such a model therefore acknowledges that there are often parties other than a plaintiff or defendant in a given data-related dispute that would be significantly affected by the outcome. Similarly, the panoptic approach would compel policy makers to carefully identify parties beyond just those lobbying in support of or in opposition to a particular piece of legislation. In most circumstances, this would require judges and lawmakers to recognize that at minimum the public has a strong interest in controversies affecting the growth of the public domain and conceivably even has an ownership interest in the materials at issue.¹⁸²

Next, the panoptic approach moves from identifying individuals and entities to examining any societal interests at stake. In disputes affecting the public domain, this would require recognition of the fact that access to a robust and ever-expanding public domain is essential to the progress of society.¹⁸³ Such material allows the public to gain valuable information that is necessary for an enlightened citizenry.¹⁸⁴ A prodigious public domain also advances learning, knowledge, and creativity by permitting later authors and innovators to build on prior works and discoveries.

¹⁸² See *supra* Part III.C.

¹⁸³ Balkin, *supra* note 47, at 4-5.

¹⁸⁴ Patry, *supra* note 5, at 381.

Furthermore, in connection with cyberspace-based controversies, this should also include an acknowledgement of the benefits that inure from a diverse, open network. The early Internet flourished in large part because "the default rule was to allow common access and use of resources."¹⁸⁵ As one leading commentator asserts, such openness "fueled the greatest technological revolution that our culture has seen since the Industrial Revolution."¹⁸⁶ Concededly, it is not always easy to ascertain the direct rewards of an open network. Nonetheless, the failure to appreciate the importance of public access to ideas and information in the online world could likely lead to a reduction in innovation, as well as an inability to realize the "educational, political, scientific, and cultural promise of the Internet."¹⁸⁷

Another possible interest that arguably merits discussion is that of "wealth maximization." Economists that ascribe to an efficiency theory contend that the basic purpose of a property system is to "ensure that resources are allocated to their highest valued use" with the objective of increasing monetary rewards.¹⁸⁸ Accordingly, in order to facilitate the realization of this goal, these economists argue that a system of clearly defined property rights is essential.¹⁸⁹ Such a structure would allow for private bargaining which can assess the worth of a given resource as defined by the price paid in connection with the market transaction.¹⁹⁰ However, "informational works affect individual and social [welfare] in a variety of ways, many of which are not registered, much less measured, by markets."¹⁹¹ As a result, neoclassical economic theory pushes in an opposite direction,

¹⁸⁵ Hunter, *supra* note 169, at 507.

¹⁸⁶ LESSIG, *supra* note 5, at xxii.

¹⁸⁷ Boyle, *supra* note 52, at 89; *see also* Hunter, *supra* note 169, at 446, 518.

¹⁸⁸ Ryan, *supra* note 6, at 656 (citing *Computer Assocs. Int'l v. Althai, Inc.*, 982 F.2d 693, 696 (2d Cir. 1992)).

¹⁸⁹ Julie Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of "Rights Management"*, 97 MICH. L. REV. 462 (1998); Ryan, *supra* note 6, at 656-57.

¹⁹⁰ Ryan, *supra* note 6, at 656-57; Cohen, *supra* note 189.

¹⁹¹ Cohen, *supra* note 189, at 539; *see also* SINGER, *supra* note 12, at 124 ("[E]fficiency analysis has fundamental drawbacks. First, by suggesting that we measure costs and benefits by market values, it assumes that market prices are accurate proxies for social utility or welfare. . . . The point, however, is that market measures draw our attention away from such costs because there is no market for social norms and no market value for trust.").

supporting a diminished public domain.¹⁹² Consequently, this "interest" is overall of quite questionable merit.

By identifying all of the parties and interests involved in a given controversy, the effects of the "owner" label are mitigated. In allocating the burdens of justifying access to ideas or information, the outcome-determinative nature of classifying the holder of any easily identifiable tangible property or the content producer as "owner" is avoided. Unlike the traditional method of property rights analysis judges and policy makers usually employ, the panoptic approach precludes an initial assignment of rights that prejudices the result.¹⁹³ For example, with regard to controversies involving access to and the use of information on publicly accessible websites, this would mean that the Internet website owner would not automatically be deemed the "owner," with the entity seeking access forced into a position of having to justify such an intrusion of the website owner's rights.

Additionally, such an approach more readily recognizes that the granting of any type of property right, particularly one concerning information, has "powerful social consequences."¹⁹⁴ Accordingly, limitations on the rights traditionally conferred to an owner may be necessary not only to protect other parties with compelling needs but also to safeguard important societal values. As such, ownership under this model no longer equates with complete control.

C. EVALUATING THE INTERESTS

The panoptic approach does not, however, conclude here. Building upon the foundation set out above, the panoptic approach next turns to the prospect of balancing the various interests involved in a data-related controversy. A thorough review of the content at issue and the context within which the dispute occurs is therefore necessary.

¹⁹² Ryan, *supra* note 6, at 657-58 ("Under a neoclassical economic justification for copyright, therefore, authors of creative expression must be afforded broad proprietary rights that extend to every conceivable valuable use. Thus, while 'the incentive approach tends to look critically at copyright's expansion, questioning whether greater protection is necessary to provide an economic incentive for the production of creative works,' the neoclassic economic approach 'has pushed economic analysis in the opposite direction. It supports expanded intellectual property rights and a diminished public domain.'") (quoting Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 308 (1996)).

¹⁹³ See, e.g., Ryan, *supra* note 6, at 685-86 (discussing the risk that the outcome in many fair use cases is predetermined based on an initial assignment of rights to the copyright holder).

¹⁹⁴ Lipton, *supra* note 15, at 143-44; see also Lemley, *supra* note 17, at 542 ("The rights and remedies we give to private property owners depend in part on the social value of allocating control to the property owner and the social value of the use that defendants make of that property."); Ryan, *supra* note 6, at 647.

1. *Content.* With regard to this component of the panoptic approach, the question becomes what type of information is at the center of the controversy. Although copyright law is not sufficiently equipped to provide all of the answers in controversies involving information rights,¹⁹⁵ it does help inform part of the analysis. Therefore, with regard to content, important questions would include whether the resource at issue consists solely of copyrighted material, only of non-copyrightable works, or a combination thereof. If copyrightable materials are involved, will only unprotected portions of such works be utilized? Alternatively, if protected portions are being used, does such use potentially fall within a specific limitation articulated in the Copyright Act or qualify as fair use?

To the extent a particular use does not run afoul of the Copyright Act, the public's interest in preserving a robust and ever-expanding public domain would initially appear to be on par with or arguably superior to the interests of an individual or entity seeking to control the use of such knowledge resources. This would be true notwithstanding the presence of contractual limitations or digital rights management systems that would indicate to the contrary. Nonetheless, the fact that non-copyrightable information is at issue, while highly persuasive, is not determinative. Further examination of the context within which the data-related dispute occurs is therefore necessary.

2. *Context.* An evaluation of the context in which the controversy concerning knowledge resources arises is oftentimes more critical to ensuring that all of the interests and issues involved in the dispute are adequately addressed than a review of its content. This is due to the fact that context frequently pushes the competing proprietary and societal interests to the forefront.¹⁹⁶ While safeguarding the continued growth of the public domain as well as removing impediments to the public's access to ideas and information are critical, in some circumstances these important goals must nonetheless give way to other property-related values.

Three examples of data-related disputes concerning identical content, but involving very different contexts, help illustrate this point:

¹⁹⁵ See Jessica Litman, *Reforming Information Law in Copyright's Image*, 22 U. DAYTON L. REV. 587, 590 (1997) ("[C]opyright doctrine is ill-adapted to accommodate many of the important interests that inform our information policy. First Amendment, privacy, and distributional issues that copyright has treated only glancingly are central to any information policy.").

¹⁹⁶ SINGER, *supra* note 12, at 174, 206 ("Two conclusions follow from this analysis. First, property rights will differ depending on the context within which they are exercised and the effects they have on other actors; and second, they must be redefined over time to prevent the illegitimate concentration of power in ways that keep individuals from participating in the market system on fair and equal terms."); UNDERKUFFLER, *supra* note 59, at 27 ("[P]roperty rights—although involving the same 'things' and the same theories of rights—may be afforded more or less stringent protection because of the *different contexts* in which those rights appear." (emphasis in original)).

Example #1: A non-original, alphabetically organized list of data contained within an individual's briefcase.

Clearly, the information at issue would not be protectable under the Copyright Act.¹⁹⁷ Nonetheless, this hypothetical provides a good illustration of a situation in which important interests, such as individual control of chattels for reasons of protecting individual security and autonomy,¹⁹⁸ come into direct conflict with the public's interest in accessing and utilizing information. While the panoptic approach does not mandate a particular result, this would be a relatively clear example of a situation in which personal property interests should take precedence over public interests.

Example #2: A non-original, alphabetically organized list of data appearing on a publicly accessible website.

Here, the website owner's interests might be said to include the encouragement and reward of individual investment,¹⁹⁹ the capacity to control access and use of information published on the Internet site, as well as the ability to manage the computer server's capacity. However, equally strong, if not more persuasive, are the public advantages that come from a diverse, open exchange of information, which include the potential for increased competition and innovation. Furthermore, placing a publicly accessible site on the Internet should indicate consent to at least a certain level of use of the information, particularly in light of the attendant benefits the website owner invariably receives from the open nature of the site.²⁰⁰

Example #3: A non-original, alphabetically organized list of data contained within a password-protected website.

¹⁹⁷ See *Feist Publ'ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991); see also *supra* Part II (discussing originality as a prerequisite for protection under the Act).

¹⁹⁸ UNDERKUFFLER, *supra* note 59, at 90 ("Nixon's claim involved core values—individual use and control of chattels for reasons of protecting individual security, autonomy, and the products of labour—which are traditionally associated with the right to property.").

¹⁹⁹ See *id.* at 91 ("The patent claim in this case involves core values that we associate with property rights. The state of affairs that it attempts to achieve or protect—that of individual use and control of a valuable commodity—is something that we clearly associate with the right to property. In addition, the reasons that are traditionally cited for this protection—such as the encouragement of individual initiative, the rewarding of investment, the need to protect individual reliance and security, and so on—are among those associated with property rights.").

²⁰⁰ Patricia Bellia, *Defending Cyberproperty*, 79 N.Y.U. L. REV. 2164, 2207 (2004); Galbraith, *supra* note 112, at 361–63; Maureen A. O'Rourke, *Property Rights and Competition on the Internet: In Search of an Appropriate Analogy*, 16 BERKELEY TECH. L.J. 561, 620 (2001).

This scenario involves many of the same interests that were raised in connection with the previous two examples. However, in this hypothetical the website owner's claims in favor of its ability to control access to the site are certainly strengthened. First, this website owner has not accrued any network benefits associated with public access to an Internet site. Additionally, the absence of any sort of implied consent to access the site, which is arguably present in the previous example, also lends considerable support to the website owner's position. As the foregoing examples illustrate, an examination of both content and context is critical to resolving any data-related disputes or formulating information policy.

D. PUTTING THE PANOPTIC APPROACH IN PERSPECTIVE

The panoptic approach in no way prescribes the result of a particular controversy. However, it does ensure that the parochial method of analysis traditionally employed in disputes concerning knowledge resources is replaced with a decisionmaking framework that takes account of the multi-dimensional nature of such conflicts. No longer would a website owner automatically be granted the unrestrained ability to dictate limitations on access to its site, particularly if it were open to the public. Similarly, contractual provisions restricting the use of ideas and data would require more than a perfunctory review before being upheld. Additionally, technological measures that impede fair use and other non-infringing activities would need to be more closely evaluated.

The panoptic approach more readily takes into account all relevant parties and important societal interests in arriving at a resolution. Such a model requires judges and lawmakers to directly confront the value choices they are making in fashioning information rights policies. In doing so, this paradigm facilitates cognizance of the effects decisions concerning knowledge resources have on the continued existence of a prodigious public domain.

Before concluding, it bears mentioning that application of the panoptic approach is by no means simple or straightforward.²⁰¹ However, as this article illustrates, controversies concerning knowledge resources are not generally amenable to a bright-line approach. Formulating information policy is inherently complex and does not lend itself to the use of clearly defined property rights. Accordingly, the goal of the panoptic approach is not to set forth an analytical framework that generates an effortless process but instead one that effectuates the proper result.

²⁰¹ See, e.g., UNDERKUFFLER, *supra* note 59, at 133 ("This understanding of property is, admittedly, not always an easy one. The idea that property's presumptive power depends upon the context in which it is asserted is often neither simple nor tidy.").

VI. CONCLUSION

As the foregoing discussion illustrates, the way in which property rights are structured significantly impacts the public domain. Unfortunately, the increasing propertization of information is occurring without a thorough examination of the likely effects. However, "[i]f we approach property rights as one of the most important vehicles for structuring relations of power in our society . . . we will start off the debate in a useful way."²⁰² The panoptic approach is designed to advance such a discussion in connection with knowledge resources.

²⁰² Jennifer Nedelsky, *Reconceiving Rights as Relationship*, 1 REV. CONST. STUD./REVUE D'ETUDES CONSTITUTIONNELLES 1, 16 (1993); see also SINGER, *supra* note 12, at 95.