

A PROTOCOL FOR EVALUATING CHANGING GLOBAL ATTITUDES TOWARD INNOVATION AND INTELLECTUAL PROPERTY REGIMES

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ABSTRACT

There have been several challenges to the architectonics of the domestic and global regimes that define and provide protection to property interests. These challenges include advances in technology, changes in product configuration and market structure, perceived evolution in innovation paradigms, and shifts in the perspectives of individuals and groups with respect to access to and use of products of the mind. In principle, such is not a new phenomenon. It is, in fact, an inherent attribute of most systems to address the delicate balance between the demands of those who have lent their hands, minds, talents, and time to the creation of new works and those who desire access to the creative products. However, there appears to be current urgency to revisit these various topics. Whatever the catalyst, the issues are very dynamic, and at times, the interests considered are extraordinarily pressing and dramatic.

Misunderstanding punctuates the discussion for many potential reasons, such as failure of inquiry, failure to truly appreciate the presumptions and perspectives of others in the

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dialogue, or intentional or unintentional nondisclosure of assumptions. This has, in fact, led to continuing tension, and often, unsatisfactory outcomes in the global intellectual property community.

This Article will discuss certain innovations and the conditions that have precipitated the current focus upon intellectual property regimes. Further, it will propose consideration of four discriminant and differential factors that might be used in developing a responsible protocol to cogently evaluate various considered approaches to recognizing and adjusting the myriad and sometimes competing interest in products of the mind.

TABLE OF CONTENTS

1.	Introduction.....	1167
2.	Perceived Changes in the Innovation Paradigm.....	1171
3.	Technological/Transactional Differential	1173
4.	A Cultural Differential	1207
	4.1. <i>Culture and the Theory of Property</i>	1207
	4.1.1. <i>Cultural Components</i>	1211
	4.1.1.1. <i>Individualism and Collectivism</i>	1212
	4.1.1.2. <i>High vs. Low Context</i>	1215
	4.1.1.3. <i>A Coalescence of the Cultural Principles</i> <i>and Their Effect on Use of Innovation</i>	1218
	4.1.2. <i>Legal Traditions</i>	1223
5.	A Principled Differential.....	1225
	5.1. <i>The Characteristic of IP</i>	1225
	5.2. <i>Theories of Property and the Protection of IP</i>	1230
	5.2.1. <i>A Natural Law Approach</i>	1231
	5.2.2. <i>Utilitarianism</i>	1238
	5.2.3. <i>Property as a Product of Community and Social</i> <i>Relationships</i>	1241
6.	An Economic and Political Differential – the Protection of Intellectual Property in the Global Trading Arena.....	1245
	6.1. <i>The Berne Convention</i>	1247
	6.2. <i>GATT and the WTO</i>	1248
	6.2.1. <i>The TRIPS Agreement</i>	1249
	6.2.2. <i>The Doha Declaration</i>	1250
	6.2.3. <i>Comments on TRIPS</i>	1255
	6.3. <i>Conflict by Example</i>	1259
7.	Conclusion	1267

1. INTRODUCTION

There have been several challenges to the architectonics of the domestic and global regimes that define and provide protection to property interests. These challenges include advances in technology, changes in product configuration¹ and market structure,² perceived evolution in innovation paradigms,³ and shifts in the perspectives of individuals and groups with respect to access to⁴ and use of products of the mind,⁵ have presented challenges to the architectonics of the domestic and global regimes that define and provide protection to intellectual property

¹ It was not long ago that there was considerable vertical integration of computer related products within single firms such as IBM and AT&T. For example, software was bundled with the hardware upon which it ran, and the firm that sold the perceived single product also provided maintenance and support. See MICHAEL A. CUSUMANO, *THE BUSINESS OF SOFTWARE* 86 (2004) (noting that in the 1950s, systems services launched the software industry, although system products were used to sell hardware). Applied Data Research, founded in 1959, was one of the first entities to sell software separate and apart from hardware. *Id.* at 91.

² As a result of an antitrust settlement, AT&T was obligated to offer Unix software apart from its hardware. See PETER SALUS, *A QUARTER CENTURY OF UNIX* 59 (1994) (noting that AT&T would license its software even though it did not intend to pursue it as a business).

³ Some commentators have characterized the phenomenon of user innovation and collaboration and the growing demand for open source access to intellectual property as essentially new. Such is not necessarily the case. Rather, it may be that enhanced communication through the Internet has given rise to an enhanced awareness of the opportunity for broad, and in some cases, unbounded use and collaboration. It has contributed to the misperception that innovation has no origin or identifiable creator and thus no one to claim a legitimate proprietary interest. Finally, the Internet has amplified the voices of the many users, who demand free access to innovation; this has, at times and by sheer numbers, overwhelmed the relative few who are the contributors of new works.

⁴ See generally THE COPY/SOUTH RESEARCH GROUP, *THE COPY/SOUTH DOSSIER: ISSUES IN THE ECONOMICS, POLITICS, AND IDEOLOGY OF COPYRIGHT IN THE GLOBAL SOUTH* (Alan Story et al. eds., 2006) [hereinafter *THE COPY/SOUTH DOSSIER*], available at <http://www.copysouth.org/en/documents/csdossier.rtf> (expressing concerns that copyright laws lead to the privatization of common cultural heritage and improperly impose western creative traditions upon the global South).

⁵ See DEP'T OF PUB. SERV. & ADMIN., *POLICY ON FREE AND OPEN SOURCE SOFTWARE USE FOR SOUTH AFRICAN GOVERNMENT 2* (2006), available at <http://www.info.gov.za/view/DownloadFileAction?id=94490> (describing the South African Government policy of favoring and promoting free and open source software when possible).

interests. In principle, this is not a new phenomenon.⁶ It is, in fact, an inherent attribute of most systems to address the delicate balance between the demands of those who have lent their hands, minds, talents, and time to the creation of new works and those who desire access to the creative products. There does, however, appear to be current urgency to revisit the topic. Perhaps it is precipitated by the concerns of innovators who fear that current social trends militate against full exploitation of their interests. Perhaps it is due to the voice of those who feel constrained in the liberal exploitation of new works and inventions not of their creation. Whatever the catalyst, the arena considering the issues is very dynamic, and at times, the interests considered are extraordinarily pressing and dramatic.⁷ As observed by Director-

⁶ In the software area, many early developers were academic investigators or avocational users, and by custom, it was not unusual for them to freely and frequently share code with collaborators. Whether unconcerned with protecting any proprietary interest or confused by the undeveloped incipient legal regimes through which some protection might be available, they oftentimes implicitly licensed rights to copy, modify, and distribute second and greater generation derivatives. See Marshall Kirk McKusick, *Twenty Years of Berkeley Unix: From AT&T-Owned to Freely Redistributable*, in *OPENSOURCES: VOICES FROM THE OPEN SOURCE REVOLUTION* 31 (Chris DiBona et al. eds., 1999) (detailing the spread of open source culture among the UC Berkeley computer science, mathematics, and statistics departments); see generally MARTIN CAMPBELL-KELLY, *FROM AIRLINE RESERVATIONS TO SONIC THE HEDGEHOG: A HISTORY OF THE SOFTWARE INDUSTRY* (2003) (tracing the history of the software industry from the 1950s through the 1990s).

⁷ For example, the access to pharmaceuticals movement has called for addressing the world health crisis by better balancing developing countries' access to affordable, lifesaving pharmaceuticals with maintaining drug manufacturers' IP rights:

The need to facilitate access to essential medicines for those with life-threatening or fatal diseases like HIV, tuberculosis, and malaria has generated significant interest. Yet, an inevitable tension exists between the need for pharmaceutical companies to profit from their patented inventions and the desire to provide access for impoverished persons. Developing nations have attempted to resolve this tension through the issuance of patent compulsory licenses—authorizations for government-approved generic copies—so that those in need of the most important new treatments can obtain them at an affordable price.

However, the practice of compulsory licensing comes with a price: the temporary or permanent deprivation of some part of a patent owner's right to exclude disrupts the investment-backed expectation of the property right. In the future, pharmaceutical companies and other industries dependent upon intellectual property rights may mistrust licensing nations' promises to protect and enforce patent rights, not to mention copyrights and trademarks. As a result, industries that find the

General of the World Trade Organization (“WTO”), Pascal Lamy, in his address to the World Intellectual Property Organization (“WIPO”) Conference on Intellectual Property and Public Policy Issues on July 14, 2009:

Let me first applaud the timely initiative taken by the World Intellectual Property Organisation (“WIPO”) to set public health together with the issues of climate change, biodiversity and food security at the heart of its ambitious new program on intellectual property (“IP”) and global challenges.

This initiative reaffirms that the international IP system cannot operate in isolation from broader public policy questions such as how to meet basic human needs for health, food and a clean environment

IP has moved to the centre of cross-cutting debates that defy traditional boundaries between separate policy domains, and between distinct areas of technical expertise. Coherence, cooperation and practical dialogue within the international system is indispensable, if we are to address these fundamental policy questions in a sustainable manner.

. . . .

Consider the international dimension of confronting the HIV-AIDS pandemic, the continuing devastation wrought by neglected diseases, suffered mostly by the world’s poorest communities, the resurgence of resistant strains of TB, and the current H1N1 flu pandemic. Climate change will likely have a severe impact on disease patterns and on agriculture: so health, food security and adaptation to climate change are fundamentally interlinked. To retreat behind borders—whether they are national borders, or

security of property rights lacking in a given nation may avoid engaging in foreign direct investment (FDI) with that nation. Because FDI is a major potential source of economic growth for recipient nations, the loss of such investment resources arising from compulsory licensing practices could force developing nations to pay a particularly heavy cost for providing needed medicines for its citizens.

Robert Bird & Daniel R. Cahoy, *The Impact of Compulsory Licensing on Foreign Direct Investment: A Collective Bargaining Approach*, 45 AM. BUS. L.J. 283, 283–84 (2008).

formal boundaries between our institutions—is not an option.⁸

It is truly a difficult, perhaps even impossible, task to develop a comprehensive scheme that would fully respond to the composite concerns presented.⁹ This is often exacerbated by proponents of

⁸ Pascal Lamy, WTO Dir.-Gen., Strengthening Multilateral Cooperation on IP and Public Health (July 14, 2009), http://www.wto.org/english/news_e/sppl_e/sppl131_e.htm (last visited Apr. 6, 2011).

⁹ The incongruity with respect to social claims of equitable distribution of entitlement can, at times, present irreconcilable conflict. The consequence can be articulation of inconsistent policy or preference, and identifying a proper course of action may be extraordinarily difficult. For example, there seems to be considerable opinion that promotion of biodiversity is indispensable to the success of the world community. As a related matter, use of indigenous knowledge is recognized as a rich source of scientific information. See United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3–14, 1992, *Report of the United Nations Conference on Environment and Development*, 390 A/CONF.151/26/Rev.1 (Vol. I) (1993), available at http://www.un.org/esa/dsd/agenda21/res_agenda21_00.shtml. (noting the importance to indigenous people of environmental conservation and their role in undertaking sustainable development). Bioprospecting has been employed as a means of tapping that information. In this context, however, concern has been expressed that the use of ethnographic information that contributes to proprietary innovation, such as in the area of pharmaceuticals, present a moral/legal claim in favor of native tribes who developed the information for economic compensation for their contribution. Use of such information without insuring native participation has been labeled as biopiracy. Note, for example, the historical conflict between Brazil and Novartis. See Thierry Ogier, *Holding Pattern: Biotech in Brazil? Perhaps Not Soon, Investors Warn*, in *LATIN TRADE* 53, 54 (2001) (discussing the pharmaceutical company Novartis's agreement to invest \$4 million in developing research programs in Brazil, in exchange for which the company would be permitted to ship 10,000 gene samples to its headquarters in Basel, Switzerland). Later, Novartis was accused of biopiracy by Brazil and the agreement fell apart. *Id.* This form of conflict diminished from the purchase of technological advances by purchase and could present an unrealistic demand if the same organizations who present that argument also prefer open and uncompensated access to the innovations to which the information contributed. If one were to incorporate into the cost of doing business the imputed cost of ethnographic information, it would be somewhat incongruous to also appropriate the product at no or reduced cost. See generally Peter Drahos, *A Networked Responsive Regulatory Approach to Protecting Traditional Knowledge*, in *INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT* 385 (Daniel J. Gervais ed., 2007) (exploring the ramifications and possible complications of an international treaty concerning indigenous peoples' intellectual property interest in traditional knowledge); Decision of the General Council of 30 August 2003, *Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, WT/L/540 (Sept. 2, 2003) (addressing access to medicines by countries that lack pharmaceutical manufacturing capacity); Peter K. Yu, *The Objectives and Principles of the TRIPS Agreement*, 46 *HOUS. L. REV.* 979, 980 (2009) (discussing "contentious negotiations" before the TRIPS Agreement went into force). Consider also the provision of the Berne Convention for the Protection of

various positions or failing to disclose certain philosophical, political or cultural assumptions and propositions. Whatever the source of the challenge and whatever the accommodations to be considered, it is incumbent upon all of those responsible for or interested in the construct of intellectual property ("IP") to reasonably heed the cry.

This Article will discuss certain innovations and the conditions that have precipitated the current focus upon intellectual property regimes. In the course of the exegesis, it will propose and employ four discriminant and differential factors that might be used in developing a responsible protocol to cogently evaluate various considered approaches to the topics. The four chosen categories are intended to precipitate a discussion of many inchoate assumptions often overlooked or avoided. They are not, however, intended to be exhaustive; nor are they necessarily separate and discrete. Rather, they are rough approximations used to identify subject areas around which legitimate concerns cluster and should be understood to interrelate to one another. For the sake of discussion these differential categories are labeled: I. Technological/Transactional, II. Cultural, III. Principled, and IV. Economic.

2. PERCEIVED CHANGES IN THE INNOVATION PARADIGM

Recent years have given rise to a variety of notable advances in areas such as xenotransplantation, gene therapy, nanotechnology, and transnuclear technology. Perhaps the single greatest impact upon the research strategies, as well as the habits of the global community at large, has been the digital revolution. This includes the consequent and enhanced ability to communicate with others and share or access information.¹⁰ This state of affairs has been the

Literary and Artistic Works and the provisions concerning deference to developing countries. See PETER DRAHOS & JOHN BRAITHWAITE, *INFORMATION FEUDALISM: WHO OWNS THE KNOWLEDGE ECONOMY* 77 (2002). Intellectual property claims are reported to have a limiting effect upon the availability of textbooks at affordable cost to developing countries. See THE COPY/SOUTH DOSSIER, *supra* note 4 at 96-99 (noting that copyright law has greatly hindered developing countries' access to textbooks by rendering textbooks unaffordable to most citizens).

¹⁰ A recent Pew Research Center study provided insight into changes in use of the internet between 2000 and 2009:

-2000: 46% of adults used the internet

-2009: 77-79% of adults use the internet

result of an evolution toward an economy based far more on the value and transfer of soft products, such as information and culture, than had been extant in the twentieth century. The serendipitous coalescence of this new state of affairs with the availability of inexpensive, and therefore widely distributed, hardware facilitates the exchange of information. In this regard, Yochai Benkler has observed that the more liberal access to cheap processors with high computational capacity “allows for an increasing role for nonmarket production in the information and cultural production sector, organized in a radically more decentralized pattern” and the shift to soft products “means that these new patterns of production—nonmarket and radically decentralized—will emerge, if permitted, at the core, rather than the periphery of the most advanced economies.”¹¹

The observed decentralization not only suggests a movement that offers positive opportunity through an open exchange of information,¹² it also introduces nonmarket forces that challenge traditional and well-established proprietary market principles.¹³

-2000: 5% of households had broadband

-2009: 63% of households have broadband

-2000: 0% connected to internet wirelessly

-2009: 54-56% connect to the internet wirelessly

Lilli Ladaga, *A Decade of the Internet*, YAHOO! NEWS (Dec. 7, 2009, 9:26 PM), http://news.yahoo.com/s/ynews_deca/ynews_deca_ts997 (citing Lee Rainie, *The New Information Ecology Presentation*, PEW RESEARCH CTR. (Nov. 20, 2009)), available at <http://www.slideshare.net/PewInternet/the-new-information-ecology>).

¹¹ YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 3 (2006).

¹² Yochai Benkler identifies three ways in which the networked information economy improves the practical capacities of individuals:

(1) it improves their capacity to do more for and by themselves; (2) it enhances their capacity to do more in loose commonality with others, without being constrained to organize their relationship through a price system or in traditional hierarchical models of social and economic organization; and (3) it improves the capacity of individuals to do more in formal organizations that operate outside the market sphere Individuals are using their newly expanded practical freedom to act and cooperate with others in ways that improve the practiced experience of democracy, justice and development, a critical culture, and community.

Id. at 8-9.

¹³ See ERIC VON HIPPEL, *DEMOCRATIZING INNOVATION* 2 (2005) (“Open, distributed innovation is ‘attacking’ a major structure of the social division of

This may, in some circumstances, be perceived as a proper and welcome stimulus to progress in the production of information. But, one should give pause when one considers that the amplification of production may beget other negative externalities. Consequently, ideas and ideals of the proprietary treatment of products of the mind must be carefully reviewed so that they may keep pace with and respond responsibly to developing nonproprietary pressures.

To properly assess alternative strategies that might be employed within the global community to respond to the demands of innovation, it is necessary to understand the variables and relationships between intellectual property and the advancement of creativity. Features of a protocol of analysis might include the technological/transactional details; the cultural dispositions that influence the extent of the recognition and exploitation of IP; the characteristics of products of the mind that distinguish them from other forms of property; the various underlying philosophies of property that contribute to and moderate the protection of IP; and economic and political considerations.

3. TECHNOLOGICAL/TRANSACTIONAL DIFFERENTIAL

Recent attention has, for example, turned (or returned) to the phenomenon of user-centered innovation and its resulting desire for the free exchange of information.¹⁴ The phenomenon has been observed not only in the software industry, as previously mentioned,¹⁵ but also in perhaps such unexpected physical product

labor. Many firms and industries must make fundamental changes to long-held business models in order to adapt.”).

¹⁴ See *id.* at 2-3 (detailing how the emerging process of user-centric, democratized innovation works and how the ongoing shift has very attractive qualities).

¹⁵ See STEVEN WEBER, *THE SUCCESS OF OPEN SOURCE 1* (2004). See also John P. Ullhøi, *Open Source Development: A Hybrid in Innovation and Management Theory*, 42 *MGMT. DECISION* 1095 (2004), noting:

The conventional notion of property is, of course, the right to exclude you from using something that belongs to me. Property in open source is configured fundamentally around the right to distribute, not the right to exclude. If that sentence feels awkward on first reading, that is a testimony to just how deeply embedded in our intuitions and institutions the exclusion view of property really is.

Open source is an experiment in building a political economy – that is, a system of sustainable value creation and a set of governance mechanisms.

areas as the iron industry,¹⁶ in relation to improvements in steam engines in the nineteenth century,¹⁷ in the early development and manufacture of semiconductors by IBM,¹⁸ and in the development of sports equipment.¹⁹

This approach to innovation is often discussed in contrast to the traditional manufacturer and seller-based process. The distinguishing characteristics are that the users intend to benefit directly from their creative work, tend to share their innovations rather freely with other users, and depend upon rewards other than economic rewards to recognize their achievement. In contrast, the traditional manufacturing sector tends to rely more heavily upon principles of intellectual property so as to restrict access to information and processes by free-riders and thereby benefit by selling products or knowledge.

However, user innovation should not be perceived as completely independent of manufacturer innovation.²⁰ There is a crucial juncture at which the themes of user and manufacturer innovation intersect. The juncture reflects an important functional point of interrelationship between users and sellers. First, and

Id. Note, however, that not all open source products can, in fact, be freely distributed. For example, the Creative Commons License imposes certain limitations upon innovation. See *Attribution-NonCommercial-NoDerivs 3.0 Unported License*, CREATIVE COMMONS [hereinafter *Creative Commons License Unported*], available at <http://creativecommons.org/licenses/by-nc-nd/3.0/legalcode> (permitting the distribution and reproduction of a licensed work, but not the modification thereof in most instances).

¹⁶ See Robert C. Allen, *Collective Invention*, 4 J. ECON. BEHAV. & ORG. 1, 1 (1983) (discussing innovation in the iron and steel industries in nineteenth-century England).

¹⁷ See Alessandro Nuvolari, *Collective Invention During the British Industrial Revolution: The Case of the Cornish Pumping Engine*, 28 CAMBRIDGE J. ECON. 347, 349 (2004) (applying Robert Allen's theory of "collective invention settings" to developments in steam engine technology).

¹⁸ See VON HIPPEL, *supra* note 13, at 79 (describing a research paper which reported that "IBM was first to develop a process to manufacture semiconductors that incorporated copper interconnections among circuit-elements instead of the traditionally used aluminum ones").

¹⁹ See Nikolaus Franke & Sonali Shah, *How Communities Support Innovative Activities: An Exploration of Assistance and Sharing Among End-Users*, 32 RES. POL'Y 157, 158-60 (2003) (discussing innovation in the manufacture of equipment for the sports of sailplaning, canyoning, boardercross, and handicapped cycling).

²⁰ See VON HIPPEL, *supra* note 13, at 126 (noting the manufacturer's role in user-centered innovation, such as (1) producing user-developed products, (2) supplying toolkits and/or platform products to users, or (3) providing complimentary products and services).

with respect to the character of innovative activity, users and manufacturers usually develop different, and at times, complementary types of information. That which is usually generated by users tends to have great value and responds directly to specific, identified, and often immediate individual needs of a discrete innovator. Furthermore, due to the cost and inconvenience of moving information from forum to forum, individual innovators tend to use information that they have at hand. To the contrary, that which is frequently within the domain of sellers is often more complex, more mature and developed, and directed toward general solutions. Consequently, traditional manufacturers tend to develop more generic solutions that can be marketed to a broader community.²¹ As noted by Eric von Hippel:

The goal of product development and service development is to create a solution that will satisfy needs of real users within real contexts of use. The more complete and accurate the information on these factors, the higher the fidelity of the models being tested User-innovators, for example, will . . . have better information about their needs and their use context than will manufacturers. After all, they create and live in that type of information in full fidelity! Manufacturer-innovators, on the other hand, must transfer that information to themselves at some cost However, manufacturers might well have a higher-fidelity model of the solution types in which they specialize than users have.²²

Second, insofar as user innovation is discrete, solution driven, and not based upon an immediate and separate goal of monetization, individual users may be fulfilled by mere application of their creative solution to the task at hand, freely disclose their innovations to others, and claim no proximate interest in intellectual property.²³ As a consequence, that information frequently enters the public domain and becomes available to other users. As a corollary, however, it also becomes

²¹ See Eric von Hippel, "Sticky Information" and the Locus of Problem Solving: Implications for Innovation, 40 MGMT. SCI. 429, 429 (1994) (exploring the impact of heightened information costs on innovation-related problem solving).

²² VON HIPPEL, *supra* note 13, at 66-67.

²³ See *id.* at 79 (explaining that innovating users claim no interest in intellectual property protection).

available to the traditional manufacturing sector. Thus, it is extraordinarily important to place innovation into the particular and proper market context and observe how the interest and opportunities of users and sellers may blend.

It would be improper, however, to precipitously conclude that open source innovators receive no private benefit from their disclosure. While manufacturers receive benefit in the form of an economic return on their creativity through exploitation of intellectual property, open source users receive other benefits.²⁴ For example, with the help and collaboration of other contributing innovators, individuals may obtain cost-free improvements that provide enhanced solutions for very personal needs. Disclosure also can enhance the user-innovator's reputation;²⁵ offer an introduction and access to a community of other innovators who share her interests; offer opportunities for further networking within her areas of interest; and provide simple self-satisfaction.²⁶ Finally, to the extent that the information is valuable to the manufacturer community, users can obtain improved and more general use products that better respond to their needs.

A more recent and complementary innovative industrial movement promises (or depending upon your vested position, threatens) to revolutionize the manufacturing component for the

²⁴ The "maximization premise" concludes that individuals are generally goal oriented and will act in ways in which they perceive themselves better off. See, e.g., HAROLD D. LASSWELL, A PRE-VIEW OF POLICY SCIENCES 16-17 (Yehezkel Dror ed., 1971) (referring to the "maximization postulate" and explaining that people only act in a way when they believe the action will leave them better off). Participants may be driven by a variety of valued motivators that include not only an economic return but also power, rectitude, affection, et al. In addition, perceptions founded upon subjective judgments vary considerably.

²⁵ See Giovanni De Fraja, *Strategic Spillovers in Patent Races*, 11 INT'L J. INDUS. ORG. 139, 139 (1993) (arguing that firms may benefit from disclosing scientific knowledge resulting from research to the general public, and to its product market competitors, even in the absence a contractual agreement to do so); Josh Lerner & Jean Tirole, *Some Simple Economics of Open Source*, 50 J. INDUS. ECON. 197, 198 (2002) (explaining that major corporations have engaged in open source projects and that open source software development has been publicly recognized as an important organizational innovation). Certain countries by their legal tradition protect that which is known as the *droit morale* or moral right in a work. The protection of such rights has become more widespread through the requirements of Article 6bis of the Berne Convention.

²⁶ While American society tends to revere individual achievement and provide economic rewards, other sectors, communities, and nations place value on other attributes. See generally LASSWELL, *supra* note 24 at 16 (explaining the role of subjectivity in the "maximization postulate").

delivery of goods. Inspired by groups like Threadless,²⁷ an open-design t-shirt company, some manufacturing innovators are moving toward producing community—or crowd-sourced—products. Described as micro-manufacturing, participant firms tap into designers who lack the financial resources necessary to develop an adequate manufacturing infrastructure to exploit their ideas and through “build centers,” translate community sourced ideas into tangible products.²⁸ An example of such a build center is the Rally Fighter automobile, available from Local Motors of Wareham, Massachusetts.²⁹ Local Motors organized a design competition through which it acquired a community-sourced plan for the automobile, a vehicle it manufactures and assembles in collaboration with Factory Five Racing,³⁰ a neighboring kit-car company.³¹

This effort is not, however, limited to the domestic market. Global design chains are becoming scale-free in response to a proliferation of inexpensive and powerful prototyping tools capable of use by non-professionals.³² “The money on the table is

²⁷ An organization named Threadless solicits ideas from readers for t-shirts designs. Community members can submit designs to a competition and may win up to \$25,000 in accord with the information on the site. For more information pertaining to the competition, see *Submit an Idea for a Chance at Twenty-Five Hundred Dollars!*, THREADLESS, <http://www.threadless.com/submit> (last visited Apr. 12, 2011).

²⁸ See Chris Anderson, *Atoms are the New Bits*, WIRED MAG. Feb. 2010, at 59, 62 (explaining that the majority of car design students do not graduate with jobs with auto companies and that Local Motors creates a forum where frustrated designers can put their ideas into practice).

²⁹ For the basic rules progressing from crowdsourced ideas to local micro-build manufacturing, see *How It Works*, LOCAL MOTORS, <http://www.localmotors.com/rules.php> (last visited Apr. 6, 2011).

³⁰ Factory Five Racing sponsors a “build school” at Mott Community College in Howell, Michigan, at which it provides instruction on kit car assembly techniques. See *Build School*, FACTORY FIVE RACING, <http://www.factoryfive.com/roadster/build/school.html> (last visited Apr. 12, 2011) (detailing Factory Five Racing’s build school program).

³¹ See Anderson, *supra* note 28, at 62 (“This combination—have the pros handle the elements that are critical to performance, safety, and manufacturability while the community designs the parts that give the car its shape and style—allows crowdsourcing to work even for a product whose use has life-and-death implications.”).

³² TechShop, for example, is a community-sourced location that provides tools, equipment, classes, and the like to members to enable them to build their dream products. See *What do You Want to Make at Techshop*, TECHSHOP, <http://www.techshop.ws> (last visited Apr. 12, 2011) (overviewing TechShop’s program).

like krill: a billion little entrepreneurial opportunities that can be discovered and exploited by smart, creative people.”³³ The only impediment apparently had been a lack of a manufacturing instrument capable of bringing the intangible ideas to a tangible reality. Recently, however, there has been a considerable and observable shift in available manufacturing resources, and more factories are becoming willing and able to respond to low-volume internet-based orders that present the potential for high marginal profit. As observed by Chris Anderson, “[t]he collective potential of a million garage tinkerers is about to be unleashed on the global markets, as ideas go straight into production, no financing or tooling required.”³⁴

Many of these micro industries are, in fact, located in China.³⁵ This is likely due to Chinese businesses responding quickly to Web-centric activity and exhibiting a willingness to accept orders via email and payment by credit card or PayPal; it is also potentially fueled by the current “deflationary spiral of commodity goods,” which has caused companies to look to new means by which to turn a profit.³⁶ Whatever the stimulus, however, the change is seen and promoted by many as no less than revolutionary.

It would be quite hazardous, however, to infer that the open source models described above provide cost-free and readily accessible benefits to all. Advocates of open source information and community-sourced products tend to emphasize and extol the virtues and potential positive attributes of these methods to the

³³ CORY DOCTOROW, *MAKERS 11* (2009).

³⁴ Anderson, *supra* note 28, at 64.

³⁵ Of particular interest to the U.S. Trade Representative, however, is that many of these Chinese factories were previously engaged in piratical activities, including the manufacture of knockoff and counterfeit products. *See id.* at 65 (explaining that Chinese vendors whose business thrive by making knock-offs are leading the manufacturing side of the maker revolution because they are able to work flexibly and quickly with micro-entrepreneurs).

³⁶ *See id.* (providing another reason why micro industries locate to China). For an example of this kind of business, see www.alibaba.com. *But cf.* SHANZAI, www.shanzai.com (last visited Apr. 12, 2011) (specializing in counterfeit and knock-off goods). Shanzai’s website claims that Shanzai is a Mandarin Chinese word meaning “Mountain Bandit or Fortress.” *About Shanzai.com*, SHANZAI.COM, <http://www.shanzai.com/home/about-us#axzz1Gyqscq8i> (last visited Apr. 6, 2011). The website also claims that Shanzai has assumed cultural meaning of “a vendor who operates a business without observing the traditional rules or practices—often resulting in innovative and unusual products or business models.” *Id.*

exclusion of disclosure and critical analysis of opportunity costs. For example, proponents often proffer that open source provides enhanced opportunities for non-market creativity through the elimination or reduction of market-based or industrial barriers to both information and products. Further, they argue that the resulting products possess technical superiority due to contributions of numerous and diverse individuals.³⁷ Another argument suggests that open source offers an improvement of social welfare through enhanced opportunities for inter-human connectedness. Finally, proponents argue that the process “democratizes” innovation and production to the political benefit of all.³⁸ Unfortunately, in the effort to promote the cause, there is

³⁷ See ERIC S. RAYMOND, *THE CATHEDRAL AND THE BAZAAR: MUSINGS ON LINUX AND OPEN SOURCE BY AN ACCIDENTAL REVOLUTIONARY* ix-x (Tim O’Reilly ed., 1999) (describing many of the benefits that open-source software provides); *History of the OSI*, OPEN SOURCE INITIATIVE, <http://www.opensource.org/history> (last visited Apr. 12, 2011) (highlighting the history of the Open Source Initiative, an “educational, advocacy, and stewardship organization that is centered on the idea of distributed peer review”).

³⁸ An academic article, for instance, explains:

[T]he concept of a *right to communicate* (RTC)—has formed the basis of an intellectual and political movement for the past 35 years. Many of its principal adherents were or are rooted in academia, and might be characterized as the political offshoot of the critical communication scholarship of the 1960s and ’70s. One can therefore speak of an ideology underlying the campaign . . .

RTC is a general norm based on ideals of participatory democracy. It asserts that all citizens must have a say, a communication right, in any and every governance process that affects them. It believes that a “right to hear and be heard, to inform and be informed,” and “to participate in public communication” (MacBride Commission, 1980) should be the touchstone of communication policy. These claims are presented as a “new human right” that expands and supersedes the individual rights of freedom of speech, the press, and assembly associated with classical liberalism. Free expression, the advocates of RTC believe, is enhanced by constructing an environment that facilitates full, well-rounded human communication. The environmental factors that realize “communication rights” are rather sweeping, including such things as improved education, “a diverse and independent media,” the “elimination of prejudice, hatred, discrimination and intolerance,” and the “promotion of cultural and social self-determination.” Theorists of . . . contend that these broader “flanking” conditions enhance liberal freedoms, and thus their writings do not dwell on how conflicts between them might arise, or how they would want to see such conflicts resolved . . .

Communities, nations and individuals can and often do assert conflicting claims against each other in numerous areas of communication-information policy (such as public security vs. privacy and free

often a failure to acknowledge and disclose limitations and qualifications on access and use. These generally include that open source is frequently restricted and conditional; it is often monetized or is employed by many in profit-making endeavors; and, within the bounds of recognizing private property, it clearly expresses a preference for protecting tangible property to the exclusion of intangible. There are innumerable other negative externalities, economic and social, attributable to a model of open access. Indeed, there are several misunderstandings or misrepresentations of particular and notable significance.

First, the use of free and open source software ("FOSS"),³⁹ commercial open source software ("COSS"), and works covered by the Creative Commons arrangement⁴⁰ are not actually "free" in the broadest and most readily understood sense.⁴¹ Even in an open

expression, or in cultural and religious conflicts over educational policy). It is, moreover, a practical issue and not just a problem of theoretical consistency. . . .

. . . .

A . . . view of communication rights . . . sees it as a broad normative banner and the language of "rights" more as a framing tactic than as something to be taken literally and applied legalistically. This worldview steps away from the legacy of d'Arcy and openly acknowledges, even embraces, the lack of precision in the norm. It is the very incompleteness of the idea that makes it possible to serve as a banner that can be waved by neo-Marxists, feminists, liberals, human rights advocates, social democrats and many other social movements involved in communication-information policy.

Milton L. Mueller et al., *Democratizing Global Communication? Global Civil Society and the Campaign for Communication Rights in the Information Society*, 1 INT'L J. COMM. 267, 274-77 (2007).

³⁹ The term free and open source should not be viewed as implying a uniform philosophy among all users of the terms. For a discussion of some of the differences among advocates of free versus open source access, see Richard Stallman, *Why Open Source Misses the Point of Free Software*, GNU OPERATING SYSTEM, <http://www.gnu.org/philosophy/open-source-misses-the-point.html> (last visited Apr. 12, 2011) (explaining that while the free software and open source communities are often conflated, they espouse very different values and ideals). For a definition of "open source," see *The Open Source Definition*, OPEN SOURCE INITIATIVE, <http://opensource.org/docs/osd> (last visited Apr. 12, 2011).

⁴⁰ The Creative Commons License includes specific license grants in Section 3 and restrictions in Section 4. *Creative Commons License Unported*, *supra* note 15, §§ 3-4 (defining the terms of the creative commons public license).

⁴¹ For a good explanation of these principles, see generally Greg Vetter, *Open Source Software and Information Wealth*, in 1 INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE 421 (Peter K. Yu ed., 2007).

source forum, access to each form is generally conditioned upon users' agreement to restrictive and conditional terms of use. These are usually contained within specific and respective IP licenses, and as suggested above, the actual arrangements vary depending upon the underlying philosophy or motive of the original developer or provider. So, for example, the GNU General Public License ("GPL"),⁴² offered by the Free Software Foundation,⁴³ states in the preamble:

[I]f you distribute copies of . . . a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.⁴⁴

While it may embrace a particularized philosophy of freedom of certain use, one should take serious note of the imposed conditions or restrictions on exploitation. While the permission could have stated that one can do anything she wants with the code, it chose rather to limit user freedom. The license conditions use upon full disclosure of the source code downstream. This restriction is fully consistent with the principles of the U.S. Copyright Act, which grants to an author of a qualified work the ability to control not only the creation of derivative works, but also certain distributions.⁴⁵

Furthermore, the GPL is intentionally designed as a license, rather than a simple contract.⁴⁶ As a result, standards of

⁴² *GNU General Public License*, FREE SOFTWARE FOUND., <http://www.fsf.org/licensing/licenses/gpl.html> (last visited Apr. 6, 2011).

⁴³ The Foundation is a non-profit organization formed in 1985 by Richard Stallman, a moving force in the free software movement. See Richard Stallman, *The Free Software Foundation Management*, FREE SOFTWARE FOUNDATION, <http://www.fsf.org/about/leadership> (last modified Mar. 7, 2011) (stating that Richard Stallman founded the foundation in 1985).

⁴⁴ *GNU General Public License*, *supra* note 42, pmbl.

⁴⁵ See 17 U.S.C. § 106 (2006) (outlining copyright holders' exclusive rights in copyrighted works including inter alia, the right to prepare derivative works and the right to distribute specified copies).

⁴⁶ See Eben Moglen, Gen. Counsel of the Free Software Found. & Chairman of Software Freedom Law Ctr., Speech at the 3rd [sic] International GPLv3 Conference (June 22, 2006), <http://fsfe.org/projects/gplv3/barcelona-moglen-transcript.en.html> (asserting the position that the GPL is a pure license); see also Richard M. Stallman, *Don't Let "Intellectual Property" Twist Your Ethos*, GNU OPERATING SYSTEM, <http://www.gnu.org/philosophy/no-ip-ethos.html> (last

intellectual property that relate to ownership,⁴⁷ transfer of interests,⁴⁸ the ability to control derivative works,⁴⁹ and presumptions as to retention of interests may apply in lieu of simple common law contract construction rules.⁵⁰ As a result, should a user fail to comply with the conditions of use, remedies such as general statutory damages, enhanced damages, and attorney's fees that are generally not available for breach under contract principles may be available through IP statutes.⁵¹

Most important, however, is that if a user is not compliant with the conditions of the license, she would be liable as an infringer. While it appears anomalous that what seems to be an anti-intellectual property or "CopyLeft" initiative would rely on the Copyright Act to enforce the obligations contained within the license, that is the case.⁵² For example, the Free Software Foundation, through the efforts of Richard Stallman and later Bradley M. Kuhn, formalized infringement enforcement efforts through the organization's GPL Compliance Labs.⁵³ As observed by Heather Meeker of Linksys:

visited Apr. 12, 2011) (noting the preference to distribute free software via licenses rather than as traditional contracts).

⁴⁷ See, e.g., 17 U.S.C. § 101 (defining "work made for hire" under the U.S. Copyright Act).

⁴⁸ For example, *Gardner v. Nike, Inc.*, 279 F.3d 774 (9th Cir. 2002), and *Everex Sys., Inc. v. Cadrak Corp.*, 89 F.3d 673 (9th Cir. 1996), held that licensees must obtain licensors' consent prior to assigning licenses.

⁴⁹ See 17 U.S.C. § 106(2) (conferring upon copyright holders the exclusive right "to prepare derivative works based upon the copyrighted work").

⁵⁰ See, e.g., *S.O.S., Inc. v. Payday, Inc.*, 886 F.2d 1081, 1088 (9th Cir. 1989) (holding that state common law contract presumptions against contract drafters do not extend to copyright licenses, which instead "are assumed to prohibit any use" which copyright licensors do not authorize).

⁵¹ See 17 U.S.C. § 412 (providing recovery of attorney's fees in copyright infringement suits where specified conditions are met).

⁵² The FSF's enforcement resources are quite significant. See Heather J. Meeker, *Open Source and the Legend of Linksys*, LINUXINSIDER (June 28, 2005, 5:00 AM), <http://www.linuxinsider.com/story/43996.html> ("The FSF, through its "Compliance Lab," conducts, according [sic] *Forbes* in 2003, 30 to 40 investigations at a time. That is quite a bit of work, which in a private company would take up at least a full time lawyer or two.").

⁵³ See Interview by Tina Gasperson with Bradley Kuhn, Founding Member, Software Freedom Law Ctr., <http://www.linux.com/archive/feature/132573> (noting that Bradley Kuhn helped form GPL Compliance Labs in order to facilitate GPL enforcement and that GPL Compliance Labs's caseload had increased to as many as thirty to fifty cases per year). Interestingly, Bradley Kuhn's home page notes: "ebb is a registered service mark of Bradley M. Kuhn, for his Open Source and Free Software consulting business." EBB.ORG, <http://www.ebb.org> (last

People often ask me how likely it is that an open-source license like the GNU General Public License will ever be enforced. When they ask that, they usually mean: “If I violate it will I get caught?” It’s a legitimate question, if one lays aside moral rhetoric, such as the idea that proprietary software companies are merely evil capitalist agents seeking to abuse the rights of free software developers.

It is the natural tendency of the citizens of a nation of laws to know exactly what the law allows them to do. Thus the legal profession, and thus the question: What can we get away with?

Now, even the most starry-eyed of us must acknowledge that with no enforcement there is no law. Anyone who has tried to train a dog to stay off the sofa knows that. So, no one will comply with the terms of a license agreement like the GPL, with which compliance can be challenging if not downright burdensome, unless they believe someone will enforce it.⁵⁴

Finally, and in accord with the language of the license itself, specific note is made that it is grounded in principles of copyright law, and as a result, its terms may not be modified without permission.⁵⁵

visited Apr. 6, 2011). See also Bradley M. Kuhn, *The SCO Subpoena of FSF*, GNU OPERATING SYS. (May 18, 2004), <http://www.gnu.org/philosophy/sco/subpoena.html> (explaining that the company had been subpoenaed “for every single document” pertaining to GPL enforcement as part of an “ongoing dispute between SCO and IBM”); Ryan Paul, *Free Software Foundation Lawsuit Against Cisco a First*, ARS TECHNICA, <http://arstechnica.com/open-source/news/2008/12/free-software-foundation-lawsuit-against-cisco-a-first.ars> (last visited Apr. 12, 2011) (reporting on FSF’s decision to sue Cisco over the company’s decision to “widely” distribute FSF software while also failing to meet “the requirements of the General Public License (“GPL”) under which the software is published”); Corbet, *Linksys/Cisco GPL Violations*, LWN.NET, <http://lwn.net/Articles/51570> (Sept. 30, 2003) (posting a recent e-mail from David Turner of the Free Software Foundation alerting Linux developers of the ongoing attempts to address GPL violations and detailing the reasons behind many of the delays).

⁵⁴ Meeker, *supra* note 52.

⁵⁵ *GNU General Public License*, *supra* note 42, (alerting its users that “[e]veryone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed”).

Second, and as noted generally above, it is improper to assume that the alleged non-market phenomenon of open or community source innovation necessarily excludes users who possess a profit motive. As one successful entrepreneur has noted, “[s]ometimes open source is . . . [created] by idealists, but I don’t think that is as prevalent as folks sometimes think.”⁵⁶ To make money, however, one needs to have something to sell.⁵⁷ Indeed, the tens of thousands of free “apps” available for the iPhone provides a good example of the “invent it now; sell it later” approach. Innovators create these “apps” and distribute many of them free of charge. After capturing an interested market and clientele, many of these innovators are now turning their attention to means by which they may economically exploit their creations. For example, some sell advertisements and others exploit users by marketing enhanced services.⁵⁸ A recent article in *Wired* addressed this specific point, and in that context it considered the social and economic concept of perceived waste and the consequent impact upon abundance-based and scarcity-based business models:

If you’re controlling a scarce resource, like the prime-time broadcast schedule, you have to be discriminating. There are real costs associated with those half-hour chunks of network time, and the penalty for failing to reach tens of

⁵⁶ E-mail from Brad Aronson, Founder of iFrontier, to author (Sept. 15, 2009, 11:14 PM EST) (on file with author).

⁵⁷ A current example of a “build it and they will come and pay” business is the iPhone. A myriad of “apps” are offered on iTunes. Some cost 99 cents, but many others are free. See John Fortt, *iPhone Apps: For Fun and Profit?*, CNNMONEY.COM (July 6, 2009, 10:26 AM), http://money.cnn.com/2009/07/06/technology/apple_iphone_apps.fortune/index.htm (noting that the Apple iTunes store contains thousands of apps, most of which sell for as low as 99 cents). Some may have been created out of charitable motives. See John Mahoney, *The Week in iPhone Apps: Apps for Charity*, GIZMODO (Dec. 19, 2008, 6:10 PM), <http://gizmodo.com/#!5114562/the-week-in-iphone-apps-apps-for-charity> (detailing apps developed for charitable purposes). However, others were created for the purpose of monetization. The weakness of the model is that it has proven difficult to turn a profit. See Fortt, *supra* (noting that most app developers are not widely profiting from apps yet). Advertisements are generally too small to be readable, and other profit-generating activities have not yet been identified.

⁵⁸ Pandora.com, for instance, began as a vehicle through which users could listen to a favorite genre of music for free. It has since added a number of discriminating and enhanced tiered service packages that users may purchase. See Tom Conrad, *Pandora One: Upgrade the Pandora Experience*, PANDORA (May 19, 2009, 6:55 PM), <http://blog.pandora.com/pandora/archives/2009/05/pandora-one-upg.html> (describing upgrades to Pandora radio which users may purchase).

millions of viewers with them is calculated in red ink and lost careers. No wonder TV executives fall back on sitcom formulas and celebrities – they’re safe bets in an expensive game.

But if you’re tapping into an abundant resource, you can afford to take chances, since the cost of failure is so low. Nobody gets fired when your YouTube video is viewed only by your mom.

For all YouTube’s successes, however, it has so far failed to make any real money for Google. The company has not figured out how to match video ads with video content the way it matches text ads with text content.

The TV networks saw an opportunity in this failing and created a competing video service, Hulu. It offers mostly commercial video, most of it taken from TV, but it is as convenient and accessible as YouTube. Because the content is a known quantity, often the same thing advertisers are already buying on TV, they’re happy to insert their commercials as pre-rolls, post-rolls, and even interruptions in the programming. It’s free, of course, but unlike on YouTube, you’re paying something in time and annoyance – just like on regular TV. However, if it’s *30 Rock* you want, and you want it now, in your browser, this is the simplest way you’re going to get it.

The YouTube model is totally free – free to watch, free to upload your own video, free of interruptions. But it doesn’t make money. Hulu is only free to watch, and you have to pay the good old-fashioned way, by watching ads you may or may not care about. Yet it generates healthy revenue. These two video outlets illustrate the tension between different variations on the free business model. Although consumers may prefer 100 percent free, a little artificial scarcity is the best way to make money.⁵⁹

⁵⁹ Chris Anderson, *Tech Is Too Cheap to Meter: It’s Time to Manage for Abundance, Not Scarcity*, WIRED MAG., June 22, 2009, http://www.wired.com/techbiz/it/magazine/17-07/mf_freer?currentPage=3.

While some licenses, such as that of the Creative Commons, attempt to limit monetization downstream,⁶⁰ others, such as the FOSS license,⁶¹ appear to accept, if not embrace, the traditional market concept.⁶² In fact, one very successful entrepreneur has observed that open source is a wonderful vehicle for small companies to become economically competitive. By opening up communications, an entrepreneur may not only access more participating developers, she can also open markets.⁶³ The approach has actually worked, even for larger and established companies. For example, as a commercial alternative to FOSS that requires that source code be made freely available downstream, Microsoft has commenced The Shared Source Initiative. Through this program, code is made available to a limited and select clientele with goals that it will:

- [1.] Bolster the freedom and success of customers, partners, researchers, and developers by affording them expanded access to source code.
- [2.] Enable Windows users to ensure the integrity and security of their computing environments.
- [3.] Enrich the development community by providing the tools to produce outstanding software.
- [4.] Enhance educational opportunities and to cultivate a vigorous software industry of the future by placing technology in the hands of universities throughout the world.

⁶⁰ See *Attribution 3.0 United States License*, CREATIVE COMMONS, <http://creativecommons.org/licenses/by/3.0/us/legalcode> § 4(b) [hereinafter *Creative Commons License United States*] (last visited Apr. 12, 2001) (setting forth downstream limitations on a licensee's grant to distribute, publicly display, publicly perform or create derivative/collective works).

⁶¹ *GNU General Public License*, *supra* note 42.

⁶² See *GNU Operating System: Selling Free Software*, FREE SOFTWARE FOUND., <http://www.gnu.org/philosophy/selling.html> (last updated July 27, 2010) (emphasizing that software developed under the GNU GPL license may be sold freely at any price and providing developers assistance on valuating such software on the open market).

⁶³ E-mail from Brad Aronson, *supra* note 56 (explaining that open source can help render small companies more competitive and allow other developers to improve such companies' software beyond their normal capacity).

[5.] Preserve the intellectual property rights that historically have fostered unparalleled innovation and growth in the global software industry.⁶⁴

Local Motors has also developed a means of direct commercial exploitation of the crowd-sourced designs that it employs. As noted above, the company sponsors design competitions that invite participants to register and submit innovative proposals.⁶⁵ It solicits the interest of registered community members and promotes the opportunity to participate directly in the creation of an automobile.⁶⁶ Competitions are held for myriad components and tasks,⁶⁷ including in the case of the Rally Fighter, overall design, artwork, engineering, parts-bin, and interior.⁶⁸ Winners are awarded cash and other prizes.⁶⁹ In the event that the company chooses to proceed to production of a particular vehicle, it will

⁶⁴ *Shared Source Initiative*, MICROSOFT, <http://www.microsoft.com/resources/sharedsource/default.aspx> (last visited Apr. 6, 2011).

⁶⁵ *LM Competition Description*, LOCAL MOTORS, <http://www.local-motors.com/competition.php> (last visited Apr. 13, 2011) (providing potential competitors logistical and background information on the Local Motors Design Competition).

⁶⁶ The competition guidelines contain a legal statement and license. The statement includes the following information concerning the inducement:

Given that automotive manufacturers for the past century have essentially been the only practical entity to make use of an automotive design, a larger body of automotive design work and creation has grown naturally to become the purview of the automotive manufacturers and their in-house design staff. Local Motors is in the business of trying to democratize that design process, and recognizes that this democratization will challenge the notion of where designers can find an outlet for their talents. Nonetheless, if you work (or have worked) for a company who might claim an interest to your auto design, you are advised to consult the company's legal counsel as to any restriction or ownership that company might have on your designs so that you might legally assign your Design to Local Motors as described above.

Local Motors Legal, LOCAL MOTORS, <http://www.local-motors.com/static.php?p=legal> (last visited Apr. 13, 2011).

⁶⁷ For a list of previous such tasks and competitions held by Local Motors, see *Past Competitions*, LOCAL MOTORS, <http://www.local-motors.com/competitions.php?focus=compPast0> (last visited Apr. 13, 2011).

⁶⁸ For a description of the Rally Fighter interior competition for instance, see *Rally Fighter Interior Competition*, <http://www.local-motors.com/competition.php?c=10> (last visited Apr. 13, 2011).

⁶⁹ See *Local Motors Legal*, *supra* note 66 (describing the types of prizes winners can expect to receive if their entry is selected).

award \$10,000 to the overall design winner.⁷⁰ Perhaps most important, however, is that in the event an entry is chosen as the “winner,” the participant agrees to assign the rights, title, and interest in the design to Local Motors so that it might exploit it in production, all in consideration of the prize awarded, with no further payments or royalties forthcoming.⁷¹

In the context of micro-manufacturing in China, the rewards may not be as generous as those provided by domestic businesses, which not only acknowledge but also, apparently, respect principles of IP ownership.⁷² As previously noted, many of the

⁷⁰ *Id.*, stating:

[I]f your Design is selected as the winning entry, you may no longer use, or allow others to use, such Design. In addition, Local Motors expects to, but is not obligated to, choose one of the Selected Designs as the basis for manufacturing an entire actual production vehicle; however, if it does choose one of the Selected Designs for that purpose, then Local Motors will pay you \$10,000 cash and you will have the ability to place your marque (e.g. stylized signature or name) on the vehicle which is ultimately manufactured.

Id.

⁷¹ *Id.*, stating:

Selected Design: If your Design is selected as the winning entry by Local Motors (the “Selected Design”) and in consideration for the Prize awarded to you by Local Motors, you hereby assign and agree to assign to Local Motors all right, title, and interest (including any and all intellectual and industrial property rights of any sort throughout the world) in and to such Selected Design. You shall assist Local Motors, at Local Motors’ expense, to further evidence, record and perfect such assignments, and to perfect, obtain, maintain, enforce, and defend any rights assigned. You hereby irrevocably designate and appoint Local Motors as your agents and attorneys-in-fact to act for and in your behalf to execute and file any document and to do all other lawfully permitted acts to further the foregoing with the same legal force and effect as if executed by you. To the extent allowed by law, this Section and any license to Local Motors hereunder includes all rights of paternity, integrity, disclosure and withdrawal and any other rights that may be known as or referred to as moral rights, artist’s rights, droit moral or the like. To the extent any of the foregoing is ineffective under applicable law, you hereby provide any and all ratification and consents necessary to accomplish the purposes of the foregoing to the extent possible. You will confirm any such ratification and consents from time to time as requested by Local Motors.

⁷² Shanzaistudios.com, an apparent affiliate of shanzai.com, has run a contest for development of a tablet PC bag. Labeled “Social Production,” the program purports to be based upon community sourced innovation. Individuals contribute ideas and Shanzai Studios will decide whether to produce the product. The organization offers winners discounts on products participants contribute and other potential future awards maybe available. There is no legal license or

micro-manufacturing entities were (and in some cases continue to be) involved in piratical activities.⁷³ Thus, innovative designs submitted to such organizations are at risk of misappropriation as well as later independent and competitive exploitation by the Chinese partners. As Will Chapman, once a “small batch” innovator of Lego compatible accessories, noted, “if your molds are in China, who knows what happens to them when you’re not using them? They could be run in secret to produce parts sold in secondary markets that you would not even know existed.”⁷⁴

Another approach to monetization has been that employed by Google. This approach entails the provision of complementary goods and services, rather than the transfer of the software product itself. Google employed a modified Linux system in the development of its search engine. It does not distribute either the source code or object code downstream. Instead, Google uses its program to deliver services. As a result, there is no obligation of disclosure under the terms of the Linux license. It has monetized its efforts by selling advertising and acknowledging its search results. Google has not stopped there, however. In addition to its refined search engine, it is developing other Linux-based programs, such as a new operating system, which it intends to sell to internet-based users. Due to its strong reputation as a reliable product source in the market, some predict that it will be able to outpace other technically competent, but less known competitors.⁷⁵

other such document posted. See Brad Linder, *Shanzai Studios Crowdsources Development of a Tablet Bag (and other items)*, LILIPUTING (Feb. 25, 2010, 4:03 PM), <http://liliputing.com/2010/02/shanzai-studios-crowdsources-development-of-a-tablet-bag-and-other-items.html> (reporting on the tablet PC bag contest and noting that contributors will receive discounts on chosen tablet PC bags they contribute to). There is also a short video on YouTube describing the activity. shanzaidotcom, *Introducing Social Production – The Future of Product Design*, YOUTUBE (Feb. 24, 2010), http://www.youtube.com/watch#playnext=1&playnext_from=TL&videos=tTJoe6Zyn-M&v=kdpJWM0Hfmw (summarizing how to participate in Shanzaistudios’s Social Production contests).

⁷³ See, e.g., David Rowan, *Chinese Pirates Are Tech’s New Innovators*, WIRED.CO.UK (June 1, 2010), <http://www.wired.co.uk/news/archive/2010-06/1/chinese-pirates-are-techs-new-innovators> (describing Shanzai.com and other China-based companies involved in selling knockoff electronics). For an example of one such company, see SHANZAI.COM, <http://www.shanzai.com> (last visited Apr. 6, 2011).

⁷⁴ Anderson, *supra* note 28, at 105.

⁷⁵ Agam Shah, *Google OS Could Put Squeeze on Other Flavors of Linux*, PCWORLD (July 8, 2009, 9:30 PM), http://www.pcworld.com/article/168099/google_os_could_put_squeeze_on_other_flavors_of_linux.html?tk=rss_news (noting that a senior analyst predicted that “[c]onsumers will be drawn to a brand

For others in the FOSS (non)market, the product is not the sale of a complementary product, but rather the marketing of a personal service, “know-how.” Innovators need not actually sell the code. Rather, they can sell consulting/installing services to companies who want to use the improved FOSS version provided by a particular developer and keep it up to date. Additionally, they might charge a fee to downstream users who want to incorporate the particular version, provided by the upstream innovator, into their own business software. In a more extreme case, a successor company may not only purchase the know-how of an entrepreneur, but also require a service provider to recode a program to a proprietary form so that no FOSS is included. It would not want an obligation under the antecedent FOSS arrangement requiring it to pass its additions on to competitors. Hence, the successful company would attempt to eliminate an “infection” of its proprietary programs with FOSS code.

A final possible approach to monetizing software is a dual licensing program. This hybrid blends the GPL open source approach with a privatized approach to software development. If, for example, a distributor employs a general FOSS license with downstream users, those users are obligated to pass their innovations downstream to their successors without restriction. On the other hand, a distributor may elect to employ an alternative in which he licenses the otherwise open source software on a royalty bearing basis. The licensee can then choose to either monetize the software or employ it as open source. To the extent that the royalty side includes open source product, however, he would have to make that code information available to successors.⁷⁶

Third, the actual value of the information made available through enhanced communication might be questionable to a serious researcher not of contemporary public opinion. Many individuals have views on or ideas about multiple subjects, and one of the positive features of a democratic information revolution is that they are now able to communicate their views rather

they recognize and that they associate with efficient online services, rather than to lesser-known names like Ubuntu and Moblin Google’s reputation for creating popular online services may also encourage PC makers to adopt the OS in netbooks”).

⁷⁶ See Vetter, *supra* note 41, at 431–32 (describing hybrid licensing approaches which fuse FOSS and proprietary licensing).

freely.⁷⁷ While some of these contributions might have considerable value, such as in a mediated software creation environment, many may not. There is no assurance that the non-market information generated is thoughtful, based upon reflection, or grounded in reality.

Even in the software sector, little, if any, open source information comes with any warranties, much less of one for fitness for a particular use.⁷⁸ In fact, the typical open source license not only disclaims warranties but also fails to provide any indemnification for loss resulting from reliance upon the information. In comparison, warranties, indemnification, obligations to defend, and performance insurance arrangements are commonplace in many proprietary IP licenses,⁷⁹ and some are also an integral and promoted part of Microsoft's Shared Initiative program.⁸⁰ Such assurances are particularly important to those who anticipate investing considerable resources in reliance upon the information; the absence of such terms should give one pause. Such issues of reliability should also be seriously considered in the context of government initiatives that promote use of open source products. However, at times, the lure of the political democratic appeal of open source, when coupled with reduced costs of access, tends to overshadow concerns of suitability. A rational and responsible approach to use and implementation should counsel a more cautious view that the information be fully vetted before one

⁷⁷ As a result of changes made in December 2009 in Facebook's privacy settings, all of Facebook's users now have "the ability to broadcast their musings, photographs, videos, and other personal information to all of Facebook's 350 million members and even beyond the borders of Facebook so they are viewable across the broader Web." Alexei Oreskovic, *UPDATE 1 – Facebook Privacy Revamp Draws Fire*, REUTERS (Dec. 9, 2009, 7:47 PM), <http://www.reuters.com/article/2009/12/10/facebook-privacy-idUSN0913072520091210>.

⁷⁸ The legal licenses of the Creative Commons, for example, have progressively included greater numbers of warranty disclaimers, conditions and exclusions, and perhaps contrary to the alleged spirit of the organization, have become very complex legal licensing documents.

⁷⁹ See generally XUAN-THAO N. NGUYEN ET AL., *IP SOFTWARE AND INFORMATION LICENSING: LAW AND PRACTICE* (2006) (providing a traditional overview of IP license drafting including how to incorporate provisions such as warranties, indemnification, obligations to defend, and insurance requirements).

⁸⁰ See, e.g., Sean Michael Kerner, *Microsoft Lauded for Indemnification Program*, INTERNETNEWS.COM (Feb. 10, 2005), <http://www.internetnews.com/business/article.php/3482286/Microsoft+Lauded+For+Indemnification+Program.htm> (surveying Microsoft's extension of indemnification to "end users of a long list of current and past versions of its software").

invests resources in reliance upon it. While there may certainly be a greater quantity of information, one might properly inquire of the particular quality of the information.⁸¹

Unfortunately, the more reserved view is often overlooked or undervalued by advocates of open source. For example, some open source advocates have observed with wonder how many contributors have joined to produce Wikipedia, all without compensation. In the course of extolling the virtue of this democratic approach to development, many also claim that it is a "serious online alternative to the *Encyclopedia Britannica*."⁸² Critical contributory research, however, indicates that sources a source is not reliable that consists of anonymous information that lacks attribution, is not reviewed editorially, is capable of being modified by any reader,⁸³ and lacks an author that can be held

⁸¹ Cory Doctorow comments that much of the information in the internet age is deficient, because among other reasons, people lie. See CORY DOCTOROW, *Metacrap: Putting the Torch to Seven Straw-Men*, in CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE 95, 97 (2008), stating:

Metadata exists in a competitive world. Suppliers compete to sell their goods, cranks compete to convey their crackpot theories (mea culpa), artists compete for audience. Attention spans and wallets may not be zero-sum, but they're damned close.

That's why:

A search for any commonly referenced term at a search engine . . . will often turn up at least one porn link in the first ten results.

Your mailbox is full of spam with the subject lines like: "Re: The information you requested."

Publishers Clearing House sent out advertisements that holler "You may already be a winner!"

Press-releases have gargantuan lists of empty buzzwords attached to them

When poisoning the well confers benefits to the poisoners, the meta-waters get awfully toxic in short order.

Id.

⁸² BENKLER, *supra* note 11, at 5.

⁸³ Cory Doctorow places some perspective on the use of "Wiki" pages. He notes:

Anyone who visits a Wiki can edit any of its pages, adding to it, improving to it, adding camel-cased links to new subjects, or even defacing it or deleting it.

It is authorship without editorship. Or authorship fused with editorship. Whichever, it works, though it requires effort. The Internet, like all human places and things, is fraught with spoilers and vandals who

accountable.⁸⁴ While it is certainly true that Encyclopedia Britannica is in the business of selling information, there is a resulting and corollary assurance that the veracity and credibility of the information has been at least minimally vetted.

Fourth, the fragmentation of information in the course of development presents some difficulty in its evaluation and use. As one downstream user modifies the open source, he generally does so in order to respond to a particular and often focused need. That “specialization,” while utile to the particular user, can make the product unsuitable to other users with distinct and discrete needs. This phenomenon has been a particular concern in the software realm and has presented considerable challenges to Google’s competitors in the Linux-based operating system market.⁸⁵ In this context, it is not the use of the basic algorithm that has given rise to

deface whatever they can. Wiki pages are routinely replaced with obscenities, with links to spammers’ websites, with junk and crap and flames.

But Wikis have self-defense mechanisms, too. Anyone can “subscribe” to a Wiki page, and be notified when it is updated. Those who create Wiki pages generally opt to act as “gardeners” for them, ensuring that they are on hand to undo the work of the spoilers.

In this labor they are aided by another useful Wiki feature: the “history” link.

CORY DOCTOROW, *Wikipedia: A Genuine HG2G – Minus the Editors*, in *CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE*, *supra* note 81, at 159, 166. Doctorow also discusses the mediated value of the medium. Ethan Zuckerman, a Fellow of the Harvard Berkman Center, notes, however, that there is a collaborative bias in the project. *Id.* at 168. It tends to favor perspectives and judgments of contributors who tend to be wealthy, reside in the world’s richest countries and possess a technological bent. *Id.*

⁸⁴ See *Evaluating Information Found on the Internet*, JOHNS HOPKINS UNIVERSITY, <http://www.library.jhu.edu/researchhelp/general/evaluating> (last visited Apr. 6, 2011) (noting several pitfalls of undiscernibly relying upon internet sources and noting factors which may render internet unreliable); see generally Thomas Chesney, *An Empirical Examination of Wikipedia’s Credibility*, 11 *FIRST MONDAY* (2006), <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1413/1331> (concluding in an empirical study that though Wikipedia was often credible, approximately thirteen percent of its articles still contained mistakes and therefore, Wikipedia could not be deemed a wholly reliable source).

⁸⁵ See Shah, *supra* note 75 (“There is also a high level of fragmentation in the netbook market, with multiple versions of Linux installed on different machines, a weakness that Google could exploit.”).

Google's distinctive success; it is its constant and particularized refinement and consequent fragmentation.⁸⁶

Fifth, while the free sharing of information may offer an expanded, rewarding, and enhanced social and intellectual life for some, it can also lead to isolation or mental impairment⁸⁷ for others.⁸⁸ While it is certainly convenient to have easy access to email and the ability to freely and quickly exchange information with others remote from your location, there can be considerable costs. Those in the mental health field have clinically observed that symptoms of anxiety may be heightened due to the constant bombardment by "news" of world events.⁸⁹ Furthermore, many have traded a social life with direct human contact for an indirect one, derived from an expanded relationship with one's computer.⁹⁰ For example, the ease with which anyone, including children, can gain access to pornographic material has greatly expanded,⁹¹

⁸⁶ See generally Steven Levy, *Inside the Box*, WIRED MAG., March 2010, at 97 (reporting that Google's constant tweaking of its algorithm has fueled its immense success).

⁸⁷ For instance, in 2006, a thirteen-year-old girl committed suicide as a result of "cyber-bullying" at the hands of her 49-year-old neighbor. See Ladaga, *supra* note 10 (noting certain such harmful consequences that uninhibited internet free speech breeds).

⁸⁸ For instances of such isolation and mental impairment, see Christopher Stewart, *The Lost Boy*, WIRED MAG., Feb. 2010, at 68, 71-72, reporting:

A fire in an unlicensed Internet café killed 25 people engaged in all-night gaming sessions; a Chengdu gaming addict died after playing *Legend of Mir 2* for 20 straight hours in a Net club; two kids from Chongquing, exhausted after two days on online gaming, passed out on railroad tracks and were killed by a train; a Quingyuan boy butchered his father after a disagreement about his internet use; a 13 year old from Tianjin finished a 36 hour session of *World of Warcraft* and leaped off the roof of his 24-story building, hoping to "join the heroes of the game," as one newspaper summary of his suicide note put it.

Id.

⁸⁹ Andrew Weil, *Q&A Library*, WEIL (Sept. 5, 2008), <http://www.drweil.com/drw/u/QAA400445/Media-Menace.html> (noting that studies have shown that exposure to stressful news and world events can cause deleterious psychological effects in certain individuals).

⁹⁰ See generally Danah Michele Boyd, *Taken Out of Context: American Teen Sociality in Networked Publics 1-2* (Fall 2008) (unpublished Ph.D. dissertation, Univ. of Cal., Berkeley) (discussing ways in which online interaction through social media websites has reinforced and complicated traditional human interaction).

⁹¹ See, e.g., *Anatomy of a Child Pornographer*, REASON MAG., July 2009, <http://reason.com/archives/2009/06/04/anatomy-of-a-child-pornographer> (describing "sexting," a phenomenon where teens take nude photos of themselves

episodes of gender harassment have increased,⁹² and serious problems of addiction to internet games have been reported.⁹³ In China, for example, numerous internet-addiction treatment centers have been established for the purpose of deprogramming.⁹⁴ In addition, intimate human relationships are being technologically mediated through a proliferation of internet and virtual dating sites.⁹⁵

Sixth, even if there is a need to hold an individual responsible for a communication, it may be impossible or impractical to do so. The concept of sovereignty, the implications of comity or public interest within the forum that affect enforcement,⁹⁶ and the

and send them over the internet, increasingly resulting in child pornography charges); see also Judith Newman, *Porn Has Gone Interactive – and Your Kids Are at Risk. From Video ‘Sexting’ to Video Chats, How to Fight Back*, READER’S DIG., May 2009, at 119 (providing an overview of the teen sexting phenomenon and how parents might prevent their children from engaging in such behavior); *15yr-Old [sic] US Girl Facing Porn Charges for ‘Sexting’*, ONEINDIANNEWS (Feb. 21, 2009), <http://news.oneindia.in/2009/02/21/15yr-old-us-girl-facing-porn-charges-for-sexting.html> (detailing the teen “sexting” phenomenon and describing a young girl facing child pornography charges for transmitting nude photographs of herself).

⁹² See Danielle Keats Citron, *Law’s Expressive Value in Combating Cyber Gender Harassment*, 108 MICH. L. REV. 373, 373 (2009) (detailing the extent of online harassment of women and criticizing the public’s and law enforcement’s failure to properly react, and their frequent marginalization of online female victims).

⁹³ It has been reported that psychiatrists have created avatars on the game World of Warcraft in order to provide counseling services to allegedly addicted youths. *Shrinks Join World Game*, MX (Melbourne), July 27, 2009, at 10. See also *Virtually Addicted: Weaning Koreans off Their Wired World*, CNN.COM (March 25, 2010), http://articles.cnn.com/2010-03-25/tech/online.gaming.addiction_1_internet-addiction-internet-cafe-gaming?_s=PM:TECH (reporting widespread addiction to the internet and online games in South Korea).

⁹⁴ See, e.g., Jonathan Adams, *In an Increasingly Wired China, Rehab for Internet Addicts*, CHRISTIAN SCI. MONITOR (Jan. 6, 2009), <http://www.csmonitor.com/World/Asia-Pacific/2009/0106/p01s03-woap.html> (noting that the opening of an internet addiction center in China in 2004 has since spawned “more than 300” additional such facilities).

⁹⁵ See, e.g., Sabath Karimi, *The Rise of Internet Dating Services*, ASSOCIATED CONTENT (June 8, 2006), http://www.associatedcontent.com/article/36554/the_rise_of_internet_dating_services.html?cat=41 (commenting on the increasing proliferation of internet dating websites).

⁹⁶ See *Hosking v. Runting*, (2004) 1 NZLR 1 (CA) (N.Z.) (reviewing various interpretations of privacy in the United States, Australia, Canada, and the United Kingdom); *Telnikoff v. Matusevitch*, 702 A.2d 230 (Md. 1997) (declining to enforce a U.K. libel judgment in a U.S. District Court); see also *Libel Terrorism Protection Act*, N.Y. C.P.L.R. 5304 (McKinney 2011) (providing grounds for non-recognition of foreign judgments under New York law).

difficulty of obtaining "jurisdiction" over the alleged offender⁹⁷ have proven to be impediments to vindicating legitimate interests. While certain countries have limited the liability of online service providers, as well as users,⁹⁸ in the course of considering issues of vicarious and contributory liability, others have, in fact, begun an effort to expand ISP responsibilities.⁹⁹

Seventh, increased access to information can result in a loss of individual privacy and security. Not only has the loss of privacy been observed through, for example, the inconvenient receipt of spam,¹⁰⁰ but the internet has also provided an avenue for destructive¹⁰¹ and criminal conduct.¹⁰² For example, numerous

⁹⁷ See *Spacey v. Burgar*, 207 F. Supp. 2d 1037 (C.D. Cal. 2001) (dismissing a movie star's lawsuit for unauthorized use of his name against an internationally registered website run by a foreign defendant because the defendant lacked sufficient minimum contacts to the United States in order to establish personal jurisdiction over the defendant).

⁹⁸ See 17 U.S.C. § 512 (2006) (codifying the 1998 Digital Millennium Copyright Act by limiting liability of ISPs from certain specified third party acts of copyright infringement occurring over their servers); see also Hélène Delabarre & Dorothee Simic, *Newspaper Companies and Journalists: Adapting to Online Media*, INT'L L. OFF., (Sept. 3, 2009), <http://www.internationallawoffice.com/Newsletters/Detail.aspx?g=b9eb5307-535d-4cf9-bdee-5bd62f325d74> (addressing The Act on Promotion of the Distribution and Protection of Creative Works on the Internet, France, June 12, 2009, and describing the liability of organized newspapers for articles that they publish online as well as limited liability for unmonitored contributions by the public); Daniel Kaboth, *Hamburg Court Rules on Liability of Usenet Access Providers*, INT'L L. OFF. (Aug. 27, 2009), <http://www.internationallawoffice.com/Newsletters/Detail.aspx?g=dd8bf97e-e9ca-488d-95df-8df795ba5722> (explaining that while certain online entities may be found liable to varying degrees, German law generally shields internet host and search engine providers from liability when they provide access to illegal content).

⁹⁹ See Francesca Besemer, *ISP Liability: Television Network Mediaset Sues Google and YouTube*, INT'L L. OFF. (Aug 14, 2008), <http://www.internationallawoffice.com/Newsletters/detail.aspx?g=cf851402-caac-4eb8-bfb7-0f2facea117f> (analyzing a lawsuit in Italy against YouTube and Google and noting that website operators under Italian law may have "to report potentially illegal activities on the Internet without delay"); Zhize Xia, *Effect of the Tort Liability Law on IP Protection*, INT'L L. OFF. (March 15, 2010), <http://www.internationallawoffice.com/Newsletters/detail.aspx?g=928a447d-5ca0-4836-8e1c-8bd8a13d0c71> (discussing ways in which an ISP may be found jointly and severally liable for IP infringement under Chinese law).

¹⁰⁰ See CORY DOCTOROW, *All Complex Ecosystems Have Parasites*, in *CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE*, *supra* note 81, at 189 (discussing the ease with which e-mail "spam" can inconvenience e-mail users).

¹⁰¹ See Ladaga, *supra* note 10 (noting cases where the internet has given rise to actual personal threats, such as sexual threats to women and threats to a

individuals have had their identities compromised through misappropriation and unauthorized use of personal information, viruses have been developed for the sheer joy of injuring others, spyware products have been used to steal passwords, and other valuable information has been purloined through a plethora of phishing schemes and other forms of online fraud.¹⁰³ Increased accessibility¹⁰⁴ and the ability to consolidate a myriad of legitimate public information sites has also resulted in practical compromise of one's sanctuary through disclosure and the ease of access and dissemination.¹⁰⁵ Facebook and other social websites often contain considerably personal and, at times, sensitive information, while the security protocols or strategies are often inadequate or ignored by users.¹⁰⁶ For example, website content may include dates when

prominent blogger which included "photos of her with a noose around her neck").

¹⁰² Kevin Graham, *FBI Outlines Retooled Scams Designed to Prey Upon People's Trust and Greed*, ST. PETERSBURG TIMES, Sept. 17, 2009, at 5B, available at <http://www.tampabay.com/news/publicsafety/fbi-outlines-retooled-scams-designed-to-prey-upon-peoples-trust-and-greed/1036843> (discussing the FBI's most recent list of the "Top 5" scams circulating throughout the internet).

¹⁰³ See Ladaga, *supra* note 10 (describing a range of online fraudulent activities including (1) sophisticated phishing scams, (2) false online advertisements purporting to give away individuals' belongings for free, and (3) noting the possibility that the internet might even be utilized by hostile nations seeking to inflict harm upon each other).

¹⁰⁴ A new privacy setting introduced by Facebook in December 2009 required that users publicly display their gender and their city location. Oreskovic, *supra* note 77. It also recommended that information be viewable by anyone, not just friends. *Id.* Representative Barry Schnitt commented that users were being encouraged to disclose because that was "the way the world [was] moving." *Facebook's New Privacy Rules Upset Users*, INTERNET.COM, Dec. 10, 2009, <http://itmanagement.earthweb.com/secu/article.php/3852401/Facebooks-New-Privacy-Rules-Upset-Users.htm>. In October 2009, Google announced plans to include Facebook information in search results. Oreskovic, *supra* note 77.

¹⁰⁵ Miley Cyrus, for example, withdrew from Twitter in order to reclaim her privacy. See mileymandy, *Good-bye Twitter*, YOUTUBE (Oct. 9, 2009), <http://www.youtube.com/watch?v=2tSOTQPUQoU> (disseminating a video recording of Miley Cyrus rapping about her frustration with using the social networking website Twitter, and explaining that she will no longer participate in it due to its intrusion upon her privacy).

¹⁰⁶ See Dan Nystedt, *Researchers Advise Cyber Self Defense in the Cloud*, PCWORLD (Oct. 12, 2009, 6:30 AM), http://www.pcworld.com/businesscenter/article/173467/researchers_advise_cyber_self_defense_in_the_cloud.html (noting that individuals are increasingly placing highly personal information on the internet via social networking websites even as "[s]ecurity researchers are warning that Web-based applications are increasing the risk of identity theft or losing personal data more than ever before").

individuals plan to be away from their homes for extended periods of time, which has been exploited by burglars and thieves in planning their heists. In addition, law enforcement agencies routinely access the private information contained on social sites in the course of investigating and curtailing crimes of all types.¹⁰⁷ At times, even legitimate use can result in a terrible inconvenience and loss to citizens through mischaracterization of their actions.¹⁰⁸ The problem has been exacerbated by legal standards,¹⁰⁹ currently extant in the U.S., in which in situations of claimed defamation, courts¹¹⁰ have given considerable deference to, access to, and use of

¹⁰⁷ Recently, local police in suburban Philadelphia accessed the Facebook accounts of Haverford and Bryn Mawr College students, learned of parties that would be attended by students, raided the parties, and arrested underage drinkers. See Michael Novinson, *The BiCo News: Haverford Party Raided by State Police*, 31 *Cited*, THE DAILY GAZETTE (Sept. 4, 2009), <http://daily.swarthmore.edu/2009/9/4/haverford-party> (describing the circumstances surrounding two arrests of suspected underage drinkers at a Haverford party who were identified by police through Facebook).

¹⁰⁸ Anyone who has found herself improperly placed on a no-fly list due to her name being the same as another who might have legitimately been listed might be able to attest to the inconvenience she has suffered. As Cory Doctorow observes:

Our network defenses are automated, instantaneous, and sweeping. But our fallback and oversight systems are slow, understaffed, and unresponsive. It takes a millionth of a second for the Transportation Security Administration's body-cavity-search roulette wheel to decide that you're a potential terrorist and stick you on a no-fly list, but getting un-Tuttle-Buttled is a nightmarish, months-long procedure that makes Orwell look like an optimist.

Cory Doctorow, *The Future of Internet Immune Systems*, in *CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE*, *supra* note 81, at 186.

¹⁰⁹ See Ladaga, *supra* note 10, stating:

Journalists have long used their First Amendment rights to protect themselves against stories they've written. Now, thanks to the ease of the Internet, anyone can write whatever they want about anyone else and reach millions of people.

In this Wild West atmosphere, the law is struggling mightily to keep up technology. Ten years ago, badmouthing your landlord was just "venting"; today, badmouthing your landlord on Twitter will get you sued. In August, a judge ordered Google to reveal the identity of an anonymous blogger who called Vogue cover model Liskula Cohen a "skank" on a blog called, naturally, "Skanks in NYC."

¹¹⁰ See *Gertz v. Robert Welch, Inc.*, 418 U.S. 323, 347 (1974) (holding that "so long as they do not impose liability without fault, the states may define for themselves the appropriate standard of liability for a publisher or broadcaster of defamatory falsehood injurious to a private individual").

information by declining to distinguish between information in which the public is interested and information in which access is deemed to be within the legitimate interest of the public.¹¹¹

Eighth, expanded public demand for entertainment, lauded by some as a symbol of the positive features of the nonmarket revolution,¹¹² when coupled with the growing disinclination of U.S. courts in the context of liberal claims of freedom of expression to distinguish between various types and uses of information, could be said to have led to erosion of many competing interests.¹¹³ This has been true even at the expense of viable proprietary IP interests.¹¹⁴ An unfortunate byproduct of this particular indulgence shown by the courts is a blurring between news reporting and news creation.¹¹⁵

¹¹¹ *But see* Von Hannover v. Ger., 2004-6 Eur. Ct. H.R. 42 (distinguishing between information in which the public is interested and that information which is in the public interest).

¹¹² *See* BENKLER, *supra* note 11, at 5 (discussing the advent and success of free information sharing and its ability to compete with for-profit ventures).

¹¹³ *See* Fla. Star v. B.J.F., 491 U.S. 524 (1989) (holding unconstitutional imposition of damages upon the press for publishing a rape victim's identity); JEFFREY ROSEN, *THE UNWANTED GAZE: THE DESTRUCTION OF PRIVACY IN AMERICA* 223 (2000), noting:

We are trained in this country to think of all concealment as a form of hypocrisy. But we are beginning to learn how much may be lost in a culture of transparency: the capacity for creativity and eccentricity, for the development of self and soul, for understanding, friendship and even love. There are dangers to pathological lying, but there are also dangers to pathological truth-telling.

New Zealand courts similarly face this problem. *See* Hosking v Runtig, (2004) CA 101/03 (N.Z.) (refusing to recognize a per se invasion of privacy cause of action against paparazzi photographers merely because the alleged victims were underage children).

¹¹⁴ *See* C.B.C. Distrib. & Mktg., Inc. v. Major League Baseball Advanced Media, L.P., 505 F.3d 818 (8th Cir. 2007) (holding that although players' names were used without permission for a company's promotion of fantasy baseball, the company's First Amendment rights trumped a Missouri state law which protected the players from unauthorized publicity).

¹¹⁵ Chief Justice Bird invoked the dual purpose of the First Amendment in *Guglielmi v. Spelling-Goldberg Prods.*:

Our courts have often observed that entertainment is entitled to the same constitutional protection as the exposition of ideas. That conclusion rests on two propositions. First, "[t]he line between informing and entertaining is too elusive for the protection of the basic right. Everyone is familiar with instances of propaganda through fiction. What is one man's amusement, teaches another doctrine" Second, entertainment, as a mode of self-expression, is entitled to constitutional protection irrespective of its contribution to the marketplace of ideas.

Ninth, the technology that purportedly permits free access to all is neither actually readily available to all persons in all nations nor available on the same terms across diverse geographic areas. The capacities or bandwidths are not even uniform from one country to the next.¹¹⁶

Tenth, while there may be a reduction in the market barriers to access resulting from, for example, the reduction in the need for formal publishing houses, other market groups have intervened and filled the void. Thus, internet service providers and owners of servers, such as universities and governments, have interposed themselves between users and information sources.¹¹⁷ The Chinese government, for example, has reportedly selectively blocked citizen access to Google, YouTube, and Twitter and has employed agents to curtail online political dissent.¹¹⁸ Many service providers

“For expression is an integral part of the development of ideas, of mental exploration and of the affirmation of self. The power to realize his potentiality as a human being begins at this point and must extend at least this far if the whole nature of man is not to be thwarted.”

Guglielmi v. Spelling-Goldberg Prods., 603 P.2d 454, 458–59 (Cal. 1979) (footnote and citation omitted).

¹¹⁶ For example, this article’s author has observed that accessibility in the most developed areas of the U.S. appears greater than in London, which appears more readily available than in most regions of Australia. See *World Internet Users and Population Stats*, INTERNET WORLD STATS, <http://www.internetworldstats.com/stats.htm> (last visited Apr. 6, 2011) (estimating that 77% of North Americans use the internet compared to 58% in Europe and 61% in Australia). Interestingly, the commercial presence of McDonald’s Restaurants or Starbucks with their WiFi access may influence accessibility. For an overview of McDonald’s and Starbucks’s extensive U.S. WiFi presence, see Brian Resnick, *How Does Starbucks’s Free Wi-Fi Compare to Other Hotspots?*, POPULAR MECHANICS, (Aug. 25, 2010, 12:00 PM), <http://www.popularmechanics.com/technology/how-to/tips/how-does-starbucks-free-wi-fi-compare-to-other-hotspots>.

¹¹⁷ The internet was recently shutdown for example, during recent political unrest in Egypt. See *Egypt’s Internet Shut Down, According to Reports*, HUFFINGTON POST (Jan. 27, 2011, 6:33 PM), http://www.huffingtonpost.com/2011/01/27/egypt-internet-goes-down-_n_815156.html (reporting that Egypt shutdown the internet during a time of political crisis). In the private sector, participation in a virtual life experience can be highly regulated by “Rules of Conduct,” and the right to citizenship in such a virtual world can be quickly withdrawn. See CORY DOCTOROW, *World of Democracy*, in *CONTENT: SELECTED ESSAYS ON TECHNOLOGY, CREATIVITY, COPYRIGHT, AND THE FUTURE OF THE FUTURE*, *supra* note 81, at 201 (describing the rules of conduct governing virtual worlds like the online role-playing game, World of Warcraft).

¹¹⁸ See Stewart, *supra* note 88, at 70 (detailing the measures the Chinese government has taken to control its citizens’ internet access).

charge a fee, while others engage in subtle or less than subtle censorship of content.¹¹⁹

Eleventh, perhaps due to the nature and attributes of products of the mind, it is distinctly possible that the public fails to possess a full appreciation for the precious character of the commodity of information, and as such, undervalues it. Consequently, the public may become impatient, frustrated, or even hostile when access is limited. There are several causes.

First, many confront and form their opinions about intellectual property in a non-vocational, non-competitive, or entertainment context. In such circumstances, and since many of these individuals are seeking relief from the rigors of their vocational activities, it is not uncommon that they perceive the providers of the intellectual property as also functioning in that mode. Since the consumer is “having fun” operating in a non-vocational manner, the assumption may be that so, too, is the provider of the good or service. Many do not understand that many individuals, such as the software game provider, the professional artist, athlete or performer, are in business and must reap an economic benefit from their creativity if they are to survive and thrive. This failure may lead to a lessening of the extrinsic value placed upon innovative activities.

Second, since the public is not always accustomed to paying directly for access to intellectual property, it misperceives that much information is “free.” Whether it is the music broadcast by terrestrial providers, the applications available to iPhone users for no apparent charge, or access to information through a search engine like Google, there is no obvious toll gate barring their access. Many fail to fully appreciate the alternative means by which such activities are monetized, and thus, it should not be surprising that much of the public has come to feel an entitlement it is accustomed to receiving for no personal charge.

Third, many individuals are more experienced in dealing with tangible property than they are with intangible property and therefore, this familiarity influences their perceptions of value and entitlement. Since IP may not be obviously exhaustible through individual consumption and because access to IP is often through possession of a tangible object, such as a CD or DVD, many draw

¹¹⁹ *Id.* (describing the Green Dam Youth Escort program initiated by the Chinese government in which it began censoring software that ordinarily comes pre-installed on computers).

the erroneous conclusion that purchase and ownership of the medium of fixation carries with it the ownership of the intangible that is embodied in or on the tangible object.¹²⁰ This misperception has often been exploited by others in the name of profit.¹²¹

Fourth, some who routinely deal with issues of intellectual property fail to appreciate the contextual and legal significance of their activities and claim a superseding right to proceed in accord with their own view of custom. For example, film producers have been heard to claim during IP disputes that they failed to adhere to mandated means of transfer of interests because “[m]oviemakers do lunch, not contracts.”¹²² Several record companies recently filed suit against The Ellen DeGeneres Show claiming willful failure to pay royalties for the use of music on the show. When approached by the record company inquiring why it had not paid, the defendant purportedly replied that it “didn’t roll that way.”¹²³

¹²⁰ The problem of mixed goods of this sort, particularly goods in which IP is embedded, has led to confusion in courts as to the applicability of, for example, Article 2 of the Uniform Commercial Code. Relatively unsuccessful efforts were made to address these issues through the Uniform Computer Information Transactions Act.

¹²¹ See *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 919 (2005) (holding that “one who distributes a device with the object of promoting its use to infringe copyright, as shown by clear expression or other affirmative steps taken to foster infringement, is liable for the resulting acts of infringement by third parties”); *A&M Records, Inc. v. Napster, Inc.*, 284 F.3d 1091 (9th Cir. 2002) (upholding an injunction that was levied against Napster in an effort to prevent the site’s facilitation of unlicensed copyright music-sharing).

¹²² *Effects Assocs., Inc. v. Cohen*, 908 F.2d 555, 556–57 (9th Cir. 1990) (internal citations omitted), holding:

Cohen suggests that section 204’s writing requirement does not apply to this situation, advancing an argument that might be summarized, tongue in cheek, as: *Moviemakers do lunch, not contracts*. Cohen concedes that “in the best of all possible legal worlds” parties would obey the writing requirement, but contends that moviemakers are too absorbed in developing “joint creative endeavors” to “focus upon the legal niceties of copyright licenses.” Thus, Cohen suggests that we hold section 204’s writing requirement inapplicable here because “it [i]s customary in the motion picture industry . . . not to have written licenses.” To the extent that Cohen’s argument amounts to a plea to exempt moviemakers from the normal operation of section 204 by making implied transfers of copyrights “the rule, not the exception,” we reject his argument.

Id.

¹²³ Travis Loller, *Record Companies Sue ‘Ellen’ Show over Copyrights* (Sept. 10, 2009) BILLBOARD.BIZ, <http://www.billboard.biz/bbbiz/industry/legal-and-management/record-companies-sue-ellen-show-over-copyrights-1004011192.story>.

Finally, a controversy arose recently between Shepard Fairey, the Associated Press, and photographer Mannie Garcia concerning the use of a photograph by Fairey in certain posters of President Obama. While it appears that the work of Fairey was, in fact, a second generation work that was dependent upon the first generation photograph of Garcia, the issue of whether the unauthorized use of the Garcia photograph could be considered a fair use is unresolved. Setting aside the legal issue, one can still express concern that Fairey felt at complete liberty to use Garcia's photo in order to reduce the need for his own independent creative effort,¹²⁴ while simultaneously failing to give credit to and acknowledge Garcia for his contribution.¹²⁵

Fifth, in the course of pressing their cause before the public, many advocates mischaracterize principles, provide less than full and adequate information, or permit miscommunications and misunderstandings to persist in order to achieve an apparent goal. For example, the National Association of Broadcasters and affiliated stations have used multiple means, including broadcast,¹²⁶ contests,¹²⁷ and the internet to lobby against a change

¹²⁴ This is not to imply that it is never proper to free ride on another's efforts. See *Rosemont Enters, Inc. v. Random House, Inc.*, 366 F.2d 303, 310 (2d Cir. 1966) (citation omitted), stating:

We . . . cannot subscribe to the view that an author is absolutely precluded from saving time and effort by referring to and relying upon prior published material. It is just such wasted effort that the proscription against the copyright of ideas and facts, and to a lesser extent the privilege of fair use, are designed to prevent.

¹²⁵ See Complaint for Declaratory Judgment and Injunctive Relief, *Fairey v. Associated Press*, No. 09-01123 (S.D.N.Y. Feb. 9, 2009), available at http://cyberlaw.stanford.edu/biguploads/Fairey_v_AP_complaint_with_exhibit_s.pdf (detailing Garcia's assertion that the Associated Press should be prevented from asserting copyright claims based upon his famous art depicting Barack Obama). Also consider that this may reflect another perspective discussed *infra* that one of the characteristics of property espoused by more communitarian advocates—although rejected by many—is that there is no real innovation but that later creators merely stand on the shoulders of those who have come before them. See BENKLER, *supra* note 11, at 37 (noting that this phenomenon is often referred to as the “on the shoulders of giants” effect).

¹²⁶ Numerous paid radio and television advertisements have been run by the National Association of Broadcasters. See Press Release, Nat'l. Ass'n. Broads., New Ads Urge Opposition to Performance Tax on Local Radio (July 30, 2007), <http://www.nap.org/documents/newsroom/pressRelease.asp?id=1871> (announcing a radio and print ad campaign to lobby against the performance tax); Press Release, Nat'l. Ass'n. Broads., More Members, New Spots Oppose Performance Tax on Radio (Apr. 21, 2009), <http://www.nab.org/documents/newsroom/pressRelease.asp?id=1794> (announcing the airing of a new radio ad

in the Copyright Act. The change would require them to internalize a cost of their business by paying a royalty to musical performers for use of their intellectual property similar to that which is currently paid to musical composers. In so doing, the broadcasters specifically trade on the public's misperception that music is "free," draw upon the public's emotive reactions by freely mischaracterizing the royalty as a tax, and suggest that the imposition of the "tax" will not only line the pockets of foreign-owned record companies, but also may result in a loss of services to and jobs within the local communities served by the stations.¹²⁸ A second example is the possible mischaracterization of information and culture as "public goods" rather than "mixed goods," thereby implying a public entitlement to access, as well as employing non-traditional and controversial attributes of property in the course of discussing and advocating for non-market treatment of certain intangibles.¹²⁹ Finally, Michael Carroll, an influential director of Creative Commons, has opined that through the Copyright Act of 1976, Congress actively took away the choice of individuals to dedicate their innovations to the public domain.¹³⁰

in opposition to the performance tax). For an example of one of the NAB's television advertisements, see wdfntheFan, *No Performance Tax!*, YOUTUBE (May 13, 2009), <http://www.youtube.com/watch?v=WcsEVREDhOU&feature=related>.

¹²⁷ See Press Release, Nat'l Ass'n. Broads., NAB Launches 'Don't Tax that Dial' Radio Competition (May 27, 2009), <http://www.nab.org/documents/newsroom/pressRelease.asp?id=1818> (announcing a competition encouraging local stations to create their own ads in opposition to the performance tax); Press Release, Nat'l Ass'n. Broads., NAB Announces Winner of 'Don't Tax that Dial' Radio Competition (Sept. 11, 2009), <http://nab.org/documents/newsroom/pressRelease.asp?id=2079> (announcing the winner of a competition to create the best radio spot raising awareness in opposition to the proposed "performance tax" law).

¹²⁸ See *About the Issue*, NOPERFORMANCETAX.ORG, <http://replay.waybackmachine.org/20090411102919/http://www.noperformancetax.org/issue.asp> (last visited Apr. 6, 2011) (accessed by searching internet url on Internet Archive) (archival copy on file with University of Pennsylvania Journal of International Law) ("What is a performance tax? A performance tax is a fee that record labels want the government to impose on local radio stations simply for airing music free of charge for listeners.") (emphasis added). For a nearly identical articulation of the issue on the No Performance Tax campaign's online Facebook petition, see *Save Your Radio – Ban the Performance Tax (Official Petition)*, FACEBOOK, <http://www.facebook.com/group.php?gid=125294048012>.

¹²⁹ See, e.g., BENKLER, *supra* note 11, at 35–38 (describing the economics of information production and innovation).

¹³⁰ Michael W. Carroll, *Creative Commons as Conversational Copyright*, in 1 INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE, *supra* note 41, at 445, 446–48 (arguing that the 1976 Copyright Act's

He claims that the response of Creative Commons is merely to restore an interest to the public domain that had been lost through this legislative action. This particular characterization can, however, be considered a considerable misstatement or distortion of the intent and effect of the Act. The 1976 Copyright Act made copyright available upon fixation of an original work in a tangible medium, rather than upon publication, as had been the case under the prior 1909 Copyright Act. The general policy of the 1976 Act was intended to be responsive to and encourage innovation; it purported to not only open its opportunities to creative activity not yet known, but also was designed to ensure that IP protection did not expand beyond what was intended by Congress.¹³¹ The change to a standard of fixation as the moment when copyright would attach was a choice made by Congress to address significant and specific failings of prior intellectual property statutes and principles. One of the main reasons for the change was to eliminate the dual system of copyright extant in the United States under the prior law. Other reasons considered included a desire to eliminate the untold burden and expense of a renewal system which required large amounts of unproductive work to remove a major cause of inadvertent and unjust loss of copyright, and to improve international dealing in copyright.¹³² It was not to narrow the public domain, as opined by Professor Carroll.

removal of certain copyright formalities which had previously channeled works into the public domain, reduced authors' ability to allow their works to enter the public domain).

¹³¹ See KASTEMEIR, COPYRIGHT LAW REVISION, H.R. Rep. No. 94-1476, at 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, stating that:

Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The bill does not intend either to freeze the scope of copyrightable technology or to allow unlimited expansion into areas completely outside the present congressional intent. Section 102 implies neither that that subject matter is unlimited nor that new forms of expression within that general area of subject matter would necessarily be unprotected.

Id.

¹³² *Id.* at 129-30, explaining:

Section 301, one of the bedrock provisions of the bill, would accomplish a fundamental and significant change in the present law. Instead of a dual system of "common law copyright" for unpublished works and statutory copyright for published works, which has been the system in effect in the United States since the first copyright statute in 1790, the bill adopts a single system of Federal statutory copyright from creation. Under

section 301 a work would obtain statutory protection as soon as it is "created" or, as that term is defined in section 101, when it is "fixed in a copy or phonorecord for the first time." Common law copyright protection for works coming within the scope of the statute would be abrogated, and the concept of publication would lose its all-embracing importance as a dividing line between common law and statutory protection and between both of these forms of legal protection and the public domain.

By substituting a single Federal system for the present anachronistic, uncertain, impractical, and highly complicated dual system, the bill would greatly improve the operation of the copyright law and would be much more effective in carrying out the basic constitutional aims of uniformity and the promotion of writing and scholarship. The main arguments in favor of a single Federal system can be summarized as follows:

1. One of the fundamental purposes behind the copyright clause of the Constitution, as shown in Madison's comments in *The Federalist*, was to promote national uniformity and to avoid the practical difficulties of determining and enforcing an author's rights under the differing laws and in the separate courts of the various States. Today, when the methods for dissemination of an author's work are incomparably broader and faster than they were in 1789, national uniformity in copyright protection is even more essential than it was then to carry out the constitutional intent.
2. "Publication," perhaps the most important single concept under the present law, also represents its most serious defect. Although at one time, when works were disseminated almost exclusively through printed copies, "publication" could serve as a practical dividing line between common law and statutory protection, this is no longer true. With the development of the 20th-century communications revolution, the concept of publication has become increasingly artificial and obscure. To cope with the legal consequences of an established concept that has lost much of its meaning and justification, the courts have given "publication" a number of diverse interpretations, some of them radically different. Not unexpectedly, the results in individual cases have become unpredictable and often unfair. A single Federal system would help to clear up this chaotic situation.
3. Enactment of section 301 would also implement the "limited times" provision of the Constitution, which has become distorted under the traditional concept of "publication." Common law protection in "unpublished" works is now perpetual, no matter how widely they may be disseminated by means other than "publication"; the bill would place a time limit on the duration of exclusive rights in them. The provision would also aid scholarship and the dissemination of historical materials by making unpublished, undissemated manuscripts available for publication after a reasonable period.
4. Adoption of a uniform national copyright system would greatly improve international dealings in copyrighted material. No other country has anything like our present dual system. In an era when copyrighted works can be disseminated instantaneously to every

4. A CULTURAL DIFFERENTIAL

4.1. *Culture and the Theory of Property*

Recognizing, cultivating, and protecting innovation is heavily influenced by the content and the dynamics of the cultural environment in which the topic is being considered. Concerns and questions once catalyzed by local, national, or regional organizations, such as the North Atlantic Treaty Organization and the European Union, are now being considered at a much broader level. Globalization, in large part stimulated by technological advances, including those in communication, has accentuated the need to better understand those with whom we deal and who more proximately affect our lives. This is not a new phenomenon.¹³³ As observed by John Stuart Mill in 1848:

It is hardly possible to overstate the value . . . of placing human being in contact with persons dissimilar to

country on the globe, the need for effective international copyright relations, and the concomitant need for national uniformity, assume ever greater importance.

Id. See also *id.* at 133–34:

Section 302. Duration of Copyright in Works Created After Effective Date

. . . .

3. Although limitations on the term of copyright are obviously necessary, too short a term harms the author without giving any substantial benefit to the public. The public frequently pays the same for works in the public domain as it does for copyrighted works, and the only result is a commercial windfall to certain users at the author's expense. In some cases the lack of copyright protection actually restrains dissemination of the work, since publishers and other users cannot risk investing in the work unless assured of exclusive rights.

. . . .

5. One of the worst features of the present copyright law is the provision for renewal of copyright. A substantial burden and expense, this unclear and highly technical requirement results in incalculable amounts of unproductive work. In a number of cases it is the cause of inadvertent and unjust loss of copyright. Under a life-plus-50 system the renewal device would be inappropriate and unnecessary.

Id.

¹³³ See KARL R. POPPER, 2 *THE OPEN SOCIETY AND ITS ENEMIES* 217 (3d ed. 1957) (explaining that "science and scientific objectivity do not (and cannot) result from the attempts of an individual scientist to be 'objective,' but from the co-operation of many scientists").

themselves, and with modes of thought and action unlike those with which they are familiar. . . . Such communication has always been . . . one of the primary sources of progress.¹³⁴

This has, in fact, been the subject of comparative law study for some time.¹³⁵ Once conceived as a means by which to discover universal truths inchoate in human organization,¹³⁶ recent movements have been directed at actually uncovering the differences among peoples.¹³⁷ The goal is to stimulate new judgments through challenging individual ethnocentric perspectives.¹³⁸ This view does not reject the notion that there may be integrative forces that may appear to level economic or political perspectives or the fashion and lifestyle among groups and individuals. Rather, it suggests that these forces may be far less significant or may have a much less dramatic effect than some may choose to admit.¹³⁹ It also considers that people may differ in their

¹³⁴ JOHN STUART MILL, *PRINCIPLES OF POLITICAL ECONOMY* 581 (1948).

¹³⁵ See generally Anne Peters & Heiner Schwenke, *Comparative Law Beyond Post-Modernism*, 49 INT'L & COMP. L.Q. 800 (2000) (suggesting new methodologies of comparative law).

¹³⁶ See *id.* at 805 (citing ALBERT HERMANN POST, *BAUSTEINE FÜR EINE ALLGEMEINE RECHTSWISSENSCHAFT AUF VERGLEICHEND-ETHNOLOGISCHER BASIS* 12 (1880)) ("Albert Hermann Post, assumed that 'there are general forms of organi[z]ation lying in human nature as such, which are not linked to specific peoples.'"); see also HENRY MAINE, *ANCIENT LAW* (3d ed. 1866). Consider, also, a discussion of the Volkgeist as the foundation of legal development. See EDWIN WILHITE PATTERSON, *JURISPRUDENCE: MEN AND IDEAS OF THE LAW* 410, 410-20 (1953) (discussing the Volkgeist as the foundation of legal development.)

¹³⁷ See Vivian Grosswald Curran, *Cultural Immersion, Difference and Categories in U.S. Comparative Law*, 46 AM. J. COMP. L. 43, 50-54 (1998) (explaining that "a valid examination of another legal culture requires immersion into the political, historical, economic and linguistic contexts that molded the legal system, and in which the legal system operates").

¹³⁸ See Paolo Carozza, *Continuity and Rupture in "New Approaches to Comparative Law,"* 1997 UTAH L. REV. 657, 663 (1997) ("We should no doubt articulate our prior conceptual and normative frameworks and critically examine the way that they give direction to our knowledge, understanding, and judgment regarding the objects of our study."); Peters & Schwenke, *supra* note 135, at 830 (critiquing post-modernist comparative law's objectivity).

¹³⁹ See GEERT HOFSTEDÉ & GERT JAN HOFSTEDÉ, *CULTURES AND ORGANIZATIONS: SOFTWARE OF THE MIND* 12 (2005):

There are many things in societies that technology and its products do not change. If young Turks drink Coca-Cola, this does not necessarily affect their attitudes toward authority. . . .

fundamental metaphysical approach to understanding what motivates them¹⁴⁰ and the way they process information.¹⁴¹ Consequently, and in this context, harmonization may be a more proper goal than an assumption of homogenization.¹⁴² Although

[D]ifferences mostly involve the relatively superficial spheres of symbols and heroes, of fashion and consumption. In spheres of values—that is, fundamental feelings about life and about other people—young Turks differ from young Americans just as much as old Turks differ from old Americans.

Id.

¹⁴⁰ See Michael Pickhardt, *Some Remarks on Self-Interest, the Historical Schools and the Evolution of the Theory of Public Goods*, 32 J. ECON. STUD. 275, 278 (2005) (commenting on motivations underlying humanity including positive “self-preservation” to benefit society, pure selfishness, general common sense within a social entity, and a “sense of justice and propriety”).

¹⁴¹ Laying the proper groundwork, or *Nemawashi*, is, for example, indispensable to a proper process of decision making in Japan. “The Japanese are not accustomed to the Western system of communicating and negotiating, which lets both sides present conflicting interests and ideas before reaching a conclusion. They prefer to reach a solution as amicably as possible, and there is a tendency to compromise with others” ROGER J. DAVIES AND OSAMU IKENO, *THE JAPANESE MIND* 159 (2002). The Japanese tend to make decisions by consensus and not necessarily by power of office and often do so prior to any meeting set to allegedly discuss the matter. The feelings of all co-workers are very important, and a leader’s view is not preemptive. This process of reaching consensus in Japan “is a different principle from that of democracy: decision by majority.” R. NAOTSUKA, *OBEIJIN GO CHINMOKU SURU TOKI* 202 (1980), *cited in* ROGER J. DAVIES & OSAMU IKENO, *THE JAPANESE MIND* (2002). Rather, *Nemawashi* is focused upon notification of views with a goal of reaching unanimous agreement before meeting so as to avoid conflict and retain group harmony.

¹⁴² See Peters & Schwenke, *supra* note 135, at 814:

[C]ultures are not hermetic, closed, immutable entities. Cultures, in contrast to individuals, do not have readily determined boundaries. And if boundaries between cultures are blurry, the boundaries of the epistemic and moral furniture of different cultures are blurry as well.

. . . .

It is well-known that the U.S.-American culture has been and is continuing to infiltrate many other cultures of the world. Also, differences within one culture may be greater than differences between cultures.

Id. Some have observed a trend to focus solely upon economic analysis. This may, in fact, be a reductionist approach founded upon an assumption of universalism. As observed by Peters and Schwenke:

To compare laws under the aspect of *economic efficiency* is not more “objective” than comparing them under the aspect of social function. The difference is that economic efficiency is a narrower criterion, referring to the particular economic function of a law. Comparative assessments under the efficiency-aspect may therefore be quite specific

practices in the world community may appear to change rapidly; perhaps core values change less rapidly if they change at all.¹⁴³ Failure to appreciate and respond to cultural divergence, particularly respecting differences in patterns of comprehension, can prove a significant obstacle to intercultural understanding and accommodation.¹⁴⁴

Cultural influence is not only a geographic¹⁴⁵ phenomenon. Virtually all communities, including the scientific and academic,¹⁴⁶ have philosophies, pop-cultures, and practices in common.¹⁴⁷ As Edward Hall has observed:

and precise. However, those aspect of an issue which are easiest to measure are not necessarily the most important ones. To focus on economic efficiency as the exclusive criterion under which to evaluate laws (as the strict law and economics approach does), and consequently to compare laws exclusively under that aspect, reveals a quite reductionist view of the law and its role in society.

Id. at 829.

¹⁴³ See HOFSTEDE & HOFSTEDE, *supra* note 139, at 13 (asserting that “[l]ayers of culture acquired later in life tend to be more changeable”); see also RICHARD NISBETT, *THE GEOGRAPHY OF THOUGHT: HOW ASIANS AND WESTERNERS THINK DIFFERENTLY . . . AND WHY?*, at xvii (2003), opining that:

The collective or interdependent nature of Asian society is consistent with Asians’ broad, contextual view of the world and their belief that events are highly complex and determined by many factors. The individualistic or independent nature of Western society seems consistent with the Western focus on particular objects in isolation from their context and with Westerners’ belief that they can know the rules governing objects and can therefore, control objects’ behavior.

Id.

¹⁴⁴ See DAVIES & IKENO, *supra* note 141, at 196 (noting that “[t]here is no doubt that the harmony of the group is vitally important in Japanese society”).

¹⁴⁵ See *id.* (noting that the “Japanese make a clear distinction between *uchi* (insiders) and *soto* (outsiders)”).

¹⁴⁶ For example, the vagaries of using metadata and hostage of the traits of human beings. As author Cory Doctorow observes: “Reasonable people can disagree forever on how to describe something. Arguably, your Self is the collection of associations and descriptors you ascribe to ideas. Requiring everyone to use the same vocabulary to describe their material denudes the cognitive landscape, enforces homogeneity in ideas.” DOCTOROW, *supra* note 81, at 83.

¹⁴⁷ See HOFSTEDE & HOFSTEDE, *supra* note 139, at 4:

Culture is always a collective phenomenon, because it is at least partly shared with people who live or lived within the same social environment, which is where it was learned. Culture consists of the unwritten rules of the social game. It is *the collective programming of the mind that distinguishes the members of one group or category of people from others.*

[A]nthropologists do agree on three characteristics of culture: it is not innate, but learned; the various facets of culture are interrelated . . . ; it is shared and in effect defines the boundaries of different groups.

Culture is man's medium; there is not one aspect of human life that is not touched and altered by culture. This means personality, how people express themselves[,] . . . the way they think, how they move, how problems are solved . . . as well as how economic and government systems are put together and function. However, like the purloined letter, it is frequently the most obvious and taken-for-granted and therefore the least studied aspects of culture that influence behavior in the deepest and most subtle ways.¹⁴⁸

This perspective is espoused not only by academics but also by those actively involved in the transnational media community. As Hiroshi Kukimoto observed, "[t]he appearance of a document or Web page is imbued with culture, custom and history conveyed through the arrangement of text and the appearance of written characters. Graphical expression must exhibit *kansei*, a largely untranslatable Japanese concept of 'look and feel' combined with sense awareness."¹⁴⁹

4.1.1. Cultural Components

Social scientists usually examine two significant characteristics when assessing the effect of culture on operations and overt practices. They are, first, the relationship between the individual and the group within the particular system, that is, the degree of individualism as opposed to collectivism,¹⁵⁰ and second, the extent to which information is communicated in specific codes, that is, high versus low context transmission.¹⁵¹

Id.

¹⁴⁸ EDWARD T. HALL, *BEYOND CULTURE* 16-17 (1989).

¹⁴⁹ *WTEC Panel Report on Digital Information in Japan*, INT'L TECH. RES. INST., app. C, 133 (Feb. 1999), available at http://www.wtec.org/loyola/digilibs/c_16.htm.

¹⁵⁰ See generally HARRY C. TRIANDIS, *INDIVIDUALISM & COLLECTIVISM* (1995) (exploring cultures of individualism and collectivism, their attributes, their antecedents, and applications of this analysis).

¹⁵¹ For an explanation, see Geoffrey R. Scott, *A Comparative View of Copyright As Cultural Property in Japan and the United States*, 20 *TEMPLE INT'L & COMP. L.J.* 283,

4.1.1.1. Individualism and Collectivism

The individualist/collectivist dichotomy describes the relationship between and the relative importance of individuals and groups¹⁵² within a given culture.¹⁵³ Societies denoted as

287 *et seq.* (2006); see also HALL, *supra* note 148, at 85 *et seq.* (describing how culture “designates what we pay attention to and what we ignore”).

¹⁵² HOFSTEDE & HOFSTEDE, *supra* note 139, at 76 (emphasis omitted), explaining:

Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong cohesive in-groups, which throughout people’s lifetimes continue to protect them in exchange for unquestioning loyalty.

¹⁵³ For an economic perspective on individualism and collectivism, see Pickhardt, *supra* note 140, at 278–79 (internal citations omitted):

Emil Sax launches his attempt to establish public economics as an exact science by identifying the two elementary forces that are responsible for all socio-economic decisions of man: individualism and collectivism. Next, Sax demonstrates that these two forces have been recognised in one way or another by a wide variety of writers from Aristotle to Hume, but criticises each of these approaches. For example, Adam Smith’s distinction of “self-interest” and “sympathy” is criticised for being less explicit and clear on same. Regarding the German romantic school and the older historical school, Sax firmly rejects the organic conception of associations or the state, but praises the acknowledgement of the two sides of the social nature of man embodied in the former. He also identifies Hermann’s juxtaposition of self-interest and *Gemeinsinn* as a reflection of the two elementary forces. But he blames von Hermann and his followers, particularly Roscher, for their inability to offer a proper theoretical background of *Gemeinsinn*. Only Knies’s treatment of *Gemeinsinn* receives some sympathy. In addition, Sax briefly discusses the introduction of *Sitte* by Schü(t)z and Schmoller, Schaeffle’s *gemeinwirtschaftliche Kräfte* and Wagner’s socialism, as evidence for the communis opinio that man is guided by two elementary forces, in Sax’s view: individualism and collectivism.

Individualism is defined by Sax as the propensity of man to design his egoistic, mutualistic and altruistic behaviour patterns regarding his fellow man as an expression of his personality and his self-determined relations with other people. In contrast, collectivism is defined as the assignment or fitting in of man into larger, stable groups, which act in an egoistic, mutualistic and altruistic manner concerning their relations to other groups or individuals, so that the individual is motivated in an egoistic, mutualistic and altruistic manner only as a member of the group and in relation to the latter. Hence, individualism and collectivism are different manifestations of egoism, mutualism and altruism, where mutualism refers to “some intermediate behaviour typically encountered in associations such as insurance, or in the formation of social classes with their common feeling of solidarity.” Moreover, according to Sax

individualistic tend to emphasize personal achievement and place a high value on independence, self-reliance, risk-taking, competitive behavior, personal pleasure, pluralism, and self-determination. Americans, for example, are generally characterized as being competitive and goal-oriented, and success in the United States is often measured in terms of personal advancement rather than in developing strong interpersonal relationships.¹⁵⁴ Australia, Great Britain, Canada, the Netherlands, and New Zealand are also often classified as individualistic.¹⁵⁵ In contrast, collectivist societies emphasize the interdependence of persons, cooperative behavior, social homogeneity, family bonds, and a developed system of hierarchy. Japan, China, South Korea, Peru, Venezuela, and Pakistan are often classified as collectivist societies,¹⁵⁶ tending to place a high value upon group harmony and social cohesion. One can certainly observe the influence of these varying perspectives upon regimes of personal property and the degree of recognition of a propriety approach to innovation.

In Japan, for example, *shudan ishiki*, or group consciousness, is a fundamental social tenet. It is born in the structure of the household (*ie*), the smallest political unit, and its values extend to virtually all relationships.¹⁵⁷ Groups establish discrete codes of

individualism and collectivism are social elementary forces, which are at work simultaneously in all man and which he assumes as inherent in man's nature right from the beginning.

At this point it should be emphasised that the distinction between individualism and collectivism and the notions of egoism, mutualism and altruism are central to the understanding of Sax's work on public economics, i.e. Sax. Moreover, it is this element of his work that provides an important link to the older and younger historical schools. Another such link is Sax's emphasis on sociology and psychology for identifying man's motivations in his pursuit of economic activities. In fact, almost all other issues raised in his major work on public economics, *Grundlegung Der Theoretischen Staatswirthschaft*, in particular his stance on valuation, places him close to the older Austrian School.

Id.

¹⁵⁴ See Scott, *supra* note 151, at 288 (noting that the United States often measures success "in terms of personal advancement and in developing strong interpersonal relationships").

¹⁵⁵ See HOFSTEDE & HOFSTEDE, *supra* note 139, at 78 (describing countries that show characteristics of individualistic societies).

¹⁵⁶ See *id.* at 79 (noting the differences between individualistic and collectivist societies and naming countries that fall into each category).

¹⁵⁷ For an analysis of the influence of *ie*, see Geoffrey R. Scott, *What Do Jim Morrison, Kurt Cobain, Elvis Presley, and Utagawa Toyoharu have in Common?*

behavior and understanding that are acceptable to, and shared by, members of the community (*uchi*) and are often unknown to outsiders (*soto*). Loyalty is rewarded with security, and group solidarity is often revered above all else.¹⁵⁸ Independence of person is rare, an idea reflected in the Japanese proverb, "The nail that stands up will be pounded down (*Deru kui wa utareru*)." This attitude can often be observed in the Japanese characteristics of negotiation. "[T]hey are unwilling either to form a consensus or to express disagreement in front of their opponents; they give strong nonverbal support to their leaders; and their counteroffers are often innovative, offering benefits to both sides."¹⁵⁹ The difference between *uchi* and *soto* is distinct and often cited as one reason why outsiders perceive the Japanese to be uncomfortable dealing with outsiders or while in alien international environments. As Takeuchi observed:

Japanese in groups are usually indifferent to outsiders. However, when outsiders are invited to come with appointments, they are treated courteously as formal guests. If they should try to join one's group without any contact, however, they would never have a warm welcome and might secretly become people who should be refused admittance and excluded from the group.¹⁶⁰

Protecting Artistic Legacy in the United States and Japan: A Comparison of U.S. Legal Principles and Iemoto Seido of Japan, 26 CONN. J. INT'L L. 161, 213-215 (2010).

¹⁵⁸ See XINZHONG YAO, AN INTRODUCTION TO CONFUCIANISM 279 (2000) ("Due to cultural differences, however, some traditions are more concerned with free choice and individuals rights, while others deal more with responsibility. Confucianism is a tradition that places much emphasis upon human responsibility.").

¹⁵⁹ ROBERT M. MARCH, THE JAPANESE NEGOTIATOR: SUBTLETY AND STRATEGY BEYOND WESTERN LOGIC 9 (1990). In contrast, Americans:

agree to ask initially for more than they want and to take a low-keyed approach. In reality, however, they are not low-keyed but are concerned with proving their position is right in order to convert the Japanese to their viewpoint. Americans show a stronger and more explicit desire to win, emphasize benefits to the other party, and make passionate presentations with the goal of winning, in contrast to the Japanese goal of defending their position. Observers repeatedly describe the American negotiating style as highly aggressive. But Americans only appear to dominate as they keep agreeing with each other and disagreeing with the other side.

Id. at 9-10.

¹⁶⁰ Y. TAKEUCHI, NIHONJIN NO KODO BUNPO 213 (1995) *cited in* DAVIES AND IKENO, *supra* note 141, at 196.

4.1.1.2. High vs. Low Context

The second consideration is the high-context/low-context component of communication.¹⁶¹ “A high-context message is one in which most of the data is either found within the physical or social context of the communication or is internalized within the recipient and employed by him in the course of understanding the meaning of the communication.”¹⁶² In high-context situations:

[I]nformation is shared through simple messages that precipitate significant meaning. In contrast, a low-context communication depends upon very explicit transmissions, and it relies very little on the prior experience of the recipient or the relevance of the surrounding environment. It is characterized by detail and a highly structured organization. In low-context situations, “communication between people is more explicit and nonpersonal.”¹⁶³

In Japan, for example, silence (*chinmoku*) is an important communicative device and may reflect the implicit mutual understandings among people born of group consciousness (*uchi*).¹⁶⁴ As suggested by Tannen, “silence can be a matter of

¹⁶¹ See HALL, *supra* note 148, at 85 *et seq.* (explaining the contrast between high-context and low-context communication).

¹⁶² Scott, *supra* note 151, at 289. See also RICHARD D. LEWIS, *WHEN CULTURES COLLIDE: LEADING ACROSS CULTURES* 8 (3d ed. 2006), stating:

Many linguists adhere to anthropologist Benjamin Whorf’s hypothesis, which states that the language we speak largely determines our way of thinking, as distinct from merely expressing it. In other words, Germans and Japanese behave in a certain manner because the way they think is governed by the language in which they think. A Spaniard and a Briton see the world in different ways because one is thinking in Spanish and the other in English

The Briton, the German and the Inuit may share a common experience, but it appears to each as a kaleidoscopic flux of impressions that has to be organized by the mind. The mind does this largely by language. Thus the three individuals end up seeing three different things.

Id.

¹⁶³ Scott, *supra* note 151, at 289 (internal footnotes and citations omitted).

¹⁶⁴ The phenomena of ambiguity and silence are often extended to the business world and the international community by the Japanese mind as linked to the virtue of trust. See MARCH, *supra* note 159, at 9–10 (describing business negotiations in which Japanese participants remain silent, give deference to the group leader, and only discuss their positions within their own groups, outside the negotiation context).

saying nothing and meaning something.”¹⁶⁵ Not all cultures understand, much less revere, such values, and people from other cultures may interpret the significance of non-communication in variant ways. Western and other low-context cultures that value open communication and emphasize detailed verbal expression may misinterpret silence and infer rejection, indifference, or insult as its meaning: “The Western tradition is relatively negative in its attitude toward silence and ambiguity, especially in social and public relations. People seldom recognize that silences do have linking, affecting revelational, judgmental, and activating communicative functions in Western cultures.”¹⁶⁶

Issues of context are often raised in intellectual property disputes when construing ambiguous terms found in licensing agreements. Resort may be made to course of dealing, course of performance, and usage of trade within a particular industry in order to aid in explaining or interpreting the unclear language in a license.¹⁶⁷ In proper circumstances and absent a “merger clause,” resort may also be made to other forms of extrinsic evidence, such as prior negotiations through use of the parole evidence rule, in order to discern the intent of the parties to the agreement.¹⁶⁸

Context is also extremely important in a contemporary technological sense, for example, in the production and use of software, the internet, and search engines. As above noted, Google’s search engine¹⁶⁹ is founded upon an open source algorithm.¹⁷⁰ Its success, however, is due largely to the repetitive

¹⁶⁵ Takie Sugiyama Lebra, *The Cultural Significance of Silence in Japanese Communication*, 6 *MULTILINGUA* 343, 343 (1987) (internal citations omitted).

¹⁶⁶ Satoshi Ishii & Tom Bruneau, *Silence and Silences in Cross-Cultural Perspective: Japan and the United States*, in *INTERCULTURAL COMMUNICATION: A READER* 246, 247 (Larry A. Samovar & Richard E. Porter eds., 1994) (internal citations omitted).

¹⁶⁷ See *Kepner-Tregoe, Inc. v. Vroom*, 186 F.3d 283, 287 (2d Cir. 1999) (holding “that in the context of the agreement, the word ‘teaching’ was susceptible to the interpretation advanced by either Dr. Vroom or K-T. Accordingly, the district court was entitled to consider extrinsic evidence to interpret the contractual language.”).

¹⁶⁸ See *NGUYEN ET AL.*, *supra* note 79, at 92 (describing the use of parole or extrinsic evidence to discern the terms of a license agreement).

¹⁶⁹ For an early article written by the founders of Google describing the creation of the search engine, see Sergey Brin & Lawrence Page, *The Anatomy of a Large-Scale Hypertextual Web Search Engine*, available at <http://infolab.stanford.edu/~backrub/google.html> (explaining how Google’s search engine was designed).

¹⁷⁰ See *supra* note 85 and accompanying text.

tweaking and refinement it has undergone over the years and that has, from the perspective of many users, made it superior to other search engines. One of the most significant advances was “Pagerank,” a system invented in 1997 by Larry Page.¹⁷¹ It rates pages hierarchically based upon the number and quality of links¹⁷² that point to them.¹⁷³ It is, however, the contextual clues that are found on the pages that actually permit the most relevant sites to surface.¹⁷⁴ Google crawls the web, searches its content, and indexes the pages. When a user inputs a query, the index is scanned for relevant pages, and the contextual signals they contain subsequently determine the location of a particular page in the search results.¹⁷⁵ Contextual signals provide relevance, and Google

¹⁷¹ For a technological overview and analysis of Pagerank and hyper-texting analysis, see *Technology Overview*, GOOGLE, <http://www.google.com/corporate/tech.html> (last visited Apr. 11, 2011) (providing a technical overview of Google).

¹⁷² Users can attempt to manipulate the results displayed by a search engine by various means. Link Farming is one such technique where owners of a site or its agent (sometimes an advertising agent operating in a “Black Hat” mode) can increase the number of inbound links by sharing or making an agreement of exchange with other sites. Insofar as the quality of the links is not also increased, this technique can skew the results. For an explanation of good linking practices, see *Link Schemes*, GOOGLE, <http://www.google.com/support/webmasters/bin/answer.py?answer=66356> (last visited Apr. 11, 2011). Other techniques include keyword stuffing and including hidden links on a page. See *Keyword Stuffing*, GOOGLE, <http://www.google.com/support/webmasters/bin/answer.py?answer=66358> (last visited Apr. 11, 2011) (describing keyboard stuffing); *Hidden Text and Links*, GOOGLE, <http://www.google.com/support/webmasters/bin/answer.py?answer=66353> (last visited Apr. 11, 2011) (describing the practice of including hidden links on a page). Yet another technique creates doorway pages just for search engines, thin affiliated sites that have no significant content but send users to other sites for a fee, or auto-generated content that usually makes little sense to users but is employed to redirect search engines. For a discussion of this technique, see *Little or No Original Content*, GOOGLE, <http://www.google.com/support/webmasters/bin/answer.py?answer=66361> (last visited Apr. 11, 2011).

¹⁷³ The following is the original formula employed to calculate the Pagerank of inbound links: $PR(A) = (1-d) + d(PR(t1)/C(t1) + \dots + PR(tn)/C(tn))$. For a more complete explanation of the application, see Phil Craven, *Google's PageRank Explained and How to Make the Most of it*, WEBWORKSHOP, <http://www.webworkshop.net/pagerank.html> (last visited Apr. 11, 2011); see also Mark Horrell, *The Google PageRank Algorithm*, MARKHORRELL.COM, <http://www.markhorrell.com/seo/pagerank.html> (last visited Apr. 11, 2011) (explaining how PageRank “can affect the position of your page on Google”).

¹⁷⁴ For a superb discussion of recent developments with respect to the Google search engine, see Levy, *supra* note 86.

¹⁷⁵ See Brin & Page, *supra* note 169 (explaining how Google's search engine was designed); see also Levy, *supra* note 86, at 100 (explaining how Google

employs over 200.¹⁷⁶ As human users queried such terms as dogs, puppies, hot water, and boiling water, the algorithm assimilated the semantics employed. The difficulty, however, was that while the synonym system comprehended certain relationships between words such as dog and puppy, it also concluded that a hotdog was logically the same as a boiling puppy. This problem was solved by connection words to their context.¹⁷⁷ Thus the term hot dog was often related to other terms such bun, mustard, picnic, baseball, and was not necessarily paired with The American Kennel Club or the Westminster Dog Show. As a result, when an individual inputs a term such as “hot dog,” the search engine algorithm now “understands” the context and brings up relevant results. As noted by Google Fellow Amit Singhal, “[t]oday if you type ‘Gandhi bio,’ we know that bio means biography, . . . and if you type ‘bio warfare,’ it means biological.”¹⁷⁸

4.1.1.3. A Coalescence of the Cultural Principles and Their Effect on Use of Innovation

An example of the interrelationship between such cultural principles and their effect on innovation and intellectual property at a macro-cultural level is illustrated with the development of the printing press. Researchers have generally concluded that the

analyzes words that are similar to each other while searching through billions of web pages).

¹⁷⁶ See Levy, *supra* note 86 at 99–100 (providing examples of such signals, including the title of the page, anchor text, freshness, location and geographical coordinates of the user, a user’s personal search history, and contextual synonyms).

¹⁷⁷ See Taher Haveliwala, Efficient Computation of PageRank 14 (October 18, 1999) (unpublished technical report, Stanford University), <http://infolab.stanford.edu/~taherh/papers/efficient-pr.pdf> (explaining “several ways of analyzing the convergence of the algorithm, based on the ordering induced on web pages by the Rank vector.”); see also Taher Haveliwala, Topic Sensitive PageRank: A Context-Sensitive Ranking Algorithm for Web Search 1 (Dec. 15, 2002) (unpublished technical report, Stanford University), <http://infolab.stanford.edu/~taherh/papers/topic-sensitive-pagerank-tkde.pdf> (explaining “techniques for efficiently implementing a large scale search system based on the topic-sensitive PageRank scheme.”); Levy, *supra* note 86, at 100 (explaining that Google’s advanced search techniques were reportedly grounded in the theories of Ludwig Wittgenstein wherein the meaning of a word is related to how it is used); Ludwig Wittgenstein, STANFORD ENCYCLOPEDIA OF PHILOSOPHY, <http://plato.stanford.edu/entries/wittgenstein/#Mea> (last updated Dec. 23, 2009) (noting that words are often defined by examining the context in which they are used).

¹⁷⁸ Levy, *supra* note 86, at 100 (internal citation omitted).

United States is a low-context society, while Japan and China are high-context countries.¹⁷⁹ Consequently, this interplay is particularly underscored by the differing roles that the printing press played in the development of copyright, as well as artists' rights, writ large, in Asia and the West.

First, let us observe the technological backdrop. The invention of paper in 105 A.D. by Cai Lun of China fueled the duplication of manuscripts in the East.¹⁸⁰ Previously, transcription by hand was the general method employed to produce manuscripts, though there is evidence of mechanical printing in Japan as early as 770 A.D.¹⁸¹ If printing was used, however, it usually employed the woodblock form known as *seihanbon*.¹⁸² There is some debate concerning when and where moveable type was first invented. While some claim that early forms found in China around the 10th Century employed ceramic type, others attribute the invention to Bi Sheng of China in 1041.¹⁸³

Second, let us overlay the extant cultural conditions. Japanese and Chinese are essentially pictographic languages, and the various symbols take much from the context in which they are used.¹⁸⁴ While various forms of printing were, in fact, introduced

¹⁷⁹ See Scott, *supra* note 151, at 289-90 (explaining that high-context communications tend to present large amounts of data in physical, social, or uniquely personal communications, while low-context communications present information in a direct and explicit manner). Common law systems that are dependent upon a strong structural theory of *stare decisis* and rely upon complex analysis of precedential information in arriving at conclusions are low-context oriented. In contrast, civil law systems, such as that in Japan, which depend upon judges' reliance on the "*volksgeist*" as a resource, are more high-context. *Id.*

¹⁸⁰ *Id.* at 322.

¹⁸¹ See *id.* (stating that "[t]he oldest known specimen of mechanical printing in Japan" was "part of the venerable Million-Pagodas Dharani project of 770").

¹⁸² See *id.* at 323 (noting that the primary form of printing was confined to "woodblock printing known as *seihanbon*").

¹⁸³ See *id.* at 323 (discussing the evolution of moveable type in early China).

¹⁸⁴ By the Second Century, there were approximately 50,000 standard characters in Chinese, and today, it is reported that linguistic units (*Hanzi*) found in some dictionaries number 80,000. In Japanese, there are actually four separate scripts, namely, *Kanji*, *Katakana*, *Hiragana*, and *Romanji*. In the mid-1940s, Japanese dictionaries listed approximately 50,000 characters (*Kanji*). Following the Allied Occupation, there was an effort made to simplify the language for use by the average person, and in 1981, the number of General Use Characters was reduced to 1,945. See Scott, *supra* note 151, at 319 *et seq.* (discussing the development of a written language in Asian countries).

into Japan throughout the centuries,¹⁸⁵ the calligraphic and pictorial forms of written Japanese constrained the utility of the printing press.¹⁸⁶ Notwithstanding the movement toward Westernization during the Meiji Period (1868-1912), printing in Japan continued to be dominated by the woodblock until approximately 1890.¹⁸⁷ Likely due to the complexity of linguistic forms, the traditions in the East were primarily oral. The Japanese people, for example were generally, not considered literate until the Edo period (1603-1867), and even then only the aristocracy and merchants could read.¹⁸⁸

Protection of artists' rights in general and copyright in particular, followed the trend of the innovation and use of printing. Due to the inefficiency of printing pictographic language characters and the lack of a broad market for printed books consequent of widespread illiteracy, there was little demand for printed text.¹⁸⁹ In addition, the collective tradition of Japan tended to discourage the identification of individual authorship. For example, "[d]uring the Heian period, the paternity of a written work was rarely identified."¹⁹⁰ If individuals were identified as contributors to published volumes, it was not uncommon that all who participated in the publication were named, including editors, helpers, block carvers, as well as authors.¹⁹¹ It was not until 1869 that an ordinance directed at publishing was promulgated, and "[i]n 1877, an independent copyright ordinance was

¹⁸⁵ Western forms, for example, were not used for approximately 200 years when Christianity was banned and the Western "barbarians" were expelled from Japan in 1612. PETER KORNICKE, *THE BOOK IN JAPAN: A CULTURAL HISTORY FROM THE BEGINNINGS TO THE NINETEENTH CENTURY* 325-330 (1998) (describing Japan's ban on Christian books beginning in the late sixteenth century); see also Scott, *supra* note 151, at 322-328 (discussing the history of printing in Japan).

¹⁸⁶ See Scott, *supra* note 151, at 325 (noting that "the technology of moveable type and the printing press had much less consequence in Japan" as a result of "the complexity of pictorial forms").

¹⁸⁷ See *id.* at 326-327 (noting that the woodblock remained the dominant form of printing in Japan until 1890).

¹⁸⁸ See *id.* at 326 (noting that more widespread literacy finally arose in Japan during the Edo Period).

¹⁸⁹ See *id.* at 325 (explaining that higher literacy spurred demand for printed works at the time in Europe whereas Japan was slower to embrace written language due to the complexity of pictorial forms).

¹⁹⁰ *Id.* at 329.

¹⁹¹ See *id.* (explaining that in certain instances, authors, "editors, helpers block carvers and others who might have contributed to its production" were included in written works during the Tokugawa period).

promulgated.”¹⁹² True recognition of intellectual property rights did not occur in Japan, however, until the end of the nineteenth century. In 1899, in order that Japan might fulfill certain obligations imposed by international treaties to which it was a party, the Copyright Act, the Patent Act, the Design Act, and the Trademark Act were passed.¹⁹³

Innovation in printing and the utility of the press in effecting social change took a different path in the West. As noted by Francis Bacon, in “Novum Organum” Aphorism 129, “[we] should note the force, effect, and consequences of inventions which are nowhere more conspicuous than in those three which were unknown to the ancients, namely, printing, gunpowder, and the compass.”¹⁹⁴

First, in contrast to the structure of language in the East, Western language is primarily phonetic, and European languages have fewer than fifty letters in their alphabets.¹⁹⁵ The language system is predominantly low-context, and the general peasant populous was semi-literate due to their familiarity with religious manuscripts.¹⁹⁶ In addition, the fabric of ancient Greek philosophy, contrary to the Eastern view of legitimate curiosity, suggested “that knowledge of the human condition should be shared by and accessible to everyone” and faith to underlying information required replication of facts and duplication of a predecessor’s efforts and demonstrated respect and veneration.¹⁹⁷ Thus, the foundation for recognition and acceptance of efficient means of communication existed.

Later, “[f]ertilized by the introspective foundation laid by Renaissance thinkers, the Protestant Reformation” of the early sixteenth century “fed the growing and considerable influence over

¹⁹² *Id.* at 331.

¹⁹³ For a detailed consideration of the significance of the printing press in Japan, see Scott, *supra* note 151, at 316 *et seq.*

¹⁹⁴ Elizabeth Eisenstein, *The Emergence of Print Culture in the West: “Defining the Initial Shift”*, in *THE RENAISSANCE IN EUROPE: A READER* 55 (Keith Whitlock ed., 2000) (internal citation omitted).

¹⁹⁵ See Scott, *supra* note 151, at 318–19 (contrasting the characteristics of Eastern and Western languages).

¹⁹⁶ The audience in Europe had expanded and by the end of the 18th century, between one-half to two-thirds of the male population in England, France, the Netherlands and Germany were considered literate. See JOHN MERRIMAN, *A HISTORY OF MODERN EUROPE: FROM THE RENAISSANCE TO THE PRESENT* 352 (2d ed. 2004).

¹⁹⁷ Scott, *supra* note 151, at 347–350.

the development of the propriety interest in ideas and their expression.”¹⁹⁸ “As the movement spread across Western Europe, . . . the social conflagration that ensued was facilitated by the reinvention of the printing press in the mid-15th century.”¹⁹⁹ Thus, a powerfully-felt need to express one’s self, a means by which to accomplish that end, and a semi-literate audience burning for the products of opinioned authorship serendipitously coalesced to fuel the first of innovation and intellectual property.²⁰⁰

Many states responded by attempting to control and censor authors, and in 1557, the Crown gave the Stationers Company in London right to control printing and publication.²⁰¹

The Age of Enlightenment followed and . . . its writers . . . emphasized rationality and the capacity of the human mind as the means by which authoritative regimes of ethics, aesthetics and knowledge might be established. Similarly, proponents of the philosophy highlighted the importance of individuality, self respect, and equality among persons as separate and apart from the rules that governed human interaction.²⁰²

In 1695, the grant to the Stationers Company expired, and what has been labeled the first modern copyright act, the Statute of Anne, was passed in 1710.²⁰³

The influence of the Enlightenment upon the American colonies was also significant. A budding republic and participatory democracy in early America was defined by its commitment to individualism, and it was through the use of documents that embodied this spirit, such as Joseph Addison’s play *Cato*, that the message of colonial independence was spread.²⁰⁴

¹⁹⁸ *Id.* at 351.

¹⁹⁹ *Id.* at 351–52 (internal citation omitted).

²⁰⁰ *See id.* at 352 (opining that the combination of several factors including individuals’ desire for self-expression, increased literacy, and more “efficient means by which ideas could be transmitted” precipitated to erode prior printing monopolies previously held by priests and monks).

²⁰¹ *See id.* at 356 (noting that because the subject right arose from the crown, it “secured the interest of the Company as opposed to that of authors”).

²⁰² *Id.* at 352–53.

²⁰³ *See id.* at 356–57 (describing the 1695 expiration of the Stationer’s Company leading up to the passage of the 1710 Statute of Anne).

²⁰⁴ The play, written in 1712, is about a Roman Senator of the first century B.C. who chose to commit suicide rather than submit to the oppressive authority of the state. *See generally* JOSEPH ADDISON, *Cato*, in 2 THE MISCELLANEOUS WORKS OF JOSEPH ADDISON 41 (1830). George Washington ordered that the play be

The first U.S. Copyright Act was passed in 1790, and in Europe, the French Law of 1793 gave authors the right to control copying, distribution, and sale of works.²⁰⁵

Throughout and following the Romantic Era, the concept of the “author” emerged and with it the view that his “works belonged to him/her individually as a personal possession to be defended against misappropriation”²⁰⁶ Handwritten text had given way to the printed word, and writing had become a profession.²⁰⁷

4.1.2. Legal Traditions

Legal regimes possess underlying conventions or precepts that distinguish them from one another, and these characteristics can affect approaches to innovation and intellectual property protection.²⁰⁸ As John Henry Merryman writes:

performed for his officers during the encampment at Valley Forge, and it was a line from the play that inspired Patrick Henry to utter his famous line in 1775: “Give me liberty, or give me death.” See Albert Furtwangler, *Cato at Valley Forge*, 41 MOD. LANGUAGE Q. 38 (1980) (recounting the play’s performance at Valley Forge); Frederic M. Litto, *Addison’s Cato in the Colonies*, 23 WM. & MARY Q. 431, 444-45 (1966) (suggesting that Patrick Henry’s declaration of “give me liberty, or give me death” was directly inspired by Addison’s play).

²⁰⁵ See *Scott*, *supra* note 151, at 357-58 (outlining passage of early French and U.S. copyright laws).

²⁰⁶ *Id.* at 355 (citation omitted).

²⁰⁷ *Id.* (noting that “[w]riting as a profession” arose following the advent of the printing press) (citation omitted).

²⁰⁸ See LEWIS, *supra* note 162, at 5-6, stating:

As the globalization of business brings executives more frequently together, there is a growing realization that if we examine concepts and values, we can take almost nothing for granted. The word *contract* translates easily from language to language, but like *truth*, it has many interpretations. To a Swiss, Scandinavian, American or Brit, a contract is a formal document that has been signed and should be adhered to. Signatures give it a sense of finality. But a Japanese businessperson regards a contract as a starting document to be rewritten and modified as circumstances require. A South American sees it as an ideal that is unlikely to be achieved but that is signed to avoid argument.

Members of most cultures see themselves as ethical, but ethics can be turned upside down. The American calls the Japanese unethical if the latter breaks a contract. The Japanese says it is unethical for the American to apply the terms of the contract if things have changed. Italians have very flexible views on what is ethical and what is not, which sometimes causes Northern Europeans to question their honesty.

Id.

A legal tradition . . . is not a set of rules of law Rather it is a set of deeply rooted, historically conditioned attitudes about the nature of law, about the role of law in the society and in the polity, about the proper organization and operation of a legal system, and about the way law is or should be made, applied, studied, perfected, and taught. The legal tradition relates the legal system to the culture of which it is a partial expression. It puts the legal system into cultural perspective.²⁰⁹

The effect of the deeply-rooted traditions of individual countries upon the world community can be seen in the contemporary context. For example, U.S. courts have declined to afford comity to or to enforce a French court's judgment that a photographer infringed the intellectual property of a fashion designer by the unauthorized publication of photographs of certain fashion designs.²¹⁰ In general, fashion designs are not considered the subject of copyright protection in the U.S. due to their useful nature. Furthermore, U.S. courts and legislatures have declined to support judgments of U.K. legislatures and courts in the area of defamation.²¹¹ This refusal is grounded in the U.S. legal system's

²⁰⁹ JOHN HENRY MERRYMAN, *THE CIVIL LAW TRADITION* 2 (2d. ed. 1985).

²¹⁰ See *Sarl Louis Feraud Int'l v. Viewfinder Inc.*, 406 F. Supp. 2d 274 (S.D.N.Y. 2005) (holding that a French judgment that photographs of fashion shows be removed from a website was not enforceable in New York).

²¹¹ See *Telnikoff v. Matusevitch*, 702 A.2d 230, 248-49 (Md. 1997) (citations omitted), observing:

A comparison of English and present Maryland defamation law does not simply disclose a difference in one or two legal principles. Instead, present Maryland defamation law is totally different from English defamation law in virtually every significant respect. Moreover, the differences are rooted in historic and fundamental public policy differences concerning freedom of the press and speech.

. . . .

The principles governing defamation actions under English law, which were applied to Telnikoff's libel suit, are so contrary to Maryland defamation law, and to the policy of freedom of the press underlying Maryland law, that Telnikoff's judgment should be denied recognition under principles of comity. In the language of the Uniform Foreign-Money Judgments Recognition Act . . . , Telnikoff's English "cause of action on which the judgment is based is repugnant to the public policy of the State. . . ."

Id. See also *Libel Terrorism Protection Act*, N.Y. C.P.L.R. 5304 (McKinney 2011) (requiring under New York law that in order for a foreign defamation judgment

principle of freedom of expression. Finally, in a recent suit brought by the U.S. against China for purported violations of the TRIPS agreement, the WTO decided that China's censorship of intellectual property, which the United States claimed was impairing the rights of U.S. copyright and trademark and thus a violation of the international agreement, was acceptable as an act of government.²¹²

5. A PRINCIPLED DIFFERENTIAL

5.1. *The Characteristic of IP*

Perhaps the most significant distinguishing feature of a product of the mind is its intangible quality. It influences the choice to afford protection to any particular expression as well as the effectiveness and the efficiency of the regime selected. In evaluating the qualities of such goods in this regard, modern microeconomics provides some insight.²¹³ To begin with, the traditional private market depends upon the premise that an individual's consumption of a good is contingent upon her paying the price for the good. A person who fails to pay in this context is, generally, presumed to be excluded.²¹⁴ The mechanism of

to be enforced in the United States, it must provide at least the same amount of free speech protection as the United States).

²¹² WTO Panel Report, *China—Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, ¶ 7.53, WT/DS362/R (Jan. 26, 2009).

²¹³ See, e.g., RICHARD A. MUSGRAVE, *THE THEORY OF PUBLIC FINANCE: A STUDY IN PUBLIC ECONOMY* (1959) (explaining the microeconomic principles of public finance); RICHARD MUSGRAVE & PEGGY B. MUSGRAVE, *PUBLIC FINANCE IN THEORY AND PRACTICE* (2d ed. 1976); Michael Pickhardt, *Fifty Years After Samuelson's "The Pure Theory of Public Expenditure": What Are We Left With?*, 28 J. HIST. & ECON. THOUGHT 439 (2006) (exploring the definition of public goods by reviewing the contribution of Paul A. Samuelson to the theory); Michael Pickhardt, *Teaching Public Goods Theory With a Classroom Game*, 36 J. ECON. EDUC. 145 (2005) (describing a method for teaching public goods theory).

²¹⁴ See Walter E. Williams, *Economics and Property Rights*, 58 FREEMAN 1, 47 (2008), explaining:

When property rights are held privately, the person who is deemed the owner has certain rights that he expects will be enforced. Among those rights are the right to keep, acquire, use, exclude from use, and dispose of property as he deems appropriate in a manner that does not infringe similar rights held by others. The owner also has the right to transfer title to the property and otherwise benefit from its use. When rights to property are held communally, such a bundle of rights does not exist. In general, the key difference between privately and communally held

exclusion may be grossly physical, technologically enabled,²¹⁵ or legally enforced²¹⁶ through recognition of principles of property. In a traditional context, “[e]xchange cannot occur without property rights and property rights require exclusion.”²¹⁷ Another characteristic of the traditional private market is rivalry of consumption. This second characteristic implies that the person who pays the price possesses the prerogative of internalizing all of the benefits of his purchase and that his choice excludes others from securing a corollary benefit.²¹⁸ The private market can fail, however, if the nature of the particular good is non-rivalrous,²¹⁹ if exclusion is not possible, or should the two conditions coalesce.²²⁰

Intellectual property is particularly vulnerable to market failure due to its intangible character. It is frequently considered inexhaustible and thus, by nature, characterized as non-rivalrous. Additionally, in some sectors and situations, IP has suffered at the hands of a public that has been permitted, or perhaps even encouraged, to believe that due to this characteristic it is or should be a public good and that consequently there is desert in freeriding. For many, since IP appears so freely accessible, it must be less valuable than tangible property.²²¹ It is, perhaps, the fear

property rights is that individuals do not have the right to exclude others from use, and they do not have the right to transfer title.

²¹⁵ Hal R. Varian, *New Chips Can Keep a Tight Rein on Consumers, Even After They Buy a Product*, N.Y. TIMES, July 4, 2002, at C2 (providing several examples of products which possess internal technology that can limit how they are used, including: inkjet printers with microchips that prevent use if the ink cartridge has been refilled, cell phones with microchips that prevent use if an incorrect battery brand is used, and compact discs that have copy-protection systems that prevent them from being played on personal computers).

²¹⁶ See Copyright Protection and Management Systems, 17 U.S.C. §§ 1201 *et seq.* (describing violations relating to the “circumvention of copyright protection systems”).

²¹⁷ MUSGRAVE & MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE, *supra* note 213, at 50.

²¹⁸ The example offered by the Musgraves is that of the simple sale of a hamburger. One who purchases the hamburger may be able to exclude others from possessing it, and should he consume the hamburger, he is able to internalize its benefits to the exclusion of others. *Id.* at 51.

²¹⁹ In this context it may be deemed economically inefficient to exclude others. See *id.* (describing market failure as a result of non-rivalrous consumption).

²²⁰ In the context of coalescence, it might be determined that exclusion cannot, and also should not, be applied. See *id.*

²²¹ Observe, for example, the difficulty in educating a public that the purchase of a CD or a DVD does not also carry with it the ownership of the

that the inability of the private market to adequately respond to the propensities of a free-riding public will result in a decline in the supply of creative products of the mind and a consequent impoverishment of the public domain²²² that drives the utilitarian protective patent and copyright regimes in the United States and the international community. As observed over a century ago by no less a figure than Justice Oliver Wendell Holmes:

The notion of property starts, I suppose, from confirmed possession of a tangible object, and consists in the right to exclude others from interference with the more or less free doing with it as one wills. But in copyright property has reached a more abstract expression. The right to exclude is not directed to an object in possession or owned, but is *in cacuo* so to speak. It restrains the spontaneity of man where, but for it, there would be nothing of any kind to hinder their doing as they saw fit. It is a prohibition of conduct remote from the persons or tangibles of the party having the right. It may be infringed a thousand miles from the owner and without his ever becoming aware of the wrong

The ground of this extraordinary right is that the person to whom it is given has invented some new collocation of visible or audible points, — of lines, sounds, or words One would expect the protection to be coextensive not only with the invention, which, though free to all, only one had the ability to achieve, but with the possibility of reproducing the result which gives to the invention its meaning and worth.²²³

Other commentators have identified other qualities that might implicate less traditional views and philosophies of property. One

software, music, or film embodied in the tangible medium. *See generally* A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002) (holding that the peer-to-peer file-sharing network, Napster, could be held liable for contributory infringement because of infringement by its users); Metro-Goldwyn-Mayer Studios, Inc., v. Grokster, Ltd., 545 U.S. 913 (2005) (holding that unauthorized peer-to-peer downloading violates copyright law).

²²² *See generally* Garrett Hardin, *The Tragedy of the Commons*, 162 SCI. 1243 (1968) (discussing how opening property up to the public disincentives people from investing resources in that property).

²²³ *White-Smith Music Pub. Co. v. Apollo Co.*, 209 U.S. 1, 18 (1908) (Holmes, J., concurring).

theorem worth noting is attributed to economic theorists by Yochai Benkler—the “On the shoulder of Giants Effect.”²²⁴ This theory presumes that new information builds upon old.²²⁵ Consequently, Benkler concludes:

This second quiriness of information as a production good makes property-like exclusive rights less appealing as the dominant institutional arrangement for information and cultural production than it would have been had the sole quirky characteristic of information been its nonrivalry [S]trengthening intellectual property rights increases the price that those who invest in producing information today must pay to those who did so yesterday, in addition to increasing the rewards an information producer can get tomorrow.²²⁶

This conclusion, however, may be an overstatement and may mislead a lay reader. It may, however, also represent an undisclosed philosophical proposition that is incompatible with the U.S. Constitutional utilitarian features of intellectual property

²²⁴ BENKLER, *supra* note 11, at 37.

²²⁵ This is not a new observation. In *Emerson v. Davies*, 8 F. Cas. 615, 619 (C.C.D. Mass. 1845), Justice Story observed:

In truth, in literature, in science and in art, there are, and can be, few, if any, things, which, in an abstract sense, are strictly new and original throughout. Every book in literature, science and art, borrows, and must necessarily borrow, and use much which was well known and used before. . . . If no book could be the subject of copy-right [sic] which was not new and original in the elements of which it is composed, there could be no ground for any copy-right [sic] in modern times, and we should be obliged to ascend very high, even in antiquity, to find a work entitled to such eminence. Virgil borrowed much from Homer; Bacon drew from earlier as well as contemporary minds; Coke exhausted all tho [sic] known learning of his profession; and even Shakespeare and Milton . . . would be found to have gathered much from the abundant stores of current knowledge and classical studies in their days.

Id. Also in this regard, consider the psychological phenomenon of cryptomnesia or unintentional copying. See *Bright Tunes Music Corp. v. Harrisongs Music Ltd.*, 420 F. Supp. 177 (1976), *aff'd sub nom. ABKCO Music, Inc. v. Harrisongs Music Ltd.*, 722 F.2d 988 (2d Cir. 1983) (holding actionable the unintentional copying of a popular song entitled “He’s So Fine” and its incorporation into a later song, “My Sweet Lord” by George Harrison).

²²⁶ BENKLER, *supra* note 11, at 37-38.

protection.²²⁷ With respect to copyright protection in particular, the regime does not actually provide a monopoly over information. The intent of the Act is to protect only “original” expression, and even in this context, it is modified to consider and address the corresponding public interest in free access to information and the system of free expression. In order to accomplish that end, for example, the Act expressly excludes fundamental building blocks of knowledge from its coverage.²²⁸ Furthermore, complex and developed principles of IP, including the idea/expression dichotomy, the concept of merger,²²⁹ and the principles of fair use,²³⁰ exist to accommodate the public need²³¹ identified by Benkler.

In addition, and with respect to patents and in order to obtain the limited statutory right to exclude others, the application and approval process imposes an obligation to disclose the invention, including descriptions and specifications, to the public.²³² There are other public interest limitations, as well. First, in order for a

²²⁷ For an overview of these features, see discussion *infra* Section 5.2.2 (discussing the utilitarian approach to intellectual property rights espoused in the U.S.).

²²⁸ See 17 U.S.C. § 102(b) (2006) (“In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.”).

²²⁹ See *Mannion v. Coors Brewing Co.*, 377 F. Supp. 2d 444, 444–45 (S.D.N.Y. 2005) (“[W]hen ‘a given idea is inseparably tied to a particular expression’ so that ‘there is a ‘merger’ of idea and expression,’ courts may deny protection to the expression in order to avoid conferring a monopoly on the idea to which it is inseparably tied.”) (quoting *Nimmer on Copyrights* Section 13.03(B)(3)).

²³⁰ See *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 575 (1994) (explaining that some form of a fair use doctrine must be read into the copyright laws because some fair use is necessary to further the progress of arts and sciences, which is the very reason copyright law was created).

²³¹ See BENKLER, *supra* note 11, at 3 (discussing the fact that society is moving to a “networked information economy” which is typified by an increased role of “decentralized individual action”); see also *Rosemont Enter., Inc. v. Random House, Inc.*, 366 F.2d 303, 310 (2d Cir. 1966), holding:

We . . . cannot subscribe to the view that an author is absolutely precluded from saving time and effort by referring to and relying upon prior published material It is just such wasted effort that the proscription against the copyright of ideas and facts, and to a lesser extent the privilege of fair use, are designed to prevent.

Id.

²³² See generally U.S. PATENT & TRADEMARK OFFICE, <http://www.uspto.gov> (last visited Apr. 11, 2011) (offering step-by-step instructions on obtaining a patent).

patent to be issued, it is required to pass a test of novelty, i.e., the invention may not be found in previously existing public knowledge or art. Second, the subject must be non-obvious, i.e., an invention must differ from prior art in a meaningful way. Third, certain subject matter is not patentable, including laws of nature, natural phenomena, abstract ideas, mathematical algorithms, and printed matter.²³³ Fourth, the limited legal (not economic) interest is short.²³⁴ Finally, a number of defenses grounded in public policy can limit the effect of a patent claim, including fraud, inequitable conduct,²³⁵ and patent misuse.²³⁶

5.2. *Theories of property and the protection of IP*

It is naïve to presume that mere adjustment of the basic and expressed definitions of property that have been incorporated into the various global regimes of intellectual property will bring about new cultural understandings and practices.²³⁷ Many of the varied preferences expressed are a mere gloss on what are truly significant and fundamental differences of social, cultural, and political philosophy. As observed by Kenneth Minogue, “[t]he simple idea that it needs only a change in some external thing (such as the structure of property rights) to transform the human condition is superstition lurking behind many treatments of the subject.”²³⁸ What may be important to keep in mind, however, is that much public policy is ultimately founded upon assumptions

²³³ See *Diamond v. Diehr*, 450 U.S. 175, 185 (1980) (excluding from patent protection laws of nature, natural phenomena, and abstract ideas); *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (explaining that patent law has some limit, including the fact that the “laws of nature, physical phenomena, and abstract ideas” are not patentable); U.S. PATENT & TRADEMARK OFFICE, *MANUAL OF PATENT EXAMINING PROCEDURE* § 706.03(a) (8th ed. 2005) (stating the instances where a patent will be rejected under 35 U.S.C. § 101).

²³⁴ See 35 U.S.C. § 154(a)(2) (2006) (proscribing a twenty-year period of patent protection from the date of application, with qualifications).

²³⁵ See *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1066 (Fed. Cir. 1998) (holding a patent invalid “for failure to disclose the best mode of practicing the invention”).

²³⁶ See 35 U.S.C. § 271(d) (elaborating as to under which circumstances a patent owner will be deemed to have misused a patent).

²³⁷ See generally Nestor M. Davidson, *Property and Relative Status*, 107 MICH. L. REV. 757 (2009) (exploring the cultural implications of property ownership and the effect it has on one’s community status).

²³⁸ *Id.* at 763 n.16 (citing Kenneth R. Minogue, *The Concept of Property and its Contemporary Significance*, in *NOMOS XXII: PROPERTY* 3, 8 (J. Roland Pennock & John W. Chapman eds., 1980)).

about the relationship of property to person. As observed by B. Jeffery Reno, “the policymaker assumes to know the needs that actuate the desire for property in the first place, the expectations regarding property’s ability to satisfy those needs, and also the way those expectations shape people’s interactions with one another.”²³⁹

While there are many ways to approach and parse the subject, for purposes of convenient organization in our current discussion, the following categories will be employed:

1. A Natural Law Approach;
2. A Utilitarian and Economic Theory;
3. Property as a Product of Community and Social Relationships;
4. The Confucian Theory.

These categories not only identify certain recognized themes of property but also acknowledge certain legal or political institutions implicated in the function of property. They also are themes commonly mentioned in the literature concerning intellectual property.

5.2.1. A Natural Law Approach

There are myriad theories that could be considered endowment based; however, two seem to possess the greatest purchase: the labor mixing and dessert theories of John Locke and the Philosophy of Right Theory of Hegel.

Locke in his *Second Treatise on Government* opined:

Though the Earth, and all inferior Creatures be common to all Men, yet every Man has *Property* in his own *Person*. This no Body has any Right to but himself. The *Labour* of his Body, and the *Work* of his Hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left in it, he hath mixed his *Labour* with, and joyned to it something that is his own, and thereby makes it his *Property*. It being by him removed from the common state Nature placed it in, it hath by this *labour* something annexed to it, that excludes the common right of other Men. For this *Labour* being the

²³⁹ B. Jeffrey Reno, *Private Property and the Law of Nature in Locke’s Two Treatises: The Best Advantage of Life and Convenience*, 68 AM. J. ECON. & SOC. 639, 640 (2009).

unquestionable Property of the Labourer, no Man but he can have a right to what that is once joyned to, at least where there is enough, and as good left in the common for others.²⁴⁰

Thus, a person may acquire rights over a thing that is not owned either by mixing his labor with it or through incorporation, i.e. making the object part or in service of his body, such as through ingestion. It is through the process of labor mixing, however, that value²⁴¹ purports to be added to the natural good, and the recognition of strong propriety rights are a reward or dessert for the expenditure of one's individual and virtuous effort. It is, thus, through this process that entitlement is purported to be established against the appropriation by the State or by others.

Of course, others have questioned the basis of the assumptions made by Locke. Robert Nozick, for example, has asked, rhetorically, why when mixing one's tomato juice with the sea one should think that he is acquiring the sea rather than losing the juice.²⁴² Others have pointed to the last phrases of Locke's proposition, which asserts a qualification of the endowment theory that leaves room for charity or welfare.²⁴³ In sum, however, the labor perspective recognizes the positive value to the collective benefits by the extraction of objects from the state of nature, the consequent use of things that would otherwise have been wasted, and the injection of such objects into commerce.

²⁴⁰ JOHN LOCKE, *The Second Treatise of Government*, in TWO TREATISES OF GOVERNMENT 265, 287-88 (Peter Laslett ed., 1988).

²⁴¹ See *id.* at 296-98 ("[T]his Labour indeed that puts the difference of value on every thing . . ."); see also David C. Snyder, *Locke on Natural Law and Property Rights*, in LOCKE AND LAW 3 (Thom Brooks ed., 2007) (discussing Locke's justification of revolution, and what his arguments say about his theory of property); Leif Wenar, *Original Acquisition of Private Property*, in LOCKE AND LAW at 109, 117-18 (Thom Brooks ed., 2007) ("[A] person can come to have rights . . . over unowned objects by mixing her labour with the objects.").

²⁴² ROBERT NOZICK, ANARCHY, STATE AND UTOPIA 174-75 (1974) ("[W]hy isn't mixing what I own with what I don't own a way of losing what I own rather than a way of gaining what I don't?").

²⁴³ See generally Snyder, *supra* note 241 (discussing Locke's analysis of property rights and how those rights influence political upheaval); Wenar, *supra* note 241 (discussing the vector-sum approach to creating personal rights and challenging whether it is a necessary feature to a Locke-based original acquisition theory of property rights); Donna M. Byrne, *Locke, Property, and Progressive Taxes*, in LOCKE AND LAW 131 (Thom Brooks ed., 2007) (discussing Locke's approach to property rights and its influence on the modern U.S. tax system).

A second natural law perspective is that property plays an important role in human identity. Hegel, in the *Philosophy of Rights*, suggests that mastery over objects was a significant step taken by humankind through which humans became aware and first moved toward individual free will. Free will enables an individual to become part of a community of other mature beings. Margaret Radin in her article *Property and Personhood*²⁴⁴ contributes to this view by arguing that it is through control over resources that one gains one's identity.²⁴⁵ No matter the theory, the natural law premise recognizes a moral claim upon private property.

Certain forms of intellectual property purport to be grounded directly in the endowment theory; others reject it as a proper foundation. For example, in some jurisdictions in the United States, the right of publicity is a product of the substantial investment that individual celebrities make in their images:

Often considerable money, time and energy are needed to develop one's prominence in a particular field. Years of labor may be required before one's skill, reputation, notoriety or virtues are sufficiently developed to permit an economic return through some medium of commercial promotion. For some, the investment may eventually create considerable commercial value in one's identity.²⁴⁶

In Australia, the natural law²⁴⁷ argument finds support in some of the earliest of cases that addressed the protection of intellectual property. As stated in *Millar v. Taylor*, "[I]t is certainly not agreeable to the natural justice that a stranger should reap the

²⁴⁴ Margaret Jane Radin, *Property and Personhood*, 34 STAN. L. REV. 957, 957 (1982).

²⁴⁵ See generally Charles Reich, *The New Property*, 73 YALE L.J. 733 (1964), in which Reich employs a similar argument suggesting that government entitlement programs are the only means by which some individuals can acquire the power necessary to actively participate in our democratic process.

²⁴⁶ *Comedy III Prods., Inc. v. Gary Saderup, Inc.*, 21 P.3d 797, 804-05 (Cal. 2001) (citing *Lugosi v. Universal Pictures*, 25 Cal.3d 813, 834-835 (1979) (Bird, C.J., dissenting)).

²⁴⁷ A natural rights foundation for copyright, for example, might lead to a stronger and potentially perpetual duration than that afforded under an incentive based conception. See *Millar v. Taylor*, [1769] 98 Eng. Rep. 201, 218-22, 252 (Gr. Brit.); see also MARK J. DAVISON ET AL., AUSTRALIAN INTELLECTUAL PROPERTY LAW 188-89 (2008) (discussing the support for the natural rights argument).

pecuniary produce of another man's work."²⁴⁸ In certain civil law countries, including France,²⁴⁹ Germany,²⁵⁰ and Japan,²⁵¹ as well as

²⁴⁸ Millar, 98 Eng. Rep. 218. See also DAVISON ET AL., *supra* note 247, at 188 *et seq.* (explaining the importance of the Millar case to the natural rights argument).

²⁴⁹ See Loi 92-597 du 4 Janvier 1995, Loi Relative au Code de la Propriété, Intellectuelle (Partie Législative) [Law 92-597 of Jan. 4, 1995, Law on the Intellectual Property Code (Legislative Part)], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAIS [J.O.] [OFFICIAL GAZETTE OF FRANCE], Jan. 5, 1995, at 8-9, *translated by* Int'l Bureau of WIPO:

TITLE II

AUTHORS' RIGHTS

Art. L. 121-1.

An author shall enjoy the right to respect for his name, his authorship and his work.

This right shall attach to his person.

It shall be perpetual, inalienable and imprescriptible. It may be transmitted *mortis causa* to the heirs of the author.

Exercise may be conferred on another person under the provisions of a will.

Art. L. 121-2.

The author alone shall have the right to divulge his work. He shall determine the method of disclosure and shall fix the conditions thereof, subject to Article L. 132-24.

After his death, the right to disclose his posthumous works shall be exercised during their lifetime by the executor or executors designated by the author. If there are none, or after their death, and unless the author has willed otherwise, this right shall be exercised in the following order: by the descendants, by the spouse against whom there exists no final judgment of separation and who has not remarried; by the heirs other than descendants, who inherit all or part of the estate and by the universal legatees or donees of the totality of the future assets.

This right may be exercised even after expiry of the exclusive right of exploitation set out in Article L. 123-1.

Art. L. 121-3.

In the event of manifest abuse in the exercise or non-exercise of the right of disclosure by the deceased author's representatives referred to in Article L. 121-2, the first instance court may order any appropriate measure. The same shall apply in the event of a dispute between such representatives, if there is no known successor in title, no heir or no spouse entitled to inherit.

Such matters may be referred to the courts by the Minister responsible for culture.

Art. L. 121-4.

Notwithstanding assignment of his right of exploitation, the author shall enjoy a right to reconsider or of withdrawal, even after publication of his

work, with respect to the assignee. However, he may only exercise that right on the condition that he indemnify the assignee beforehand for any prejudice the reconsideration or withdrawal may cause him. If the author decides to have his work published after having exercised his right to reconsider or of withdrawal, he shall be required to offer his rights of exploitation in the first instance to the assignee he originally chose and under the conditions originally determined.

Art. L. 121-5.

An audiovisual work shall be deemed completed when the final version has been established by common accord between the director or, possibly, the joint authors, on the one hand, and the producer, on the other.

Id.

²⁵⁰ Deutsches Urheberrecht und verwandte Schutzrechte [Law on Copyright and Neighboring Rights], Sept. 9, 1965, BGBl. I at 1273, last amended June 23, 1995, BGBl. I at 1325 (Ger.), translated by Int'l. Bureau of WIPO, available at http://www.wipo.int/wipolex/en/text.jsp?file_id=126255, which reads:

SECTION IV SCOPE OF COPYRIGHT

1. General

Article 11.

Copyright shall protect the author with respect to his intellectual and personal relationship with his work, and also with respect to utilization of his work.

2. Moral Rights of Authors

Article 12. Right of Publication

(1) The author shall have the right to decide whether and how his work is to be published.

(2) The author shall have the exclusive right to publicly communicate or describe the content of his work for as long as neither the work nor its essence nor a description of the work has been published with his consent.

Article 13. Recognition of Authorship

The author shall have the right of recognition of his authorship of the work. He may decide whether the work is to bear an author's designation and what designation is to be used.

Article 14. Distortion of the Work

The author shall have the right to prohibit any distortion or any other mutilation of his work which would jeopardize his legitimate intellectual or personal interests in the work.

²⁵¹ Japanese Copyright Law, Law No. 48 (1970), translated by Int'l Bureau of WIPO, available at http://www.wipo.int/wipolex/en/text.jsp?file_id=128358, providing:

Subsection 2 *Moral Rights*

(Right of making the work public)

Art. 18.-

(1) The author shall have the right to offer to and make available to the public his work which has not yet been made public (including a work which has been made public without his consent; the same shall apply in the next paragraph). The author shall have the same right with respect to works derived from his work which has not yet been made public.

(2) In the following cases, the author shall be presumed to have consented to the following acts:

(i) where copyright in his work which has not yet been made public has been transferred: the offering to and the making available to the public of the work by exercising the copyright therein;

(ii) where the original of his artistic or photographic work which has not yet been made public has been transferred: the making available to the public of the work by exhibiting its original;

(iii) where the ownership of copyright in his cinematographic work belongs to the maker under the provisions of Article 29: the offering to and the making available to the public of the work by exercising the copyright therein.

(Right of determining the indication of the author's name)

Art. 19.-

(1) The author shall have the right to determine whether or not his true name or pseudonym should be indicated as the name of the author, on the original of his work or when his work is offered to or made available to the public. The author shall have the same right with respect to the indication of his name when works derived from his work are offered to or made available to the public.

(2) In the absence of any declaration of the intention of the author to the contrary, a person using his work may indicate the name of the author in the same manner as that already adopted by the author.

(3) It shall be permissible to omit the name of the author where it is found that there is no risk of damage to the interests of the author in his claim to authorship in the light of the purpose and the manner of exploiting his work and insofar as such omission is compatible with fair practice.

(Right of preserving the integrity)

Art. 20.-

(1) The author shall have the right to preserve the integrity of his work and its title against any distortion, mutilation or other modification against his will.

(2) The provision of the preceding paragraph shall not apply to the following modifications:

(i) change of ideographs or words or other modifications deemed unavoidable for the purpose of school education in the case of the exploitation of works under the provisions of Article 33, paragraph (1) (including the case where its application *mutatis mutandis* is provided for under the provision of paragraph (4) of the same Article) and Article 34, paragraph (1);

other countries that are signatories to the Berne Convention,²⁵² moral rights, as distinct from economic rights in expression, flow from the author's person.²⁵³ Finally, some have argued that natural rights are embodied in an understanding of the broader concept of human rights and may in fact be found existing at the international level in article 27(2) of the Universal Declaration of Human Rights.²⁵⁴

(ii) modification of an architectural work by means of extension, rebuilding, repairing, or remodeling;

(iii) modification which is necessary for enabling the use in a particular computer of a program work which is otherwise unusable in that computer, or to make more effective the use of a program work in a computer;

(iv) other modifications not falling within those mentioned in the preceding three items, which are deemed unavoidable in the light of the nature of a work as well as the purpose and the manner of exploitation.

²⁵² Berne Convention for the Protection of Literary and Artistic Works art. 6bis, Sept. 9, 1886, as revised at Paris on July 24, 1971, and amended in 1979, S. Treaty Doc. No. 99-27 (1986), available at http://www.wipo.int/treaties/en/ip/berne/trtdocs_wo001.html#P119_19081, providing:

Moral Rights:

1. To claim authorship; to object to certain modifications and other derogatory actions;

2. After the author's death; 3. Means of redress

(1) Independently of the author's economic rights, and even after the transfer of the said rights, the author shall have the right to claim authorship of the work and to object to any distortion, mutilation or other modification of, or other derogatory action in relation to, the said work, which would be prejudicial to his honor or reputation.

(2) The rights granted to the author in accordance with the preceding paragraph shall, after his death, be maintained, at least until the expiry of the economic rights, and shall be exercisable by the persons or institutions authorized by the legislation of the country where protection is claimed. However, those countries whose legislation, at the moment of their ratification of or accession to this Act, does not provide for the protection after the death of the author of all the rights set out in the preceding paragraph may provide that some of these rights may, after his death, cease to be maintained.

(3) The means of redress for safeguarding the rights granted by this Article shall be governed by the legislation of the country where protection is claimed.

²⁵³ See Amy M. Adler, *Against Moral Rights*, 97 CAL. L. REV. 263 (2009) (opposing moral rights laws).

²⁵⁴ See, e.g., Orit Fischman Afori, *Human Rights and Copyright: the Introduction of Natural Law Considerations into American Copyright Law*, 14 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 497, 507-10 (2004) (detailing the interpretation of Article

To the contrary, the “Sweat of the Brow” doctrine has been expressly rejected as a proper basis of U.S. Copyright Law. The U.S. Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Company, Inc.* stated:

Known alternatively as “sweat of the brow” or “industrious collection,” the underlying notion was that copyright was a reward for the hard work that went into compiling facts. The classic formulation of the doctrine appeared in *Jeweler’s Circular Publishing Co.*, 281 F., at 88:

The right to copyright a book upon which one has expended labor in its preparation does not depend upon whether the materials which he has collected consist or not of matters which are *publici juris*, or whether such materials show literary skill or originality, either in thought or in language, or anything more than industrious collection. The man who goes through the streets of a town and puts down the names of each of the inhabitants, with their occupations and their street number, acquires material of which he is the author.

The “sweat of the brow” doctrine had numerous flaws . . .²⁵⁵

5.2.2. Utilitarianism

Pursuant to a rhetoric of incentives,²⁵⁶ recognition of property is in response to a recognized scarcity in the resource. Since intellectual property’s economic nature is as a non-rival mixed good, there is the inherent risk that those who create such products will not be able to capture the value of those contributions through traditional sale. In the absence of providing appropriate assurance to a creative individual that she can control, gain the benefit of, and exclude others from the enjoyment of the product of effort, there

27(2) of the Universal Declaration of Human Rights recognizing broad human rights in creators’ natural rights to IP).

²⁵⁵ *Feist Publications, Inc. v. Rural Tel. Serv. Co, Inc.*, 499 U.S. 340, 352–53 (1991). See also *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1369 (5th Cir. 1981) (noting that the labor of research by an author is not protected by copyright).

²⁵⁶ CRAIG JOYCE ET AL., COPYRIGHT LAW 52–54 (7th ed. 2006) (outlining the incentives-based normative policy justification for copyright law, which is often purported to underlie some countries’ copyright systems).

would be a paucity in the production of that which is valued by society. In order to precipitate the necessary supply of products of the mind, in some circumstances, a carrot of security is dangled before potential authors and inventors to encourage their production of original works or novel inventions.²⁵⁷

In the United States and pursuant to statutes executing the prerogative found in Article I, Section 8, Clause 8 of the U.S. Constitution,²⁵⁸ individuals may be afforded a legal monopoly for a limited period of time. Along with this legal right, an author and inventor are given the opportunity for, and security of, limited economic exploitation.²⁵⁹ While the immediate beneficiary appears to be the owner of the interest, the real party in interest is the public, and the genuine purpose behind copyright and patent laws is the enrichment of the public domain. Hence, the Supreme Court has, on many occasions, opined that the philosophy supporting some of these laws is utilitarianism.²⁶⁰ The Copyright Act accommodates more immediate interests of the public's access to information by providing that ideas et al. are not contained within the subject of copyright,²⁶¹ certain discrete and statutorily

²⁵⁷ See *Harper & Row Publishers, Inc. v. Nation Enterprises*, 471 U.S. 539, 558 (1985) ("By establishing a marketable right to the use of one's expression, copyright supplies the economic incentive to create and disseminate ideas.").

²⁵⁸ U.S. CONST. art. I, § 8, cl. 8 (permitting Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries").

²⁵⁹ See *Mazer v. Stein*, 347 U.S. 201, 219 (1954), discussing that:

The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts." Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.

Id.

²⁶⁰ See *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975) ("The immediate effect of our copyright law is to secure a fair return for an 'author's' creative labor. But the ultimate aim is, by this incentive, to stimulate artistic creativity for the public good."). See also, *Feist Publications*, 499 U.S. at 349 (noting that the primary objective of copyright is not to reward the labor of authors, but to encourage others to build freely upon the ideas conveyed by a work).

²⁶¹ 17 U.S.C. § 102(b) (2010) ("In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.")

recognized interest are specifically accommodated,²⁶² and access can be obtained through the affirmative defense of fair use.²⁶³ The utilitarian presumption in the United States is, however, that if a work falls within the protection of the Copyright Act and without the above exceptions, the author should be entitled to compensation.²⁶⁴

²⁶² 17 U.S.C. §§ 108–22 (2010) recognizes this statutory interest by providing for several copyright exceptions and accommodations. *See id.* § 108 (providing an exception for reproductions by libraries; *id.* § 109 (articulating the “first sale” exception); *id.* § 110 (providing exemptions for certain “performances and displays”); *id.* § 111 (providing an exception for certain secondary transmissions of some copyrighted works); *id.* § 112 (providing an exception for “ephemeral recordings”); *id.* § 113 (articulating the scope of “exclusive rights in pictorial, graphic and sculptural works”); *id.* § 114 (outlining the scope of exclusive rights in sound recordings); *id.* § 115 (articulating the mandatory license for “making and distributing phonorecords”); *id.* § 116 (allowing copyright owners and owners of “coin-operated phonorecord players” to negotiate licenses); *id.* § 117 (explaining the limitation on exclusive rights for computer programs); *id.* § 118 (articulating the “use of certain works in connection with noncommercial broadcasting”); *id.* § 119 (explaining the limitations that apply to “[s]econdary transmissions of superstations and network stations for private home viewing”); *id.* § 120 (explaining the scope of “exclusive rights in architectural works”); *id.* § 121 (explaining the limitation on rights that apply to “[r]eproduction for blind or other people with disabilities”); *id.* § 122 (explaining the limitation on the rights that apply to “[s]econdary transmissions by satellite carriers within local markets”).

²⁶³ *See* 17 U.S.C. § 107 (2006) (articulating the fair use doctrine which includes considering the following factors: (1) “the purpose and character of the use,” (2) “the nature of the copyrighted work,” (3) “the amount and substantiality of the portion used in relations to the copyrighted work as a whole,” and (4) “the effect of the use upon the potential market for or the value of the copyrighted work”).

Fair use in the United States differs from the concept of fair dealing found in certain other countries, such as the United Kingdom and Australia. Fair use is an affirmative defense that must be raised in a judicial proceeding and applies only after a finding of infringement. Furthermore, it is considered “open ended,” that is, a court is to apply the standards found in the statute to the specific facts of the particular case in which the defense is raised. Fair use is a judicial conclusion found after trial.

Fair dealing, on the other hand, is generally a pre-established set of circumstances under which the legislature has determined that access may be had and that no royalty need be paid. Many of these appear to be consistent with U.S. judicial determinations. For example, fair dealing exceptions in Australia include use for research, criticism, news, legal advice, parody, satire, and a large number of very specific exceptions for certain uses, e.g., format shifting, and users, e.g., libraries. For a description of fair dealing in Australia, see *Find An Answer, AUSTRALIAN COPYRIGHT COUNCIL*, <http://www.copyright.org.au/find-an-answer> (last visited Apr. 12, 2011).

²⁶⁴ In determining that a restaurant must pay for performing a musical composition, Justice Holmes observed:

5.2.3. *Property as a Product of Community and Social Relationships*

A final conception posits that, in lieu of perceiving property as an object, one should instead view it as a political and social phenomenon. Rather than a thing, property is a reciprocal system through which the interests of myriad community members are considered and accommodated. As observed by C.B. MacPherson:

[A]ny given system of property is a system of rights of each person in relation to other persons. This is clearest in the case of modern private property, which is my right to exclude you from something, but is equally true of any form of common property, which is the right of each individual not to be excluded from something.²⁶⁵

Born of the work of early-twentieth-century legal realists such as Morris Cohen, this approach proffered that actual property rights could only be fully appreciated in the context of restrictions and positive duties imposed by the state upon the otherwise exclusive interest of a more traditionally and economically conceived “owner.” Furthermore, it was considered sheer folly and illusion that the rights of the community were no greater than

If the rights under the copyright are infringed only by a performance where money is taken at the door they are very imperfectly protected. Performances not different in kind from those of the defendants could be given that might compete with and even destroy the success of the monopoly that the law intends the plaintiffs to have. It is enough to say that there is no need to construe the statute so narrowly. The defendants’ performances are not eleemosynary. They are part of a total for which the public pays, and the fact that the price of the whole is attributed to a particular item which those present are expected to order, is not important. It is true that the music is not the sole object, but neither is the food, which probably could be got cheaper elsewhere. The object is a repast in surroundings that to people having limited powers of conversation or disliking the rival noise give a luxurious pleasure not to be had from eating a silent meal. If music did not pay it would be given up. If it pays it pays out of the public’s pocket. Whether it pays or not the purpose of employing it is profit and that is enough.

Herbert v. Shanley Co., 242 U.S. 591, 594-95 (1916). This is not to suggest that the current philosophy should necessarily continue. Rather, it is to opine that arguments for radical change to another perspective, such as an endowment or communitarian base, would be better directed to constitutional amendment rather than continue to violence to the current constitutional structure.

²⁶⁵ Crawford B. Macpherson, *The Meaning of Property*, in PROPERTY: MAINSTREAM AND CRITICAL POSITIONS 1, 4 (Crawford B. Macpherson ed., 1978).

those of a neighbor.²⁶⁶ Among the limits to interests in exclusion, for example, are those deemed communally necessary to vindicate social interests in public safety, peace, health, morals, housing, education, and the preservation of natural resources.²⁶⁷

Other contemporary commentators have turned attention away from the role of state enforced obligations to those that result from the consensus of a working community. The civic republican tradition identifies economic inequality as a prime threat to democracy and freedom. As a consequence, the notion of property as a commons is considered indispensable—so as not only to fulfill individual needs but also to facilitate participation in self governance. It is perceived not only as a source of general duties to the larger group, but also as comprising specific obligations among members. Property has the capacity to define community as much as it creates boundaries among and between individuals.²⁶⁸ In 1785, Thomas Jefferson, in a letter to James Madison, wrote:

I am conscious that an equal division of property is impracticable. But the consequences of this enormous inequality producing so much misery to the bulk of mankind, legislators cannot invent too many devices for subdividing property Whenever there is in any country, uncultivated lands and unemployed poor, it is clear that the laws of property have been so far extended as to violate natural right.²⁶⁹

Another thread in the fabric, at times known as communitarianism, is a recent intellectual movement founded upon the tenets of nineteenth century communalism. While it, too, emphasizes the importance of fellowship and community over economic relations and market interactions, it relies much less upon the institutions of government and far more on the dynamics of social organization. The Communitarian Network, a coalition of

²⁶⁶ Morris Cohen, *Property and Sovereignty*, in PROPERTY: MAINSTREAM AND CRITICAL POSITIONS, *supra* note 265, at 155, 170.

²⁶⁷ *Id.* at 168 (quoting same).

²⁶⁸ See Davidson, *supra* note 237, at 772 & nn.65–68 (citing numerous publications by social-relations theorists who emphasize the relational aspects of property between individuals and the community).

²⁶⁹ *Equality-Overview-Civic Republicanism*, SCIENCE ENCYCLOPEDIA, <http://science.jrank.org/pages/9189/Equality-Overview-Civic-Republicanism.html> (last visited Apr. 12, 2011) (quoting Jefferson).

persons who share an interest in certain common principles, was founded by Amitai Etzioni in 1993. As stated in the vision statement of the organization:

Communitarians believe that strong rights presume strong responsibilities and that the pendulum of contemporary society has swung too far in the direction of individual autonomy at the expense of individual and social responsibility. One key to solving contemporary America's social problems is replacing our pervasive "rights talk" with "responsibility talk."

In finding solutions to our social problems, communitarians seek to rely neither on costly government programs nor on the market alone, but on the powerful "third force" of the community.²⁷⁰

This does not, however, presume an anarchical condition; there is a proper role for government. It is not to replace local communities; however, it may "need to empower them by strategies of support, including revenue-sharing and technical assistance."²⁷¹

A more extreme philosophical branch of communitarianism, known as radical multiculturalism, advocates for complete governmental and national neutrality.²⁷² As described by Etzioni, the multiculturalists advocate:

[A]bolishing the particularistic values of nations, that is, those values which differentiate the one national

²⁷⁰ *The Communitarian Vision*, THE COMMUNITARIAN NETWORK, <http://communitariannetwork.org/communitarian-vision> (last visited Apr. 12, 2011).

²⁷¹ *The Communitarian Vision: Civil Society*, THE COMMUNITARIAN NETWORK, <http://communitariannetwork.org/communitarian-vision/civil-society> (last visited Apr. 12, 2011).

²⁷² For an interesting political criticism on the consequences of the abolition of a competitive utilitarian society in favor of a more egalitarian state, see generally BERNARD MANDEVILLE, *THE FABLE OF THE BEES: OR, PRIVATE VICES, PUBLIC BENEFITS* (F.B. Kaye ed., 1988) (1795) (describing a bee community that thrives until many of the bees decide to seek honesty and abandon the desire of personal gain, thus implying that without private vices there exists no public benefit). See also Pickhardt, *supra* note 140, at 285 (noting that the modern theory of public goods has been dominated by a public choice approach, which asserts that self-interest is the only motivational force of man in his pursuit of economic activities, and that moral and constitutional norms, rather than non-selfish motives, impose constraints on the public sector).

community from another." She is someone who holds that "the state should strive for normative neutrality centered around the protection of rights that all share, and should not foster a distinct conception of the common good and the particularistic commitments it entails." She believes that "the government should avoid promoting any set notion of national identity and culture" and should pursue policies that "seek to erase the national ethos."²⁷³

Finally, the thoughts of Karl Marx are an exemplar of the critique of the liberal position. The philosophy of Marx considers economic inequalities within the context of freedom. For him, economic inequalities affect political equalities, as he writes:

To be a capitalist, is to have not only a purely personal, but a social status in production. Capital is a collective product, and only by the united action of many members, nay in the last resort, only by the united action of many . . . members of society, can it be set in motion.

Capital is therefore not a personal, it is a social power.

When, therefore, capital is converted into a common property, into the property of all members of society, personal property is not thereby transformed into social property. It is only the social character of the property that is changed. It loses its class-character.²⁷⁴

Thus, inequality inherently exists between those who own the means of economic production and those wage-laborers who are exploited in the creation of capital. To Marx, liberal democratic philosophy only supports the freedom of some, i.e., the bourgeois class, and not all members of the community. Insofar as capitalist society appropriates the labor of workers, they are not free. They are denied the opportunity to fulfill their fundamental nature. In fact, to Marx, no one is truly free in a capitalist society. The bourgeois are denied freedom insofar that they are alienated from

²⁷³ Michael Hand, *In Defence of Etzioni's "Radical Multiculturalist"*, THE COMMUNITARIAN NETWORK, <http://communitariannetwork.org/about-communitarianism/idea/in-defence-of-etzioni%E2%80%99s-%E2%80%98radical-multiculturalist%E2%80%99/> (last visited Apr. 12, 2011).

²⁷⁴ KARL MARX & FRIEDRICH ENGELS, THE COMMUNIST MANIFESTO (1848), as reprinted in PROPERTY: MAINSTREAM AND CRITICAL POSITIONS, *supra* note 265, at 61, 62.

being productive. Consequently, for him, genuine freedom would only exist in a classless society, for in that context, not only would everyone own the means of production, but also they would be productive and fulfill their nature.²⁷⁵

6. AN ECONOMIC AND POLITICAL DIFFERENTIAL - THE PROTECTION OF INTELLECTUAL PROPERTY IN THE GLOBAL TRADING ARENA

The rapidly accelerating influence of transnational trade has precipitated a growing interest in the global recognition and regulation of intellectual property. For example, the need for international protection of intellectual property emerged when foreign exhibitors refused to attend the International Exhibition of Inventions in Vienna in 1873. It was reported that they feared their ideas "would be stolen and exploited commercially in other countries" without their approval.²⁷⁶ In 1884, the Paris Convention for the Protection of Industrial Property, the first major international treaty designed to address intellectual property, then known as inventions (patents), trademarks, and industrial designs, entered into force with fourteen members.²⁷⁷ Many countries,

²⁷⁵ KARL MARX, CAPITAL: A CRITIQUE OF POLITICAL ECONOMY, (Frederick Engels ed., Samuel Moore & Edward Aveling trans., Charles H. Kerr & Co. 1906) (1890) 834-35, opining:

The private property of the labourer in his means of production is the foundation of petty industry, . . . petty industry again, is an essential condition for the development of social production and of the free individuality of the labourer himself [I]t flourishes . . . only where the labourer is the private owner of his own means of labour set in action by himself: the peasant of the land which he cultivates, the artisan of the tool which he handles as a virtuoso.

See also Renildo Souza, *Classical Marxism, Socialism, and the Market*, 20 NATURE, SOC. & THOUGHT 438, 442 (2007) ("The market inevitably generates workers' alienation, the fetishism of the product, as classical Marxism long ago taught. Market forces generate growing social and regional inequalities"); Jean Axelrad Cahan, *The Concept of Property in Marx's Theory of History: A Defense of the Autonomy of the Socioeconomic Base*, 58 SCI. & SOC'Y 392 (1995) (describing Marx's theory of property as being primarily a person-person relationship as opposed to a person-land/property relationship); August Nimtz, *Democracy in America: Two Perspectives (Marx and Toqueville)*, INT'L ENDOWMENT FOR DEMOCRACY, http://www.iefd.org/articles/democracy_in_america.php (last visited Apr. 12, 2011) (discussing Marx's belief that capitalism results in inequality based on private property).

²⁷⁶ WIPO Treaties - General Information, WORLD INTELL. PROP. ORG., <http://www.wipo.int/treaties/en/general> (last visited Mar. 16, 2011) (providing a timeline and general information about WIPO treaties).

²⁷⁷ *Id.*

however, offered little protection to those outside their national borders. The United States, for example, had no international copyright relations until 1891.

Today, intellectual property has considerable observable effect on the economies of most countries around the globe. Consider the observation of the World Trade Organization:

Ideas and knowledge are an increasingly important part of trade. Most of the value of new medicines and other high technology products lies in the amount of invention, innovation, research, design and testing involved. Films, music recordings, books, computer software and on-line services are bought and sold because of the information and creativity they contain, not usually because of the plastic, metal or paper used to make them. Many products that used to be traded as low-technology goods or commodities now contain a higher proportion of invention and design in their value—for example branded [sic] clothing or new varieties of plants.²⁷⁸

As a consequence, there has been tremendous pragmatic pressure to facilitate trade by harmonizing the treatment of intellectual property, and there are a large number of important bilateral, trilateral, plurilateral, and multilateral international treaties and agreements that address these issues.²⁷⁹ Some, such as the 1886 Berne Convention for the Protection of Literary and Artistic Works, have been in place for a considerable time and have continued to progressively attract adherents. Others of considerable note, such as the 1992 North American Free Trade Agreement between Canada, the United States, and Mexico; the Australia-USA Free Trade Agreement of 2004; the 1994 Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS”), Including Trade in Counterfeit Goods, which is perhaps

²⁷⁸ *Understanding the WTO - Intellectual property: protection and enforcement*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm (last visited Apr. 12, 2011).

²⁷⁹ For a recent addition to a series of excellent critical discussion on legal innovation in the international community, see generally Graeme Dinwoodie & Rochelle Dreyfuss, *Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO, and Beyond*, 46 HOUSTON L. REV. 1187 (2010) (advocating for reliance on WIPO as a source for a more balanced approach to intellectual property protection, which can be incorporated into the WTO’s lawmaking process to create optimal results).

the most far reaching; and certain bilateral “TRIPS-Plus” agreements are of more recent vintage.

Let us turn our attention to just two of the treaties, namely, the Berne Convention and TRIPS, to help place the discussion into an institutional context.

6.1. *The Berne Convention*

The Berne Convention was originally concluded in 1886 and was revised on a number of occasions, including Paris in 1971.²⁸⁰ The United States acceded to Berne in November 1988, and the Convention entered into force in the United States on March 1, 1989. As of September 2009, there were 164 contracting parties to the Berne Convention.²⁸¹ The treaty contains three basic premises—national treatment of works,²⁸² automatic protection of works without conditional formalities,²⁸³ and independence of protection.²⁸⁴

The Berne Convention is administered by the World Intellectual Property Organization (“WIPO”), a specialized agency of the United Nations. WIPO administers twenty-two other intellectual property and global protection treaties and

²⁸⁰ The Convention was revised at Paris in 1896 and at Berlin in 1908, completed at Berne in 1914, revised at Rome in 1928, at Brussels in 1948, at Stockholm in 1967 and at Paris in 1971, and amended in 1979. See *Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886)*, WORLD INTELLECTUAL PROP. ORG., http://www.wipo.int/treaties/en/ip/berne/summary_berne.html [hereinafter *WIPO Summary*] (last visited Apr. 12, 2011).

²⁸¹ For a list of the parties, see *Contracting Parties*, WORLD INTEL. PROP. ORG., http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=15 (last visited Apr. 12, 2011).

²⁸² See *WIPO Summary*, *supra* note 280, stating:

Works originating in one of the contracting States (that is, works the author of which is a national of such a State or works which were first published in such a State) must be given the same protection in each of the other contracting States as the latter grants to the works of its own nationals (principle of “national treatment”).

²⁸³ See *id.* (“[P]rotection must not be conditional upon compliance with any formality.”).

²⁸⁴ See *id.*, stating:

[P]rotection is independent of the existence of protection in the country of origin of the work If, however, a contracting State provides for a longer term than the minimum prescribed by the Convention and the work ceases to be protected in the country of origin, protection may be denied once protection in the country of origin ceases.

agreements,²⁸⁵ including the Patent Law Treaty,²⁸⁶ the Patent Cooperation Treaty,²⁸⁷ the Trademark Law Treaty,²⁸⁸ and the Madrid Protocol.²⁸⁹ Pursuant to pressure from the United States and certain European countries to address a digital agenda, two additional treaties—the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty—were concluded in December 1996. Unfortunately, however, WIPO lacks adequate direct enforcement power and must generally refer matters to the International Court of Justice. The TRIPS portion of the World Trade Organization Agreement was the mechanism devised to more efficiently enforce international norms of intellectual property practice. In 1995, the World Trade Organization (“WTO”) was born. It is headquartered in Geneva.

6.2. *GATT and the WTO*

While the General Agreement on Tariffs and Trade (“GATT”) focused predominantly on trade in goods, the WTO and its other agreements also “cover trade in services and in inventions, creations, and designs (intellectual property).”²⁹⁰ The “Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts” contains approximately sixty agreements, annexes, decisions, and understandings, and they can be divided into six basic categories, namely, the umbrella agreement that established the WTO; agreements for each of the three broad areas of trade that the WTO covers (goods, services, and intellectual property); provisions for dispute settlement; and review of governments’ trade policies.²⁹¹ There are two abiding principles that govern

²⁸⁵ World Intellectual Property Organization, *WIPO-Administered Treaties*, available at <http://www.wipo.int/treaties/en>.

²⁸⁶ World Intellectual Property Organization, *Patent Law Treaty* (Jan. 6, 2000) available at <http://www.wipo.int/treaties/en/ip/plt>.

²⁸⁷ World Intellectual Property Organization, *Patent Cooperation Treaty* (June 19, 1970), available at <http://www.wipo.int/treaties/en/registration/pct>.

²⁸⁸ World Intellectual Property Organization, *Trademark Law Treaty* (Oct. 27, 2004), available at <http://www.wipo.int/treaties/en/ip/tlt>.

²⁸⁹ World Intellectual Property Organization, *Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks* (June 27, 1989), available at http://www.wipo.int/treaties/en/registration/madrid_protocol.

²⁹⁰ World Trade Organization, *What is the World Trade Organization?*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact1_e.htm (last visited Apr. 13, 2011).

²⁹¹ See *Overview: a Navigational Guide*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm1_e.htm (last

WTO agreements: the most favored nation principle²⁹² and the principle of national treatment.²⁹³ For purposes of this Article, TRIPS is the most important agreement.

6.2.1. *The TRIPS Agreement*

TRIPS was adopted in 1994 by 107 countries that had participated in the Uruguay Round of the GATT.²⁹⁴ As of July 23, 2008, the WTO had 153 members.²⁹⁵

The agreement covers five fundamental subjects:

- (1) Basic principles of the trading system and other international intellectual property agreements to be enforced;
- (2) The minimum protection to be given to intellectual property rights;
- (3) Obligations of enforcement of IP rights within the territories of members;
- (4) Dispute settlement between members of the WTO
- (5) Transitional arrangements²⁹⁶

visited Apr. 13, 2011) (describing the layouts of dozens of agreements and other documents).

²⁹² See *Principles of the trading system*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/tif_e/fact2_e.htm (last visited Apr. 13, 2011) (describing the most favoured nation principle – of Article One of the General Agreement on Tariffs and Trade (“GATT”), Article Two of the General Agreement on Trade in Services (“GATS”), and Article Four of the Agreement on Trade-Related Aspects of Intellectual Property Rights (“TRIPS”) – whereby a country, if it gives special treatment to one WTO member state, must give the same treatment to all other member states).

²⁹³ The national treatment principle requires that:

Imported and locally-produced goods should be treated equally – at least after the foreign goods have entered the market. The same should apply to foreign and domestic services, and to foreign and local trademarks, copyrights and patents. This principle of “national treatment” (giving others the same treatment as one’s own nationals) is also found in all the three main WTO agreements (Article 3 of GATT, Article 17 of GATS and Article 3 of TRIPS).

Id.

²⁹⁴ The TRIPS Agreement is Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization.

²⁹⁵ See WORLD TRADE ORG., <http://www.wto.org> (last visited Apr. 13, 2011).

²⁹⁶ See *Intellectual Property: Protection and Enforcement*, WORLD TRADE ORG., http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm (last visited Apr. 6, 2011) (outlining the “five broad issues” addressed by TRIPS).

Furthermore, the agreement addresses a myriad of forms of intellectual property, including: “[1] copyright and related rights; [2] trademarks, including service marks; [3] geographical indications; [4] industrial designs; [5] patents; [6] layout-designs (topographies) of integrated circuits; and [7] undisclosed information, including trade secrets.”²⁹⁷

As previously noted, the agreement establishes minimum standards for intellectual property protection, starting with the main agreements previously extant in the world community and enforced by the World Intellectual Property Organization: the Paris Convention and the Berne Convention.²⁹⁸

Part 3 requires that member states take appropriate measures to enforce the standards. Enforcement requires that intellectual property rights and the penalties for infringement are proper. In addition, the procedures must be fair and equitable. For example, in appropriate circumstances, courts should have the power to order the disposal or destruction of pirated or counterfeit goods, and willful trademark counterfeiting or copyright piracy that rises to a commercial scale should be made a criminal offense.

6.2.2. *The Doha Declaration*

TRIPS attempts to strike a balance between the long-term interest of society in enriching the public domain by providing an incentive to creative persons and the short-term desire of users for liberal access.²⁹⁹ One of the means by which that balance is struck

²⁹⁷ *Id.*

²⁹⁸ *See id.* (explaining that the TRIPS agreement aims to maintain adequate IP protection in all member countries and therefore is initially guided by the Paris Convention and Berne Convention, but that it “adds a significant number of new or higher standards” where the protections of those conventions “were thought inadequate”); *see also* WIPO Summary, *supra* note 280, at n.1 (noting that in addition to according most favored nation treatment to WTO members, TRIPS extends copyright obligations embodied primarily in the Berne Convention such as national treatment, automatic protection, and independence of protection to WTO members who were not parties to the Berne Convention).

²⁹⁹ *See* Agreement on Trade-Related Aspects of Intellectual Property Rights, arts. 7–8, April 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299 [hereinafter TRIPS], *available at* http://www.wto.org/english/docs_e/legal_e/27-trips_03_e.htm; *Philosophy: TRIPS Attempts to Strike a Balance*, WORLD TRADE ORG. http://www.wto.org/english/tratop_e/trips_e/factsheet_pharm01_e.htm (last visited Apr. 13, 2011) (noting the philosophy of TRIPS to balance long-term incentives to invest and create in the future with the present, short-term needs of allowing people to use existing technology):

is through the use of compulsory licensing.³⁰⁰ Although the terms are not specifically employed in TRIPS, reference is made in Article 31 to “Use Without Authorization of the Right Holder,” the intent of which is to permit, in appropriate circumstances, the use of a patent not only by governments for their own purposes but also by others authorized by government. Except in circumstances of a national emergency, other circumstances of extreme urgency, or in cases of public non-commercial or government use, one seeking a compulsory license must first attempt to obtain a license from the right holder on reasonable terms.³⁰¹ Should such a license issue, the rights holder must be given adequate notice and be paid adequate remuneration in the circumstances of each case.³⁰² Adequate compensation must take the economic value of the

The TRIPS Agreement

Article 7

Objectives

The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.

Article 8

Principles

1. Members may, in formulating or amending their laws and regulations, adopt measures necessary to protect public health and nutrition, and to promote the public interest in sectors of vital importance to their socio-economic and technological development, provided that such measures are consistent with the provisions of this Agreement.

2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, may be needed to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or adversely affect the international transfer of technology.

Id.

³⁰⁰ TRIPS affirmatively states that there can be no compulsory license of a trademark. *See* TRIPS, *supra* note 299, § 2 (allowing member states to determine the licensing and assignment conditions of trademarks, though noting that compulsory licensing of trademarks is not allowed, and that the owner of the registered trademark may assign the trademark with or without transfer of the business which the trademark belongs to).

³⁰¹ *Id.* art. 31(b).

³⁰² *Id.* art. 31(h).

authorization into account.³⁰³ Compulsory licensing must also meet additional requirements.³⁰⁴ A compulsory licensee may not, generally, be given a license that would foreclose the rights holder from exercising its interest under the patent. Normally, a compulsory license is granted only to supply domestic needs.³⁰⁵

The compulsory license and its terms under TRIPS were specifically addressed in the Doha Ministerial Conference of 2001 and the Declaration on the TRIPS Agreement and Public Health, adopted by WTO member organizations on November 14, 2001. Additionally, the members considered whether TRIPS might be interpreted in a manner that supported the mission of public health in a way that stimulated research into new medicines and simultaneously promoted greater access to existing pharmaceuticals.³⁰⁶ By means of the Doha Declaration, the group agreed that TRIPS did not and should not prevent members from taking measures to address public health issues, and acknowledged that the TRIPS Agreement permitted the use of compulsory licensing and parallel importing. They also agreed to extend exemptions on pharmaceutical patent protection for least-developed countries until 2016.³⁰⁷

The Conference did not specify the grounds under which a compulsory license might be issued. Rather, that was left to the prerogative of the member country in need of the pharmaceutical. In that context, relevant sections of the Doha Declaration state:

5. Accordingly and in the light of paragraph 4 above, while maintaining our commitments in the TRIPS Agreement, we recognize that these flexibilities include:

.....

(b) Each Member has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted.

³⁰³ *Id.*

³⁰⁴ See generally *id.* arts. 31(b)-(l) (detailing additional requirements for an individual or entity to use a patent without authorization of the right holder).

³⁰⁵ This latter limitation has been altered for certain goods such as pharmaceuticals under the Doha Agreement.

³⁰⁶ *Obligations and exceptions*, WORLD TRADE ORG., http://www.wto.org/english/tratop_e/trips_e/factsheet_pharm02_e.htm#dohadec15b (last visited Apr. 13, 2011).

³⁰⁷ *Id.*

(c) Each Member has the right to determine what constitutes a national emergency or other circumstances of extreme urgency, it being understood that public health crises, including those relating to HIV/AIDS, tuberculosis, malaria and other epidemics, can represent a national emergency or other circumstances of extreme urgency.

(d) The effect of the provisions in the TRIPS Agreement that are relevant to the exhaustion of intellectual property rights is to leave each Member free to establish its own regime for such exhaustion without challenge, subject to the MFN and national treatment provisions of Articles 3 and 4.³⁰⁸

Article 31(f) of TRIPS also presented difficulty insofar as it specifically states that a use under a compulsory license shall be authorized predominantly for the supply of the domestic market of the Member authorizing such use.³⁰⁹ This provision limits the export amount of a drug manufactured under a compulsory license, and it was recognized by the Conference as having potential adverse impact upon countries unable to make needed medicines and requiring a supply of generics.³¹⁰ They opined that the restriction would make it more difficult to find exporting countries that were able to provide an adequate supply.³¹¹ On August 30, 2003, WTO members agreed to shared understandings on certain waivers³¹² in order to make it easier for countries unable to manufacture an adequate domestic supply of needed medicines to import cheaper generics made under compulsory licensing. These waivers did not, however, immediately amend Article 31 of TRIPS. In December 2005, an agreement³¹³ was reached with

³⁰⁸ World Trade Organization, *Ministerial Declaration of 14 November 2001*, WT/MIN(01)/DEC/2, 41 I.L.M. 755 (2002) available at http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_trips_e.htm.

³⁰⁹ See TRIPS, *supra* note 299, art. 31(f).

³¹⁰ See, e.g., Uché Ewelukwa, *Patent Wars in the Valley of the Shadow of the Death: The Pharmaceutical Industry, Ethics, and Global Trade*, 59 U. MIAMI L. REV., 203, 224-225 (detailing the Conference's discussion of Article 31(f)'s restriction on access to pharmaceuticals in certain countries).

³¹¹ *Id.*

³¹² World Trade Organization, *Decision of the General Council of 30 August 2003*, WT/L/540 and Corr. 1 (2003), available at http://www.wto.org/english/tratop_e/trips_e/implem_para6_e.htm.

³¹³ World Trade Organization, *Decision of the General Council of 6 December 2005*, WT/L/641, (2005), available at http://www.wto.org/english/tratop_e

respect to the direct translation of the waivers into law and they are to enter into force at such time as they are accepted by two-thirds of the members.

The understanding contains three waivers:

- (1) Exporting member countries' obligations under Article 31(f) can be waived to permit export of generic pharmaceutical products made under compulsory licenses for the purpose of meeting the needs of importing countries;
- (2) Remuneration for a compulsory license would be paid by the exporting country and any obligation of an importing country to fairly compensate a rights holder under a compulsory licensing would be waived in order to avoid double payment;
- (3) Export constraints would be waived for developing and least-developed countries in order to permit export of qualified medicinal products within a regional trade agreement on condition that at least half of the members of those in the regional agreement are categorized as least-developed countries at the time of the decision.³¹⁴

In addition, there are specific conditions that apply to pharmaceutical products under the Doha system which are intended to ensure that beneficiary countries can import the generics without undermining patent systems. These include measures to prevent the medicines from being diverted from targeted developing countries to other countries with sounder and more competitive markets.³¹⁵

/trips_e/wtl641_e.htm; see also Press Release, World Trade Org., Members OK Amendment to Make Health Flexibility Permanent, Press/426 (Dec. 6, 2005), http://www.wto.org/english/news_e/pres05_e/pr426_e.htm (detailing the WTO members decision to make a permanent amendment regarding patents and public health).

³¹⁴ *Obligations and Exceptions*, WORLD TRADE ORG. (Sept. 2006), http://www.wto.org/english/tratop_e/tratop_e/trips_e/factsheet_pharm02_e.htm#art31.

³¹⁵ While all member countries are theoretically eligible to take advantage of this declaration and accommodation, thirty-three countries have specifically indicated that they will not employ the method. These countries are: Australia, Austria, Belgium, Canada, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Slovak Republic and Slovenia, Sweden, Switzerland, United Kingdom and the United States. Eleven others have indicated that the system

6.2.3. *Comments on TRIPS*

TRIPS is generally perceived as born of Western principles and grounded in the utilitarian philosophy of a mass market, seller-based economy.³¹⁶ It is believed that U.S. interest during the 1980s, in particular the interest in enforcement of international obligations with respect to IP, led to the linkage of trade and innovation, and it is generally accepted that it TRIPS emerged through the combined efforts of industrialized countries, such as the United States, Japan, and certain members of the European Union, and established research-based pharmaceutical and software companies.³¹⁷ Commentators with divergent philosophical views, economists with different policy approaches, as well as countries, nations, groups, and individual community members with numerous cultural traditions, often disagree with respect to their support of TRIPS and other international norms for the protection of IP.

Numerous countries have either declined to become a treaty party, or if they have formally acceded to treaty terms, have failed, on occasion, to fully meet treaty obligations. Among the numerous reasons or rationalizations for this state of affairs is that IP protection is, by nature, territorial, and that divergent cultural, political, or economic perspectives produce different results. So, as previously observed, common law countries whose IP philosophy is predominately grounded in utilitarian theory have often emphasized the protection of pecuniary interests, while others, such as those of a civil law tradition that possess a more vibrant natural law perspective, have tended to emphasize and reward moral and non-pecuniary interests. Another observable trend has been that in many cases, developing countries that perceive their economic survival to depend upon liberal access to intellectual

would only be used in national emergencies or other circumstances of extreme urgency for importation of subject medicines. They are: Hong Kong China, Israel, Korea, Kuwait, Macao China, Mexico, Qatar, Singapore, Chinese Taipei, Turkey, and United Arab Emirates. As of 2006, certain potential exporting countries have taken action to alter their laws and regulations to affirmatively implement the waivers. These are Norway, Canada, India and certain European Union countries. *See id.*

³¹⁶ *See generally* Katherine J. Strandburg, *Evolving Innovation Paradigms and the Global Intellectual Property Regime*, 41 CONN. L. REV. 861 (2009) (evaluating TRIPS's general approach to innovation); Yu, *supra* note 9 (explaining how Articles 7 and 8 can help less developed countries take advantage of the TRIPS Agreement).

³¹⁷ Daniel J. Gervais, *TRIPS and Development*, in INTELLECTUAL PROPERTY, TRADE AND DEVELOPMENT, *supra* note 9, at 6-7.

property have found it propitious to afford less protection to intellectual property interests than have other more economically developed countries, such as the United States and Japan.³¹⁸

Thus, the debate continues as to whether the utilitarian incentive system and a system of strong protection of IP actually enhance the productivity of authors and inventors.³¹⁹ For some advocates, the proper focus is not upon protection of IP but rather upon global welfare. They argue that, perhaps, a more homogenous communitarian arrangement that permitted relative free access to innovation would best serve the interests of

³¹⁸ See generally DAVISON ET AL., *supra* note 247, at 12–15, discussing the international trend in intellectual property whereby:

[D]eveloping countries have tended not to provide high levels of protection while developed countries have provided higher protection. Some countries, such as Japan and the United States of America, have significantly increased their protection of intellectual property as their economies have developed and it became increasingly in their economic interest to provide that greater degree of protection.

Id.

³¹⁹ See THE COPY/SOUTH DOSSIER, *supra* note 4, at 160 (suggesting that the motivation of many individuals is not economic and the Western incentive system does not apply cross culturally). Compare Daniel Chow, *The Role of Intellectual Property in Promoting International Trade and Foreign Direct Investment*, in 4 INTELLECTUAL PROPERTY AND INFORMATION WEALTH: ISSUES AND PRACTICES IN THE DIGITAL AGE, *supra* note 41, at 187 (explaining the Western IP paradigm posits that it is necessary to have a strong legal regime to protect IP rights), and Connie Loo, *Understanding IP and the Variations in IP Law Systems*, in IP CLIENT STRATEGIES IN ASIA 55 (2009) (acknowledging the importance of strong forms of IP protection to innovation), with Rod Falvey et al., *Intellectual Property Rights and Economic Growth*, 10 REV. DEV. ECON. 700 (2006) (concluding that though there is a link between IP protection, innovation, and growth for low and high-income countries, such is not necessarily the case for middle-income countries because they “have offsetting losses from reduced scope of imitation”), and Yi Qian, *Do National Patent Laws Stimulate Domestic Innovation in a Global Patenting Environment? A Cross-Country Analysis of Pharmaceutical Patent Protection, 1978-2002*, 89 REV. ECON. & STAT. 436 (2007) (concluding that “[n]ational patent protection alone does not stimulate domestic innovation However, domestic innovation accelerates in countries with higher levels of economic development, educational attainment, and economic freedom”).

everyone.³²⁰ For others, however, strong IP protection is indispensable³²¹ and the warning is clear:

[T]he Doha Declaration and so-called TRIPS flexibilities . . . may certainly have an effect on countries in the developing world, because . . . when the exception becomes the rule it sends a message to the developing world that they do not need to strictly apply some standards—for example, patentability. . . . Thailand is not really a developing country Despite this, Thailand seized on the language in the Doha Declaration about TRIPS flexibilities to claim for itself the right to determine whether certain technologies should or should not be patented.³²²

Still others observe that political forces in some countries are actually anti-IP because the average citizen actually considers IP to be, “OPIP” that is, “Other People’s IP,”³²³ and that the better system is an anti-TRIPS model that recognizes the interest of some communities in independently pursuing a non-Western model founded upon discrete and separate communal rights.³²⁴ As observed in *The Copy/South Dossier* regarding the experience of the southern hemisphere:

As a system, copyright is far more than a set of complicated domestic legal rules or the words contained in various international agreements and conventions. And it is also

³²⁰ See generally Strandburg, *supra* note 316 (arguing that the debate over the global governance of technological innovation should be expanded to account for the increasing potential for user innovation and collaboration, which has brought about an explosion of innovative activity not explained by the sales-oriented, mass market model underlying the global intellectual property regime).

³²¹ See Open Letter from Novartis International AG, Novartis Open Letter: Improving Indian Patent Law Helps Patients and Societies (Jan. 29, 2007), available at <http://www.maketradefair.com/assets/english/novartis-open-letter-organizations.pdf> (“Protecting innovation is the foundation for massive R&D investments made by the pharmaceuticals industry that are vital to medical progress. Companies can continue to bring improvements and innovations to patients and societies only with effective patent laws. For a research-based company such as Novartis, patents are not negotiable.”).

³²² Edward Kelly, *Advocating IP Protection as an Aspect of National Competitiveness*, in IP CLIENT STRATEGIES IN ASIA, *supra* note 319, at 29, 48.

³²³ *Id.* at 34.

³²⁴ See generally THE COPY/SOUTH DOSSIER, *supra* note 4 (arguing that copyright laws foster the privatization of common cultural heritage and improperly impose western-style regulations upon peoples of the Southern Hemisphere).

much more than a mere economic calculus used by the owners of copyrighted materials to accumulate wealth (or, sometimes by authors and artists, as a way of protecting and getting payment for their labour.) Rather, copyright represents one possible answer—and there are many alternative answers—to a wide range of questions: how do cultural, artistic, and literary objects get produced? By whom? For what reasons? And for whose benefit? Copyright thus represents a wide-ranging value system and it encompasses a set of philosophical justifications as to why this Western-based system should continue both to exist and to expand in its global reach and power.

. . . [T]he dossier examines what we are calling ‘the values and ideology of copyright’, namely, individualism, commodification, reward, and consumerism. In the case of countries of the South, they are values which are daily being transplanted and implanted by rich countries of the North to justify the overturning of long-standing and alternative approaches to cultural production³²⁵

Finally there are those who are directed by pragmatic political pressures. To them, the IP laws of particular jurisdictions are tested annually through the evaluation of the effectiveness of IP enforcement by the U.S. Trade Representative’s “Special 301 Report.” This source identifies IP issues of concern, placing countries viewed as significantly lacking in IP protection on a Watch or Priority Watch List. More importantly, membership, or lack thereof, in the WTO does not dictate who is or is not on the list. For example, WTO members China, Thailand, the Philippines, the Republic of Korea, Taiwan, and Vietnam were on the Watch List in 2008.³²⁶ While Korea and Taiwan were removed in 2009, and the Philippines and Vietnam were removed in 2010, China remains on the list.³²⁷

³²⁵ *Id.* at 52.

³²⁶ Glenn W. Rhodes, *A Global Perspective on Asian Enforcement*, in IP CLIENT STRATEGIES IN ASIA, *supra* note 319, at 17, 18 (detailing WTO member countries appearing on the 2008 Special 301 list). For a list of countries appearing on the watch list in 2008, see OFF. OF THE U. S. TRADE REPRESENTATIVE, 2008 SPECIAL 301 REPORT (2008), available at http://www.ustr.gov/sites/default/files/asset_upload_file553_14869.pdf.

³²⁷ For a list of countries currently on the watch list as of 2010, see OFF. OF THE U.S. TRADE REPRESENTATIVE, 2010 SPECIAL 301 REPORT (2010), available at

6.3. *Conflict by Example*

So, is the light we see at the end of the tunnel a promise for a quick resolution of the conflicts or the headlight of an oncoming train that threatens collision and catastrophic consequences? While there is no need to be pessimistic, there is a need to realistically acknowledge that there are significant differences of opinion, many of which are based on deeply held political, philosophical, and cultural beliefs. The following provide some examples of recent discord that suggests continued attention to disparate needs is required:

(1) Weak patent laws in some countries have permitted them to become centers for the production of generic pharmaceuticals through implementation of a system of reverse engineering. A significant portion of the world's supply of medicines comes from those countries, and much of that supports the needs of the poor.³²⁸ India has been such a country, and yet, on January 1, 2005, it promulgated a new patent law designed to protect pharmaceutical compositions rather than merely the processes for making them. The alleged purpose of the legislation is to provide a catalyst that may enable India's "drug-manufacturing sector to evolve from reverse engineering to innovation."³²⁹ The law does, however, have some significant limitations on protection. First, patent coverage for pharmaceutical products is prospective only, and significant limitations are imposed upon applications filed between 1995 and the effective date of the legislation.³³⁰ Second, if any Indian generics firm began manufacture of a drug before 2005 that

http://www.ustr.gov/webfm_send/1906; see also Rhodes, *supra* note 326, at 18-19 (detailing WTO member countries' movement off the Special 301 list in 2009).

³²⁸ As Janice Mueller notes:

In the absence of notable patent-law restraints before 2005, India developed a world-class generic-drug-manufacturing sector, spawning major generics firms such as Ranbaxy, Cipla, and Dr. Reddy's, in addition to hundreds of smaller firms. India boasts more drug-manufacturing facilities that have been approved by the U.S. Food and Drug Administration than any country other than the United States. Indian generics companies, for instance, supply 84% of the AIDS drugs that Doctors without Borders uses to treat 60,000 patients in more than 30 countries.

Janice M. Mueller, *Taking TRIPS to India – Novartis, Patent Law, and Access to Medicines*, 356 NEW ENG. J. MED. 541 (2007).

³²⁹ *Id.* at 541.

³³⁰ *Id.* at 542.

is later covered by a patent, they may continue to make and sell the drug (although they may have to pay certain royalties).³³¹ Third, the law contains what is claimed to be “the world’s most extensive provisions on compulsory licensing.”³³² Fourth, there is an opposition provision in the law that permits public interest groups and others to challenge the issuance of a patent.³³³ Lastly, there is a provision against “evergreening.”³³⁴ Section 3(d) of the Act “forbids the patenting of derivative forms of known substances . . . unless they are substantially more effective than the known substance.”³³⁵

Recently, India has been embroiled in a lengthy and public dispute with Novartis, the Swiss pharmaceutical company, over the denial of a patent for various modalities of the drug Gleevec, the company’s brand-name version of imatinib mesylate. In large part due to the opposition of advocacy groups,³³⁶ a patent for the drug was denied. In addition to challenging this and other actions in the courts of India,³³⁷ Novartis has decided to reverse a prior decision to invest hundreds of millions of dollars in an Indian-based research program. It is reported to be moving its resources to China.³³⁸

³³¹ *Id.*

³³² *Id.*

³³³ *Id.*

³³⁴ *Id.*

³³⁵ *Id.* (noting that this provision has been met with opposition due to the ambiguity surrounding “efficacy;” the statute and implementing guidelines do not define the term and opponents argue that the provision imposes stricter requirements than the TRIPS Agreement for obtaining a patent).

³³⁶ See Gopal Dabade, *It’s a Relief for the HIV-infected*, DECCAN HERALD (July 9, 2008), available at <http://novartisboycott.org/its-a-relief-for-the-hiv-infected/#more-36> (arguing that Novartis’ patent application for the drug Viramune should be denied so that generic drug manufacturers can continue to make the drug accessible and affordable to the general public).

³³⁷ See *Novartis Attacks Indian Patent Law Again Threatening Future of Access to Affordable Medicines*, CAMPAIGN FOR ACCESS TO ESSENTIAL MEDS. (Aug. 28, 2009), <http://www.msfaccess.org/main/access-patents/novartis-attacks-indian-patent-law-again-threatening-future-of-access-to-affordable-medicines> (describing Novartis’s challenge to public health safeguards in India’s patent laws, with the key issue being the interpretation of “efficacy” in Section 3(d) of the Act).

³³⁸ Rhodes, *supra* note 326, at 19. See also Chris Morrison, *Novartis’ Herrling Talks China With PharmAsiaNews*, IN VIVO BLOG (May 6, 2008, 10:35 AM), <http://invivoblog.blogspot.com/2008/05/novartis-herrling-talks-china-with.html> (reporting on Novartis’s plan for expansion in China).

(2) In April 2006, *Playboy* magazine, then headquartered in Jakarta, published its first Indonesian edition.³³⁹ Since the inhabitants of Indonesia were purportedly eighty-eight percent Muslim, the decision was made that the issue “would contain no nudity or explicit discussions of sex.”³⁴⁰ Representatives of the magazine visited the government Press Council empowered to approve new publications, which reportedly expressed no reservations concerning the proposed magazine.³⁴¹ A public interest group, the Front Pembela Islam, objected to publication of the magazine, and another group, Indonesian Society Against Piracy and Pornography, filed a criminal complaint against the editor and one of the models that appeared in the magazine.³⁴² The company moved its headquarters to Bali, a predominately Hindu area, and published its second issue in June 2006.³⁴³ In April 2007, the parties were acquitted after a lengthy trial.³⁴⁴ By October 2009, an issue of *National Geographic* magazine reported that *Playboy* ceased publication of its Indonesian issue.³⁴⁵

Indonesia is not alone in attempting to control access to various forms of expression. Iran, for example, has engaged in

³³⁹ See Erwin Arnada, *Playboy of the Muslim World*, PLAYBOY (Sept. 2007), available at <http://www.playboy.com/magazine/features/playboy-of-the-muslim-world/playboy-of-the-muslim-world-01.html> (recounting the criminal trial of Playboy editor Erwin Arnada for violating feelings of decency and arousing lust among Playboy readers); see also M. Taufiqurrahman, *Indonesia: 'Playboy' Gets Down to Business Amid Threats*, JAKARTA POST (Apr. 18, 2006), available at <http://www.asiamedia.ucla.edu/article-southeastasia.asp?parentid=43442#> (chronicling the obstacles Playboy encountered while attempting to publish its magazine in Indonesia).

³⁴⁰ Arnada, *supra* note 339.

³⁴¹ *Id.* (claiming that the Indonesian Press Council expressed no disapproval of the tamer Indonesian issue of Playboy).

³⁴² See Peter W. Stevenson, *Indonesia Targets Playboy*, CBS NEWS (June 29, 2006), <http://www.cbsnews.com/stories/2006/06/29/world/main1766784.shtml> (noting that the announcement by the police to charge the editor and model in an indecency case coincides with a push by hard-line Islamic groups to ban erotic and offensive literature).

³⁴³ See Arnada, *supra* note 339.

³⁴⁴ See *Indonesia Playboy Editor-in-Chief Not Guilty*, USA TODAY (Apr. 5, 2007, 2:35 AM), http://www.usatoday.com/news/world/2007-04-05-playboy-indonesia_N.htm (describing Indonesia's investigation of Playboy Magazine and the ultimate finding that the editor was innocent of violating decency laws).

³⁴⁵ Michael Finkel, *Facing Down the Fanatics*, NAT'L GEOGRAPHIC, Oct. 2009, at 77, 92 (reporting that the Indonesian *Playboy* had “folded”).

considerable policing of the internet for the purpose of censoring what it considers offensive content. There is even a proposal to impose the death penalty against pornographers.³⁴⁶

(3) Egypt purports to have an economic, legal, and social environment suitable to foreign direct investment.³⁴⁷ The level of education is adequate, labor is relatively cheap, many of the people speak English, and investment laws have been liberalized. In addition, the country has taken formal steps to modernize its intellectual property laws. Its first contemporary patent law was enacted in 1949. Much like the abovementioned law of India, it protected the manufacturing process for pharmaceuticals but did not provide protection of the product itself. This law was updated in 2002.³⁴⁸ In order to comply with the TRIPS Agreement, it expanded its protection of pharmaceutical products. The law does, however, include a provision for compulsory licensing. As noted previously, Article 31 of TRIPS permits "other use of . . . [patents] without the authorization of the right holder."³⁴⁹

Article 17 of Egypt's Patent Law provides that the head of the Ministry of Health, the Ministry of Internal Affairs, or other ministers can oppose any patent application if that application "relates" or is of "significance" to their respective fields.³⁵⁰ If an opposition is filed, the patent process stops.³⁵¹ Article 23(2)

³⁴⁶ See Kenly Walker, *Death Penalty For Porn In Iran?*, CBS NEWS (June 14, 2007), <http://www.cbsnews.com/stories/2007/06/14/world/main2927315.shtml> ("Iran's parliament on Wednesday voted in favor of a bill that could lead to the death penalty for persons convicted of working in the production of pornographic movies.").

³⁴⁷ See, e.g., Bird & Cahoy, *supra* note 7, at 301-03 (noting that, although Egypt's foreign direct investment flows have steadily declined, the country receives more foreign direct investments than most other African countries).

³⁴⁸ Law No. 82 of 2002 (Law on the Protection of Intellectual Property Rights), *Al-Jarida Al-Rasmiyya* 3 June 2002 (Egypt), translation available at http://www.wipo.int/wipolex/en/text.jsp?file_id=126540 [hereinafter Law No. 82 of 2002] (repealing the 1954 law in its entirety and introducing several new concepts, such as national folklore (Art. 138 & 142) and neighboring rights (Art. 153 and following)). See also Sahar Aziz, *Linking Intellectual Property Rights in Developing Countries with Research and Development, Technology Transfer, and Foreign Direct Investment Policy: A Case Study of Egypt's Pharmaceutical Industry*, 10 ILSA J. INT'L & COMP L. 1, 13 (2003) (highlighting the features of the new law, including its "comprehensive and historic improvement in the legal rights of inventors, artists, and entrepreneurs").

³⁴⁹ TRIPS, *supra* note 299, art. 31.

³⁵⁰ Law No. 82 of 2002, *supra* note 348, art. 17.

³⁵¹ See Nermien Al-Ali, *The Egyptian Pharmaceutical Industry After TRIPS – A Practitioner's View*, 26 FORDHAM INT'L L.J. 274, 302 (2003) (discussing the

permits the Minister of Health to grant a compulsory license if the quantity of available medicine fails to meet the nation's needs and the failure is due to the poor quality of alternatives, or there is a prohibitive price for alternatives, or if there is a presence of incurable or endemic diseases.³⁵² Article 23(1)(c) allows the Egyptian government to grant a license when it is deemed necessary to support "national efforts in vital sectors for economic, social, and technological development, without unreasonable prejudice to the rights of the patent holder and taking into consideration the legitimate interests of third parties."³⁵³ Finally, Article 24(8) of the law addresses the issue of compensation to the patent holder. It states that a holder is entitled to "fair compensation for the exploitation of his invention. The amount of the compensation shall be fixed on the basis of the economic value of the invention."³⁵⁴

In 1998, Pfizer applied for regulatory approval to enter the market for the drug Viagra, which was approved in 2002. Local drug manufacturers, however, placed pressure on the Egyptian Ministry of Health, and approximately two months after Pfizer's entry into the Egyptian market, it granted authorization to produce Viagra to all Egyptian companies who applied for the privilege.³⁵⁵ The interest of the poor was cited as the justification for the issuance of compulsory license. In response, Pfizer withdrew plans to develop research and development facilities in Egypt.³⁵⁶ A Pfizer representative stated that the action would "send a chill

similarities between Article 17 of the new law and Articles 8, 27(2), and 30 of TRIPS, and the mechanism by which the patent consideration process is "halted").

³⁵² Law No. 82 of 2002 (Egypt) art. 23(2).

³⁵³ *Id.* art. 23(1)(c).

³⁵⁴ *Id.* art. 24(8); *cf.* TRIPS, *supra* note 299, art. 31(h) ("[T]he right holder shall be paid adequate remuneration in the circumstances of each case, taking into account the economic value of the [compulsory license].").

³⁵⁵ See Richard A. Castellano, *Patent Law for New Medical Uses of Known Compounds and Pfizer's Viagra Patent*, 46 IDEA 283, 289 (2006) (discussing second therapeutic use patent protection in an effort to understand the availability of such protection in foreign markets, as well as the uncertainty with which companies like Pfizer can expect enforcement); see also Abeer Allam, *Seeking Investment, Egypt Tries Patent Laws*, N.Y. TIMES, Oct. 4, 2002, at W1 (detailing the "fight over Viagra" against the backdrop of the Egyptian pharmaceutical industry and the implications its newly formed intellectual property laws have had in the region).

³⁵⁶ See Castellano, *supra* note 355, at 289 (discussing the issues surrounding Egyptian patent law and its effects on pharmaceutical giants such as Pfizer).

down foreign investor's [sic] spines" and that "[t]here are many other countries in the region who are competing for these new high-tech investments."³⁵⁷

(4) Piracy of intellectual property by China is considered a significant problem.³⁵⁸ It has been estimated that the U.S. loses more than four billion dollars annually as a result of that activity.³⁵⁹ That assertion may, however, be too simplistic. Indeed, "a crime" from the U.S. perspective may be viewed quite differently from the Confucian-influenced³⁶⁰ and Socialist-inspired Chinese perspectives.³⁶¹ "The moral and political requirements of

³⁵⁷ *Id.* Compare this scenario to that of the action Brazil took in issuing a compulsory license for AIDS/HIV pharmaceuticals discussed in Bird and Cahoy, *supra* note 7, at 309-317 (discussing Brazil's tactical approach to combating the country's growing "AIDS epidemic" through pharmaceutical licensing).

³⁵⁸ See Chow, *supra* note 319, at 198 (noting that "China now accounts for up to 80 percent" of pirated and counterfeit goods throughout the world); Kelly, *supra* note 322, at 36 (noting that a large amount of "fake goods" are made in China); Peter Yu, *Piracy, Prejudice, and Perspectives: An Attempt to use Shakespeare to Reconfigure the U.S.-China Intellectual Property Debate*, 19 B.U. INT'L L.J. 1 (2001) (discussing the breadth of the Chinese piracy issue and its detrimental effects on the U.S. economy).

³⁵⁹ See *Bollywood Piracy Fighters Take Battle to US Congress*, ECON. TIMES (Apr. 22, 2008, 7:07 PM), <http://economictimes.indiatimes.com/business-of-bollywood/bollywood-piracy-fighters-take-battle-to-us-congress/articleshow/2987223.cms> (claiming that the U.S. loses "four billion dollars a year to counterfeiters").

³⁶⁰ The Confucian perspective has been summarized as follows:

Confucian ethics are still useful and . . . the uniqueness of the Confucian religiosity is being recognised as an important dimension of human spirituality, and . . . Confucian speculation on metaphysical views is considered conducive to the healthy growth of the global village. If in the past it was true that an understanding of the Chinese and East Asian peoples and their societies was impossible without an appreciation of Confucianism, then it has now become true that a picture of China and East Asia which takes no account of Confucianism is partial and superficial.

YAO, *supra* note 158, at 277. See also Pak Chong-Hong, *Historical Review of Korean Confucianism*, in MAIN CURRENTS OF KOREAN THOUGHT 60, 81 (Korean Nat'l Comm'n for UNESCO ed., 1983) ("Confucianism still continues to exert a die-hard influence and it is concluded that without sufficient knowledge of Korean Confucianism it is difficult to predict what the future of Korean thought might be.").

³⁶¹ See generally Nelson C. Lu, *To Steal a Book Is No Longer Such an Elegant Offense: The Impact of Recent Changes in Taiwanese Copyright Law*, 5 ASIAN L.J. 289 (1998) (discussing the [relatively recent] strengthening of Taiwanese intellectual property law); Yu, *supra* note 358, at 16-22 (explaining how Confucianism differentiates Chinese culture from Western culture); Peter K. Yu, *From Pirates to*

Confucianism were crystallized as 'Three Guiding Principles' (*san gang*) and 'Five Constant Regulations' (*wu chang*), on which Confucian states were established."³⁶² Consider the following summary of certain tenets of Confucianism apposite to the current discussion:

A. COMPLEMENTARY OBLIGATIONS: The stability of society is based upon unequal relationships between people. Wu lun: Relationships are based upon mutual and complementary obligations: ruler-subject, father-son, older-younger brother, husband-wife, senior-junior friend.³⁶³

B. THE INDIVIDUAL IS PART OF GROUP: The family is the prototype of all social organizations.³⁶⁴ A person is not

Partners: Protecting Intellectual Property in China in the Twenty-first Century, 50 AM. U. L. REV. 131 (2000) (discussing China's presence in the global intellectual property forum and the issues its rampant piracy problems have caused).

³⁶² The Five Regulations are the constant and unchanging natural laws of virtues of "humanness (*ren*), righteousness (*yi*), ritual/propriety (*li*), wisdom (*zhi*), and faithfulness (*xin*)," and extend to the State from the moral codes applicable to individuals. See Yao, *supra* note 158, at 34.

³⁶³ Perhaps the most important of the Three Guiding Principles is that of the hierarchy of relationships and the reciprocal obligations:

Confucius was seriously concerned with political irregularities. In order to bring peace to states . . . he paid great attention to the rules of propriety. One of his concerns was about the discrepancy between names and reality, between language and action, and between rights and duties:

If names be not correct (*zheng*), language could not be fluently used. If language be not fluently used, affairs could not be carried on to success . . . ritual/propriety (*li*) and music could not be flourishing . . . the punishments could not be properly made . . . then the people would not know how to behave.

What Confucius tried to argue here is that if a ruler, a subject, a father and a son do not fulfill their duties, they abuse their titles and violate the names by which they are defined. For Confucius, this is the beginning of the collapse of ritual/propriety and music, and is one of the causes which bring about social disorder and political chaos.

Yao, *supra* note 158, at 35.

³⁶⁴ Yao, *supra* note 158, at 184, stating:

In a Confucian context, a state (*guo*) is nothing other than an enlarged form of family (*jia*) and the relations between the ruler and the subjects, and those between those who govern and those who are governed are equivalent to the relationship between parents and children. However, unlike in the family where children are held primarily responsible for dissolving conflict, in the state the chief responsibility for reducing tension and solving conflict is laid on those who rule and govern.

primarily an individual; rather he or she is a member of a family. The task of everyone is to overcome individuality and seek harmony. Harmony is found when everybody maintains face in dignity, self-respect and prestige.³⁶⁵

C. Virtuous Behavior: "Virtuous behavior toward others consists of *not* treating others as one would *not* like to be treated oneself Virtue with regard to one's tasks in life consists of trying to acquire skills and education, working hard, not spending more than necessary, being patient, and persevering.³⁶⁶

If one considers these maxims for purposes of summarizing and communicating the general ideas, it could be that from a cultural Confucian perspective, copying is, to the Chinese, considered more a noble art than a moral or legal offense. The past is an embodiment of cultural and social values, and such materials should be in the public domain if one is to learn about and venerate one's ancestors. It is the collective that is of significance, and the rights of individuals are subordinate. Moreover, and in accord with philosophical communist and socialist views, property belongs to the State not to individuals. "[S]tealing an object that is owned by someone else is less corrupt than owning it outright yourself."³⁶⁷

Additionally, China often voices the politically expeditious opinion that the East has, for far too long, been under the oppressive hand of the West. It is now time for the East to catch up, and liberal access to intellectual property is necessary to accomplish that goal efficiently. To engage in censorship and control is to protect China's culture.

This latter claim of a right of censorship was, in fact, one of a number of subjects under review in a recent dispute before the WTO. The United States filed a complaint alleging that China was in violation of certain intellectual property obligations in general.

Id. See also Nisbett, *supra* note 143, at 6 (noting that Chinese Confucianism stresses "collective agency" in that an individual functions as "part of a large, complex, and generally benign social organism").

³⁶⁵ HOFSTEDE & HOFSTEDE, *supra* note 139, at 209.

³⁶⁶ *Id.* (emphasis added).

³⁶⁷ Susan Tiefenbrun, *Piracy of Intellectual Property in China and the Former Soviet Union and its Effects upon International Trade: A Comparison*, 46 BUFF L. REV. 1, 38 (1998).

In particular, the United States questioned the content review and censorship procedure in place in the country. China responded: "China, like many countries in the world, bans from publication and dissemination such works as those that consist entirely of unconstitutional or immoral content. Art. 4.1 simply provides that such a work also shall not be protected by the Copyright Law" ³⁶⁸ The Panel concluded that while China's IP laws were not in complete compliance with its obligations under TRIPS, there was no prohibition under the Agreement for a proper exercise of content review by a country. ³⁶⁹

Finally, some have suggested that the piracy problem in China is simply a matter of the poverty extant in the country. ³⁷⁰ If sales and pricing policies and other strategies were properly adapted to Chinese consumers, the problem of counterfeiting might naturally retreat. ³⁷¹ Finding qualities that appeal to Chinese purchasers, such as quality and dependability that cannot be found in many pirated goods, has proven of some success to companies like Microsoft. ³⁷²

7. CONCLUSION

Misunderstanding, whether it be through failure of inquiry, failure to truly appreciate the presumptions and perspectives of others in the dialogue, or intentional or unintentional nondisclosure of assumptions or expectations, seems to often punctuate the discussion and has led to considerable tension and

³⁶⁸ Report, *China – Measures Affecting the Protection and Enforcement of Intellectual Property Rights*, at ¶ 7.53, WT/DS362/R (Jan. 26, 2009). *See also id.* ¶ 7.79 (noting that several provisions regulating the administration of films, audiovisual products, and publications contain identical lists of categories of prohibited content, including those that jeopardize social ethics or fine national cultural traditions, propagate obscenity and undermine social stability, insult or slander others, or infringe upon legitimate rights and interests of others).

³⁶⁹ *Id.* ¶ 7.53.

³⁷⁰ *See* Shaun Rein, *How to Deal with Piracy in China*, FORBES (Oct. 15, 2009, 2:30 PM), <http://www.forbes.com/2009/10/15/china-piracy-counterfeiting-leadership-managing-infringement.html> (noting that China's problem with piracy is not because of a dearth in "morality", but instead "it is a matter of poverty").

³⁷¹ *See id.* (noting that instead of suing vendors of fake goods, luxury brands should use their resources to foster brand loyalty in China by building flagship stores and penetrate markets through advertising campaigns).

³⁷² *See id.* (discussing the gains Microsoft and other companies have made in remaining competitive in the Chinese market by adjusting their sales strategies to reflect an understanding of Chinese consumer behaviors).

often unsatisfactory outcomes in the global intellectual property community. One could compare it to neglecting to inquire about or disclose the location of a water main before excavation for a land improvement. Breach of the line can cause flooding and considerable frustration, or in many cases, total failure of the project.

The recognition of changing themes in innovation and creative products and the treatment given to intellectual property is, today, a significant issue in the world community. Success in harmonizing differing viewpoints will likely only be achieved, however, when discussants actually discuss the same implications in the same context. As such, it is indispensable to effective decision making that participants investigate, understand and appreciate not only the political and monetary implications, but also the social and cultural implications of the debate. It would also benefit commentators and proponents to possess a critical comprehension of such elements in their comments and disclose their motives, philosophical and political agendas, and fundamental assumptions contained within their propositions. In any case, a cogent protocol for evaluation is necessary to catalyze positive progress, and it is proposed that features such as those described above may begin to aid analysts in achieving some consensus.