

# THE GREENPEACE OF CULTURAL ENVIRONMENTALISM

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“The public domain should have its Greenpeace, its Environmental Defense Fund, its Nature Conservancy, its Environmentally Concerned Scientists.”

James Boyle<sup>1</sup>

## INTRODUCTION

Intellectual-commons are intellectual resources that anyone can use with or without permission granted beforehand. Since they are crucially important to creativity, innovation, and human development,<sup>2</sup> the shrinkage of the intellectual-commons environment will be a profound loss for cultural freedom. Therefore, protecting intellectual-commons has been one of the most important goals of contemporary innovation and information policies.<sup>3</sup> The importance of these goals has become critical in recent years as increased information-control digital technologies and expanding intellectual property (IP) laws rapidly diminish the intellectual-commons.<sup>4</sup>

Based on the analogy of the IP environment to the natural environment, Professor James Boyle uses cultural environmentalism as a metaphor to call for a social and political movement to protect the cultural commons.<sup>5</sup> Other scholars have joined Boyle to urge society to reconstruct the public domain that protects the commons from enclosure,<sup>6</sup> and public-interest advocates

1. James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 33, 73 [hereinafter Boyle, *Second Enclosure Movement*].

2. See, e.g., YOCHAI BENKLER, THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM 13-16, 24 (2006) [hereinafter BENKLER, WEALTH OF NETWORKS]; JAMES BOYLE, THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND 184, 197-99 (2008) [hereinafter BOYLE, PUBLIC DOMAIN]; LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD 14 (2001) [hereinafter LESSIG, FUTURE OF IDEAS]; Yochai Benkler, *From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access*, 52 FED. COMM. L.J. 561, 577 (2000) [hereinafter Benkler, *From Consumers to Users*]; Sonali K. Shah, *Open Beyond Software*, in OPEN SOURCES 2.0: THE CONTINUING EVOLUTION 339, 353-54 (Chris DiBona et al. eds., 2006).

3. See, e.g., LAWRENCE LESSIG, CODE: VERSION 2.0, at 198-99 (2006) [hereinafter LESSIG, CODE 2.0]; Boyle, *Second Enclosure Movement*, *supra* note 1, at 40. See also LESSIG, CODE 2.0, *supra*, at 377-79 n.68 (providing abundant literature on the value of intellectual commons in IP systems); LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY (2004) [hereinafter LESSIG, FREE CULTURE] (explaining the importance of freedom provided by commons in creative activities); Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965, 1023 (1990) (arguing that intellectual commons in the public domain is critically important for the operation of a copyright system based on the system's institutional assumptions).

4. See *infra* notes 14-25 and accompanying text.

5. BOYLE, PUBLIC DOMAIN, *supra* note 2, at 240-45; James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L.J. 87, 108 (1997) [hereinafter Boyle, *Politics of Intellectual Property*]; Boyle, *Second Enclosure Movement*, *supra* note 1, at 72-73. See also Brett M. Frischmann, *Cultural Environmentalism and The Wealth of Networks*, 74 U. CHI. L. REV. 1083, 1087-97 (2007) (introducing and analyzing Boyle's work on cultural environmentalism).

6. See, e.g., BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 25-26; DAVID BOLLIER, SILENT THEFT: THE PRIVATE PLUNDER OF OUR COMMON WEALTH 133-34 (2003) [hereinafter BOLLIER, SILENT THEFT]; Lawrence Lessig, *Foreword*, LAW & CONTEMP. PROBS., Spring 2007, at

have also sought ways to expand access to various online intellectual resources.<sup>7</sup> As a result, significant institutional efforts have emerged to preserve the intellectual-commons environment.<sup>8</sup>

Institutions are among the structures through which a society seeks to deal with its various problems; therefore, it is important to understand the effectiveness of alternative forms of institutions, such as the government, for-profit businesses, and nonprofit organizations (NPO). By the same token, in any discussion of preserving and strengthening the intellectual-commons environment, it is crucial for researchers to understand how different institutions affect this environment.<sup>9</sup> Over the past twenty years, institutions and organizations such as Creative Commons (CC), the Electronic Frontier Foundation (EFF), the Free Software Foundation (FSF), and Public Knowledge (PK) have established the essential foundations for intellectual-commons as a social movement.<sup>10</sup> Boyle argues that these organizations parallel the functions of environmental groups like Greenpeace, the Environmental Defense Fund, and Environmentally Concerned Scientists.<sup>11</sup> Significantly, these organizations are primarily NPOs.

This Article focuses on the NPOs that occupy an increasingly critical and visible position in the cultural environmentalism movement in recent years. These organizations have been involved in current IP reform via litigation, political advocacy, public-interest grant-making, as well as various private ordering activities, such as producing free licensing schemes and repositories of commons resources. The unique features of these NPOs enable them to serve important social aims that neither the proprietary sector nor the government may fulfill very well. Nonetheless, IP scholars have tended to overlook the NPO as a topic worthy of theoretical or empirical investigation. Given the importance of NPOs in the intellectual-commons environment, it is surprising how little attention they have received in legal literature.

The aim of this Article is to fill that gap. Through a detailed description of these NPOs, I argue that such organizations have provided the social structures that are necessary to support cultural environmentalism. Moreover, this Article tests the robustness of two dominant NPO theories—*contract failure theory* and *government and market failure theory*—in the commons movement context. By applying these theories and touching on related ones in a new territory, this study not only broadens the scope of NPO scholarship but also provides a new lens to understand the commons environment and cultural environmentalism.

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1, 1-2; Lawrence Lessig, *Re-crafting a Public Domain*, 18 YALE J.L. & HUMAN. (SPECIAL ISSUE) 56 (2006) [hereinafter Lessig, *Re-crafting a Public Domain*]; *infra* notes 20-21 and accompanying text.

7. See *infra* Part III.B.2.

8. James Boyle, *Cultural Environmentalism and Beyond*, 70 CONTEMP. PROBS. 5, 9 (2007) [hereinafter Boyle, *Cultural Environmentalism*].

9. See BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 26 (stating that institutional forms may influence human beings' interaction with information production and consumption).

10. Boyle, *Cultural Environmentalism*, *supra* note 8, at 14-17; BOYLE, PUBLIC DOMAIN, *supra* note 2, at 243-44.

11. Boyle, *Second Enclosure Movement*, *supra* note 1, at 73.

The essential data in this research is derived from four sources. The first three are publicly available. First, I reviewed the existing literature with a focus on the commons environment or specific NPOs. Second, I read a broad range of news articles related to NPOs in the commons environment. Third, I browsed the information provided on these NPOs' websites. The most important source of information, however, has been a series of in-depth, semi-structured interviews I conducted from October 2007 to July 2008 with fourteen officials from eleven NPOs.

Although NPOs have a unique value for cultural commons, I do not suggest that they can or will completely supplant the government and for-profits in the commons environment. Neither do I suggest that NPOs are adversaries to the market and the state. In fact, these three sectors share many characteristics and perform complementary tasks. Their complementary coexistence and relative salience as organizational forms for various social activities determine the allocation of resources in our society.<sup>12</sup>

#### I. CULTURAL ENVIRONMENTALISM: COMMONS AS A SOCIAL MOVEMENT

In recent years, proprietary control has increasingly expanded in the digitally-networked environment due to progressively stronger copyright protection<sup>13</sup> and digital rights management (DRM) techniques.<sup>14</sup> As the degree

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12. For example, governments' monopoly over coercive power supports the IP system through the public enforcement of law. Governments may also subsidize basic research and the development of *free or open source software (F/OSS)*. Proprietary firms appropriate IP rights to gain business advantages. These firms may also invest in the production of intellectual commons. See, e.g., BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 46-47; BOYLE, PUBLIC DOMAIN, *supra* note 2, at 190.

13. See, e.g., Amy Kapczynski, *The Access to Knowledge Mobilization and the New Politics of Intellectual Property*, 117 YALE L.J. 804, 821-25 (2008).

14. DRM techniques are technologies that enable media companies to limit, monitor, and control the transport and use of their products. Such techniques, widely adopted by the digital media industry, restrict public access to information. These non-negotiable arrangements of digital materials often prohibit fair use and prohibit information sharing that seemed closer at hand with the Internet. See, e.g., J.D. LASICA, DARKNET: HOLLYWOOD'S WAR AGAINST THE DIGITAL GENERATION 118 (2005); LESSIG, FREE CULTURE, *supra* note 3, at 147-53; LAWRENCE LESSIG, REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY 99 (2008) [hereinafter LESSIG, REMIX]; Kapczynski, *supra* note 13, at 823-24; Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 62-63; Madhavi Sunder, *IP<sup>3</sup>*, 59 STAN. L. REV. 257, 281 (2006); Electronic Frontier Foundation, *Digital Rights Management and Copy Protection Schemes*, <http://www.eff.org/issues/drm/> (last visited Sept. 25, 2009). Relying on DRM techniques, media industries went one step further and pressed the U.S. federal government to pass the Digital Millennium Copyright Act (DMCA), which would infuse in these techniques the force of law, thus, strengthening the industries' control over their products. The DMCA imposes criminal penalties on individuals who circumvent "technological measures" or who distribute circumventing tools. See Digital Millennium Copyright Act, 17 U.S.C. § 1201 (2006) (prohibiting the circumvention of technology that protects a specified work); LASICA, *supra*, at 140-41; Kapczynski, *supra* note 13, at 824. See also BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 25 (noting Hollywood's effort to implement DRM systems in computation devices); BOLLIER, SILENT THEFT, *supra* note 6, at 129-30 (articulating the social costs brought by DRM systems).

of control increases, the commons environment faces a threat of shrinkage.<sup>15</sup> As a result, distributed creativities may be blocked by such a permission culture.<sup>16</sup> Professor James Boyle has referred to this trend of expanding private control as the *second enclosure movement*, after the enclosure movement in England during medieval times when new landholders enclosed their land after identifying it as private property.<sup>17</sup>

Recognizing the danger of the second enclosure movement, Boyle has championed a call for “*cultural environmentalism*,” to preserve (and conserve) the cultural commons.<sup>18</sup> Based on an analogy with the environmental movement, Boyle envisions an avenue for reforming IP laws.<sup>19</sup> Concurrently, a number of IP scholars have become aware of both the trend of privatization of intellectual-commons<sup>20</sup> and the shrinkage of the public domain.<sup>21</sup> They believe that although the Internet has promised unprecedented opportunities for human creativity, communications, and access to information, the proliferation of copyright laws threatens to restrict these possibilities.<sup>22</sup>

15. See LESSIG, *FREE CULTURE*, *supra* note 3, at 8; Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 56; see also Charlotte Hess & Elinor Ostrom, *Introduction: An Overview of the Knowledge Commons*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE 3, 12-13 (Charlotte Hess et al. eds., 2007) [hereinafter Hess & Ostrom, *Overview of the Knowledge Commons*] (noting that intellectual commons is threatened by commodification and enclosure); LASICA, *supra* note 14, at 36 (quoting an interview with Lawrence Lessig that private control over information runs the risk of making “a huge chunk of our culture essentially inaccessible”).

16. See, e.g., Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 67.

17. BOLLIER, *SILENT THEFT*, *supra* note 6, at 44-45 (discussing the enclosure movement in England); BOYLE, *PUBLIC DOMAIN*, *supra* note 2, at 45; Boyle, *Second Enclosure Movement*, *supra* note 1, at 33-40. See also Benkler, *From Consumers to Users*, *supra* note 2, at 562-63, 569-70 (using the enclosure movement to describe how information producers capture excessive value for profits via the IP system).

18. See Boyle, *Politics of Intellectual Property*, *supra* note 5, at 108-13; Boyle, *Second Enclosure Movement*, *supra* note 1.

19. See Boyle, *Politics of Intellectual Property*, *supra* note 5.

20. See, e.g., Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. Rev. 354, 354-55 (1999); Yochai Benkler, *Siren Songs and Amish Children: Autonomy, Information, and Law*, 76 N.Y.U. L. Rev. 23, 112 (2001); Boyle, *Second Enclosure Movement*, *supra* note 1, at 39; Frischmann, *supra* note 5, at 1087-88; Joseph E. Stiglitz, *Economic Foundations of Intellectual Property Rights*, 57 DUKE L.J. 1693, 1708-09 (2008); Sunder, *supra* note 14, at 321; David Bollier, *The Future of the Digital Commons: Is the Commons a Movement?*, Remarks at the Wizards of OS3, at 3 (June 12, 2004) (transcript available at <http://www.bollier.org/pdf/BerlinWizardsOfOS3speechJune2004.pdf>) [hereinafter Bollier, *Is the Commons a Movement?*]. See also LESSIG, *FUTURE OF IDEAS*, *supra* note 2 (elucidating how enclosure of the commons in IP and cyberspace harms the society).

21. See, e.g., Boyle, *Second Enclosure Movement*, *supra* note 1, at 38-39; Dan L. Burk, *Muddy Rules for Cyberspace*, 21 CARDOZO L. REV. 121 (1999) (recognizing public domain shrinkage in cyberspace); Julie E. Cohen, *Copyright and the Jurisprudence of Self-Help*, 13 BERKELEY TECH. L.J. 1089 (1998) (observing how proprietary owners use contracts to decrease the scope of the public domain).

22. See, e.g., LESSIG, *CODE 2.0*, *supra* note 3, at 224-25; LESSIG, *FREE CULTURE*, *supra* note 3, at 41-47, 184-85; Boyle, *Second Enclosure Movement*, *supra* note 1, at 48; Hess & Ostrom, *Overview of the Knowledge Commons*, *supra* note 15, at 14; Dan Hunter, *Culture War*, 83 TEX. L. REV. 1105, 1107-11 (2005); Greg Lastowka, *Digital Attribution: Copyright and the Right to Credit*, 87 B.U. L. REV. 41, 43, 46 (2007); Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 62, 64.

Moreover, the freedom to cultivate and spread culture has been eroded by the increasing power of copyright law, technology, and the market.<sup>23</sup> Accordingly, numerous opportunities for new and valuable innovation and creativity will be lost.<sup>24</sup>

The metaphor Boyle offered, cultural environmentalism, has helped lay the foundation for a series of *cultural environmentalism movements* or *intellectual-commons movements* that aim to protect commons from enclosure.<sup>25</sup> The first of these was the *free or open source software (F/OSS) movement*,<sup>26</sup> caused by “a dissatisfaction with proprietary models for software development that emphasize intellectual property rights and discourage knowledge-sharing.”<sup>27</sup> Following the concept of the F/OSS movement, the *free culture movement* advocates preserving a “permission free” and “lawyer free” zone<sup>28</sup> to build our culture upon our past.<sup>29</sup> The free culture movement seeks to “build a layer of *reasonable* copyright on top of the extremes that now reign.”<sup>30</sup> As described by Professor Lawrence Lessig, *free* refers to “the sense that the culture and its growth would no longer be controlled by a small group of [entities].”<sup>31</sup> Correspondingly, in academia, the *open access movement* has been seeking to promote the free distribution of scholarly material through the Internet.<sup>32</sup>

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23. See LESSIG, FREE CULTURE, *supra* note 3, at 168-73, 181, 186, 256, 261.

24. *See id.*

25. *See, e.g.*, BOYLE, PUBLIC DOMAIN, *supra* note 2, at 239-42 (introducing cultural environmentalism as a social and political movement); Niva Elkin-Koren, *What Contracts Cannot Do: The Limits of Private Ordering in Facilitating a Creative Commons*, 74 FORDHAM L. REV. 375, 387 (2005) (noting Creative Commons’ social movement against the enclosure of IP); Hess & Ostrom, *Overview of the Knowledge Commons*, *supra* note 15, at 4 (noting the information commons movement in the digital era); Kapczynski, *supra* note 13, at 806, 830, 855, 858 (referring to this whole movement as the “access to knowledge movement” and positioning “commons” in the center of the movement); Lydia Pallas Loren, *Building A Reliable Semicommons of Creative Works: Enforcement of Creative Commons Licenses and Limited Abandonment of Copyright*, 14 GEO. MASON L. REV. 271, 274-76, 283-88 (2007) (arguing that CC licensed works are semicommons rather than commons and describing F/OSS and CC as social movements).

26. *See, e.g.*, CASS R. SUNSTEIN, INFOTOPIA: HOW MANY MINDS PRODUCE KNOWLEDGE 168-72 (2006); Loren, *supra* note 25, at 283-85.

27. Julie E. Cohen, Lochner in Cyberspace: *The New Economic Orthodoxy of “Rights Management,”* 97 MICH. L. REV. 462, 530 n.258 (1998); *see also* Mark A. Haynes, *Commentary: Black Holes of Innovation in the Software Arts*, 14 BERKELEY TECH. L.J. 567, 573 (1999) (describing F/OSS as “a clear reaction to the closed nature of copyright protected software”).

28. Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 57-58, 71, 77. *See* LESSIG, FREE CULTURE, *supra* note 3, at 282-83.

29. LESSIG, FREE CULTURE, *supra* note 3, at 168-73; *see also* CHRISTINE HAROLD, OURSPACE: RESISTING THE CORPORATE CONTROL OF CULTURE 143-45 (2007).

30. LESSIG, FREE CULTURE, *supra* note 3, at 282.

31. *Id.* at 94.

32. *See, e.g.*, Bollier, *Is the Commons a Movement*, *supra* note 20, at 1; Dan Hunter, *Walled Gardens*, 62 WASH. & LEE L. REV. 607, 613-23 (2005); David W. Opperbeck, *The Penguin’s Paradox: The Political Economy of International Intellectual Property and the Paradox of Open Intellectual Property Models*, 18 STAN. L. & POL’Y REV. 101, 107-09 (2007); Peter Suber, *Public Knowledge, The Open Access Project: Promoting the Free and Unrestricted World-Wide Electronic Distribution of Peer-Reviewed Journal Literature*, <http://www.publicknowledge.org/about/what/projects/open-access.html> (last visited July 22, 2009).

Similarly, the *Open Educational Resources (OER) movement* supports free uses of digital teaching, learning, and research resources.<sup>33</sup>

In summary, the commons movements not only promote the idea of knowledge as a public good, but also encourage creativity as an ongoing and public process. Furthermore, these movements provide crucial value for various NPOs' ideological orientation into cultural environmentalism.<sup>34</sup>

## II. NONPROFIT ORGANIZATIONS AND CULTURAL ENVIRONMENTALISM

This section will introduce the concept of NPOs and their role in cultural environmentalism. NPOs' are able to fulfill an integral social function in the commons environment due to several indispensable characteristics.

### *A. Characteristics of a Nonprofit Organization*

NPOs, sometimes collectively referred to as the “voluntary sector,”<sup>35</sup> are private organizations that are restricted from distributing any profit to anyone associated with the organization.<sup>36</sup> As a result, NPOs do not seek to maximize financial profit for distribution. Scholars have regarded such a *non-distribution constraint* as the NPOs' most important institutional characteristic and have developed NPO theories based on that characteristic.<sup>37</sup>

33. DANIEL E. ATKINS ET. AL., WILLIAM & FLORA HEWLETT FOUND., A REVIEW OF THE OPEN EDUCATIONAL RESOURCES (OER) MOVEMENT: ACHIEVEMENTS, CHALLENGES, AND NEW OPPORTUNITIES 1-5 (2007), [http://oerdes.org/wp-content/uploads/2007/03/a-review-of-the-open-educational-resources-oermovement\\_final.pdf](http://oerdes.org/wp-content/uploads/2007/03/a-review-of-the-open-educational-resources-oermovement_final.pdf).

34. See Paul J. DiMaggio & Helmut K. Anheier, *The Sociology of Nonprofit Organizations and Sectors*, ANN. REV. SOC., Aug. 1990, at 137, 145 (“NPOs are often based on strong ideological . . . orientations: value-rational rather than means-rational. . .”).

35. See, e.g., PETER FRUMKIN, ON BEING NONPROFIT: A CONCEPTUAL AND POLICY PRIMER 14 (2002); DiMaggio & Anheier, *supra* note 34, at 144; Al Slivinski, *The Public Goods Theory Revisited: Comments on Kingma's Revisitation of Weisbrod*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES AND APPROACHES 67, 69 (Helmut K. Anheier & Avner Ben-Ner eds., 2003).

36. See Joseph Galaskiewicz & Wolfgang Bielefeld, *The Behavior of Organizations*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES AND APPROACHES, *supra* note 35, at 205, 206 (stating that “[i]nstitutional economists have argued that the nondistribution constraint removes an important incentive from organizational decision-making—claims to residual earnings or profits”). See generally BURTON A. WEISBROD, THE NONPROFIT ECONOMY 1 (1988) [hereinafter WEISBROD, NONPROFIT ECONOMY]; Henry B. Hansmann, *The Role of Nonprofit Enterprise*, 89 YALE L.J. 835, 838 (1980) [hereinafter Hansmann, *Nonprofit Enterprise*]; Richard Steinberg, *Economic Theories of Nonprofit Organizations*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK 117, 118 (Walter W. Powell & Richard Steinberg eds., 2006).

37. See, e.g., FRUMKIN, *supra* note 35, at 4; WEISBROD, NONPROFIT ECONOMY, *supra* note 36, at 1; Avner Ben-Ner & Benedetto Gui, *The Theory of Nonprofit Organizations Revisited*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES AND APPROACHES, *supra* note 35, at 3, 5; Galaskiewicz & Bielefeld, *supra* note 36, at 205-09; Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 838; Henry B. Hansmann, *Reforming Nonprofit Corporation Law*, 129 U. PA. L. REV. 497, 505-07, 511, 553 (1981) [hereinafter Hansmann, *Reforming Nonprofit Corporation Law*]; Steinberg, *supra* note 36, at 118. But see Alberto Bacchiega & Carlo Borzaga, *The Economics of the Third Sector: Toward a More Comprehensive Approach*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES

Nonetheless, a NPO can still earn and use surpluses for their own purposes or for other charitable purposes.<sup>38</sup> Further, United States law encourages NPOs by exempting them from certain taxes<sup>39</sup> and subsidizing them on the basis that they provide services that are not obtainable from proprietary firms.<sup>40</sup>

### B. Nonprofit Organizations in the Commons Environment

Based on the analogy of the IP environment to the natural environment, Professor Boyle recognizes that, similar to the environmental movement, an institutional diversity has emerged in the commons movement.<sup>41</sup> By “institutional diversity,” Boyle means various organizations that have their own approaches to address issues relevant to the movement.<sup>42</sup> Although Boyle identifies several NPOs, such as the EFF, PK, and CC as primary supporters of the movement, he does not map out all nonprofit actors in the commons environment.

Most current NPO theories treat the nonprofit sector as a response to gaps in the supply of public goods.<sup>43</sup> In this section, I attempt to identify the

AND APPROACHES, *supra* note 35, at 27, 30 (noting that pure focus on the non-distribution constraint will overlook many other parts of the third sector); Burton A. Weisbrod, *Institutional Form and Organizational Behavior*, in PRIVATE ACTION AND THE PUBLIC GOOD 69, 72 (Walter W. Powell & Elisabeth S. Clemens eds., 1998) [hereinafter Weisbrod, *Institutional Form and Organizational Behavior*] (arguing that the importance of non-distribution has been exaggerated in NPO studies).

38. See Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 838. See also John Markoff, *When Tech Innovation Has a Social Mission*, N.Y. TIMES, Apr. 13, 2008, at BU4 (reporting several NPOs with significant revenues in Silicon Valley).

39. This is why the nonprofit sector was once called “the tax-exempt sector.” See FRUMKIN, *supra* note 35, at 10-11.

40. WEISBROD, NONPROFIT ECONOMY, *supra* note 36, at 1, 28-30; Joseph J. Cordes & Burton A. Weisbrod, *Differential Taxation of Nonprofits and the Commercialization of Nonprofit Revenues*, in TO PROFIT OR NOT TO PROFIT: THE COMMERCIAL TRANSFORMATION OF THE NONPROFIT SECTOR 83, 84-85 (Burton A. Weisbrod ed., 1998) (discussing the tax exemption benefits enjoyed by NPOs); John Simon et al., *The Federal Tax Treatment of Charitable Organizations*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 267, 269, 271-72 (focusing on charitable organizations, rather than the whole nonprofit sector, and explaining the difference in tax benefits enjoyed by charitable nonprofits as opposed to noncharitable nonprofits).

41. BOYLE, PUBLIC DOMAIN, *supra* note 2, at 243.

42. *Id.*

43. See, e.g., Eleanor Brown & Al Slivinski, *Nonprofit Organizations and the Market*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 140, 146-47. See also, FRUMKIN, *supra* note 35, at 69-70; Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 848-49; Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 505-06, 508, 514; Bruce R. Kingma, *Public Good Theories of the Nonprofit Sector: Weisbrod Revisited*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES AND APPROACHES, *supra* note 35, at 53, 54-55; Kenneth Prewitt, *Foundations*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 355, 356; Steven Rathgeb Smith & Kirsten A. Gronbjerg, *Scope and Theory of Government-Nonprofit Relations*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 221, 224; Howard P. Tuckman, *Competition, Commercialization, and the Evolution of Nonprofit Organizational Structures*, in TO PROFIT OR NOT TO PROFIT: THE COMMERCIAL TRANSFORMATION OF THE NONPROFIT SECTOR, *supra* note 40, at 25, 28. But see ROGER A. LOHMANN, THE COMMONS: NEW

primary public goods produced by these NPOs. By categorizing these public goods, a general picture of how various NPOs operate in the commons ecology will emerge. It should be noted that many of the public goods introduced in the following pages provide crucial infrastructure resources for the commons environment.<sup>44</sup> Moreover, the choice provided by NPOs over other proprietary products or services may sometimes be considered a public good as well.<sup>45</sup>

### 1. Social Norms and Licensing Terms

NPOs have played an important role in a wide range of America's major social movements.<sup>46</sup> NPOs can help the participants of such movements propagate their ideological visions of society.<sup>47</sup> Since preserving the commons has become the focus of a series of social movements in recent years, it is not surprising to find that these movements also have their roots in the nonprofit sector. There are two important premises underlying the commons movement: the sharing norms; and the licensing terms that enforce such norms.<sup>48</sup> Interestingly, NPOs have played a crucial role in both reinforcing the norms and producing the licensing terms.

Many community norms now enforced by F/OSS licenses existed before any specialized NPOs were formed and before F/OSS licenses were introduced. In the 1960s and 1970s, code sharing between programmers in commercial and academic institutions was quite common.<sup>49</sup> According to Richard Stallman, when he worked at the Massachusetts Institute of Technology (MIT) Artificial Intelligence Lab in the 1970s, the community

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PERSPECTIVES ON NONPROFIT ORGANIZATIONS AND VOLUNTARY ACTION 186 (1992) ("Most nonprofit organizations . . . do not produce public goods."); Kingma, *supra*, at 59 (introducing theories that suggest NPOs produce "private good[s] with positive externalities" or with "more social value.").

44. Cf. Elinor Ostrom & Charlotte Hess, *A Framework for Analyzing the Knowledge Commons*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE, *supra* note 15, at 41, 66-68 [hereinafter Ostrom & Hess, *Framework*] (noting that infrastructure resources are required in all effective commons governance systems).

45. See, e.g., Markoff, *supra* note 38 (stating that "Mozilla's mission is to preserve choice and innovation on the Internet, which it considers a social good."). Cf. Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031, 1067 (2005) ("[C]ompetition itself is a public good . . .").

46. FRUMKIN, *supra* note 35, at 31; Peter Dobkin Hall, *A Historical Overview of Philanthropy, Voluntary Associations, and Nonprofit Organizations in the United States, 1600-2000*, in THE NONPROFIT SECTOR: A RESEARCH HANDBOOK, *supra* note 36, at 32, 51-53; Lester M. Salamon, *The Rise of the Nonprofit Sector*, FOREIGN AFF., July/Aug. 1994, at 109, 109; Smith & Grønberg, *supra* note 43, at 231-32.

47. See Ben-Ner & Gui, *supra* note 37, at 17-18.

48. Cf. Peter Levine, *Collective Action, Civic Engagement, and the Knowledge Commons*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE, *supra* note 15, at 247, 254 (stating that "[c]ommons are made possible by demanding moral norms and/or enforceable agreements").

49. PETER R. MONGE & NOSHIR S. CONTRACTOR, THEORIES OF COMMUNICATION NETWORKS 321 (2003); Josh Lerner & Jean Tirole, *Some Simple Economics of Open Source*, 50 J. INDUS. ECON. 197, 200-201 (2002).

recognized software sharing customs and members could ask to see a source code, and could make changes or modifications to the code.<sup>50</sup> Stallman embraced this sharing culture and its openness.<sup>51</sup> Nevertheless, such norms were quickly eroded by increasing proprietary control over software.<sup>52</sup>

In the early 1980s, the informal norm of sharing basic operating code was threatened when AT&T decided to enforce its IP rights over the Unix System.<sup>53</sup> This decision illustrated that norms may easily weaken without a formal structure.<sup>54</sup> As a result, Stallman institutionalized the norms of free code distribution and modification by establishing the Free Software Foundation in 1985.<sup>55</sup> This was the first NPO to support the idea of protecting software commons from enclosure.

According to Stallman, all software should be free in the sense of “free speech,” as opposed to the sense of “free beer.”<sup>56</sup> The free software movement led by the FSF has led programmers and researchers to think first about how to write the best software code and about IP control of the code thereafter.<sup>57</sup> One of the most important innovations of the FSF is its formal licensing procedure.<sup>58</sup> The licensing process has been recognized as a key factor in the success of F/OSS because it facilitates the enforcement of F/OSS community norms and clarifies the distinctions between F/OSS and proprietary software.<sup>59</sup>

By defining ownership functionally, F/OSS movement leaders have designed many of the F/OSS licenses to protect the norms of sharing and related freedoms.<sup>60</sup> Professor Steven Weber even regards the licenses as

50. RICHARD STALLMAN, *The GNU Project, in* FREE SOFTWARE, FREE SOCIETY 15, 15 (Joshua Gay ed., 2002).

51. *See id.* at 15-16; JONATHAN ZITTRAIN, *THE FUTURE OF THE INTERNET AND HOW TO STOP IT* 77, 131-32 (2008).

52. *See, e.g.*, LESSIG, *FREE CULTURE*, *supra* note 3, at 279-80; STALLMAN, *supra* note 50, at 15-16. *See also* David McGowan, *Legal Implications of Open-Source Software*, 2001 U. ILL. L. REV. 241, 282 (quoting Russ Allbery’s opinion concerning the danger of hacker culture being swept away).

53. MONGE & CONTRACTOR, *supra* note 49, at 321; Lerner & Tirole, *supra* note 49, at 201.

54. STEVEN WEBER, *THE SUCCESS OF OPEN SOURCE* 161 (2004); *see also* Lerner & Tirole, *supra* note 49, at 201 (indicating that the informality of the cooperative software development process proved to be problematic since property rights were not carefully delineated).

55. Robert W. Gomulkiewicz, *How Copyleft Uses License Rights to Succeed in the Open Source Software Revolution and the Implications for Article 2B*, 36 HOUS. L. REV. 179, 183 (1999).

56. STALLMAN, *supra* note 50, at 18 (noting that “free beer” represents products that are free of charge, whereas “free speech” signifies freedom of human behavior).

57. *See* STEVE LOHR, *GO TO: THE STORY OF MATH MAJORS, BRIDGE PLAYERS, ENGINEERS, CHESS WIZARDS, MAVERICK SCIENTISTS AND ICONOCLASTS – THE PROGRAMMERS WHO CREATED THE SOFTWARE REVOLUTION* 214 (2001).

58. Lerner & Tirole, *supra* note 49, at 201.

59. *See* McGowan, *supra* note 52, at 245.

60. *See, e.g.*, LESSIG, *FREE CULTURE*, *supra* note 3, at 280; STALLMAN, *supra* note 50, at 20-21; WEBER, *supra* note 54, at 49; Lawrence Lessig, *The Limits in Open Code: Regulatory Standards and the Future of the Net*, 14 BERKELEY TECH. L.J. 759, 764-65 (1999); Tim Wu, *On Copyright’s Authorship Policy*, 2008 U. CHI. LEGAL F. 335, 344.

constituting the social structure in the F/OSS world.<sup>61</sup> Although many other NPOs have designed other F/OSS licenses for their own projects,<sup>62</sup> the GNU Public License<sup>63</sup> (GPL), developed by the FSF and adopted by the GNU/Linux operating system, is the most famous and dominant licensing mechanism among all the F/OSS license models.<sup>64</sup> The GPL requires anyone who redistributes modified versions of GPL software to license the software's source code to users.<sup>65</sup>

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61. See WEBER, *supra* note 54, at 179-85.

62. For example, the Apache License was developed by the Apache Software Foundation. The Apache Software Foundation, Licenses, <http://www.apache.org/licenses/> (last visited July 22, 2009). The Artistic License 2.0 was written by the Perl Foundation staff with contribution from the Perl community. Wikipedia.org, Artistic License, [http://en.wikipedia.org/w/index.php?title=Artistic\\_License&oldid=139986856](http://en.wikipedia.org/w/index.php?title=Artistic_License&oldid=139986856) (last visited July 22, 2009). The Python Software Foundation established the PSF licenses. David Ascher, *The Python Software Foundation: A Primer*, THE PERL REVIEW, Apr. 2002, at 8, available at <http://www.theperlreview.com/Articles/v0i2/psf.pdf>. The Mozilla Public License was developed by the Mozilla Foundation and its predecessor Netscape Communications Corporation. Wikipedia.org, Mozilla Public License, [http://en.wikipedia.org/w/index.php?title=Mozilla\\_Public\\_License&oldid=118798847](http://en.wikipedia.org/w/index.php?title=Mozilla_Public_License&oldid=118798847) (last visited July 22, 2009).

63. GNU is an acronym for "GNU's Not UNIX." BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 64. Variants of the GNU open-rating system, which use the kernel Linux, are now widely available; although these systems are often referred to as "Linux," they are more accurately called GNU/Linux systems. See The GNU Operating System, <http://www.gnu.org/> (last visited July 22, 2009).

64. See BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 64; FADI P. DEEK & JAMES A. M. MCHUGH, OPEN SOURCE: TECHNOLOGY AND POLICY 252 (2008); ROD DIXON, OPEN SOURCE SOFTWARE LAW 19 (2004); RON GOLDMAN & RICHARD P. GABRIEL, INNOVATION HAPPENS ELSEWHERE: OPEN SOURCE AS BUSINESS STRATEGY 116 (2005); Brian W. Carver, *Share and Share Alike: Understanding and Enforcing Open Source and Free Software Licenses*, 20 BERKELEY TECH. L.J. 443, 447 (2005); McGowan, *supra* note 52, at 253; Siobhán O'Mahony, *Guarding the Commons: How Community Managed Software Projects Protect Their Work*, 32 RES. POL'Y 1179, 1186 (2003).

65. Section 5 of the GPL Version 3 provides the following:

You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

- a) The work must carry prominent notices stating that you modified it, and giving a relevant date.
- b) The work must carry prominent notices stating that it is released under this License and any conditions added under section 7. This requirement modifies the requirement in section 4 to "keep intact all notices".
- c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.
- d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

Stallman believes that GPL's unique distribution terms maintain the freedom associated with free software and preclude the software from being appropriated proprietarily.<sup>66</sup> The FSF has also supported the free software movement in many other ways. The FSF has not only mobilized proponents to fight against software patents, it has also created a network of individuals to regularly discuss the concept of free software.<sup>67</sup> In this way, the FSF works to convince the public that free software is more beneficial to society than proprietary software.

The Open Source Initiative (OSI) is another NPO that constitutes a mechanism for enforcement of certain industry norms. The OSI was established because many software developers felt that the FSF free software movement had a tarnished reputation in the business world due to the more radical ideas associated with free software.<sup>68</sup> In contrast to the FSF's "ethical position focused on the freedoms associated with software," the OSI takes a "pragmatic position" regarding the market merits of the F/OSS.<sup>69</sup> The OSI has published its Open Source Definition (OSD), which enumerates several criteria for an open source license,<sup>70</sup> and the OSI analyzes licenses' consistency with the OSI definition of "open source."<sup>71</sup> License approval from the OSI has become a precondition for any software to be regarded as open source.<sup>72</sup> In this sense, the OSI plays the role of "a standard builder," "a watchdog," and "a trusted standards body" for the F/OSS community.<sup>73</sup>

Similarly, licensing plays a decisive role in facilitating commons production other than F/OSS. Creative Commons is a NPO that has worked to adapt the F/OSS movement model to other forms of creative works.<sup>74</sup> Through a wide

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GNU General Public License, Version 3 (June 2007), <http://www.opensource.org/licenses/gpl-3.0.html>.

66. See, e.g., LESSIG, *FREE CULTURE*, *supra* note 3, at 280; O'Mahony, *supra* note 64, at 1183, 1186; See also David Bollier, *The Rediscovery of the Commons*, UPGRADE, June 2003, at 10, 11 (arguing that "GPL assures that the fruits of the commons will *stay* in the commons. This gives the commons significant structural advantages over corporate-sponsored software development").

67. For example, the FSF provides its supporters with "end software patents" action alerts and a mailing list for its supporters. Free Software Foundation, End Software Patent Action Alerts, <http://www.fsf.org/campaigns/esp-action-alerts.html/view?searchterm=software%20patent> (last visited Sept. 1, 2009).

68. Interview with Danese Cooper, Board Member, Open Source Initiative, in Palo Alto, Cal. (June 12, 2008); Michael Tiemann, Open Source Initiative, History of the OSI (Sept. 19, 2006), <http://www.opensource.org/history>. But see STALLMAN, *supra* note 50, at 22 (articulating that the free software philosophy is not against business).

69. JOSEPH FELLER & BRIAN FITZGERALD, UNDERSTANDING OPEN SOURCE SOFTWARE DEVELOPMENT 41-44 (2002) (emphasis omitted).

70. See Ken Coar, Open Source Initiative, The Open Source Definition (July 7, 2006), <http://www.opensource.org/docs/definition.php>.

71. See David Axmark, Open Source Initiative, The License Review Process (July 24, 2006), <http://www.opensource.org/approval>.

72. LAWRENCE ROSEN, OPEN SOURCE LICENSING: SOFTWARE FREEDOM AND INTELLECTUAL PROPERTY LAW 3 (2005).

73. FELLER & FITZGERALD, *supra* note 69, at 64, 66.

74. See, e.g., Eric E. Johnson, *Retinking Sharing Licenses for the Entertainment Media*, 26 CARDOZO ARTS & ENT. L.J. 391, 407 (2008); Loren, *supra* note 25, at 285-86.

range of licensing terms, CC offers a web application that enables users to donate their works to the public domain, or to freely license their works for certain uses and to simultaneously retain copyright.<sup>75</sup> CC aims to “develop a rich repository of high-quality works in a variety of media, and to promote an ethos of sharing, public education, and creative interactivity.”<sup>76</sup> Scholars have recognized that CC has initiated a global social movement,<sup>77</sup> advocating for the norms of information sharing and reusing.<sup>78</sup>

Through the production and promotion of licenses, the FSF, the OSI, and CC are enabling creativity to spread more easily and promoting the philosophy underlying the commons movement. They use private ordering to build a commons environment and introduce an innovative way of exercising legal rights to bring about social change. In this sense, the FSF, the OSI, and CC are providing “prescriptive norms” or “normative norms”<sup>79</sup> to teach creators how they should deal with their intellectual works.<sup>80</sup> These NPOs have provided formal organizations for their founders to pursue their ideas systematically and within institutional settings. Moreover, by facilitating such norms, these NPOs provide essential public goods to those who share their views in the movement.<sup>81</sup>

## 2. Legal Support

Individuals and organizations participating in commons production, distribution, or consumption face a number of legal uncertainties, which may ultimately hinder distributed creative activities.<sup>82</sup> As a result, some NPOs have devised mechanisms to provide legal support to reduce legal risks facing participants in the commons settings.

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75. BOYLE, PUBLIC DOMAIN, *supra* note 2, at 180-81; Loren, *supra* note 25, at 285, 288-94.

76. Creative Commons, Legal Concepts: Intellectual Property Conservancies, [http://wiki.creativecommons.org/Legal\\_Concepts](http://wiki.creativecommons.org/Legal_Concepts) (last visited July 22, 2009).

77. See, e.g., Elkin-Koren, *supra* note 25, at 377-78; Lawrence Lessig, CC as a Global Movement (Nov. 16, 2006), <http://creativecommons.org/weblog/entry/6155>.

78. Elkin-Koren, *supra* note 25, at 394.

79. “Prescriptive norms” or “normative norms” are social norms regarding how an individual should behave. F. Scott Kieff, *Facilitating Scientific Research: Intellectual Property Rights and the Norms of Science—A Response to Rai & Eisenberg*, 95 NW. U. L. REV. 691, 693 (2001). Such social norms are different from “descriptive norms,” which refer to how individuals tend to behave. *Id.* at 696.

80. See, e.g., McGowan, *supra* note 52, at 242, 244-45 (suggesting F/OSS licenses enforce norms regarding how code may be freely copied, modified, and distributed); O’Mahony, *supra* note 64, at 1187 (concluding from interviews with F/OSS developers that the GPL license designed by FSF is used to “codify a norm of reciprocity and temperance . . . to prevent code from becoming subtractable . . .”).

81. See Robert D. Benford & David A. Snow, *Framing Processes and Social Movements: An Overview and Assessment*, ANN. REV. SOC., Aug. 2000, at 611, 613 (2000) (asserting that a key task of movement actors is to produce and maintain “meaning for constituents, antagonists, and bystanders or observers”). Cf. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 854 n.59.

82. See, e.g., LASICA, *supra* note 14, at 118-19 (stating that certain culture creativity does not occur because of the fear of law suits).

The Software Freedom Law Center (SFLC) is probably the most representative NPO that provides legal support for F/OSS development. The SFLC was founded in 2005 to supply pro bono legal services to protect and advance F/OSS development.<sup>83</sup> The organization provides legal representation for both individuals and other NPOs that participate in the F/OSS development.<sup>84</sup> The SFLC assists the represented parties in enforcing copyrights in both the United States and other jurisdictions.<sup>85</sup> Moreover, it also offers licensing assistance and NPO formation for F/OSS communities.<sup>86</sup> The public goods provided by the SFLC include not only legal support, but also, and more importantly, assists in providing legal certainty among F/OSS developers.<sup>87</sup>

Beyond the F/OSS world, several NPOs have endeavored to protect the commons through litigation. Stanford University's Center for Internet and Society has challenged the constitutionality of the Copyright Renewal Act and the Copyright Term Extension Act<sup>88</sup> (CTEA). Further, the Center's Fair Use Project has aimed to protect individual creators' fair use right in a series of lawsuits.<sup>89</sup>

The EFF is dedicated to fighting for individual freedoms in the digital economy as well.<sup>90</sup> In the context of copyright rights, the EFF has been involved in milestone lawsuits<sup>91</sup> such as *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*<sup>92</sup> (*MGM v. Grokster*), *Online Policy Group v. Diebold, Inc.*,<sup>93</sup> *Kelly v. Arriba Soft Corp.*,<sup>94</sup> and *Lenz v. Universal Music Corp.*<sup>95</sup> Cindy Cohn, the Legal

83. Software Freedom Law Center, <http://www.softwarefreedom.org/> (last visited July 22, 2009); Software Freedom Law Center, Services, <http://www.softwarefreedom.org/services/> (last visited July 22, 2009).

84. Software Freedom Law Center, Services, *supra* note 83.

85. *Id.*

86. *Id.*

87. Peter Galli, *Center Will Provide Legal Services*, EWEEK, Feb. 7, 2005, at 32.

88. *Kahle v. Gonzales*, 474 F.3d 665 (9th Cir. 2007).

89. *See, e.g.*, Stanford Center for Internet and Society, The Fair Use Project (Nov. 8, 2006), <http://cyberlaw.stanford.edu/node/3136>; Anthony Falzone, Executive Director, Fair Use Project, Stanford Center for Internet & Society, *Fair Use Project Files Suit On Behalf Of Brave New Films Against Michael Savage and Original Talk Radio Network* (Oct. 13, 2008), <http://cyberlaw.stanford.edu/node/5884>.

90. Electronic Frontier Foundation, About EFF, <http://www.eff.org/about/> (last visited July 22, 2009).

91. A list of all the IP cases that EFF has been involved in is available at Electronic Frontier Foundation, Intellectual Property, <http://www.eff.org/cases> (last visited July 22, 2009).

92. *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. 913 (2005) (ruling against Grokster's peer-to-peer file sharing program).

93. *Online Policy Group v. Diebold, Inc.*, 337 F. Supp. 2d 1195 (N.D. Cal. 2004) (holding that plaintiffs' publishing of the e-mails was clearly a fair use, and the DMCA, as federal law, preempts the state law claim of tortious interference with contractual relations).

94. *Kelly v. Arriba Soft Corp.*, 336 F.3d 811 (9th Cir. 2003) (ruling that the creation of an index of "thumbnail" size images from other websites is justified for fair use defense in copyright law).

95. *Lenz v. Universal Music Corp.*, No. C 07-3783 JF, 2008 WL 962102 (N.D. Cal. Apr. 8, 2008) (determining whether a home video with proprietary background music involves copyright infringement).

Director of the EFF, used *MGM v. Grokster* as an example to illustrate EFF's role in the commons movement:

The idea that we were protecting [in *MGM v. Grokster*] was that in order to have a robust commons, people have to be able to make the tools that let all the rest of us enjoy the commons. The question and issue in *MGM v. Grokster* was whether you could declare a technology illegal because people were using it to violate the copyright law. While we didn't win the case, we did save the principle. The goal of the content industry was to get a ruling that said that if people use your product to infringe, they could get your product declared illegal. That suggestion was strongly rejected by the Supreme Court even though the Court did find that if you intentionally induce people to infringe, you could be liable for that infringement, and remanded it back to the lower court for the question of whether our client had infringed. The principle at stake was one that I think is pretty core to the idea of the commons movement and we did vindicate that principle in the lawsuit.<sup>96</sup>

The result of this litigation is certainly a public good for consumers of intellectual commons. If, through litigation, NPOs successfully sustain the freedom to consume commons, all consumers will benefit from the results without fear of infringing.<sup>97</sup>

### 3. Political Advocacy

NPOs have played an active role in the policymaking process in many areas of the United States.<sup>98</sup> They educate the public and policymakers in a broad range of issues and their policy implications.<sup>99</sup> This informational function is especially important given the "political blindness to the importance of the public domain as a whole."<sup>100</sup> As a result of the aforementioned *second enclosure movement*, many public-interest advocates worry that the expanding IP laws may damage the existing commons environment. As a result, some of these advocates have formed NPOs in order to influence legislation through lobbying activities.

For example, Public Knowledge is a NPO that aims to protect intellectual commons by "monitor[ing] Congress, U.S. Agencies, State Legislatures and International Bodies for any proposed legislation or policy that relates to intellectual property or technology policy."<sup>101</sup> It participates actively "in the debate about proposed legislation" and discusses its position with "key

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96. Interview with Cindy Cohn, Legal Director, Electronic Frontier Foundation, in S.F., Cal. (Mar. 11, 2008).

97. Cf. Curtis J. Milhaupt, *Nonprofit Organizations as Investor Protection: Economic Theory and Evidence from East Asia*, 29 YALE J. INT'L L. 169, 184 (2004) (suggesting that NPOs litigating for investors provide the public good of good corporate governance to all shareholders).

98. Hall, *supra* note 46, at 53.

99. FRUMKIN, *supra* note 35, at 30.

100. BOYLE, PUBLIC DOMAIN, *supra* note 2, at 241.

101. Public Knowledge, Core Work, <http://www.publicknowledge.org/about/what/corework> (last visited July 22, 2009).

policymakers, the press . . . [and] industry.”<sup>102</sup> PK has primarily focused on preventing “harmful legislation from passing” in the last few years.<sup>103</sup> Its co-founder and President Gigi B. Sohn stated in an interview: “We have probably stopped a half a dozen proposed laws that strengthen . . . the penalties for copyright infringement. [For example,] [w]e stopped the legislation that would have mandated the broadcast flag, which is a technology mandate.”<sup>104</sup>

PK is also involved in international World Intellectual Property Organization (WIPO) meetings to influence legislation on an international level. Sohn described such efforts as a “domestic approach to international policy.”

Our main thing is to try to inform U.S. policymakers about what the U.S. government is advocating overseas. For instance, [for] the WIPO Broadcast Treaty, we basically blew the whistle on the U.S. delegation. We told members of Congress that the U.S. delegation was advocating a position that was inconsistent with U.S. law . . . . We go to WIPO and we participate in the overseas activities . . . we try to influence policymakers here to make sure that the U.S. delegation does and says the right thing overseas.<sup>105</sup>

Other NPOs involved in international IP legislation include EFF, Knowledge Ecology International (KEI), and Open Society Institute. As a permanent member of the WIPO,<sup>106</sup> the EFF aims to promote developing countries’ access to knowledge in the international IP system.<sup>107</sup> The Open Society Institute has been advocating for users’ rights in the WIPO’s discussion of copyright limitations and exceptions to the Broadcasting Treaty.<sup>108</sup> The KEI has likely made extensive efforts to influence the WIPO’s treaties involving access to knowledge.<sup>109</sup> These treaties include the WIPO Digital Copyright Treaty in 1996 and the proposed Database Treaty, Broadcasting Treaty, and Treaty on Access to Knowledge.<sup>110</sup> According to its founder and Director James Love:

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102. *Id.*

103. *Id.*

104. Telephone Interview with Gigi B. Sohn, Co-founder & President, Public Knowledge (Mar. 4, 2008).

105. *Id.*

106. See Electronic Frontier Foundation, Development Agenda, <http://www.eff.org/issues/development-agenda> (last visited July 22, 2009).

107. See Electronic Frontier Foundation, *Statement of the Electronic Frontier Foundation on the Proposal for WIPO to Establish a Development Agenda*, Inter-Sessional Intergovernmental Meeting, Apr. 11-13, 2005, [http://www.eff.org/files/filenode/dev\\_agenda/eff\\_intervention\\_041305.pdf](http://www.eff.org/files/filenode/dev_agenda/eff_intervention_041305.pdf).

108. Telephone Interview with Vera Franz, Program Manager, Information Program, Open Society Institute (July 29, 2008).

109. Telephone Interview with Manon Röss, Director of Information Society Projects, and James Love, Founder & Director, Knowledge Ecology International (Mar. 6, 2008).

110. *Id.*

We're trying to get the World Intellectual Property Organization to change its fundamental mission and to be more responsive to consumer interest, innovation, and the development interest of developing countries. We're looking at the mission-setting activities and we're both trying to stop bad things and to support new initiatives. . . .<sup>111</sup>

Although lobbies may produce a *public bad* for society,<sup>112</sup> the potential benefits that result from lobbying constitute a public good that every individual in the society may automatically enjoy.<sup>113</sup> In this sense, it is possible that PK and the EFF engage in lobbying activities whose public goods spill over into the entire society. However, the well-established copyright industry has also been intensely involved in the copyright lobby, which aims to further strengthen current copyright protection.<sup>114</sup> Since such lobbying has been supported by a well-organized and financially resourceful proprietary industry,<sup>115</sup> it is not easy for NPOs, such as PK and the EFF, to fully achieve their goal through similar lobbying activities.

#### 4. Information Access and Repositories

One may not have access to a commons due to physical confines. In order to allow more people to benefit from the commons, some NPOs have provided access to and repositories of these resources.<sup>116</sup> For example, the Public Library of Science (PLOS) is a NPO dedicated to "making the world's scientific and medical literature a freely available resource."<sup>117</sup> It publishes both online and print academic journals, and the articles all appear under a CC license that allow unrestricted reproduction, distribution, and modification in any medium, provided that the original work is properly cited.<sup>118</sup> In 2003, the PLOS launched a series of open-access journals beginning with PLOS Biology. All of the articles published in the PLOS journals are immediately available online without charge. The PLOS pursues these ends because it believes that

111. *Id.*

112. See TODD SANDLER, *COLLECTIVE ACTION: THEORY AND APPLICATIONS* 124 (1992) (suggesting trade-protectionist lobbies create a public bad); See also James Douglas, *Political Theories of Nonprofit Organization*, in *THE NONPROFIT SECTOR: A RESEARCH HANDBOOK* 43, 52 (Walter W. Powell ed., 1987) (indicating that voluntary organizations may impede societal decision processes if they represent too narrow a range of interests).

113. See, e.g., JEFFREY M. BERRY, *LOBBYING FOR THE PEOPLE: THE POLITICAL BEHAVIOR OF PUBLIC INTEREST GROUPS* 7-8 (1977); Hamid Mohtadi & Terry Roe, *Growth, Lobbying and Public Goods*, 14 *EUR. J. POL. ECON.* 453, 455-57 (1998); V. Kerry Smith, *A Theoretical Analysis of the "Green Lobby"*, 79 *AM. POL. SCI. REV.* 132, 133 (1985).

114. LESSIG, *FREE CULTURE*, *supra* note 3, at 52, 196-97, 218.

115. *Id.*

116. See *id.* at 213-14. It is estimated that in the United States, only 20,000 out of sixteen million books in the public domain are digitalized for public access. See LASICA, *supra* note 14, at 40.

117. PLOS Public Library of Science, <http://www.plos.org/> (last visited July 22, 2009).

118. PLOS Public Library of Science, Open Access License, <http://www.plos.org/journals/license.html> (last visited July 22, 2009).

“Open Access publishing . . . leads to wider dissemination of information and increased efficiency in science, by providing [o]pen [a]ccess [t]o [i]deas . . . [and] . . . [o]pen [a]ccess [t]o [t]he [b]roadest [a]udience.”<sup>119</sup> To cover its expenses, the PLoS requires that authors pay from \$1,350 to \$2,900 for each piece that appears in the PLoS’s various journals.<sup>120</sup>

The PLoS is certainly not the only NPO involved in open access academic publishing. Universities, a unique type of NPO, have historically been viewed as important social institutions that produce and disseminate knowledge. They have also begun to provide access to their researchers’ publications.<sup>121</sup> For instance, the University of California has planned to initiate an open-access academic journal.<sup>122</sup> Moreover, many other reputable universities have adopted DSpace, a repository software platform, to provide free access to their faculty’s publications.<sup>123</sup>

Another interesting example of the access to knowledge provided by universities is MIT’s OpenCourseWare (OCW). In September 2003, MIT launched its OCW initiative, which made the content of its course materials freely available online.<sup>124</sup> All of the OCW materials are licensed under CC Attribution-Noncommercial-Share Alike 3.0 licenses.<sup>125</sup> Through OCW, MIT has published almost all course materials since 2007.<sup>126</sup> After MIT initiated the OCW project, Rice University, the University of Notre Dame, Yale University, and University of California, Berkeley also decided to make their educational materials freely available online.<sup>127</sup>

Other universities have also begun to provide access to information digitally, which was not available before the Internet era. For example, the University of Michigan has built the Internet Public Library<sup>128</sup> (IPL), which

119. PLoS Public Library of Science, Open Access, <http://www.plos.org/oa/index.html> (last visited July 22, 2009).

120. PLoS Public Library of Science, Publication Fees for PLoS Journals, <http://www.plos.org/journals/pubfees.html> (last visited July 22, 2009). Nonetheless, publication fees may be completely or partially waived if authors do not have adequate funds to cover the expenses. *Id.*

121. Ostrom & Hess, *Framework*, *supra* note 44, at 55-57. At the same time, universities are also enclosing commons through the increasing number of IP rights they own. Ostrom & Hess, *Overview of the Knowledge Commons*, *supra* note 15, at 10.

122. Catherine Zandonella, *UC to Launch Open-Access Journals*, GENOME BIOLOGY, June 16, 2003, available at [http://genomebiology.com/researchnews/default.asp?arx\\_id=gb-spotlight-20030616-02](http://genomebiology.com/researchnews/default.asp?arx_id=gb-spotlight-20030616-02).

123. *Id.*; Ostrom & Hess, *Framework*, *supra* note 44, at 56.

124. See Massachusetts Institute of Technology, MIT OpenCourseWare, <http://ocw.mit.edu/OcwWeb/index.htm> (last visited July 22, 2009).

125. Massachusetts Institute of Technology, Privacy and Terms of Use, <http://ocw.mit.edu/OcwWeb/Global/terms-of-use.htm> (last visited July 22, 2009).

126. See Massachusetts Institute of Technology, About OCW: Our History, <http://ocw.mit.edu/OcwWeb/Global/AboutOCW/about-ocw.htm> (last visited Sept. 1, 2009).

127. Michael W. Carroll, *Creative Commons and the New Intermediaries*, 2006 MICH. ST. L. REV. 45, 57-59; Anne Marie Chaker, *Yale on \$0 a Day: Top Universities Post Lectures and Other Course Materials On Web, Free and Open to All*, WALL ST. J., Feb. 15, 2007, at D1.

128. The Internet Public Library, About the Internet Public Library <http://www.ipl.org/div/about> (last visited July 22, 2009).

provides 20,000 books in full-text, a collection of links categorized by various topics, and reference service at no charge.<sup>129</sup> The IPL enables users to freely reproduce its pages and resources in print sources for non-commercial use, provided that the users comply with specific conditions, such as citing appropriately and informing the IPL.<sup>130</sup> Tufts University is running the Perseus Digital Library project that collects texts and images pertaining to the Archaic and Classical Greek world, late Republican and early Imperial Rome, the English Renaissance, and nineteenth-century London.<sup>131</sup> The Perseus Digital Library allows online users to freely search for and read information about specific people, places, and dates in its digital collections.<sup>132</sup>

Several NPOs treat information as a public good by making it available to the public. For instance, the online library Internet Archive provides the public with open and free access to text, audio, images, software, and archived web pages in its collections.<sup>133</sup> It operates Web crawlers—programs that index information stored on the Internet—and offers the Wayback Machine, which allows Internet users to find previous versions of Websites.<sup>134</sup> Similarly, Project Gutenberg, hosted by the Project Gutenberg Literary Archive Foundation, has provided the public with free online access to a large number of public domain books.<sup>135</sup> The Television Archive has been building a television library “with the purpose of offering permanent access for researchers, historians, and scholars to historical collections that exist in digital format.”<sup>136</sup> It is worthwhile to note that by archiving a variety of digital information, these organizations have preserved important social memory.<sup>137</sup>

All the NPOs described in this section not only provide access to information, but also function as open repositories of information. They function as online public libraries for society. Nonetheless, they are technically different from traditional public libraries in the physical world. The books in traditional libraries are not pure public goods, which are subtractable.<sup>138</sup> Moreover, much of the information provided by these books is proprietary.

129. The Internet Public Library, Introduction to the IPL, <http://www.ipl.org/div/about/tours/IPLTourIntroText.html> (last visited July 22, 2009).

130. The Internet Public Library, Policy on Reproduction of Our Pages and Resources, <http://www.ipl.org/div/about/repopol.html> (last visited July 22, 2009).

131. See Perseus Digital Library, The Mission of Perseus, <http://www.perseus.tufts.edu/hopper/research> (last visited July 23, 2009).

132. *Id.*

133. Internet Archive, About the Internet Archive, <http://www.archive.org/about/about.php> (last visited July 23, 2009).

134. Internet Archive, About the Wayback Machine, <http://www.archive.org/web/web.php> (last visited July 23, 2009).

135. Project Gutenberg Literary Archive Foundation, About Project Gutenberg, <http://www.gutenberg.org/wiki/Gutenberg:About> (last visited Aug. 21, 2010).

136. Television Archive, <http://www.televisionarchive.org> (last visited Aug. 2, 2010).

137. Guy Pessach, *[Networked] Memory Institutions: Social Remembering, Privatization and its Discontents*, 26 CARDOZO ARTS & ENT. L.J. 71, 84-85 (2008).

138. See Rebecca Tushnet, *My Library: Copyright and the Role of Institutions in a Peer-to-Peer World*, 53 UCLA L. REV. 977, 987 (2006) (stating that a traditional library “loses physical control over its copy while it is lent out . . .”). Cf. Hess & Ostrom, *Overview of the Knowledge Commons*, *supra* note 15, at 9 (noting that libraries themselves are common-pool resources).

You cannot reproduce, prepare derivative works, or distribute copies of these books without permission before the underlying copyrights expire.<sup>139</sup> In contrast, the information provided by NPOs described in this section is non-excludable. This unique characteristic is especially effective in fostering a participatory read-and-write culture in the networked environment.

### 5. Public-interest Grant-making

Grant-making foundations are legally distinct from other NPOs in the sense that the latter have to spend “85 percent of [their] income on the active conduct of [their] charitable program.”<sup>140</sup> In contrast, grant-making foundations usually endeavor to improve social, economic, or political life through funding for other intermediary organizations.<sup>141</sup> In other words, grant-making foundations do not provide public goods directly to society. The financial support provided by these foundations can be regarded as a “private good with positive externalities.”<sup>142</sup> These grants can often be more than just cash transfers: they often affirm beliefs that accomplish public purposes<sup>143</sup> while providing grant makers with the satisfaction of seeing their values put into action. Therefore, some researchers claim that “[p]hilanthropy is . . . about donors’ [sic] using their funds to explore their own private visions of the public good.”<sup>144</sup>

Grant-making foundations have played a critical role in supporting various social movements in the United States.<sup>145</sup> A number of these organizations have also provided indispensable funding for NPOs in the commons discourse.<sup>146</sup> For example, the OER program of the William and Flora Hewlett Foundation (hereinafter “Hewlett Foundation”) invested \$68 million from 2002 to 2006 to stimulate the OER movement, which included \$43 million for “creation and dissemination of open content,” and \$25 million for “reducing barriers, understanding, and/or stimulating use.”<sup>147</sup> The Hewlett Foundation’s grantees have included CC, Internet Archive, MIT OCW, and other academic institutions opening up their educational resources online.<sup>148</sup>

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139. 17 U.S.C. § 106 (2006).

140. Simon et al., *supra* note 40, at 269.

141. Hall, *supra* note 46, at 47.

142. See Kingma, *supra* note 43, at 59.

143. See Brown & Slivinski, *supra* note 43, at 141; Prewitt, *supra* note 43, at 362.

144. FRUMKIN, *supra* note 35, at 105.

145. Prewitt, *supra* note 43, at 372-73.

146. See Kapczynski, *supra* note 13, at 841 n.174. Generally, grant-making foundations direct most of their funds to other NPOs. Prewitt, *supra* note 43, at 356-57.

147. See ATKINS ET AL., *supra* note 33, at 7.

148. See *id.* at 8-24; William and Flora Hewlett Foundation, OER Proposals, <http://www.hewlett.org/programs/education-program/open-educational-resources/oer-proposals/> (last visited July 23, 2009).

Further, the Hewlett Foundation requires that all products from its grants be licensed under a CC license.<sup>149</sup>

The John D. and Catherine T. MacArthur Foundation (hereinafter “MacArthur Foundation”) advocates the protection of the public domain and has provided grants to some of the aforementioned NPOs, such as CC, the EFF, PK, and the PLoS.<sup>150</sup> It also sponsors research and policy analysis focused on the public domain.<sup>151</sup> The aim of the MacArthur Foundation’s general program is “to contribute to an intellectual property regime in the digital era that balances the legitimate needs of both creators and the public. . . . [and to] support work designed to protect—over the long term—the public domain of information and ideas.”<sup>152</sup>

The Open Society Institute, affiliated with the Open Society Foundation, provides grants for reform of the international IP regimes and open knowledge production activities.<sup>153</sup> The Open Society Institute provides funding to CC branches in a number of countries,<sup>154</sup> and sponsors a series of research activities and conferences on access to knowledge.<sup>155</sup> Other grant-making NPOs in the commons environment include the Center for the Public Domain, the Rockefeller Foundation, and the Andrew W. Mellon Foundation.<sup>156</sup> Through various grant-making activities, these organizations have provided indispensable financial resources for the commons movement.

149. Interview with Catherine M. Casserly, Program Officer of Education Program, and Jack Fascher, Communications Officer, William and Flora Hewlett Foundation, in Menlo Park, Cal. (Oct. 5, 2007).

150. MacArthur Foundation, Select Examples of MacArthur Technology Grants, Property and the Public Domain, [http://www.macfound.org/site/c.jjYJcMNIqE/b.2000013/k.70A0/Select\\_Examples\\_of\\_MacArthur\\_Technology\\_Grants.htm#intellectual](http://www.macfound.org/site/c.jjYJcMNIqE/b.2000013/k.70A0/Select_Examples_of_MacArthur_Technology_Grants.htm#intellectual) (last visited Aug. 20, 2010); MacArthur Foundation, Support for Science, [www.macfound.org/atf/cf/%7BB0386CE3-8B29-4162-8098E466FB856794%7D/INFO\\_SCIENCE.PDF](http://www.macfound.org/atf/cf/%7BB0386CE3-8B29-4162-8098E466FB856794%7D/INFO_SCIENCE.PDF) (last visited Aug. 20, 2010).

151. *Id.*

152. MacArthur Foundation, Intellectual Property and the Public Domain: Grantmaking Guidelines, [http://www.macfound.org/site/c.lkLXJ8MQKrH/b.943335/k.8487/General\\_Grantmaking\\_Intellectual\\_Property\\_Grantmaking\\_Guidelines.htm](http://www.macfound.org/site/c.lkLXJ8MQKrH/b.943335/k.8487/General_Grantmaking_Intellectual_Property_Grantmaking_Guidelines.htm) (last visited Aug. 4, 2009).

153. Open Society Institute, Intellectual Property Reform and Open Knowledge: Grants, <http://www.soros.org/initiatives/information/focus/access/grants/reform> (last visited July 23, 2009) [hereinafter Open Society Institute, Grants].

154. *See* Open Society Institute, Intellectual Property Reform: Grantee List, <http://www.soros.org/initiatives/information/focus/access/grants/reform/grantees> (last visited Aug. 20, 2010).

155. *Id.*

156. *See* Americans for the Arts, Center for the Public Domain, <http://www.culturalpolicy.org/commons/directorydetail.cfm?ID=139> (last visited Sept. 1, 2009) (noting that the Center for the Public Domain has awarded grants for more than \$5 million dollars to protect the public domain); The Andrew W. Mellon Foundation, Research in Information Technology, [http://www.mellon.org/grant\\_programs/programs/rit](http://www.mellon.org/grant_programs/programs/rit) (last visited Sept. 1, 2009) (noting that the Foundation supports the development of technologies that can benefit multiple institutions. It has funded MIT’s OCW and PKI (an open source public infrastructure)); The Rockefeller Foundation, The Rockefeller Grant Database, <http://www.rockefellerfoundation.org/grants> (last visited Aug. 20, 2010) (using “copyright” as the term for grant search and finding the

### III. CURRENT NONPROFIT ORGANIZATION THEORIES AND THEIR APPLICATIONS

The heterogeneous nature of the nonprofit sector has greatly complicated the work of theorists who seek to model the origins and the behavior of NPOs. In this section, I introduce two principal NPO theories—the contract failure theory, and the government and market failure theory—both of which suggest that NPOs are a private response to certain failures in society.<sup>157</sup> These theories highlight NPOs’ social value, and suggest that their value rests on their particular failure-correcting devices.

By applying both theories to the commons context, I will test their strengths and weaknesses. Although I seek to expose some gaps in both theories, I do not reject their central insights, which are necessary tools to understanding NPOs’ role in the cultural environmentalism.

#### A. Contract Failure Theory

##### 1. Theory

The “contract failure theory” was first proposed by Professor Henry Hansmann. The central concept of contract failure theory lies in the concept that the monitoring that occurs naturally in a normal market, in which buyers pay when the suppliers perform acceptably, cannot discipline the supplier of certain goods or services.<sup>158</sup> As a result, when consumers are under-informed, in relation to the suppliers, the proprietary sector tends to perform badly. In other words, the basic hypothesis of contract failure theory is that poorly-informed consumers are unlikely to discover proprietary firms supplying higher quality when low quality can be sold at the same price. Thus, contract failure, which is a particular type of market failure, occurs in venues in which services are difficult to evaluate.<sup>159</sup>

Professor Hansmann uses charity as an example to articulate the essence of contract failure theory.<sup>160</sup> He believes that NPOs function as a trusted channel when donors of specific services or goods and the corresponding recipients

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foundation’s grants for Stanford University, PK, and American University’s works on protecting the public domain).

157. *See, e.g.*, FRUMKIN, *supra* note 35, at 70 (identifying these two theories as the two “most prominent theories”). Certainly, there have been other NPO theories developed by some other prominent scholars. *See, e.g.*, BRIAN E. DOLLERY & JOE L. WALLIS, *THE POLITICAL ECONOMY OF THE VOLUNTARY SECTOR: A REAPPRAISAL OF THE COMPARATIVE INSTITUTIONAL ADVANTAGE OF VOLUNTARY ORGANIZATIONS* 9 (2003) (outlining various NPO theories, such as supply-side theory, welfare state theory, interdependence theory, and social origins theory); FRUMKIN, *supra* note 35, at 72-78 (introducing Lester Salamon’s voluntary failure theory). However, for the purpose of this research, I chose the two dominant theories that are the most relevant to the NPOs studied in this Article.

158. DOLLERY & WALLIS, *supra* note 157, at 14-15.

159. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 844-45.

160. *Id.* at 846-48; Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 505-07, 514.

have no connections with each other.<sup>161</sup> The non-distribution constraint of NPOs can assure donors that their contribution, in fact, meets the costs of the organizations' production.<sup>162</sup> Conversely, a for-profit firm has both the opportunity and the incentive to exploit the customer in such a circumstance.<sup>163</sup>

Therefore, NPOs seem necessary when there is this kind of contract failure—where the donor cannot directly contact the intended beneficiary of the gift.<sup>164</sup> In circumstances where contributors know the quality of the tendered service, contract failures still occur when contributors have little assurance about whether their payment will be appropriately used on the service they receive.<sup>165</sup> A NPO form may, therefore, inspire greater trust.<sup>166</sup>

In sum, according to contract failure theory, “contract failure is the essential factor in the role of nonprofit enterprise.”<sup>167</sup> NPOs' non-distribution constraint solves the problem of market failure that stems from the information asymmetry between the parties involved in the transaction. Therefore, NPOs offer the purchaser a degree of assurance that the goods or services being purchased meet adequate standards of quality and quantity.

## 2. Applications

It may be the case that contract failure theory satisfactorily explains public-interest grant-making NPOs. Donors trust that NPOs, as opposed to for-profit firms, will make use of the donors' monetary donations according to the

161. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 846-48; Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 505.

162. Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 505. Of course, whether NPOs can fulfill their duty efficiently is another issue. I thank Professor Mark A. Lemley for reminding me of this point.

163. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 843-44; Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 505. *See also* WEISBROD, *NONPROFIT ECONOMY*, *supra* note 36, at 30 (noting that the “informational handicap” resulting from proprietary firms' nature may reduce donors' willingness to deal with these organizations).

164. *See* Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 846-48. *But see* Steven E. Permut, *Consumer Perceptions of Nonprofit Enterprise: A Comment on Hansmann*, 90 *YALE L.J.* 1623 (1981) (arguing that the non-distribution constraint does not significantly increase consumer confidence in the trustworthiness of NPOs).

165. *See* Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 850-51.

166. Although Hansmann acknowledges that NPOs may distribute their earnings by overcompensating their employees to some extent, he asserts that, in some circumstances, the NPOs still cause fewer inefficiency-based losses than do their for-profit counterparts. *Id.* at 844-45. In the real world, agency costs rise when NPOs and their officials do not honestly follow their donors' expectations. *See* PAUL MILGROM & JOHN ROBERTS, *ECONOMICS, ORGANIZATION, AND MANAGEMENT* 524 (1992) (describing scandals involving NPOs, including the Red Cross, Christian evangelists' PTL organization, the Covenant House, and Stanford University); *See also* Kevin E. Davis, *The Role of Nonprofits in the Production of Boilerplate*, 104 *MICH. L. REV.* 1075, 1089 (2006) (describing the potential agency costs resulting from NPOs' inability to hold their agents accountable); Steinberg, *supra* note 36, at 125-27 (identifying a number of NPO-associated agency costs as “voluntary failure”).

167. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 845.

organizations' mission statements. Therefore, some philanthropists use the NPO as a tool to fulfill their charitable projects.

In the commons movements, there are also several grant-making foundations, such as the aforementioned Hewlett Foundation, the MacArthur Foundation, and the Open Society Institute. These foundations fulfill their public-interest function by channeling financial resources to other NPOs and entities in the commons environment. Such public-interest grant-making activities exemplify how, by connecting the donors with the recipient NPOs, grant-making NPOs can alleviate contract failure.

Although there are alternatives to establishing a formal organization,<sup>168</sup> the NPOs' non-distribution constraint provides donors with certain assurances that the NPOs' use of the donated resources will not clash with the public interest. Patrick O. Brown of the PLoS explained in an interview how the organization's nonprofit status provides trust for its donors:

[P]eople who want to donate money will certainly have greater confidence that there's only one reason we're doing this. It's right there in our stated mission. It is never ever going to come in conflict with anything else, including our responsibility with our investors to make a profit. You can be sure that whatever we do with [their] money is going to be driven by this goal and nothing else.<sup>169</sup>

Nonetheless, one distinction between the traditional contract failure scenario and commons peer production hinges on the type of donation that people make. In traditional contract failure theory, the type of donation, including money,<sup>170</sup> food and other supplies,<sup>171</sup> consists of private goods. Rivalry and exclusiveness characterize private goods. Although these private goods can be delivered and consumed physically, the delivery and the consumption of intellectual resources unfold in a unique way. Consequently, in the commons movements, new types of contract failure may occur in either of the following two scenarios. The first is a result of physical obstacles between information donors and information recipients, whereas the second type results from legal constraints.

#### a. Access Failure

Access to information<sup>172</sup> has always been an important policy consideration in contemporary copyright law.

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168. Siobhán O'Mahony, *Nonprofit Foundations and Their Role in Community-Firm Software Collaboration*, in PERSPECTIVES ON FREE AND OPEN SOURCE SOFTWARE 393, 396-97 (Joseph Feller et al. eds., 2005).

169. Interview with Patrick O. Brown, Co-founder & Board Member, Public Library of Science, in Stanford, Cal. (Apr. 29, 2008).

170. See Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 849-50 (explaining monetary donation to nonprofit radio stations).

171. See *id.* at 846 (using the case of CARE to illustrate foodstuff donation).

172. The definition of *access to information* may vary according to scenarios. The term may refer to Internet connectivity or to technology usability. See CHRISTINE L. BORGMAN, FROM

The purpose of the IP system has been to balance private incentives to engage in creative activity with the social benefits that arise from broad access to creative works.<sup>173</sup> The tradeoff between “access” and “incentives” has been an important decision for IP policymakers.<sup>174</sup> Nonetheless, with for-profit entities’ increasing control over information,<sup>175</sup> the policy goal of public access to information has been difficult to achieve.<sup>176</sup> Therefore, some commons movement proponents have asserted that because information has strong public goods characteristics, for-profit companies should not profit from the access to information.<sup>177</sup>

When individual creators fail to provide ready access for consumers, access failure—a new type of contract failure—occurs in the market for information access. Access failure was first perceived in the market for academic journals. In recent years, although digital technologies have substantially decreased the cost of disseminating journal articles,<sup>178</sup> the average cost of a journal subscription has increased significantly.<sup>179</sup> The prices that users pay to access scholarly journal articles have drastically increased due to publishers’ adoption of digital technologies that restrict access to academic works.<sup>180</sup> Publishers typically charge by the number of users or by the number of articles downloaded,<sup>181</sup> and it is estimated that the subscription fee for academic journals increased 220% from 1986 to 2004.<sup>182</sup> The prices of scientific, technical, and medical journals “rose more than 600 percent between 1982 and 2002, with certain fields like chemistry increasing 752 percent.”<sup>183</sup>

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GUTENBERG TO THE GLOBAL INFORMATION INFRASTRUCTURE: ACCESS TO INFORMATION IN THE NETWORKED WORLD 5-57 (2000). In this Article, access to information means the way in which potential consumers can use intellectual resources.

173. Glynn S. Lunney, Jr., *Reexamining Copyright’s Incentives-Access Paradigm*, 49 VAND. L. REV. 483, 485-86 (1996); *See* H.R. REP. NO. 60-2222, at 7 (1909); WILLIAM M. LANDES & RICHARD A. POSNER, *THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW* 11, 20-21 (2003); Sunder, *supra* note 14, at 280-81.

174. *See, e.g.*, LANDES & POSNER, *supra* note 173, at 11, 22; Lunney, *supra* note 173, at 492-98.

175. As early as the eighteenth century, British Parliament was concerned about commercial control over knowledge, which, Parliament argued, should be free for society. *See* LESSIG, *FREE CULTURE*, *supra* note 3, at 88-90.

176. *See supra* text accompanying notes 20-22.

177. *See* Interview with Ahrash Bissell, Executive Director of ccLearn Project, Creative Commons, in S.F., Cal. (Oct. 22, 2007).

178. LESSIG, *FREE CULTURE*, *supra* note 3, at 280; *see also* HAROLD, *supra* note 29, at 151-52 (noting that digital technologies have made the sharing of information much easier).

179. *See, e.g.*, DON TAPSCOTT & ANTHONY D. WILLIAMS, *WIKINOMICS: HOW MASS COLLABORATION CHANGES EVERYTHING* 158 (2006); Jessica Litman, *The Economics of Open Access Law Publishing*, 10 LEWIS & CLARK L. REV. 779, 784 (2006).

180. Chris Armbruster, *Cyberscience and the Knowledge-Based Economy, Open Access and Trade Publishing: From Contradiction to Compatibility with Nonexclusive Copyright Licensing*, INT’L J. COMM. L. & POL’Y, Winter 2008, at 20, 27; Litman, *supra* note 179, at 782.

181. Armbruster, *supra* note 180, at 27; Litman, *supra* note 179, at 782.

182. *See* NANCY KRANICH, *THE INFORMATION COMMONS: A PUBLIC POLICY REPORT* 18 (2004), <http://www.fepproject.org/policyreports/InformationCommons.pdf>.

183. Robert B. Townsend, *History and the Future of Scholarly Publishing*, PERSP. ON HIST., Oct. 2003, at 32, 32-33.

With strong copyright and market control, commercial publishers usually bundle journals in a license package.<sup>184</sup> As a result, small libraries, institutions in developing countries,<sup>185</sup> independent scholars, and the general public<sup>186</sup> cannot afford the tremendous cost of these bundles. This cost-prohibition is most problematic in scientific and medical research because journal subscriptions in such fields are usually very expensive, yet access to the published articles is critically important for the advancement of research in progress.<sup>187</sup> What is worse about the digitalization of journal articles is that the entities with centralized control may even have the power to remove them completely from circulation.<sup>188</sup>

The access failure stemming from increasing journal subscription fees may be detrimental to the advancement of human knowledge because the knowledge contained in a proprietary journal may not be open enough to rigorous criticism.<sup>189</sup> From their perspective as authors, scholars usually place much more importance on professional recognition than on pecuniary profit.<sup>190</sup> Therefore, rather than choosing to earn substantial profits from copyright, most scholars prefer to have their works disseminated and cited as widely as possible.<sup>191</sup> Furthermore, from their perspective as readers of

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184. Armbruster, *supra* note 180, at 27; Nicholas Bramble, Note, *Preparing Academic Scholarship for an Open Access World*, 20 HARV. J. L. & TECH. 209, 216 (2006).

185. See BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 324; Charlotte Hess & Elinor Ostrom, *Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 111, 136-37 [hereinafter Hess & Ostrom, *Ideas, Artifacts, and Facilities*]; Hunter, *supra* note 32, at 615. Cf. Hess & Ostrom, *Framework*, *supra* note 44, at 55, 62 (indicating that open access publishing can strengthen research and accessibility in developing countries).

186. LESSIG, FREE CULTURE, *supra* note 3, at 281 (indicating that publishers have begun to restrict a library's ability to grant general access to electronically bundled journals).

187. See Litman, *supra* note 179, at 784.

188. See Hess & Ostrom, *Ideas, Artifacts, and Facilities*, *supra* note 185, at 134. Cf. HAROLD, *supra* note 29, at 136-37 (noting that the centralized control granted by copyright over intellectual resources is dangerous).

189. Cf. BOLLIER, SILENT THEFT, *supra* note 6, at 183 (noting that the norm of the scientific community is transparency for critique); LESSIG, FREE CULTURE, *supra* note 3, at 279-80 (indicating that knowledge should be open to criticism in both software development and academia).

190. Suber, *supra* note 32. Cf. BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 323 (asserting that scientists write and review scholarly papers for reasons other than monetary reward); LANDES & POSNER, *supra* note 173, at 306-07 (stating that the incentive for basic research consists usually of celebrated reputations and prestigious awards whereas applied research is incentivized by IP rights); ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 474 (3d ed. 2003) (noting that value in academia is not measured in profit, but in prestige and professional advancement); Armbruster, *supra* note 180, at 30 (describing the importance of reputation and prestige in academia); Yochai Benkler, *Freedom in the Commons: Towards a Political Economy of Information*, 52 DUKE L.J. 1245, 1255 (arguing that the core people involved in scientific research have been those "who forgo monetary rewards and [who] work instead for glory, immortality, or the pure pleasure of learning something new").

191. LESSIG, REMIX, *supra* note 14, at 276; Hunter, *supra* note 32, at 617-18. See also Ostrom & Hess, *Framework*, *supra* note 44, at 55 (noting the importance of a citation rate for

academic articles, it is critically important for scholars to have access to others' work because scholarly discussion is a continuous process based on previous research.<sup>192</sup> A reader of an academic article is very possibly an author of another article. Accordingly, in academia, authors' willingness to disseminate their works is usually consistent with the public's interest in free access to information.<sup>193</sup> Such consistency indicates that the academic journal market does not need copyright as an incentive for intellectual creation.

Nonetheless, in *American Geophysical Union v. Texaco*,<sup>194</sup> the court stated that copyright still plays an important role in the dissemination of scholarly research:

Copyright protection is vitally necessary to the dissemination of scientific articles of the sort that are at issue. This is not because the authors insist on being compensated. . . . But copyright protection is essential to finance the publications that distribute them. Circulation of such material is small, so that subscriptions must be sold at very high prices. If cheap photoduplications could be freely made and sold at a fraction of the subscription price, *Catalysis* would not sell many subscriptions; it could not sustain itself, and articles of this sort would simply not be published. And without publishers prepared to take the financial risk of publishing and disseminating such articles, there would be no reason for authors to write them; even if they did, the articles would fail to achieve distribution that promoted the progress of science.<sup>195</sup>

In other words, the court argued that in the academic journal market, copyright's primary role was not to protect authors' scholarly works, but rather to induce the professional publication, reproduction, and distribution of these works.<sup>196</sup> Because authors generally do not seek to profit directly from their published work, they would rather relinquish the underlying copyright to commercial publishers in exchange for publication and distribution of their works.<sup>197</sup>

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scholars); Wu, *supra* note 60, at 345, 347 (stating that scientists prefer wide dissemination of their papers).

192. Hunter, *supra* note 32, at 613.

193. Interview with Patrick O. Brown, *supra* note 169. See also LOHMANN, *supra* note 43, at 144-45, 150-51 (viewing academia and journals as commons).

194. *Am. Geophysical Union v. Texaco Inc.*, 802 F. Supp. 1 (S.D.N.Y. 1992), *aff'd*, 60 F.3d 913 (2d Cir. 1994).

195. *Id.* at 16.

196. Copyright's role of providing incentive for distributors is also recognized in fields other than academic publications. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 195-96; John Quiggin & Dan Hunter, *Money Ruins Everything*, 30 HASTINGS COMM. & ENT. L.J. 203, 244 (2008); Wu, *supra* note 60, at 335-39.

197. Litman, *supra* note 179, at 782; cf. Dan Hunter, *Open Access to Infinite Content (Or "In Praise of Law Reviews")*, 10 LEWIS & CLARK L. REV. 761, 768-69 (2006) (noting that copyright and commercial intermediaries are necessary for distributing to society various forms of media, such as books, movies, and music). Copyright assignment from authors to distributors is also common in industries other than academic journal publishing. See Wu, *supra* note 60, at 336.

However, behind this type of exchange lies a potential conflict that arises between the interests of authors and the interests of publishers,<sup>198</sup> which leads to access failure in the academic journal market. As noted previously, authors wish to distribute their works as widely as possible, whereas for-profit publishers are not incentivized to make journal articles widely and cheaply available. These publishers, instead, prefer to strengthen and extend the copyright protection of information in order to maximize their profits.<sup>199</sup> As a result, copyright has become a tool with which commercial publishers extract all potential commercial value from works of authorship.

In the midst of this mismatch between the interests of scholars and the interests of commercial publishers, the PLoS has adopted a new approach to the academic journal publishing market. The PLoS provides scientists with an opportunity to take charge of their own IP and to bypass the market control of commercial publishers. Because the Internet has significantly decreased the costs of disseminating academic journals,<sup>200</sup> the copyright system is not the only mechanism that can be relied upon to publish and distribute academic journals.<sup>201</sup> In other words, with the Internet's capacity to transmit information economically,<sup>202</sup> it becomes problematic to justify commercial publishers' control over the copyright of published papers.<sup>203</sup> Using the case of the PLoS, the organization's co-founder and board member Patrick O. Brown similarly expressed this suspicion regarding publishers' appropriation of the copyright underlying academic papers:

[S]ince there's a perfectly good business model for open access publication, which basically says that you don't need to restrict who can distribute and the terms of distribution of articles, or anything like that at all, you can just have a financially viable model. So if you say the journal couldn't sustain itself and articles would not be published, that's not true.<sup>204</sup>

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198. Hunter, *supra* note 32, at 614; Bramble, *supra* note 184, at 216. *Cf.* Elkin-Koren, *supra* note 25, at 384 (describing similar exchanges between creators and publishers in the content industry); Wu, *supra* note 60, at 336 n.4 (stating that copyright assignment to distributors is likely to "result in the loss of authorial copyright").

199. *See* KRANICH, *supra* note 182, at 18; *see also* Hunter, *supra* note 32, at 610 (noting "a pernicious problem in scholarly publishing—that of restricting access to ideas in order to make a profit"); Opderbeck, *supra* note 32, at 151 (claiming that IP "facilitate[s] a 'blockbuster' business model" in the science, technology, and medical publishing market).

200. Armbruster, *supra* note 180, at 27; Hunter, *supra* note 32, at 618.

201. *Cf.* Quiggin & Hunter, *supra* note 196, at 245 ("[C]opyright is no longer the only mechanism for ensuring that content moves from the author into society.").

202. *See, e.g.*, BOYLE, PUBLIC DOMAIN, *supra* note 2, at 187-98.

203. *See* James Boyle, *Mertonianism Unbound? Imagining Free, Decentralized Access to Most Cultural and Scientific Material*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE, *supra* note 15, at 123, 135 [hereinafter Boyle, *Mertonianism Unbound*] (arguing that openness is the baseline for academy and scholarship, and any deviation requires justification); *see also* Lastowka, *supra* note 22, at 63 ("Network technologies now provide . . . means, allowing creators to respond to very old incentives."); Quiggin & Hunter, *supra* note 196, at 215 ("[D]igital technologies remove the need for highly capitalized intermediaries to guarantee the widespread dissemination of content.").

204. Interview with Patrick O. Brown, *supra* note 169.

In the interest of publishing quality academic journals, a formal organizational structure is desirable to cover various transaction costs required by a professional publication. Such costs include, for example, costs of running the server, and administering peer review, editing, layout, typesetting processes, and publication itself.<sup>205</sup> Therefore, in order to simultaneously eliminate access failure and internalize transaction costs that stem from journal publication, the NPO emerges as an ideal organizational form for the PLoS.<sup>206</sup> Through the Internet connection, the PLoS has successfully corrected the contract failure that has long existed between academic writers and academic readers.<sup>207</sup>

The Wikimedia Foundation's Wikipedia project has likewise corrected access failure in the encyclopedic world. Wikipedia provides readers with a free alternative to the once dominant *Encyclopedia Britannica*, which requires an arduous registration process and a monthly fee of \$11.95.<sup>208</sup> Although the content on Wikipedia is free of charge, the amount of information and self-correcting mechanisms are unparalleled.<sup>209</sup> Furthermore, its quality is almost as good as that of *Encyclopedia Britannica*.<sup>210</sup>

In the cultural industry, access failure similarly occurs when media companies completely control the intellectual resources through copyright. In *Free Culture*, Lessig tells a story about the tremendous difficulties that the

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205. See Ostrom & Hess, *Framework*, *supra* note 44, at 65; Charles M. Schweik, *Free/Open-Source Software as a Framework for Establishing Commons in Science*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE, *supra* note 15, at 277, 300. Cf. Litman, *supra* note 179, at 793 (describing similar necessary costs borne by commercial scholarly journal publishers). See also Patrick O. Brown et al., *Why PLoS Became a Publisher*, PLoS BIOLOGY, Oct. 2003, at 1, 1 (stating that PLoS journals demand "high standards of quality and integrity, rigorous and fair peer-review, expert editorial oversight, high production standards, a distinctive identity, and independence.").

206. It should be noted that there are also commercial players involved in "open-access" scholarly journal publishing. For example, BioMed Central (BMC) is a British scientific publisher specializing in open access publishing. Similar to the PLoS, BMC charges authors processing fees and provides people with free access to its journal articles. See BioMed Central, What is BioMed Central, <http://www.biomedcentral.com/info/> (last visited July 24, 2009); BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 324. Prentice Hall, a commercial publisher, has also released some books under public licenses, allowing further reproduction and modification. Stephen Shankland, *Book Publisher Adopts Open-Source Idea*, CNET NEWS, Jan. 16, 2003, <http://news.com.com/2100-1001-981018.html>. Nonetheless, not all NPOs support the idea of open access publishing. Some nonprofit publishers, particularly scientific societies that finance their activities from the sale of their own scholarly journals, are opposed to open access publishing. See Lila Guterman, *Scientific Societies' Publishing Arms Unite Against Open-Access Movement*, CHRON. HIGHER EDUC., Mar. 26, 2004, at A20.

207. See Brown et al., *supra* note 205, at 1. It should be noted that academic institutions, such as universities, are another type of NPO that have identical interests to those of their scholars in making academic works freely accessible. Therefore, many of these institutions have begun to build online institutional repositories that archive their researchers' works. See Ostrom & Hess, *Framework*, *supra* note 44, at 55-57; *supra* text accompanying notes 121-123. These institutional repositories can also correct some access failures.

208. TAPSCOTT & WILLIAMS, *supra* note 179, at 76.

209. *Id.* at 75-76.

210. *Id.* at 75.

independent documentary filmmaker Jon Else faced in trying to use a 4.5-second cartoon clip in a scene.<sup>211</sup> Although the cartoon creator, Matt Groening, granted Else the permission to use this clip, FOX, which claimed to own the copyright of that cartoon, asked for \$10,000.00 from Else.<sup>212</sup> The claim successfully precluded Else from using the short clip in his documentary.<sup>213</sup>

Another set of failures, which result from for-profits' proprietary control over information and resemble the access failure in the academic journal market, exist in the culture industry. To respond to such failures, NPOs such as the Internet Archive and the Television Archive provide a platform where creators are free to build upon existing creative work. By offering free access to abundant digital information and by decreasing the costs of clearing relevant IP rights,<sup>214</sup> these organizations foster a wealth of creativity and alleviate contract failure between information creators and information users.

The story of MIT's OCW and analogous initiatives by other universities are similar, but not identical, to the efforts to correct access failure by the Internet Archive and the Television Archive as described above. As many researchers illustrate, universities have historically been constructed as commons.<sup>215</sup> The OCW project was therefore initiated, not because of for-profits' excessive power over information, but rather as MIT's response to an institutional question of what the institution stands for in the Internet era. MIT has recognized that OCW is an effective way to fulfill the institution's core mission—to advance knowledge, to educate, and to serve the nation and the world<sup>216</sup>—which is usually not the primary goal of proprietary firms. As a NPO dedicated to education and research, MIT is aware that proprietary firms cannot usurp its role in generating, producing, and disseminating knowledge. By providing the public with free access to high-quality materials, MIT has successfully corrected the contract failures between its scholars and those who

211. LESSIG, FREE CULTURE, *supra* note 3, at 95-99; *see also* Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 61 (noting that news programs like ABC's *Good Morning, America* do not license any of their content for reuse).

212. LESSIG, FREE CULTURE, *supra* note 3, at 96.

213. *Id.* at 97.

214. *See id.* at 95-107 (illustrating the high transaction costs stemming from clearing relevant IP rights in cultural production activities). *See also* MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES 12-16 (2008) (describing the enormous costs of copyright clearance in producing film and music); LASICA, *supra* note 14, at 71-72 (noting that most major studios do not allow home video makers to include a clip of their major films without paying thousands of dollars); LESSIG, REMIX, *supra* note 14, at 9-15 (describing the enormous costs of clearing IP rights in two other cases); Lawrence Lessig, *The Second Annual Distinguished Lecture in Intellectual Property and Communications Law: Creative Economies*, 2006 MICH. ST. L. REV. 33, 38-39 (illustrating the huge transaction costs of clearing IP rights for the Internet Archive and music remixers) [hereinafter Lessig, *Creative Economies*].

215. *See, e.g.*, BOLLIER, SILENT THEFT, *supra* note 6, at 137-38; LOHMANN, *supra* note 43, at 106-07; Michael J. Madison, *The University as Constructed Cultural Commons*, 30 WASH. U. J. L. & POL'Y 365 (2009).

216. MIT OpenCourseWare, *Our History*, <http://ocw.mit.edu/OcwWeb/web/about/history/index.htm> (last visited July 23, 2009).

have little or no access to sufficient high quality educational materials, such as scholars in the developing world and researchers in rural areas of the United States.<sup>217</sup>

As the financial supporter of MIT's OCW and many other institutes' OER projects, the Hewlett Foundation has further aimed at correcting access failure in various educational settings.<sup>218</sup> The goal of the Foundation's Education Program is "to use information technology to help equalize the distribution of high quality knowledge and educational opportunities for individuals, faculty, and institutions within the United States and throughout the world."<sup>219</sup> Through the OER projects created by MIT, the Hewlett Foundation, and other similar organizations, NPOs have demonstrated their ability to correct the educational access failure through the Internet, their OER platforms, and financial resources.

#### b. Licensing Failure

There are two types of licensing failures in the commons environment. The first type occurs when there is an absence of a contractual arrangement between creators and users. Because copyright law protects creators by default when copyrightable materials are first created,<sup>220</sup> it is necessary for users to secure permission for each use of every copyrighted resource.<sup>221</sup> In addition, because U.S. copyright law does not require any formalities, such as copyright notice and registration,<sup>222</sup> it is difficult to ascertain whether a work falls under copyright protection or has shifted into the public domain.<sup>223</sup> As a result, users may hesitate to consume such resources due to fear of infringement. Even if

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217. See MIT OpenCourseWare, World Reaction to MIT OpenCourseWare, [http://ocw.mit.edu/ans7870/global/World\\_Reaction.pdf](http://ocw.mit.edu/ans7870/global/World_Reaction.pdf) (last visited July 23, 2009).

218. See ATKINS ET AL., *supra* note 33, at 1-2.

219. *Id.* at 2.

220. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 181; LESSIG, FREE CULTURE, *supra* note 3, at 138, 249-50; Lessig, *Creative Economics*, *supra* note 214, at 41; Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 65-67; Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L.J. 1, 13-23 (2004); Loren, *supra* note 25, at 295; Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 STAN. L. REV. 485, 494 (2004).

221. Although copyright law's fair use doctrine allows certain uses of copyrighted material without right-holders' permission, this doctrine is too ambiguous and uncertain for users to apply. See, e.g., LESSIG, REMIX, *supra* note 14, at 99-100; Mark A. Lemley, *Dealing with Overlapping Copyrights on the Internet*, 22 U. DAYTON L. REV. 547, 566-67 (1997); Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 45-46 (1996). Given such uncertainties, most users tend to secure copyright licenses beforehand regardless of need. See James Gibson, *Risk Aversion and Rights Accretion in Intellectual Property Law*, 116 YALE L.J. 882, 887-95 (2007).

222. See LESSIG, FREE CULTURE, *supra* note 3, at 137-38, 249-50, 288; Litman, *supra* note 220, at 14-18; Loren, *supra* note 25, at 281.

223. Boyle, *Mertonianism Unbound*, *supra* note 203, at 126.

the potential users decide to get a license from copyright holders, it may be extremely expensive to identify, locate and negotiate with the right holders.<sup>224</sup>

Because of the default rule in copyright law, creators must take affirmative action if they want to opt out of the full copyright protection.<sup>225</sup> Although some of the creators may initially be willing to allow a particular use of their work, they are ultimately likely to conclude that granting permission is unwise because of the high costs of legal fees for the licensing process.<sup>226</sup> As a result, this first type of licensing failure<sup>227</sup> typically occurs between individual creators and users of intellectual resources, and can be attributed to prohibitively high information and transaction costs.<sup>228</sup>

In this type of contract failure scenario, the most desirable free licensing arrangement is one that facilitates the free distribution of copyright protected works.<sup>229</sup> Such licenses can allow creators to release and distribute their works for public use under certain conditions. Among all these licenses, the CC licenses are most flexible for reflecting creators' preference regarding reuse of the creators' works.<sup>230</sup> Legal devices like the CC Attribution License allow the creators to waive some of their copyrights and to simultaneously retain other copyrights, such as the right to prevent dissemination of altered or commercialized copies.<sup>231</sup> Such free licenses not only enable creators to exercise their rights flexibly and economically, but also facilitate users' efforts to identify creative works that are readily available for reuse without bargaining.<sup>232</sup> Therefore, by producing and freely distributing the licenses, CC, the FSF, and other NPOs provide the public with greater access to copyrighted materials than the default legal rules would otherwise allow.

Nonetheless, despite various free licenses, users may still encounter legal difficulties remixing various commons resources from the Internet. These difficulties, which constitute the second type of licensing failure, can be attributed to the incompatibilities between different free licenses.<sup>233</sup> Ahrash

224. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 12; LESSIG, FREE CULTURE, *supra* note 3, at 222-23, 249, 288; Elkin-Koren, *supra* note 25, at 380; Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 67; Loren, *supra* note 25, at 272.

225. See *supra* text accompanying note 220.

226. Elkin-Koren, *supra* note 25, at 380. See also BOYLE, PUBLIC DOMAIN, *supra* note 2, at 14 ("Almost everything up on the Internet is copyrighted, even if its creators . . . would prefer it to be in the public domain.")

227. Boyle calls this failure as "failed sharing." BOYLE, PUBLIC DOMAIN, *supra* note 2, at 182.

228. See *id.* at 15 (arguing that the copyright system occasionally satisfies neither creators' nor users' needs because of the high cost associated with seeking permission).

229. Cf. Carroll, *supra* note 127, at 47 ("Creative Commons licenses act as a disintermediating force because they enable end-to-end transactions in copyrighted works.")

230. See LESSIG, FREE CULTURE, *supra* note 3, at 283.

231. See, e.g., Creative Commons Legal Code, Attribution 2.5, <http://creativecommons.org/licenses/by/2.5/legalcode> (last visited July 24, 2009).

232. See, e.g., Carroll, *supra* note 127, at 48; see also Edward Lee, *Warming Up to User-Generated Content*, 2008 U. ILL. L. REV. 1459, 1460 (stating that user-generated content is produced from "unorganized, informal practices of various, unrelated users. . .").

233. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 204; Elkin-Koren, *supra* note 25, at 412-14; Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 77; Lawrence Lessig, *CC in*

Bissell, the Executive Director of the ccLearn Project under CC, vividly described how the incompatibilities between diverse licensing terms hinder collaboration and content reuse in the digital world:

[I]f you are a teacher, and you are trying to assemble a lesson plan[,] [y]ou grab something from Wikipedia and something from the OpenCourseWare, and something else from the Connexion. Those things are licensed under three different conditions, and they cannot be put in the same document without violating at least one of these licenses. Under fair use educational exceptions, you can still do it as long as you don't re-disseminate your work. . . . But the law does not allow you to put it back [online]. You can't put it up for anybody to see and adopt.<sup>234</sup>

The incompatibility problem has drawn attention from many NPOs that have produced and adopted free licenses. For example, CC has launched a project to facilitate interoperability among several license types.<sup>235</sup> Additionally, the Wikimedia Foundation has initiated community discussions on relicensing content to overcome the incompatibility predicament.<sup>236</sup> More recently, at the request of the Wikimedia Foundation,<sup>237</sup> the FSF released version 1.3 of the GNU Free Document License (FDL), which allows public wikis like Wikipedia to relicense their FDL-covered materials under the CC Attribution-ShareAlike (CC-BY-SA) 3.0 license.<sup>238</sup> Therefore, the compatibility between FDL and CC licenses has been made possible by the FSF, the CC, and the Wikimedia Foundation.

According to Bissell, “[p]eople in the movement may have disagreement on what the best solution is, but they all know [CC] is an organization working to figure [it] out for the community.”<sup>239</sup> Therefore, although this incompatibility issue has not been solved yet, these NPOs are pioneers in providing potential solutions for the future.

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Review: Lawrence Lessig on Compatibility (Nov. 30, 2005), <http://creativecommons.org/weblog/entry/5709>.

234. Interview with Ahrash Bissell, *supra* note 177.

235. Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 78; Interview with Ahrash Bissell, *supra* note 177.

236. Wikimedia Foundation, Resolution: License Update, [http://wikimediafoundation.org/wiki/Resolution:License\\_update](http://wikimediafoundation.org/wiki/Resolution:License_update) (last visited July 24, 2009).

237. Mike Linksvayer, *Wikipedia/CC News: FSF Releases FDL 1.3* (Nov. 3, 2008), <http://creativecommons.org/weblog/entry/10443>.

238. Free Software Foundation, GNU Free Documentation License, Version 1.3 (Nov. 3, 2008) <http://www.gnu.org/copyleft/fdl.html>. See also *id.* §11 (noting the compatibility between the aforementioned licenses).

239. Interview with Ahrash Bissell, *supra* note 177.

### 3. Theoretical Implications

Hansmann's contract failure theory is sometimes referred to as *trust theory*<sup>240</sup> or the *trust hypothesis*<sup>241</sup> because one of the theory's most important propositions is that donors must voluntarily entrust and contribute their resources to the NPOs.<sup>242</sup> Contract failure theory focuses on circumstances in which customers are more likely to trust NPOs than their for-profit counterparts because the former are not motivated by profit, and, thus, may be less likely to act opportunistically toward consumers.<sup>243</sup> Trust functions as both the catalyst for the formation of the NPO and as the key ingredient for its survival.

Trust plays a crucial role in the OSI, which defines the open source standard for F/OSS communities. Danese Cooper, a board member of the OSI, articulated in an interview how the nonprofit status of the OSI helped to build neutrality and trust among F/OSS communities:

[T]he reason that it was important that we be a nonprofit is that it implies neutrality. We weren't owned by any commercial entity and that was really important, both for the developers that were trusting us that we were applying these rules correctly, and for the corporations that were looking for endorsement . . . . [I]f we had not been incorporated as a nonprofit with the plurality of support, it would have been easy for Microsoft to say "this is just a smear campaign against us . . . ." The nonprofit status just makes it easier to explain that we're not in this for the money at the outset. . . . [E]vidence of neutrality and separation from companies has been very important for us. It would destroy our credibility not to have that. . . . [W]e [also] made a way for corporations to reach those developers that they would have not otherwise have easily got to [sic]. Because they would have had to build trust on their own, and that would have been difficult or impossible.<sup>244</sup>

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240. See, e.g., DOLLERY & WALLIS, *supra* note 157, at 9; Kingma, *supra* note 43, at 61-62. See also FRUMKIN, *supra* note 35, at 67-70 (introducing the contract failure theory based on the concept of trust); Bernard Enjolras, *Coordination Failure, Property Rights and Non-Profit Organizations*, 71 ANNALS PUB. & COOPERATIVE ECON. 347, 359 (2000) (noting that Hansmann's main point is that NPOs are more trustworthy than for-profits).

241. See, e.g., Andreas Ortmann & Mark Schlesinger, *Trust, Repute, and the Role of Nonprofit Enterprise*, in THE STUDY OF THE NONPROFIT ENTERPRISE: THEORIES AND APPROACHES, *supra* note 35, at 77, 78-79.

242. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 896.

243. Cf. Kenneth J. Arrow, *Uncertainty and the Welfare Economics of Medical Care*, 53 AM. ECON. REV. 941, 965 (1963) (observing that in medical care, "[t]he very word, 'profit,' is a signal that denies the trust relations"); Enjolras, *supra* note 240, at 353 ("The potential trustor[s] . . . decision will depend on his estimation of the probability that the trustee complies to the norm of reciprocity.").

244. Interview with Danese Cooper, *supra* note 68.

In commons operating beyond the F/OSS world, NPOs similarly provide trust, which is indispensable for the sustainability of communities.<sup>245</sup> Trust is also important for political advocacy NPOs to build credibility among their supporters. With the non-distribution constraint, NPOs usually “appear to be independent voices for the public good” and face much less suspicion than for-profits regarding their motives in engaging in political advocacy.<sup>246</sup> As Ress of KEI explained in an interview:

We want to keep our independence and our ability to criticize the industry whenever we want. . . . I think it’s important that people trust that what we’re doing is because we believe in our mission and not because there’s a profit attached to that position. It is very important for us. Our word or our honor is probably part of our power. It’s not something you can sell. . . . [For example,] [w]e don’t take . . . money from Microsoft. And I think people trust us when we’re criticizing this industry. It’s not because we’re being paid by another one. And I think it’s important because we have more credibility.<sup>247</sup>

Although NPOs may form a coalition with major for-profits on certain legislative issues, NPOs’ non-distribution constraint makes them significantly different from for-profits. As Franz of the Open Society Institute explains:

[T]he difference is that [business] interests might collide and that’s why you can form a coalition with industry, but ultimately the business has still its own profit. It’s still responsible to its shareholders and that’s its ultimate interest. One day we might be in a coalition with Google and Microsoft and Intel and others, but the next day they might not care about the issue anymore or have other agenda items. . . . [T]here often is an overlap between public interest and business interests, but it’s not a permanent thing.<sup>248</sup>

Moreover, with the non-distribution constraint, a nonprofit publisher, like the PLoS, is less likely to guard access to research thereby jealously maximizing profits;<sup>249</sup> thus, the publisher can do a better job in aligning its own interests with the interests of the authors and readers. Therefore, NPOs such as the PLoS can become trusted intermediaries that facilitate the exchange of ideas between scholars. As a result, a NPO, and the trust that it provides, represents an institutional mechanism that best manages the commons.<sup>250</sup>

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245. *Cf.* DEEK & MCHUGH, *supra* note 64, at 212 (“Collaboratively sharing and seeking information from or with others requires an appropriate organizational incentive structure.”).

246. FRUMKIN, *supra* note 35, at 58-59.

247. Telephone Interview with Manon Ress & James Love, *supra* note 109.

248. Telephone Interview with Vera Franz, *supra* note 108.

249. *Cf.* Hunter, *supra* note 32, at 636 (noting that law reviews have greater opportunity to be open access because, in contrast to commercial publishers, law reviews are not responsible for maximizing the shareholders’ value).

250. In making this argument, I do not mean that the nonprofit organizational form is the only way to build trust in the commons environment. There are certainly other ways to

#### 4. The Limitations of Contract Failure Theory

Hansmann's contract failure theory helps to explain the behavior of some NPOs in the commons discourse, especially those that provide the public with access to valuable information, collaborative platforms, and free licenses. However, Hansmann's assumption that consumers distrust for-profit organizations may be exaggerated in some commons scenarios. Indeed, for-profits and NPOs may coexist and compete with each other in certain industries.<sup>251</sup> Nonetheless, for-profit actors occasionally have insufficient incentives to invest in certain public goods because they cannot capture the most value from this type of investment.<sup>252</sup> For instance, Bissell of ccLearn Project has been skeptical about for-profits' willingness to become involved in CC's task of license interoperability, which is crucial to free culture and OER movements:

There is no question that the movement is being driven by philanthropic interest. . . . [I]t's not motivated at its core by business interest. . . . For business, you probably find a model just choosing a particular license and restricting yourself only to the work under that license. But I don't see a reason that business want[s] to deal with the interoperability issue.<sup>253</sup>

Patrick O. Brown, co-founder and board member of the PLoS, also explained in an interview that the organization was established as a NPO because its mission cannot provide sufficient incentive for profit-seeking investors:

I thought of it as a mistake to start [the PLoS] as a for-profit . . . [because] what we were trying to do was something that there was no clear way how we were going to make it work as a business. What we were basically doing and our motivation was to do something that is in the public interest and is essentially an extension of a heavily publicly subsidized scientific enterprise, where it seemed to me that there would be a lot of interest from charitable organizations and scientific funding agencies . . . to . . . work with us to make this successful for the purpose of the greater good that they are trying to advance. That's like their mission. . . . It's really more of an effort to do a public service, even if it wasn't

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construct trust. For example, licenses, such as the GPL, can shape trust within the community as well. *See* Telephone Interview with David Bollier, Co-founder & Board Member, Public Knowledge (Oct. 11, 2007). Neither do I suggest that for-profits can never gain trust from the commons communities. IBM and Red Hat are great examples of how for-profits obtain credibility from the commons communities. *See, e.g.,* LESSIG, REMIX, *supra* note 14, at 184; TAPSCOTT & WILLIAMS, *supra* note 179, at 81-83.

251. *See, e.g.,* DiMaggio & Anheier, *supra* note 34, at 139.

252. *Cf.* Davis, *supra* note 166, at 1084 (asserting that "while for-profits might only take into account the net financial returns that they realize from producing contracts, nonprofits might take into account a broader range of factors when making decisions"); Tuckman, *supra* note 43, at 28-29 ("Competition between for-profits and nonprofits is . . . unlikely in situations where excludable goods or services are produced and individuals receiving the intended output cannot afford to pay.").

253. Interview with Ahrash Bissell, *supra* note 177.

going to make money. We would have a hard time raising investment money for a for-profit, given the fact that we didn't have an established business model. . . . So that just seemed to me like the way to go, was to do it as a nonprofit and say, look, we're doing something very risky. Let's try to accomplish something important for the public good and try to raise money on that basis.<sup>254</sup>

In contrast, due to the non-distribution constraint, NPOs can better account for those benefits and costs that are not recognized by for-profit organizations.<sup>255</sup> While consumers may fear that for-profits will attach excessive charges to their products and services, NPOs' can provide freely available repositories of valuable information, legal support for individuals, and public licenses<sup>256</sup> for consumer consumption. Cindy Cohn of the EFF explained the organization's differences from a for-profit company:

[I]f you're a for-profit organization, your main goal has to be to make profit. . . . And anything that gets in the way of that goal like having the social conscience, protecting your customer's privacy, you know there's a tension there. We don't have that tension. People give us [donations] to do good and we go out and do good. . . . [W]e don't have a competing concern about trying to be in the black.<sup>257</sup>

Therefore, Hansmann's assumption regarding for-profits' incentive to over-charge may need to undergo a tune-up in light of the aforementioned scenario. This shortcoming in contract failure theory stems from Hansmann's focus on the demand side of public goods, rather than on the supply side.<sup>258</sup> However, consumers' choice of NPOs may sometimes rely more heavily on supply-side factors.

Furthermore, there are other NPOs involved in cultural environmentalism that do not attempt to primarily resolve the contractual difficulties described by Hansmann.<sup>259</sup> For example, it is difficult to determine whether the NPOs involved in lobbying activities and public-interest litigation primarily aim to solve contract failures.<sup>260</sup> It is also difficult to explain why some NPOs promote specific social norms or social movements in the information society.

254. Interview with Patrick O. Brown, *supra* note 169.

255. Davis, *supra* note 166, at 1084.

256. Nevertheless, in the software industry, many proprietary companies, such as Apple, Lucent, IBM, and Intel, have motives to write their own F/OSS license. *See, e.g.*, ROSEN, *supra* note 72, at 160-61; Peter G. Capek et al., *A History of IBM's Open-Source Involvement and Strategy*, 44 *IBM Sys. J.* 249, 251-252 (2005).

257. Interview with Cindy Cohn, *supra* note 96.

258. Bacchiega & Borzaga, *supra* note 37, at 31.

259. *But see* Hansmann, *Reforming Nonprofit Corporation Law*, *supra* note 37, at 523 ("When contract failure is not involved, there is generally no reason to expect nonprofit firms to provide any particular advantage over profit-seeking firms.").

260. Of course, there are still some aspects of these organizations that can be explained by typical contract failure theory. For example, the nonprofit form provides an ideal platform and indispensable trust for those who believe in the organizations' missions and who donate to these NPOs. However, it is hard to tell purely from the theory whether these NPOs are responding to other failures, such as government failure, in addition to contract failure. I thank Professor Michael Klausner for pointing out the contract-failure aspects of these NPOs.

Hansmann's theory fails to capture the fact that the stated objective of many NPOs is to respond, not to private-contract failures, but to government failures, especially those pertaining to IP law design and enforcement. When NPOs emerge as a response to failures other than contract failure, the theory of government and market failure, as introduced in the next section, may better explain the NPO's role of providing certain public goods.<sup>261</sup>

### B. Market and Government Failure Theory

#### 1. Theory

Another important theory, proposed by Professor Burton A. Weisbrod, traces the existence of NPOs back to both "market failure" and "government failure," where obstacles limit both the private market's and the government's ability to provide public goods.<sup>262</sup> Providing public goods purely through the market will, in effect, ensure that they will be under-supplied because few consumers will volunteer to pay for products that they could enjoy at no expense.<sup>263</sup> Consequently, the producer will produce less of a public good than the public really needs. In traditional economic theory, this "free-rider" problem is the major rationale for the government because a government can overcome market failure by taxing people to produce public goods.<sup>264</sup>

Nevertheless, the government also encounters certain restraints as a public goods producer. In a democratic society, the government will provide the public with only a limited range and a limited quantity of public goods to obtain majority support.<sup>265</sup> With limited resources, the government can only respond to "majoritarian interests."<sup>266</sup> The limitation of the public goods means that some unsatisfied demand will persist. Certainly, some dissatisfied customers will purchase substitute, but not necessarily the same, commodities in a private market.<sup>267</sup> However, when the substitute goods offered by the market do not fully meet the unsatisfied demand for collective goods, consumers can resort to NPOs.<sup>268</sup> According to Weisbrod, "[A] class of voluntary organizations will come into existence as *extragovernmental providers of collective-consumption goods*. These organizations will 'supplement' the *public*

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261. Ben-Ner & Gui, *supra* note 37, at 6 (stating that "NPOs may make possible advantageous transactions that cannot be carried out by FPFs [*i.e.*, for-profit firms], thus increasing overall efficiency to the benefit of all parties. . .").

262. BURTON A. WEISBROD, *THE VOLUNTARY NONPROFIT SECTOR: AN ECONOMIC ANALYSIS* 52-61 (1977) [hereinafter WEISBROD, *VOLUNTARY NONPROFIT SECTOR*] (describing the obstacles faced by the government and private market in providing public goods, and NPOs' role in filling that void).

263. *Id.* at 57.

264. *Id.* at 53-57; Steinberg, *supra* note 36, at 122.

265. *See* WEISBROD, *VOLUNTARY NONPROFIT SECTOR*, *supra* note 262, at 53.

266. WEISBROD, *NONPROFIT ECONOMY*, *supra* note 36, at 26; *see also* WEISBROD, *VOLUNTARY NONPROFIT SECTOR*, *supra* note 262, at 63 (indicating that from a historical perspective, the minority demand for goods will not be satisfied by governmental provision).

267. WEISBROD, *VOLUNTARY NONPROFIT SECTOR*, *supra* note 262, at 58.

268. *Id.* at 58-59.

provision (which can be zero) and provide an alternative to the *private*-sector provision of the private-good substitutes for collective goods.<sup>269</sup>

In summary, Weisbrod's theory suggests that NPOs produce certain public goods desired by one or some segments of the society, but not by a majority.<sup>270</sup> According to this theory, the more diverse a society is, the more extensive the NPO sector is likely to be.<sup>271</sup>

## 2. Applications

Advocates for preserving the commons have argued that the mismanagement of commons resources is due to the invasive actions of for-profits and governments.<sup>272</sup> According to this line of reasoning, the market and the government not only fail to provide the society with commons as public goods, but also hamper the commons environment. In contrast, NPOs in the commons environment produce various public goods, which are provided neither by the government nor by the market. Therefore, Weisbrod's theory may explain why many of these NPOs exist at all. Nonetheless, a study of NPOs and the commons environment should seek to identify the exact government failures and the market failures, and should further specify how the NPO's respond in the digital age. Such a study will create a more complete understanding of both NPOs and the environment in which they are rooted. This Article will identify the principal failures facing NPOs in the commons environment as well as their responses to these failures.

### a. Government and Market Failures

#### i. Government Failure

According to Weisbrod's theory, to satisfy diverse societal demands, NPOs have emerged as a private response, not only to market failures, but also to government failures. In this sense, Weisbrod's theory can explain some of the

269. *Id.* at 59-60.

270. WEISBROD, NONPROFIT ECONOMY, *supra* note 36, at 25. *See also* FRUMKIN, *supra* note 35, at 9 (stating that sometimes NPOs' solutions to social problems are solutions that "a majority of citizens are unable or unwilling to support"). Some political scientists also suggest that the NPO is an ideal organizational form for small-scale groups, where each member's contribution is significant and where the free-rider problem is not serious. *See* Douglas, *supra* note 112, at 45. They argue that if a large number of people need certain public goods and if the free-rider problem is obvious, these people will then seek to invoke the government's coercive power. *Id.* at 45-46.

271. WEISBROD, NONPROFIT ECONOMY, *supra* note 36, at 27; WEISBROD, VOLUNTARY NONPROFIT SECTOR, *supra* note 262, at 67-68; *see also* Douglas, *supra* note 112, at 46-48 (describing the diversity argument from political theories and arguing that NPOs provide their contributors with social values not shared by all, but that the government has to distribute benefits equally); Kingma, *supra* note 43, at 58 (summarizing researchers that test Weisbrod's heterogeneity hypothesis).

272. *See, e.g.*, TOMALES BAY INSTITUTE, THE COMMONS RISING 2-3 (2006), available at [http://www.commonsvdev.us/media/pdf/original/Commons\\_Rising\\_06.pdf](http://www.commonsvdev.us/media/pdf/original/Commons_Rising_06.pdf).

circumstances associated with government activities that are not mentioned in the contract failure theory. This theory's application to the commons environment also resonates with the advocacy for novel institutions to replace the government as new trustees for commons resources.<sup>273</sup>

Moreover, Weisbrod's insight into government failure is especially useful in analyzing NPOs in the commons environment, many of which were established as responses to government copyright laws.<sup>274</sup> As Professor Dan Hunter indicates, a number of public-interest groups, including the CC, the Center for the Public Domain, and the Open Knowledge Network, emerged in the aftermath of the Digital Millennium Copyright Act (DMCA) and the Sonny Bono Copyright Term Extension Act<sup>275</sup> (CTEA). Other commentators also indicate that DMCA and CTEA engendered the free culture movement.<sup>276</sup>

There are two primary types of government failures pertaining to copyright law: the copyright law itself and its legislative process. As Gigi B. Sohn of PK described in an interview, "content owners have monopolies over their content. So copyright law [itself] . . . [is] a failure of government over-regulation."<sup>277</sup> Scholars have argued that current copyright law has created unnecessary barriers for commons production and sharing activities.<sup>278</sup> With respect to international copyright treaties, Manon Ress of KEI attributes analogous failure to the U.S. government.<sup>279</sup>

[T]he U.S. government is very committed to the wrong side. They promote a new treaty on enforcement for intellectual property rights, which is probably a bad idea. They push for extensions of copyright terms in these [Free Trade

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273. TOMALES BAY INSTITUTE, THE STATE OF THE COMMONS 29 (2003), available at [www.community-wealth.org/\\_pdfs/articles-publications/commons/report-barnes-et-al-07.pdf](http://www.community-wealth.org/_pdfs/articles-publications/commons/report-barnes-et-al-07.pdf).

274. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 183-84 ("Creative Commons was conceived of as a second-best solution created by private agreement because the best solution could not be obtained through public law."). Cf. Kapczynski, *supra* note 13, at 854 (describing that in the international IP arena, different access-to-knowledge groups are brought together with similar problems and form coalitions against IP industries).

275. Hunter, *supra* note 22, at 1113, 1116-17. The Sonny Bono Copyright Term Extension Act extended copyright terms, and the DMCA made circumvention of copyright-protection technologies illegal. Both of these pieces of legislation have attracted considerable controversy with respect to the expansion of IP protection. See, e.g., BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 413-18, 442-43; BOYLE, PUBLIC DOMAIN, *supra* note 2, at 85-121; LASICA, *supra* note 14, at 34, 139-46.

276. LASICA, *supra* note 14, at 30.

277. Telephone Interview with Gigi B. Sohn, *supra* note 104.

278. See, e.g., BOYLE, PUBLIC DOMAIN, *supra* note 2, at 203; LESSIG, REMIX, *supra* note 14, at 253-54; Lee, *supra* note 232, at 1539, 1548; Quiggin & Hunter, *supra* note 196, at 243-46. See also Loren, *supra* note 25, at 272-73 (stating that copyright law fails to keep up with the creative environment enabled by new technologies); *Id.* at 298 (noting the "over-propertization" of copyright law).

279. Telephone Interview with Manon Ress & James Love, *supra* note 109.

Agreements] with developing countries. They push for bad implementations of . . . DRM systems.<sup>280</sup>

The fact that current copyright law brought about the cultural environmentalism and the incorporation of numerous NPOs bolsters Michael W. McCann's view that law can be a resource for groups seeking to "name and to challenge existing social wrongs or injustices."<sup>281</sup>

The most common government failure associated with copyright laws is that the legislative process was captured by powerful copyright industries.<sup>282</sup> Professor Jessica Litman vividly describes how, in the past century, the legislative process has evolved into an industry-negotiated and industry-drafted process.<sup>283</sup> The industry-drafted copyright legislation tends to tilt copyright law in the direction of increasingly stronger protection.<sup>284</sup> Litman suggests that the resulting copyright legislation is due to the industries' generous campaign contributions and the government's intrinsic incompetence.<sup>285</sup> Recent examples given by Litman include the DMCA legislative process, where established players, such as the sound recording and movie industries, exercised their considerable influence.<sup>286</sup>

Similarly, the CTEA reflects Disney's intense lobbying for an extension of copyrights that would protect Disney's copyright on Mickey Mouse.<sup>287</sup>

280. *Id.*

281. Michael W. McCann, *How Does Law Matter for Social Movements?*, in *HOW DOES LAW MATTER?* 76, 83 (Bryant G. Garth & Austin Sarat eds., 1998).

282. *See, e.g.*, Christina Bohannon, *Reclaiming Copyright*, 23 *CARDOZO ARTS & ENT. L.J.* 567, 568 (2006) ("As a result of special-interest capture, the Copyright Act confers overly broad rights to copyright owners at the expense of the public interest in having access to creative works."); Opderbeck, *supra* note 32, at 103 (asserting that "[t]he standard narrative is that large corporate interests . . . have been able to capture the lawmaking process such that the law has increasingly come to favor stronger intellectual property protection"); Open Society Institute, Grants, *supra* note 153 ("IP policymaking processes are overshadowed by political and professional corruption.").

283. *See* JESSICA LITMAN, *DIGITAL COPYRIGHT* 23-37 (2001) [hereinafter *LITMAN, DIGITAL COPYRIGHT*]; Jessica D. Litman, *Copyright, Compromise, and Legislative History*, 72 *CORNELL L. REV.* 857, 879-88 (1987). *See also* BOYLE, *PUBLIC DOMAIN*, *supra* note 2, at 56 (stating that the copyright industries were "asked to draft the rules by which they would live"); Mark A. Lemley, *The Constitutionalization of Technology Law*, 15 *BERKELEY TECH. L.J.* 529, 532 (2000) ("Congress . . . seems to have abdicated its role in setting intellectual property policy to the private interests who appear before it.").

284. *LITMAN, DIGITAL COPYRIGHT*, *supra* note 283, at 54-57; *see also* LESSIG, *REMIX*, *supra* note 14, at 39 (arguing that the content industry and the government cooperated to implement new copyright legislation from 1997 to 1998); Benkler, *From Consumers to Users*, *supra* note 2, at 570 (claiming that the IP industry's lobbying has caused the "ever-increasing centralization" of IP); Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 74 (being pessimistic about copyright reform today, which "protect powerful . . . copyright industries").

285. *LITMAN, DIGITAL COPYRIGHT*, *supra* note 283, at 62.

286. LESSIG, *FREE CULTURE*, *supra* note 3, at 218. For a detailed legislative process of the DMCA, *see* *LITMAN, DIGITAL COPYRIGHT*, *supra* note 283, at 122-45.

287. *See* BOLLIER, *SILENT THEFT*, *supra* note 6, at 123; PAT CHOATE, *HOT PROPERTY: THE STEALING OF IDEAS IN AN AGE OF GLOBALIZATION* 276-77 (2005); HELLER, *supra* note 214, at 207 n.46; LESSIG, *FREE CULTURE*, *supra* note 3, at 231; Hunter, *supra* note 22, at 1113. *See also* William Patry, *The Failure of the American Copyright System: Protecting the Idle Rich*, 72 *NOTRE DAME*

Although CTEA was once challenged in the U.S. Supreme Court, the court ruled that it was Congress' decision to make.<sup>288</sup> If, as the *New York Times* suggested, "[t]he court's decision . . . does not serve the public well,"<sup>289</sup> such a decision is another government failure to protect the interests of the public. The consequence of this decision is to foster further collective action in cultural environmentalism.<sup>290</sup>

## ii. Market Failure

Market failure in the commons discourse has been the focus of many NPOs. According to Weisbrod's theory, for-profits fail to provide certain public goods due to the free-rider problem.<sup>291</sup> Since for-profits have difficulties in profiting from producing these public goods, they will have no incentive to provide them in the marketplace. Because these public goods are crucial to certain creative activities, market failure occurs as a result of for-profits' incapability of supplying these goods. Therefore, David Bollier writes that "[t]o defend the commons is to recognize that human societies have collective needs and identities that the market cannot fulfill by itself."<sup>292</sup> This hypothesis resonates with the commons scenario in which NPOs play an increasingly important role in producing public goods. As Catherine M. Casserly of the Hewlett Foundation said, "[The NPOs'] role is to fill a gap where both for-profits exist to make money and where governments exist to provide social goods. . . . For-profits won't do that because there isn't a clear revenue stream [and] because there isn't a very clear value proposition."<sup>293</sup>

Because contract failure is a type of market failure,<sup>294</sup> the above-mentioned commons contract failures can also exemplify market failures when applying Weisbrod's theory to the NPOs studied here. In addition to contract failure, Richard Steinberg identifies two types of market failures that NPOs aim to correct: under-provision and over-exclusion.<sup>295</sup> In fact, sometimes contract failure may occur in the form of under-provision or over-exclusion. For example, *access failure*, which is a new type of contract failure identified in this Article, occurs as a result of proprietary publishers or other enterprises' over-exclusion of information.<sup>296</sup> *Licensing failures*, which are a result of the

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L. REV. 907, 932 (1997) (stating that "[t]he real impetus for term extension comes from a very small group: children and grandchildren of famous composers whose works are beginning to fall into the public domain, thereby threatening trust funds.").

288. *Eldred v. Ashcroft*, 537 U.S. 186 (2003).

289. Editorial, *The Coming of Copyright Perpetuity*, N.Y. TIMES, Jan. 16, 2003, at A28.

290. Kapczynski, *supra* note 13, at 841-42.

291. WEISBROD, VOLUNTARY NONPROFIT SECTOR, *supra* note 262, at 56-57.

292. David Bollier, *The Growth of the Commons Paradigm*, in UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE, *supra* note 15, at 27, 38.

293. Interview with Catherine M. Casserly & Jack Fascher, *supra* note 149.

294. Hansmann, *Nonprofit Enterprise*, *supra* note 36, at 845.

295. Steinberg, *supra* note 36, at 121-24.

296. See discussion *supra* Part III.A.2. This over-exclusion problem is sometimes perceived as a failure of under-consumption or under-use. See, e.g., Ostrom & Hess, *Framework*, *supra* note 44, at 58 (stating the under-use problem in the context of university repositories).

significant transaction costs imposed by the default rules in copyright law, lead to the under-provision of intellectual resources and inhibit cultural growth based upon the past.<sup>297</sup> Moreover, as described in Part IIC, the NPOs studied in this Article produce certain public goods that both the government and the market failed to provide in the first place. Society's extensive consumption of these public goods thereafter indicates that an under-provision problem existed prior to the NPOs' efforts, regardless of whether the function of these goods is to cure contract failure or the over-exclusion problem.<sup>298</sup>

Under-provision problems are usually the result of the pursuit of narrow private interests.<sup>299</sup> Regarding intellectual resources, these problems originate when proprietary publishers fail to provide society with content that is not commercially profitable. PLoS's co-founder Patrick O. Brown described in an interview how a for-profit structure would hamper his organization's mission of building a robust commons in scientific research:

[I]f we were a for-profit, that means someone is supporting us in part because they want to make a profit. Sometimes that's going to create a conflict with what we really want to accomplish, where we're going to have to sacrifice: take a smaller profit, or take no profit, or take a higher risk than investors would want us to take, or something like that. Because what matters to us is the goal we're trying to accomplish, which is not to make a profit, but to change the world in a certain way. . . . Because I don't want someone who is investing in us for profit to be able to tell me that I have a responsibility to that person to give them a return, and do that at the expense of the things that matter for us.<sup>300</sup>

Moreover, since most for-profit media companies only focus on selling information for profit, they are not interested in a creative work's *noncommercial life* or *non-exclusive-right* life that persists after a creative work's commercial life ends.<sup>301</sup> As a result, a significant number of creative works are not commercially available to the society.<sup>302</sup> More importantly, access to these

297. See LESSIG, FREE CULTURE, *supra* note 3, at 252.

298. For example, according to the CC website: "We believe there is an unmet demand for an easy yet reliable way to tell the world 'Some rights reserved' or even 'No rights reserved'." Creative Commons, Frequently Asked Questions: What Is Creative Commons?, <http://wiki.creativecommons.org/FAQ> (last visited July 25, 2009). The "unmet demand" perceived by Creative Commons explains the fact that this organization is producing certain public goods, that is, flexible copyright licenses, which the government and the market fail to provide. I thank Professor A. Mitchell Polinsky for bring this point to my attention.

299. WEISBROD, NONPROFIT ECONOMY, *supra* note 36, at 29.

300. Interview with Patrick O. Brown, *supra* note 169.

301. See LESSIG, FREE CULTURE, *supra* note 3, at 112-13; Lessig, *Creative Economies*, *supra* note 214, at 33-34. Nonetheless, it is still possible for for-profits to build sustainable business models based on public domain materials, for example, Google's Google Book project provides full access to public domain books. See Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 68; Peter S. Menell, *Knowledge Accessibility and Preservation Policy for the Digital Age*, 44 Hous. L. Rev. 1013, 1015-16, 1046-47 (2007). Lexis-Nexis and Westlaw provide an electronic version of court decisions to their subscribers. See LESSIG, FREE CULTURE, *supra* note 3, at 280-81.

302. See LESSIG, FREE CULTURE, *supra* note 3, at 228 (describing the results of research, that "94 percent of the films, books, and music produced between 1923 and 1946 is

works is usually restricted by copyright law.<sup>303</sup> Therefore, without a copyright owner's permission, no one can digitalize these materials to share them with the public online. However, as Lessig points out, the non-exclusive-right life of creative work has significant social value in preserving our culture.<sup>304</sup> Brewster Kahle of the Internet Archive elucidates the danger of losing our culture if no one digitally archives the copyrighted but out-of-print books:

Unfortunately, this [type of book represents] most of the books that are in libraries . . . . [I]f we do not bring [these books] to the next generation of people growing up, they will not be able to learn from [these books] and [learn] what a library is. . . . We will end up having abused the next generation for no reason. Because out-of-print means that it's not commercially viable. It's the land of the library. So we need to have libraries [such as the Internet Archive] have these materials.<sup>305</sup>

In summary, if for-profits and other creators cannot preserve the content they produce, an under-provision problem will occur due to lack of content, and some of the shared culture will disappear.<sup>306</sup> In this sense, the market will fail to archive culture for future generations.<sup>307</sup>

Over-exclusion may be a more serious problem for intellectual resources than for other resources due to DRM technologies and expanding copyright legislation.<sup>308</sup> Since free-market ideologists tend to favor the expansion of IP rights,<sup>309</sup> the market failure of over-exclusion may occur as a result of the extreme implication of that ideology. Vera Franz described Open Society Institute's awareness of the over-exclusion problem:

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not commercially available"). See also Frank H. Easterbrook, *Contract and Copyright*, 42 Hous. L. Rev. 953, 956 (2005) (suggesting that less than one percent of copyrighted publications are commercially valuable); Wu, *supra* note 60, at 353-54 ("Only a tiny number of works are still actively marketed thirty-five years after assignment [to commercial distributors]").

303. Boyle, *Mertonianism Unbound*, *supra* note 203, at 126; BOYLE, PUBLIC DOMAIN, *supra* note 2, at 12.

304. LESSIG, FREE CULTURE, *supra* note 3, at 113, 225.

305. Interview with Brewster Kahle, Director & Co-founder, Internet Archive, in S.F., Cal. (May 6, 2008).

306. See Internet Archive, About the Internet Archive, *supra* note 133. See also Pessach, *supra* note 137, at 109-14 (analyzing the importance of social memory and memory institutions).

307. See LESSIG, FREE CULTURE, *supra* note 3, at 227; Internet Archive, About the Internet Archive, *supra* note 133.

308. See, e.g., LESSIG, FREE CULTURE, *supra* note 3, at 133-61; Elkin-Koren, *supra* note 25, at 381; Open Society Institute, Grants, *supra* note 153. See also BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 36 (stating "if these [IP] laws are . . . necessary to create the incentives for publication, the market that develops based on them will, from the technical economic perspective, systematically be inefficient"); BOYLE, PUBLIC DOMAIN, *supra* note 2, at 274 (introducing literature on the danger caused by "legally backed DRM"); Stiglitz, *supra* note 20, at 1700 (describing the inefficiency caused by IP's restriction on the use of knowledge).

309. LANDES & POSNER, *supra* note 173, at 414. See also BOLLIER, SILENT THEFT, *supra* note 6, at 121 (arguing that the IP regime has "morphed into a market protectionist system"); BOYLE, PUBLIC DOMAIN, *supra* note 2, at 198-99 (describing the viewpoint that more IP leads to more innovation).

[I]n the IP area . . . the one biggest problem we currently have is actually a problem of market failure. . . . [S]o our work in the IP field is very specifically trying to address those market failures. And the reason we want to address them is that because we think . . . the marginalized need affordable, knowledge-based goods. With trying to address these market failures, trying to think creatively about what new business models could look like in all areas: music, pharmaceuticals and so on and so forth, we hope eventually, which is [Open Society Institute's] most important goal, that the marginalized will be able to participate, be able to have access to drugs, be able to have the textbooks they need to learn and so on and so forth.<sup>310</sup>

James Love of KEI similarly explains the organization's concentration: "we focus on . . . areas where exclusive rights lead to either excessive prices or restrictions on the freedom of people to innovate."<sup>311</sup> This line of description can be applied to various other NPOs in the commons realm as well.

The over-exclusion problem is closely tied to the for-profit sector which owns abundant intellectual resources.<sup>312</sup> For most proprietary media businesses, exclusion is desirable because it helps extract additional profits from consumers<sup>313</sup> and restrains newcomer competition in the market.<sup>314</sup> As Elspeth A. Revere, Vice President of the John D. and Catherine T. MacArthur Foundation, said, "[t]he content industries are very much trying to protect their old business models and want to see the technology . . . limit access to content."<sup>315</sup> Therefore, for-profit incumbents usually do not have sufficient incentives to open their proprietary information to public creative activities.<sup>316</sup>

Instead, these incumbents tend to criticize the virtue of commons production models<sup>317</sup> and to use exclusion to resist the new ways of commons

310. Telephone Interview with Vera Franz, *supra* note 108.

311. Telephone Interview with Manon Röss & James Love, *supra* note 109. *Cf.* Lemley, *supra* note 45, at 1058-65 (identifying various costs of overbroad IP rights); Lunney, *supra* note 173, at 497-98 (noting that "deadweight loss" happens when consumers are not willing to pay for copyrighted works).

312. *See* HAROLD, *supra* note 29, at 136-37. *See also* BOLLIER, SILENT THEFT, *supra* note 6, at 112-13 (describing how for-profits enclose information and restrict public use of it). *Cf.* John F. Burns, *Tradition in India vs. a Patent in the U.S.*, N.Y. TIMES, Sept. 15, 1995, at D4 (discussing whether genetic resources should be maintained as shared commons or be privatized by a few corporations as their IP).

313. *See* LASICA, *supra* note 14, at 23-29 (describing how the entertainment, software, and hardware industries acted jointly to restrict the public's use of information).

314. *Cf.* BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 2 (stating that the new nonproprietary information production model "threatens the incumbents of the industrial information economy").

315. Telephone Interview with Elspeth A. Revere, Vice President, General Program, John D. & Catherine T. MacArthur Foundation (Oct. 3, 2007).

316. *See* LESSIG, FREE CULTURE, *supra* note 3, at 106-07; *see also* Bollier, *Is the Commons a Movement*, *supra* note 20, at 2, 6 (indicating that corporate control and privatization pose a significant threat to commons resources).

317. *See* TAPSCOTT & WILLIAMS, *supra* note 179, at 16; Yochai Benkler & Helen Nissenbaum, *Commons-Based Peer Production and Virtue*, 14 J. POL. PHIL. 394, 418-19 (2006).

production.<sup>318</sup> As Benkler points out, to maximize profits, for-profit companies have systematically restricted individuals' freedom of producing information.<sup>319</sup> Consequently, market failure occurs in the form of over-exclusion, which only allows a few powerful media companies to create the culture.<sup>320</sup> Furthermore, this failure has an anti-competitive effect due to for-profit incumbents' dictatorship over the possibility of individual creative activities in cyberspace.<sup>321</sup>

#### b. NPOs' Response to Government and Market Failures

Lessig identifies four factors that constrain or enable human behavior: the law, norms, the market, and architecture.<sup>322</sup> Government may use each of these *regulators* to achieve its policy goals.<sup>323</sup> Similarly, NPOs may respond to certain government or market failures via these four types of constraints. Below, this Article will illustrate how NPOs use these tools to correct or mitigate the previously described government and market failures.

##### i. Law

Since copyright law and its captured legislative process are the primary causes for government and market failure in the information society, it is no surprise that some NPOs exist to influence copyright legislation. For example, PK was established as a response to copyright lobbying activities.<sup>324</sup> This organization seeks to preserve intellectual commons and expose related market failures by documenting which segments of the general public are trying to

318. BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 25; Frischmann, *supra* note 5, at 1109-10, 1118, 1120; *see also* BOLLIER, SILENT THEFT, *supra* note 6, at 112 (describing how Microsoft resists F/OSS development); LESSIG, REMIX, *supra* note 14, at 150 (“[T]he content industry . . . wages war against . . . sharing economies. . .”).

319. BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 25.

320. *See* Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 63-64 (stating that although the Internet has the potential to facilitate distributed creativity, current copyright law and DRM techniques are actually restricting widespread creative activities). *Cf.* BOYLE, PUBLIC DOMAIN, *supra* note 2, at 239 (“Markets would *routinely* fail to make activities internalize their own costs . . . This failure would, routinely, disrupt or destroy fragile ecological systems, with unpredictable, ugly, dangerous, and possibly irreparable consequences.”).

321. BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 28 (arguing that “allowing yesterday’s winners to dictate the terms of tomorrow’s economic competition would be disastrous”). *See also* Wu, *supra* note 60, at 353 (noting that occasionally incumbents use copyright to prevent competition and potential market entry).

322. Lawrence Lessig, *The New Chicago School*, 27 J. LEGAL STUD. 661, 662-67 (1998) [hereinafter Lessig, *The New Chicago School*]; LESSIG, FREE CULTURE, *supra* note 3, at 121-22; LESSIG, CODE 2.0, *supra* note 3, at 122-25.

323. LESSIG, CODE 2.0, *supra* note 3, at 125-32.

324. Actually, in the 1980s and the 1990s, there were already consumer groups lobbying to protect the personal use of copyrighted materials. Pamela Samuelson, *Toward a “New Deal” for Copyright in the Information Age*, 100 MICH. L. REV. 1488, 1500 (2002) (reviewing JESSICA LITMAN, *supra* note 283).

influence specific legislation.<sup>325</sup> Since the government is not always perfectly informed regarding its policymaking, it may fail due to the significant information costs in the decision-making process.<sup>326</sup> PK may correct such failure, to some extent, by providing important information to the government regarding certain legislation, which would otherwise be unavailable.<sup>327</sup>

To this end, several NPOs function as common platforms for collaborations between different groups. For instance, PK has invested significant resources in “coalition building” to integrate voices from individuals, business, and other NPOs that share similar ideas of an ideal copyright system.<sup>328</sup> The Open Society Institute has been involved in “strategic organizing,” which is “a mix between convening meetings, bringing players together . . . [to] advance an issue together, [and] build coalition . . . ”<sup>329</sup> On the other hand, KEI has “coordinated the efforts to get a draft as a treaty and manage the process, bringing stakeholders together to bring a consensus on a potential draft”<sup>330</sup> in the WIPO’s treaty-enacting process. As Manon Ress of KEI explained regarding one of the organization’s main tasks:

[W]e create events and we invite people to come and talk and it’s a lot of exchange of information and communication. We prepare, outside of the events, discussion lists and provide more information. And basically there’s a lot of coordination of different interest groups within a campaign. And we do a lot of that. . . . [I]t’s kind of creating a network of people with the same interest on an issue as a team.<sup>331</sup>

Nonetheless, the impact of NPOs’ advocacy efforts is often difficult to evaluate.<sup>332</sup> Organizations such as PK still face difficulties translating public concerns into legislative action. According to Gigi B. Sohn

the toughest challenge is building a grassroots movement in support of copyright reform . . . . [S]ort of subsequent of that is getting affirmative legislation passed. It’s not that difficult to stop legislation from passing, but much more difficult to get something passed. We need to bring balance back to copyright and that’s not going to happen unless there’s some legislation passed at some point. Those are intertwined because unless you have a really strong constituency base for copyright reform, it’s not going to happen. The

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325. See Mohtadi & Roe, *supra* note 113, at 454-55 (explaining that when there is market failure, agents are able to convey their willingness to pay for public goods via lobbying activities).

326. F. Scott Kieff, *Coordination, Property and Intellectual Property: An Unconventional Approach to Anticompetitive Effects and Downstream Access*, 56 EMORY L.J. 327, 365-66 (2006).

327. See FRUMKIN, *supra* note 35, at 30 (explaining NPOs’ role in informing and educating policymakers via lobbying); Mohtadi & Roe, *supra* note 113, at 455 (noting that lobbyists provide the government with information, which is not available in the policymaking process).

328. Telephone Interview with Gigi B. Sohn, *supra* note 104.

329. Telephone Interview with Vera Franz, *supra* note 108.

330. Telephone Interview with Manon Ress & James Love, *supra* note 109.

331. *Id.*

332. FRUMKIN, *supra* note 35, at 53.

opposition is too powerful. That's the problem. You have Hollywood, recording industry, Microsoft, you know the business, they'll all be against just about anything that we do in this area.<sup>333</sup>

Given the obvious difficulty of convincing Congress to pass ideal legislation, litigation has emerged as an alternative to prevent the overexpansion of IP rights.<sup>334</sup> Therefore, NPOs, such as the EFF and the SFLC, have sought remedies for the public in court. As Cohn of the EFF said, "we . . . use the power of our litigation strengths to create space for the intellectual commons so that people can really engage and remix culture without fear of lawsuits and create that space."<sup>335</sup>

Other NPOs, such as the FSF and CC, are involved in enacting *private law*. By providing creators with non-exclusive licenses, these organizations are building a broader scope of commons for creative activities.<sup>336</sup> The FSF-designed GPL has acquired a reputation as a contractual mechanism "cutting back" the scope of background IP rights.<sup>337</sup> Similarly, CC, established in the aftermath of *Eldred v. Ashcroft*,<sup>338</sup> is a more obvious example of a private response to the imperfect copyright system. CC deems current copyright law to be a major obstacle to creative activities and seeks to change the default rule that it created.<sup>339</sup> By providing flexible licenses (private license arrangements) to authors who wish to share their works, CC aims to eliminate the obstacles and create "a layer of reasonable, flexible copyright in the face of increasingly restrictive default rules."<sup>340</sup> The CC licenses provide freedoms beyond those promised by the "fair use" doctrine in current copyright law.<sup>341</sup> All the licensing arrangements are not only tools to fix the tragedy of the anticommons,<sup>342</sup> but are also a species of private ordering that provide some

333. Telephone Interview with Gigi B. Sohn, *supra* note 104. Cohn of the EFF similarly said in an interview that "unfortunately, what we end up doing in Congress is that we don't actually often get to help make good things happen, but we've spent most of our time trying to knock down bad things, stop bad things." Interview with Cindy Cohn, *supra* note 96. See also Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 74 (expressing similar pessimistic viewpoints of copyright reform).

334. Yochai Benkler, *Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain*, LAW & CONTEMP. PROBS., Winter/Spring 2003, at 173, 196-201 [hereinafter Benkler, *Through the Looking Glass*].

335. Interview with Cindy Cohn, *supra* note 96.

336. LESSIG, CODE 2.0, *supra* note 3, at 199.

337. Margaret Jane Radin & R. Polk Wagner, *The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace*, 73 CHI.-KENT L. REV. 1295, 1312-13 (1998).

338. *Eldred v. Ashcroft*, 537 U.S. 186 (2003). In this case, the Supreme Court affirmed the constitutionality of the CTEA, which extends the copyright terms for both existing works and new works by twenty years.

339. Elkin-Koren, *supra* note 25, at 379. See also LESSIG, REMIX, *supra* note 14, at 278-79 (suggesting that CC can function as a private copyright law reform).

340. Creative Commons, History, <http://wiki.creativecommons.org/History> (last visited July 25, 2009).

341. LESSIG, FREE CULTURE, *supra* note 3, at 283.

342. See HELLER, *supra* note 214, at 197 (suggesting that the F/OSS movement and CC help to overcome the gridlock problem, *i.e.*, the tragedy of the anticommons).

social-welfare balance to the expansion of these interests without destroying private property.

For NPOs that provide free licensing arrangements, it is also crucial to continuously improve their licenses so that these legal arrangements can meet the evolutionary demands of the commons communities. As Ostrom and Hess stated, effective institutions for commons production and use depend partly on “the continual design and/or evolution of appropriate rules.”<sup>343</sup> This is why both the FSF and CC have endeavored to release new versions of their licenses. John Sullivan from the FSF explained the importance of the organization’s releasing new versions of the GPL:

The world around us has changed, so the things that we have to deal with change in technology . . . things like releasing the update of the GPL in order to respond to things [such as] patents and DRM, and the international nature of free software . . . . [W]hen [updates] need to be done, I think it is a really important function for us. Having the same organization [perform these functions] means that all of the knowledge and everything that went into drafting these licenses is carried on in the organization. So we’re not going to re-make a mistake that was corrected years ago, because we were around for the drafting of the first version. So I think having the same organization be responsible for it provides an important sense of continuity.<sup>344</sup>

In the United States, foundation funds have been channeled to advance policy analysis in various social science disciplines.<sup>345</sup> Therefore, it is no surprise that several NPOs provide financial grants to other institutions involved in public or private copyright law reform. These grant-making organizations usually have their own conceptions of the ideal copyright system and the ideal public domain. It is on the basis of those organizational ideals that the NPOs make decisions about grants. For example, the John D. and Catherine T. MacArthur Foundation’s Vice President Elspeth A. Revere said:

[W]e were at a moment when content was more locked up. . . . [T]here was a timing concern that if there were no public voices and debates about copyright essentially, in this country especially, there w[ould] be no way to use the opportunities that technology] provide[d]. Another concern was that intellectual property effect[ed] everything we d[id]. So that was why we decided to get involved.<sup>346</sup>

These grant-making foundations attempt to influence the law by sponsoring research on the subject of the public domain.<sup>347</sup> For example, the MacArthur Foundation supports work in IP and the public domain because, as the foundation states, “the amount and quality of information available for free

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343. Ostrom & Hess, *Framework*, *supra* note 44, at 43.

344. Telephone Interview with John Sullivan, Manager of Operations, Free Software Foundation (Apr. 4, 2008).

345. Prewitt, *supra* note 43, at 368-69.

346. Interview with Elspeth A. Revere, *supra* note 315.

347. *See* text accompanying note 151.

and uncontrolled use will actually decrease.”<sup>348</sup> In discussing the role of grant-making foundations, Jack Fascher of the Hewlett Foundation said, “[a NPO] can’t directly affect legislation, but [it] can support research and seek that research to be disseminated to people that do make policy”<sup>349</sup> In general, these NPOs desire to use grants to effectively correct government and market failures resulting from expanding IP laws.

## ii. Other Regulators

Other effective ways to correct government and market failure, in addition to the law, are social norms, the market, and architecture. These four constraint modalities are interdependent.<sup>350</sup> By introducing and encouraging the use of non-exclusive licenses, advocacy groups, such as CC, the FSF, and the OSI, promote a social norm of information-sharing and information-reuse.<sup>351</sup> The OSI has promoted a social norm that bridges the gap between hackers and the commercial world, which is essential to for-profits’ involvement in F/OSS development. According to OSI board member Danese Cooper:

[F]rom an awareness perspective . . . we have explained a lot of stuff to a lot of companies to create those bridges. We’ve explained some stuff to some hackers as well. . . . OSI . . . gave developers a way to feel comfortable about the entrance of corporations into the open source world. By helping to educate corporations about open source licensing and why the choices we made were made, by holding [open source licensing] to standard, we gave the developer the opportunity to feel comfortable and not have to become a lawyer, which is important. . . . [W]hat we did was create an easy way for developers in the community to feel comfortable about at least the licensing terms under which things were coming at them from corporations.<sup>352</sup>

Other NPOs, such as the EFF, Open Society Institute, and PK, shed light on government and business activities by publishing reports and studies that are designed to awaken public opinion. The information produced by these NPOs has also provided an essential foundation for building new norms in the commons movement. Since grant-making foundations have provided central funding for the whole commons movement, their values and commitment play an increasingly important role in shaping these norms. Moreover, the success of the PLoS has influenced scientific funding agencies’ norm of grant-making. The PLoS co-founder and board member, Patrick O. Brown elucidated the shift of such norms:

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348. MacArthur Foundation, Intellectual Property and the Public Domain: Grantmaking Guidelines, *supra* note 152.

349. Interview with Catherine M. Casserly & Jack Fascher, *supra* note 149.

350. LESSIG, CODE 2.0, *supra* note 3, at 124.

351. *See, e.g.*, Elkin-Koren, *supra* note 25, at 394-95; Lee, *supra* note 232, at 1540-41. *See also* Benkler & Nissenbaum, *supra* note 317, at 412 (noting the norm of knowledge sharing in F/OSS projects).

352. Interview with Danese Cooper, *supra* note 68.

Having established that open access publication can be good and also just pressuring the funding agencies and arguing with them all the time about why it's in their interest to support open access . . . has moved the line of statement . . . [A] lot of funding agencies are shifting their polic[ies] steadily more and more [towards] open access and they'll get there.<sup>353</sup>

Therefore, by fostering new culture and norms regarding the control over digital information, NPOs may occasionally constrain government regulation and business practice in social life.<sup>354</sup>

According to Lessig, architecture is the natural or human-built environment that constrains or facilitates human behavior.<sup>355</sup> In cyberspace, software and hardware are both examples of architecture that have regulatory effects.<sup>356</sup> Numerous NPOs have built architecture to preserve the commons environment. For example, the PLoS, MIT, and other academic institutions have provided access to valuable scholarly information. Internet Archive and similar organizations have created digital artifacts that preclude cultural memory from fading.<sup>357</sup> Through the promotion of flexible licenses, CC has transferred a substantial amount of content into a common pool to provide infrastructure resources for widespread creative activities.<sup>358</sup>

Moreover, through the production of licenses and architecture, NPOs have reshaped the market for online information. In the past, the use of information was constrained by considerable legal costs and uncertainties.<sup>359</sup> Now, through non-exclusive licenses and free access to once-costly information, a variety of intellectual resources have become commons that are “free” for use.<sup>360</sup> Businesses are also able to explore new profit opportunities with free licenses, such as CC.<sup>361</sup> As an example, the PLoS reshaped the market of scientific journals with the CC license. According to Patrick O. Brown:

[PLoS] has helped . . . the scientific community . . . that never even thought about the possibility of open access to just be aware of it and appreciate it and start to understand it and that has definitely activated, at least in the biomedical world, a lot of scientific community to come around to realizing that that's

353. Interview with Patrick O. Brown, *supra* note 169.

354. *Cf.* FRUMKIN, *supra* note 35, at 58 (describing how NPOs build international norms to influence the behavior of governments and businesses).

355. Lessig, *The New Chicago School*, *supra* note 322, at 663; LESSIG, CODE 2.0, *supra* note 3, at 121, 123.

356. LESSIG, CODE 2.0, *supra* note 3, at 124-25.

357. *See, e.g.*, Internet Archive, About the Internet Archive, *supra* note 133.

358. *See, e.g.*, BOYLE, PUBLIC DOMAIN, *supra* note 2, at 183, 244; LESSIG, FREE CULTURE, *supra* note 3, at 282; Carroll, *supra* note 127, at 48; Loren, *supra* note 25, at 298. *See also* HAROLD, *supra* note 29, at 149 (noting that CC's strategy is more focused on the amplification than on the scarcity of intellectual resources); ZITTRAIN, *supra* note 51, at 79 (arguing that CC licenses contribute significantly to “content-level generativity”).

359. *See* Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 58.

360. *See* HAROLD, *supra* note 29, at 162-63; *see also* Lawrence Lessig, *The Architecture of Innovation*, 51 *Duke L.J.* 1783, 1788 (2002).

361. *See, e.g.*, Loren, *supra* note 25, at 302.

something that they want. So it's shifted . . . the expectations and the demands of the market for scientific publications. . . . [I]t's . . . shifting the market's expectations more and more toward expecting open access, thinking that that's really what we all want.<sup>362</sup>

In summary, these NPOs help to correct under-provision and over-exclusion failures through “a model of property based more on *amplification* than scarcity.”<sup>363</sup>

### 3. Theoretical Implications

Through the application of contract failure theory and market and government failure theory, the different focuses in explaining the NPO phenomenon are apparent. Contract failure theory highlights NPOs' unique behavior, whereas the focal point of the market and government failure theory is the origin of the various NPOs. Compared to contract failure theory, market and government failure theory can encompass a much broader spectrum of NPOs.

Weisbrod argues that the non-distribution constraint would prevent a NPO from engaging in privately-profitable, but socially-inefficient activities.<sup>364</sup> Therefore, NPOs “tend to engage in more activities that provide more external (uncaptured) social benefits and in fewer activities that impose external costs.”<sup>365</sup> In subsequent sections, this Article provides some implications of Weisbrod's theory and its limitations in the commons context.

#### a. Social Experimentation

Based on NPOs' response to government and market failures, it is apparent that some NPOs provide resources for social experimentation. Since governments are occasionally discouraged from using taxpayer money to make new policies on the basis of trial and error,<sup>366</sup> NPOs can help fill the role of

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362. Interview with Patrick O. Brown, *supra* note 169.

363. HAROLD, *supra* note 29, at 149.

364. Weisbrod, *Institutional Form and Organizational Behavior*, *supra* note 37, at 72.

365. *Id.* at 75. See also Galaskiewicz & Bielefeld, *supra* note 36, at 206 (making similar arguments regarding the additional effects of the non-distribution constraint).

366. Of course, if circumstances permit, the government itself still conducts certain social experiments for future policymakers in arenas such as education. See, e.g., Alexander Morgan Capron, *Social Experimentation and the Law*, in ETHICAL AND LEGAL ISSUES OF SOCIAL EXPERIMENTATION, *supra*, at 127, 143-46; Edward M. Gramlich & Larry L. Orr, *The Ethics of Social Experimentation*, in ETHICAL AND LEGAL ISSUES OF SOCIAL EXPERIMENTATION 105, 105-08 (Alice M. Rivlin & P. Michael Timpane eds., 1975); Alice M. Rivlin & P. Michael Timpane, *Introduction and Summary*, in ETHICAL AND LEGAL ISSUES OF SOCIAL EXPERIMENTATION, *supra*, at 1, 1. I thank Professor Deborah Hensler for making this point and directing relevant literature to me.

experimenters for future policymaking.<sup>367</sup> More often than not, governments then implement new policies that imitate successful NPO programs.<sup>368</sup>

Historically, it is not uncommon for NPOs to financially support such social experimentation. For example, the Rockefeller Foundation sponsored remedial social and economic sciences in England during the interwar years, because it believed that the levels of poverty and unemployment were misinterpreted.<sup>369</sup> Likewise, the NPOs that use their funds to stimulate commons development recognize that there is something fundamentally wrong or insufficient with government policy concerning creative activities.<sup>370</sup> For example, the Open Society Institute has aimed to influence policy by funding of a series of experiments. According to the Open Society Institute's explanation of grant-making:

[It] provide[s] direct support for experimentation with new models, when individual experiments break new ground or could demonstrate the viability of an untested model. Such demonstrations are valuable on their own terms, but are further essential to policy interventions as they will, in the form of "proof of concept," contribute to governments more openly embracing new models as an integral part of their knowledge governance policies.<sup>371</sup>

The PLoS has successfully influenced the funding policy of National Institutes of Health (NIH) through its experiment on open access publishing. Starting in 2005, NIH, the largest funder of science research in the U.S. federal government, began requiring every scientist who receives an NIH research grant, and who publishes the result in a peer-review journal, to deposit a digital copy of the article in PubMed Central<sup>372</sup> (PMC). PMC then provides free online access to its copy some time after the article is published in a journal.<sup>373</sup> Patrick O. Brown of the PLoS has described how their organization influenced NIH's policy regarding public access to NIH-funded research:

[W]e've shown that we can survive using the open access business model . . . . So that takes away another argument against open access, [that] people say there's no sustainable financial model for open access. . . . We definitely influence the NIH policy both directly and indirectly. . . . we've talked to people at the NIH a lot. We've talked to people in Congress or the ones that set the policy. . .

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367. See FRUMKIN, *supra* note 35, at 26, 32. See also DiMaggio & Anheier, *supra* note 34, at 151 (noting that NPOs "enlarge the menu of models among which policy makers may choose when experimenting locally with solutions to social ills"); Douglas, *supra* note 112, at 48-49 (using the example of governments' follow-up support for the "green revolution" initiated by the Rockefeller Foundation).

368. FRUMKIN, *supra* note 35, at 32.

369. Douglas, *supra* note 112, at 49.

370. See *supra* text accompanying notes 346-48; *infra* text accompanying notes 389-91.

371. Open Society Institute, Grants, *supra* note 153.

372. Policy on Enhancing Public Access to Archived Publications Resulting From NIH-Funded Research, 70 Fed. Reg. 6891, 6891-92 (Feb. 9, 2005), available at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html>.

373. *Id.*

. So we have directly influenced the policy change . . . the people behind PLoS have been involved in doing this.<sup>374</sup>

Many other NPOs also aim to influence government policy through their social experimentation. For example, after their own experience with a digital archive, the Internet Archive began assisting governments in preserving the digital culture. According to Brewster Kahle of the Internet Archive:

[G]overnment support is going to be critical. . . . We seem to have had a lot of impact [on government actions of preserving digital culture]. We work not only with the U.S. government, but governments from around the world. . . . We work with first twelve national libraries, and now I believe it is up to forty national libraries. We supply tools and technique. If they want services, they can pay us to do the calling on their behalf. This has helped move many national libraries forward. . . . In our case and experience, the Internet Archive plays a role and allows the government officials to get involved without taking too much responsibility. And sometimes they will want to take it on themselves, but we find sometimes they just want to keep it going.<sup>375</sup>

In order to avoid the threat to the collaborative process that produces the F/OSS, the FSF has advocated a top-down legal change regarding software patents. Through the anti-software-patent campaign, the FSF aims to demonstrate to policymakers the potential innovation opportunities arising in the absence of software patents via its free software experiment. As John Sullivan of the FSF states in an interview:

Some of the things that we try to demonstrate [to policymakers] are the way[s] that free software promotes innovation, because the main argument that people make in favor of software patents is that if we don't have them, then we won't have an incentive for people to invent things. So I think just pointing to the whole world of free software and [making] efforts . . . to organize a list of those innovations [helps educate the policymaker]. . . . [O]ne other thing that we work to demonstrate to lawmakers is that this isn't a problem of companies' getting awarded patents that they shouldn't have because the inventions are obvious or something like that. It's just actually a problem with the whole idea of having patents on software.<sup>376</sup>

The Hewlett Foundation has invested substantially in open textbooks for K-12 students and other OER projects.<sup>377</sup> By making OER grants, the Foundation is attempting to force the government to recognize OER's value from a policy perspective. According to Catherine M. Casserly, Program Officer of the Foundation's Education Program:

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374. Interview with Patrick O. Brown, *supra* note 169.

375. Interview with Brewster Kahle, *supra* note 305.

376. Telephone Interview with John Sullivan, *supra* note 344.

377. Interview with Catherine M. Casserly & Jack Fascher, *supra* note 149.

The Foundation will invest [in] it for a while . . . [b]ut ultimately [for] it [to] really be successful, government needs to see the values of OER. . . . I think it would . . . [be useful to have] examples and demos, and then the government will pick [it] up . . . We have to . . . prove the efficiency of the economy first before government picks it up. . . . I think that's true that nonprofits [are] being more flexible and creative than governments and bureaucracies. . . . [Governments] aren't innovative or testing out or experimenting. They can't do that risk-taking sometimes with public money. They don't have that flexibility because they are more bureaucratic.<sup>378</sup>

The ccLearn Project under CC utilizes a similar strategy to influence government policy through grassroots OER actions. As Bissell stated,

[ccLearn's] burden now is to bring the project up to scale, get it to go to all different types of disciplines, across all grade-levels and get it incorporated in the educational system. . . . I think that's kind of the model that we are depending on. We are assuming that in all parts of the world, there will be enough grassroots actions based on creative kernels of content in the education system, and [that] at some point, the government starts to notice.<sup>379</sup>

Therefore, the way that Hewlett Foundation and ccLearn respond to government failure is to prove OER's value through a set of social experiments. These two organizations believe that the result of these experiments will provide policymakers with essential information that is unavailable through the traditional and formal policymaking process.

The most ambitious NPO project in the commons environment with the goal of changing the law through social experimentation is probably CC,<sup>380</sup> which aims to help IP policymakers understand authors' desire to control their creative works as well as the importance of the public domain to various creativities.<sup>381</sup> As CC's founder Lessig states: "[the] lesson [from CC] may help policy makers recraft copyright law in the future."<sup>382</sup> Through the private reform initiated by CC, Lessig desires to "awake recognition of the need for [public] reform."<sup>383</sup> He envisioned that, only when the free culture movement promoted by CC has gained significant public support, will Congress be more likely to engage in copyright legislative reform to protect the freedom of the general public.<sup>384</sup>

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378. *Id.*

379. Interview with Ahrash Bissell, *supra* note 177.

380. Telephone Interview with Vera Franz, *supra* note 108 ("Creative Commons is a brilliant example for an experiment. . . .").

381. LESSIG, FREE CULTURE, *supra* note 3, at 283-86.

382. LESSIG, CODE 2.0, *supra* note 3, at 199. *See also* LESSIG, REMIX, *supra* note 14, at 279 ("CC is just a step to rational copyright reform, not itself an ultimate solution.").

383. Lessig, *Re-crafting a Public Domain*, *supra* note 6, at 74.

384. LESSIG, FREE CULTURE, *supra* note 3, at 275, 286.

### b. Balanced IP Policymaking Process

IP laws concern interests far beyond those of the copyright industries, and IP policies are more about “a matter of balance” than about the “maximization of rights.”<sup>385</sup> Given the captured legislative process and the increasing IP protection for copyright-holders, some researchers assert that the current IP lawmaking process has been systematically unbalanced.<sup>386</sup>

Because of the imbalance in favor of copyright industries, political advocacy NPOs, such as PK and the EFF, have emerged to ensure that a broader set of interests is represented in the IP policymaking process. Officers from these NPOs similarly expressed their organizations’ mission with respect to the preceding imbalance. For example, PK’s co-founder and President Gigi B. Sohn emphasized that PK aims to ensure “an open and balanced Internet and balanced copyright laws.”<sup>387</sup> Cindy Cohn of the EFF stated the organization’s viewpoint regarding copyright policy is that “copyright . . . [has] really gotten far out of balance” because “the content industries have a very loud voice against the government. . . . [B]ut there’s nobody there talking for ordinary people . . . .”<sup>388</sup> Therefore, EFF’s role is “looking more for balance with policymaking and the law, the application law, the courts.”<sup>389</sup>

In addition to political advocacy NPOs, some grant-making foundations are concerned about the unbalanced conversation in the copyright policymaking process as well. For example, the Open Society Institute aims to foster a “healthy knowledge ecology—one based on a balance between private property rights and the commons” because the institute is aware that there is “a global expansion of the rights of intellectual property owners without comparable implementation of the rights of the users.”<sup>390</sup> Its Manager of the Information Program Vera Franz said:

[W]e’re trying to sort of tell the government to do things better, to create policies that better reflect the interests of larger populations and, in particular, marginalized populations. . . . [W]e think in the IP field, the government has been listening more to IP-based industries, pharmaceutical industry, music industry and probably publishing. . . . So we’re saying again this is not how things should be and we try to rebalance the government actions through influencing them.<sup>391</sup>

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385. Boyle, *Cultural Environmentalism*, *supra* note 8, at 14-15. *See also* Open Society Institute, Grants, *supra* note 153 (“A healthy knowledge ecology . . . based on a balance between private property rights and the commons . . .”).

386. *See, e.g.*, Benkler, *Through the Looking Glass*, *supra* note 334, at 196; Kapczynski, *supra* note 13, at 839-40. *See also* BOYLE, PUBLIC DOMAIN, *supra* note 2, at 238-39 (stating that one of the primary goals of the commons movement is to make careful, balanced suggestions); Quiggin & Hunter, *supra* note 196, at 209 (“[V]arious industries . . . came to lobby governments and have a disproportionate influence over the development of intellectual property policy.”).

387. Telephone Interview with Gigi B. Sohn, *supra* note 104.

388. Interview with Cindy Cohn, *supra* note 96.

389. *Id.*

390. Open Society Institute, Grants, *supra* note 153.

391. Telephone Interview with Vera Franz, *supra* note 108.

Similarly, Elspeth A. Revere of the MacArthur Foundation expresses the Foundation's concern regarding the imbalanced IP policymaking:

On the government side, at least in this country . . . the content industry has been a very vocal constituent. . . . [We] thought there were other voices that government [should] listen to beside[s] just [the] content industry. . . . We are looking for a policy process that has more voices in it. We are looking for policy outcomes that do not overly favor one side or the other. . . . What we would say toward ourselves is that in order for there to be robust, better, or balanced public debate about these issues, we need to have institutions or resources [looking toward] the public-interest side of the questions, because the corporations resources were already used to looking into the other side of these questions.<sup>392</sup>

In 2003, James Boyle suggested that “[w]e need a change in the way that these [IP] issues are understood, a change that transforms even our perceptions of self-interest, making possible a coalition where none existed before.”<sup>393</sup> Boyle's expected change has taken place through NPOs' efforts to voice interests other than the copyright industries, which suggests that both government failure and market failure existed in the past IP policymaking process.<sup>394</sup> These NPOs have not only changed the nature of the IP policy debate,<sup>395</sup> but also proved Frumkin's argument that their rise contributes to “opening up societies and giving people a voice and a mode of collective expression that has . . . been suppressed.”<sup>396</sup> Moreover, by expressing the needs of their members, constituents, and the broad public, various NPOs associated with the commons movement echo J. Craig Jenkins's argument that NPOs can promote public interests by “ensuring greater pluralism in terms of political and social representation.”<sup>397</sup>

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392. Telephone Interview with Elspeth A. Revere, *supra* note 315.

393. Boyle, *Second Enclosure Movement*, *supra* note 1, at 52.

394. See Boyle, *Cultural Environmentalism*, *supra* note 8, at 14 (noting that “[t]en years ago, civil society had little to offer in terms of groups that represented anything other than an industry position on intellectual property. . . .”).

395. See, e.g., Telephone Interview with David Bollier, *supra* note 250. Cf. FRUMKIN, *supra* note 35, at 166 (“By opening the public sphere to people whose interests have been underrepresented or ignored, nonprofit and voluntary civic and political action aims at generating change.”).

396. FRUMKIN, *supra* note 35, at 1-2. See also Enjolras, *supra* note 240, at 362 (stating that NPOs provide platforms “where ‘voice’ is possible”).

397. J. Craig Jenkins, *Nonprofit Organizations and Political Advocacy*, in *THE NONPROFIT SECTOR: A RESEARCH HANDBOOK*, *supra* note 36, at 307, 308. See also DiMaggio & Anheier, *supra* note 34, at 151 (arguing that the nonprofit sector “contribute[s] to pluralism by creating centers of influence outside the state and provide vehicles through which disenfranchised groups may [be] organize[d]”); Mary Tschirhart, *Nonprofit Membership Associations*, in *THE NONPROFIT SECTOR: A RESEARCH HANDBOOK*, *supra* note 36, at 523, 526 (stating NPOs' pluralistic function in the policymaking process).

#### 4. The Limitations of Government and Market Failure Theory

Weisbrod's theory embraces the subtle assumption that because government must satisfy the majority's needs with limited resources, it may fail to respond to diverse demands from other parts of society. As a result, NPOs emerge to correct such government failures for a minority of society. This hypothesis certainly explains the existence of the SFLC, the OSI, the FSF,<sup>398</sup> and the other NPOs that aim to satisfy a small segment of society.

But with respect to the captured copyright legislation, the government failure is quite different from that portrayed in the market and government failure theory. As Professor Boyle argues, the very structure of the decision-making process in government agencies tends to produce socially undesirable outcomes for the benefit of a select few content providers.<sup>399</sup> Boyle notes that the government's copyright policymaking process fails when well-organized, politically powerful groups capture the process and trump individual interests.<sup>400</sup> He implies that by ignoring individual demand and public interests, the government, in fact, fails to maximize the utility of society.<sup>401</sup>

Other IP scholars argue similarly that within the policymaking process, there is a general predominance of narrow copyright industries compared with the influence of the general public.<sup>402</sup> According to Litman, copyright legislation evolved in an industry-friendly manner because the costs from the collective action of copyright owners were lower than the costs stemming from collective action by widespread copyright users.<sup>403</sup> Therefore, the existence of the industry-oriented copyright legislation dramatically highlights

398. However, the FSF has shifted its focus in programmers to the general public in recent years. The organization's Operations Manager, John Sullivan, described this shift in an interview: "[I]t was more for programmers. But now with so many people using so many different computers and electronic devices, it really is something that has grown to be important for a much bigger section of the public." Telephone Interview with John Sullivan, *supra* note 344. "I think in the end that we work for everybody's interests . . . because the freedoms involved with free software are relevant in all those contexts." *Id.*

399. BOYLE, PUBLIC DOMAIN, *supra* note 2, at 56-57, 240-41; Boyle, *Politics of Intellectual Property*, *supra* note 5, at 110-12.

400. Boyle, *Politics of Intellectual Property*, *supra* note 5, at 110-12. *See also* Dennis S. Karjala, *Judicial Review of Copyright Term Extension Legislation*, 36 LOY. L.A. L. REV. 199, 232-33 (2002) (using CTEA as an example to illustrate how individual members of the public are ignored in the legislative process).

401. *See supra* text accompanying note 399.

402. *See supra* text accompanying notes 283-406. *See also* BENKLER, WEALTH OF NETWORKS, *supra* note 2, at 41 (noting that industries occupying the IP policymaking stage are actually a very small part of the universe of the information production system); LASICA, *supra* note 14, at 77 (quoting Professor Siva Vaidyanathan regarding copyright legislation, stating that Congress listened to industry lobbyist Jack Valenti rather than the general American people); LESSIG, FREE CULTURE, *supra* note 3, at 234 (stating that by passing the CTEA, Congress was supporting a small number of "[f]amous and beloved copyright owners," rather than the general public); Bohannon, *supra* note 282, at 568 (stating that the public interest in access to information is sacrificed in copyright legislation).

403. LANDES & POSNER, *supra* note 173, at 407; *see also* Karjala, *supra* note 400, at 232-33 (using CTEA as an example to illustrate collective action and benefits from lobbying activities).

the societal exclusion of the general public from the legislative process.<sup>404</sup> These scholarly arguments regarding the government failure to satisfy majority needs are echoed by the current literature concerning interest group politics. This literature suggests that a small minority can effectively capture the government policymaking process because it is uneconomical for the majority to collectively oppose them.<sup>405</sup>

Indeed, the government failure sensed by IP scholars has provided the essential motives for several NPOs' incorporation and operation.<sup>406</sup> Some of these organizations perceive themselves as representatives of the general public. For example, Gigi B. Sohn of PK stated that "[the] general public has almost no representation [in the copyright lawmaking process], and that's why [PK] exist[s]."<sup>407</sup> Manon Ress of KEI expressed a similar viewpoint regarding the organization's role: "[W]e . . . consider ourselves [as] a public-interest organization with a focus on the public that has very low leverage of power usually."<sup>408</sup> Lessig, the founder of CC, on the other hand, believes that current copyright law is supporting the extreme of *All Rights Reserved*, rather than the reasonable middle.<sup>409</sup> He indicates that the demand of *Some Rights Reserved* by approximately 85% of the citizens is inappropriately ignored in the copyright legislation,<sup>410</sup> which is why CC emerged to provide flexible licenses for the public.

In summary, the fact that several NPOs exist to represent the majority interests indicates one limitation of the market and government theory. If the government fails, not due to addressing majority interests but rather as a result of the influential lobbying activities of industry, Weisbrod's hypothesis regarding government failure will need to be adjusted.

## CONCLUSION

NPOs have formed an unprecedented ecosystem that makes various commons-related activities possible. Without NPOs, the commons environment might be much less vigorous than it now is. Currently-prevailing NPO theories aid in explaining the NPOs' role and behavior in cultural environmentalism and the current IP system. These theories may be regarded,

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404. See LITMAN, DIGITAL COPYRIGHT, *supra* note 283, at 116-17.

405. See, e.g., MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS (1965); George J. Stigler, *Economic Competition and Political Competition*, in THE ESSENCE OF STIGLER 117, 125 (Kurt R. Leube & Thomas Gale Moore eds., 1986).

406. Boyle, *Second Enclosure Movement*, *supra* note 1, at 72-73. Boyle cited PK, EFF, CC, and Duke Law School's Center for the Study of the Public Domain as examples. *Id.* at 73, n.157.

407. Telephone Interview with Gigi B. Sohn, *supra* note 104.

408. Telephone Interview with Manon Ress & James Love, *supra* note 109.

409. LASICA, *supra* note 14, at 35-36, 38.

410. *Id.* at 38. See also LESSIG, FREE CULTURE, *supra* note 3, at 285, 305 (stating that the current "All Rights Reserved" copyright regime "works well only for the top 1 percent of the clients," and is inconsistent with most creators' view regarding the ideal control over their works).

to a large extent, as complementary rather than mutually exclusive efforts to understand a heterogeneous sector operating in diverse economies.

In this Article, I have identified access failure and licensing failure as the two major types of contract failure in the cultural commons discourse. By clarifying the role of NPOs in correcting contract failures in our intellectual environment, I argue that the trust provided by NPOs is indispensable for cultural environmentalism. Moreover, NPOs are a private response to various government and market failures. These failures include the captured copyright legislation, the copyright law itself, contract failure, and under-provision and over-exclusion of intellectual resources. The role of NPOs in conducting social experimentation and empowering individuals in our intellectual ecology can be more clearly understood through the lens of government and market failure theory. Moreover, NPOs occasionally act as independent innovators that harness individual values and direct them toward significant collective ends.

Still, these traditional theories only offer a partial explanation of the NPO phenomenon that I have analyzed in this Article. Contract failure theory can neither fully illuminate the missions and effects of NPOs, nor illustrate the observed government and market failures. The contract failure theory assumes that consumers distrust for-profits, but this may be exaggerated in some NPO scenarios. Consumers may simply choose NPOs because for-profit firms lack the incentive needed for the production of desired goods or services. Alternately, government and market failure theory interprets “government failure” too narrowly. Its hypothesis that NPOs respond only to the demands of minorities must be fine-tuned in the commons arena.

## APPENDIX: INTERVIEWEES

Date	Name	Organization	Title	Venue
Oct. 3, 2007	Elspeth A. Revere	John D. and Catherine T. MacArthur Foundation	Vice President, General Program	Telephone
Oct. 5, 2007	Catherine M. Casserly and Jack Fascher	William and Flora Hewlett Foundation	Program Officer of Education program Communications Officer	Menlo Park
Oct. 11, 2007	David Bollier	Public Knowledge	Co-founder and Board Member	Telephone
Oct. 22, 2007	Ahrash Bissell	Creative Commons	Executive Director of ccLearn Project	San Francisco
Mar. 4, 2008	Gigi B. Sohn	Public Knowledge	Co-founder and President	Telephone
Mar. 6, 2008	James Love and Manon Ress	Knowledge Ecology International	Founder and Director Director, Information Society Projects	Telephone
Mar. 11, 2008	Cindy Cohn	Electronic Frontier Foundation	Legal Director	San Francisco
Apr. 4, 2008	John Sullivan	Free Software Foundation	Manager of Operations	Telephone
Apr. 29, 2008	Patrick O. Brown	Public Library of Science	Co-founder and Board Member	Stanford
May 6, 2008	Brewster Kahle	Internet Archive	Director and Co-Founder	San Francisco
June 12, 2008	Danese Cooper	Open Source Initiative	Board Member	Palo Alto
July 29, 2008	Vera Franz	Open Society Institute	Program Manager of Information Society Program	Telephone

