

RESISTING THE RESISTANCE: RESISTING COPYRIGHT AND PROMOTING ALTERNATIVES

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ABSTRACT

This article discusses the resistance to the Digital Revolution and the emergence of a social movement “resisting the resistance.” Mass empowerment has political implications that may provoke reactionary counteractions. Ultimately—as I have discussed elsewhere—resistance to the Digital Revolution can be seen as a response to Baudrillard’s call to a return to prodigality beyond the structural scarcity of the capitalistic market economy. In Baudrillard’s terms, by increasingly commodifying knowledge and expanding copyright protection, we are taming limitless power with artificial scarcity to keep in place a dialectic of penury and unlimited need. In this paper, I will focus on certain global movements that do resist copyright expansion, such as creative commons, the open access movement, the Pirate Party, the A2K movement and cultural environmentalism. A nuanced discussion of these campaigns must account for the irrelevance of copyright in the public mind, the emergence of new economics of digital content distribution in the Internet, the idea of the death of copyright, and the demise of traditional gatekeepers. Scholarly and market alternatives to traditional copyright merit consideration here, as well. I will conclude my review of this movement “resisting the resistance” to the Digital Revolution by sketching out a roadmap for copyright reform that builds upon its vision.

I. INTRODUCTION

In *The Creative Destruction of Copyrights*, Raymond Ku applied for the first time the metaphor of the “wind of creative destruction”—made famous by Joseph Schumpeter—to the Digital Revolution.¹ According to Schumpeter, the “fundamental impulse that sets and keeps the capitalist engine in motion” is the process of creative destruction which “incessantly revolutionises the economic structure by incessantly destroying the old one, incessantly creating a new one.”² Traditional business models’ resistance to technological innovation unleashed the wind of creative destruction. Today, we are in the midst of a war over the future of our cultural and information policies. The preamble of the Washington Declaration on Intellectual Property and the Public Interest explains the terms of this struggle:

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¹ See Raymond S. R. Ku, *The Creative Destruction of Copyrights: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263 (2002).

² JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM, AND DEMOCRACY* 83 (Harper and Row 1975) (1942).

[t]he last 25 years have seen an unprecedented expansion of the concentrated legal authority exercised by intellectual property rights holders. This expansion has been driven by governments in the developed world and by international organizations that have adopted the maximization of intellectual property control as a fundamental policy tenet. Increasingly, this vision has been exported to the rest of the world. Over the same period, broad coalitions of civil society groups and developing country governments have emerged to promote more balanced approaches to intellectual property protection. These coalitions have supported new initiatives to promote innovation and creativity, taking advantage of the opportunities offered by new technologies. So far, however, neither the substantial risks of intellectual property maximalism, nor the benefits of more open approaches, are adequately understood by most policy makers or citizens. This must change if the notion of a public interest distinct from the dominant private interest is to be maintained.³

The underpinnings of this confrontation extend to a broader discussion over the cultural and economic tenets of our capitalistic society, freedom of expression and democratization.

II. RESISTANCE AND RESISTING THE RESISTANCE

Since the origins of the open source movement, mass collaboration has been envisioned as an instrument to create a networked democracy.⁴ The political implications of mass collaboration in terms of mass empowerment are extremely relevant with consequences touching upon freedom and equality. User-generated mass collaboration has promoted decentralization and autonomy in our system of creative production. Internet mass empowerment might spur enhanced content production's democratization from which political democratization might follow.⁵ As Clay Shirky described, open networks reverse the usual sequence of "filter, then publish," by making it easy to "publish, then filter."⁶ Minimizing cultural filtering empowers sub-cultural creativity and thus cultural distinctiveness and identity politics.⁷

Mass empowerment, however, triggers reactionary effects. Change has always unleashed a fierce resistance from the established power, both public and private. It did so with the Printing Revolution. It does now with the Internet Revolution. For public power, the emergence of limitless access, knowledge, and therefore freedom, is a

³ The Washington Declaration on Intellectual Property and the Public Interest (August 25, 2011), Preamble, <http://infojustice.org/washington-declaration-html>. See also Sebastian Haunss, *The Politicisation of Intellectual Property: IP Conflicts and Social Change*, 3 WIPO J. 129 (2011).

⁴ See DOUGLAS RUSHKOFF, *OPEN SOURCE DEMOCRACY* 46-62 (Demos 2003); see also Yochai Benkler, *Coase's Penguin, or, Linux and The Nature of the Firm*, 112 YALE L. J. 369, 371-372 (2002).

⁵ See Yochai Benkler, *A Free Irresponsible Press: Wikileaks and the Battle over the Soul of the Networked Fourth Estate*, 46 HARVARD CIVIL RIGHTS-CIVIL LIBERTIES L. REV. 311 (2011) (mentioning the democratic function of Wikileaks).

⁶ See CLAY SHIRKY, *COGNITIVE SURPLUS: CREATIVITY AND GENEROSITY IN A CONNECTED AGE* 81-109 (The Penguin Press 2010).

⁷ See Rebecca Tushnet, *Payment in Credit: Copyright Law and Subcultural Creativity*, 70 LAW & CONTEMP. PROBS. 135 (2007); THEORIZING FANDOM: FANS, SUBCULTURE AND IDENTITY (Alexander Alison & Harris Cheryl eds., Hampton Press 1997); see also, ANDREW L. SHAPIRO, *THE CONTROL REVOLUTION: HOW THE INTERNET IS PUTTING INDIVIDUALS IN CHARGE AND CHANGING THE WORLD WE KNOW* (Public Affairs 1999).

destabilizing force that causes governments to face increasing accountability and therefore relinquish a share of their power. Private power sees in mass empowerment, Internet and global access to knowledge the dreadful prospective of having to switch from a top-down to a bottom-up paradigm of consumer consumption. Much to the dismay of the corporate sector, the Internet presents serious obstacles for the management of consumer behavior. As Patry noted, “copyright owners’ extreme reaction to the Internet is based on the role of the Internet in breaking the vertical monopolization business model long favored by the copyright industries [. . .] [t]he Copyright Wars are an effort to accomplish the impossible, to change the Internet into a vehicle for the greatest form of vertical monopolization ever seen”⁸ In particular, the steady enlargement of copyright becomes a tool used by reactionary forces willing to counter the Digital Revolution. From a market standpoint, stronger rights allow the private sector to enforce a top-down consumer system. The emphasis of copyright protection on a permission culture favours a unidirectional market, where the public is only a consumer, passively engaged to pay-per use or stop using copyrighted works.⁹ From a political standpoint, a tight control on reuse of information will prevent mainstream culture to be challenged by alternative culture. Copyright law would serve to empower mainstream culture and marginalize minority alternative counter-culture, therefore relenting any process leading to a paradigm shift.¹⁰

From a broader socio-economic perspective, there is also a more systemic explanation to the reaction facing the emergence of the networked information society. Baudrillard’s arguments might be useful to explain the reaction to the Digital Revolution driving cultural goods’ marginal cost of distribution and reproduction close to zero.¹¹ Copyright law might become an instrument to protect the capitalistic notion of consumption and perpetuate a system of artificial scarcity. Inasmuch the Digital Revolution turns consumers into users and then creators, it defies the very notion of consumer society. It turns the capitalistic consumer economy into a networked information economy, which is characterized by sharing and gift economy. So, for the socio-economic consumerist paradigm not to succumb, the limitless power of peer and mass collaboration must be tamed by the artificial scarcity created by copyright law. Ultimately, resistance to the Digital Revolution can be seen as a response to Baudrillard’s call to a return to prodigality beyond the structural scarcity of the capitalistic market economy.¹² The Internet and networked peer collaboration may represent a return to “collective

⁸ See WILLIAM PATRY, *MORAL PANICS AND THE COPYRIGHT WARS* 31-34 (Oxford U. Press 2009) (eBook Adobe Digital Editions).

⁹ Cf. *id.*, at 35.

¹⁰ I have discussed the effects of copyright expansion on semiotic democracy—with a comprehensive review of literature on point—in a previous piece of mine to which I remand. See Giancarlo F. Frosio, *Rediscovering Cumulative Creativity from the Oral Formulaic Tradition to Digital Remix: Can I Get a Witness?* 13(2) *J. MARSHALL REV. INTELL. PROP. L.* 341, 376-390 (2014), available at <http://ssrn.com/abstract=2199210>.

¹¹ For a more detailed discussion of Baudrillard’s categories as applied to cyberspace and the Digital Revolution, see Giancarlo F. Frosio, *User Patronage: the Return of the Gift in the “Crowd Society”*, 2015(5) *MICH. ST. L. REV.* 1983, 2036-2039 (2015), available at <http://ssrn.com/abstract=2659659>.

¹² See JEAN BAUDRILLARD, *THE CONSUMER SOCIETY: MYTHS AND STRUCTURES* 66-68 (SAGE Publ. 2007) (1970)

improvidence or prodigality” and its related “real affluence.”¹³ New Internet dynamics of exchange and creativity might answer in the positive Baudrillard’s question whether we will “return, one day, beyond the market economy, to prodigality.”¹⁴ In Baudrillard’s terms, by increasingly commodifying knowledge and expanding copyright protection, we are taming limitless power with artificial scarcity to keep in place a “dialectic of penury” and unlimited need.¹⁵ Therefore, the reaction to the Internet revolution may be construed as a gatekeepers’ attempt to keep in place their privileges as they thrive within a paradigm that builds the need of production—and overproduction—over an obsession with scarcity through the creation of artificial scarcity.

In the past few years, a global movement grew under the understanding that the digital networked environment must be protected from external manipulations intended to stop exchange and re-instate scarcity. In this sense, resistance to copyright over-expansion can be understood as a cultural movement “resisting the resistance” to the Digital Revolution.¹⁶ Francis Gurry, Director General of the World Intellectual Property Organization, gives a good explanation of these mechanics of resistance to change. Gurry noted that the central question of copyright policy

implies a series of balances: between availability, on the one hand, and control of the distribution of works as a means of extracting value, on the other hand; between consumers and producers; between the interests of society and those of the individual creator; and between the short-term gratification of immediate consumption and the long-term process of providing economic incentives that reward creativity and foster a dynamic culture. Digital technology and the Internet have had, and will continue to have, a radical impact on those balances. They have given a technological advantage to one side of the balance, the side of free availability, the consumer, social enjoyment and short-term gratification. History shows that it is an impossible task to reverse technological advantage and the change that it produces. *Rather than resist it, we need to accept the inevitability of technological change and to seek an intelligent engagement with it.* There is, in any case, no other choice—either the copyright system adapts to the natural advantage that has evolved or it will perish.¹⁷

In the dedication to the *Expositiones in Summulas Petri Hispani*—printed around 1490 in Lyons—the editor, Johann Trechsel, announced: “[i]n contrast to xylography, the new art of impression I am practicing ends the career of all the scribes. They have to do the binding of the books now.”¹⁸ Similarly, in the digital era, the role of distributors might

¹³ *Id.*, at 67.

¹⁴ *Id.*, at 68.

¹⁵ *Id.*, at 67.

¹⁶ I first heard this idea from Eben Moglen lecturing at the Columbia-Leyden University Summer Program in Leyden, The Netherlands, July 2004; *see also* Eben Moglen, Professor, Free and Open Software: Paradigm for a New Intellectual Commons, speech given at the Law of the Commons Conference at Seattle University (March 13, 2009), transcript *available at* http://en.wikisource.org/wiki/Free_and_Open_Software:_Paradigm_for_a_New_Intellectual_Commons.

¹⁷ Francis Gurry, The Future of Copyright, speech delivered at the Blue Sky Conference: Future Directions in Copyright Law, Queensland University of Technology, Brisbane, Australia (February 25, 2011), *available at* http://www.wipo.int/about-wipo/en/dgo/speeches/dg_blueskyconf_11.html.

¹⁸ Uwe Neddermeyer, *Why Were There No Riots of the Scribes? First Result of a Quantitative Analysis of the Book-production in the Century of Gutenberg*, 31 GAZETTE DU LIVRE MÉDIÉVAL 1, 7 (1997). Surprisingly, at the time of the printing revolution, the resistance to the new technology was little. Only few

change and they might be forced to redefine their function. One of the key lessons in the gradual shift in market power in the entertainment industry these days is that the power of the old gatekeepers is declining, even as the overall industry grows. The power, instead, has definitely moved directly to the content creators themselves. Creators no longer need to go through a very limited number of gatekeepers, who often provide deal terms that significantly limit the creator's ability to make a living. Instead, a major new opportunity has opened up, not for gatekeepers, but for organizations that enable artists to do the different things that the former gatekeeper used to do—but while retaining much more control, as well as a more direct connection with fans. As discuss at length in another piece of mine,¹⁹ there have been emerging multiple organizations enabling a direct discourse between artists and users, such as Kickstarter, TopSpin or Bandcamp.²⁰ As a consequence, traditional cultural intermediaries might be forced to give up their *Ancien Régime's* privileges, thus causing further resistance to change. In the words of Nellie Kroes, European Commission Vice-President for the Digital Agenda,

[a]ll revolutions reveal, in a new and less favourable light, the privileges of the gatekeepers of the "Ancien Régime". It is no different in the case of the internet revolution, which is unveiling the unsustainable position of certain content gatekeepers and intermediaries. No historically entrenched position guarantees the survival of any cultural intermediary. Like it or not, content gatekeepers risk being sidelined if they do not adapt to the needs of both creators and consumers of cultural goods. [...] Today our fragmented copyright system is ill-adapted to the real essence of art, which has no frontiers. Instead, that system has ended up giving a more prominent role to intermediaries than to artists. It irritates the public who often cannot access what artists want to offer and leaves a vacuum which is served by illegal content, depriving the artists of their well-deserved remuneration. And copyright enforcement is often entangled in sensitive questions about privacy, data protection or even net neutrality. [...] It may suit some vested interests to avoid a debate, or to frame the debate on copyright in moralistic terms that merely demonise millions of citizens. But that is not a sustainable approach. [...] My position is that we must look beyond national and corporatist self-interest to establish a new approach to copyright.²¹

protests from scribes were recorded throughout Europe. *See id.*, at 4-5 (reporting protests in Genoa in 1472, in Augsburg in 1473, and in Lyon in 1477); *see also* PETER BURKE, *THE ITALIAN RENAISSANCE: CULTURE AND SOCIETY IN ITALY* 71 (Princeton U. Press 1999) (noting the adaptability of several scribes, who became printers themselves). Reconversion from old to new jobs was smooth. A variety of new jobs was created and there are no indications of unemployment or poverty suffered by any part of society due to the introduction of the new technology. *See* Neddermeyer, *supra*, at 5-7; CYPRIAN BLAGDEN, *THE STATIONERS' COMPANY: A HISTORY, 1403-1959* 23 (Stanford U. Press 1977) (reporting that "there is no evidence of unemployment or organized opposition to the new machines" in England). Quite the contrary, in the last quarter of the fifteenth century more money was spent on books than any time before. *Id.*

¹⁹ *See* Frosio, *supra* note 11, at 2039-2046.

²⁰ *See* MICHAEL MASNICK AND MICHAEL HO, *THE SKY IS RISING: A DETAILED LOOK AT THE STATE OF THE ENTERTAINMENT INDUSTRY* 5-6 (Floor 64, January 2012), available at <http://www.techdirt.com/skyisrising>.

²¹ Nellie Kroes, European Commission Vice-President for the Digital Agenda, *A Digital World of Opportunities*, speech delivered at the Forum d'Avignon - Les Rencontres Internationales de la Culture, de l'Économie et des Médias, Avignon, France, SPEECH/10/619 (November 5, 2010).

III. RESISTING COPYRIGHT (AT ZERO MARGINAL COST) AND PROMOTING ALTERNATIVES

In the aftermath of the legal battles targeting p2p platforms, such as ThePirateBay, the Pirate Party emerged in Sweden to contest elections on the basis of the abolition or radical reform of intellectual property, in general, and copyright, in particular. The platform of the Pirate Party proclaims that “[t]he monopoly for the copyright holder to exploit an aesthetic work commercially should be limited to five years after publication. A five years copyright term for commercial use is more than enough. Non-commercial use should be free from day one.”²² The Pirate Party met with large success at its first electoral appearance both in Sweden and Germany and similar political groups have now formed in other countries. The Pirate Party may serve as an extreme expression of the sentiment of distaste or disrespect for copyright.²³ However, we may conceivably conclude that that sentiment is definitely widespread if even the Economist has argued that copyright should return to its roots, because as it is now it may cause more harm than good.²⁴ A recent Report from the Australian Government Productivity Commission widely criticized the present copy(not)right—this is how the Commission refers to it!—model, pointing at a number of very critical issues:

Australia’s copyright arrangements are weighed too heavily in favour of copyright owners, to the detriment of the long-term interests of both consumers and intermediate users. Unlike other IP rights, copyright makes no attempt to target those works where ‘free riding’ by users would undermine the incentives to create. Instead, copyright is overly broad; provides the same levels of protection to commercial and non-commercial works; and protects works with very low levels of creative input, works that are no longer being supplied to the market, and works where ownership can no longer be identified.²⁵

Therefore, Copyright law has fallen into a deep crisis of acceptance with respect to not only users, but creators also.²⁶ Especially with new generations,²⁷ copyright tends to

²² See Piratpartiet, International, The Pirate Party, <http://www.piratpartiet.se/international/english>; see also CHRISTIAN ENGSTRÖM AND RICK FALKVINGE, THE CASE FOR COPYRIGHT REFORM (The Swedish Pirate Party & Greens/EFA EP 2012), available at <http://www.copyrightreform.eu>.

²³ See, e.g., Miaoran Li, *The Pirate Party And The Pirate Bay: How The Pirate Bay Influences Sweden And International Copyright Relations*, 21 PACE INT’L L. REV. 281 (2009); Jonas Anderson, *For the Good of the Net: The Pirate Bay as a Strategic Sovereign*, 10 CULTURE MACHINE 64 (2009); NERI LUCA, LA BAIA DEI PIRATI: ASSALTO AL COPYRIGHT (Cooper Editore 2009).

²⁴ See Copyright and Wrong: Why the Rules on Copyright need to Return to Their Roots, THE ECONOMIST, April 8, 2010, available at http://www.economist.com/displayStory.cfm?story_id=15868004.

²⁵ AUSTRALIAN PRODUCTIVITY COMMISSION, INTELLECTUAL PROPERTY ARRANGEMENTS, DRAFT REPORT 16 (Canberra, 2016), <https://assets.documentcloud.org/documents/2819862/Intellectual-Property-Draft.pdf>.

²⁶ See, e.g., JESSICA SILBEY, THE EUREKA MYTH: CREATORS, INNOVATORS, AND EVERYDAY INTELLECTUAL PROPERTY (Stanford University Press 2015) (noting that, after collecting interview-based empirical data, suggesting that creators – and even businesses – need intellectual property and exclusivity overstated, if not misstates, the facts and explaining how this misunderstanding about creativity sustains a flawed copyright system); Jessica Litman, *Real Copyright Reform*, 96 IOWA L. REV. 1, 3-5, 31-32 (2010) (noting that “the deterioration in public support for copyright is the gravest of the dangers facing the copyright law in a digital era [. . .] [c]opyright stakeholders have let copyright law’s legitimacy crumble”); see JOHN TEHRANIAN, INFRINGEMENT NATION: COPYRIGHT 2.0 AND YOU xvi-xxi (Oxford University Press 2011);

become irrelevant in the public mind, if not altogether opposed. Sharing a common opinion, David Lange noted that the over-expansion of copyright entitlements lies at the backbone of their crisis in public acceptance:

Raymond Nimmer has said that copyright cannot survive unless it is accorded widespread acquiescence by the citizenry. I think his insight is acutely perceptive and absolutely correct, for a reason that I also understand him to endorse: Never before has copyright so directly confronted individuals in their private lives. Copyright is omnipresent. But what has to be understood as well is that copyright is also correspondingly over-extended.²⁸

Technological and cultural change then played a central role in lowering the acceptance of an over-expansive copyright paradigm. Ubiquitous technology, cost minimization, and the emergence of fan authorship affect radically the traditional market failure that copyright is supposed to cure, both at the creation and distribution level. The distributive power of the Internet instituted new economics of distribution for digital content. Close to zero distribution and reproduction marginal costs potentially eliminate, or at least strongly reduce, the need for third-party investment. In *The Creative Destruction of Copyrights*, Raymond Ku wondered whether a copyright monopoly at close to zero marginal cost is still a sustainable option.²⁹ Ku concludes that, absent the need for encouraging content distribution, the artificial scarcity and exclusive rights created by copyright cannot find any other social reason for existence. When distributors' rights are unbundled from creators' rights, society cannot support longer the protection of distributors' rights. Under these circumstances, copyright would serve no other social purpose than transferring wealth from the public to distributors. Therefore, in Ku's view, copyright in the digital environment is a meaningless burden for society and should be eliminated.³⁰ As radical as Ku's position can be, if technological innovation lead to a substantial reduction of the production, reproduction and distribution costs of cultural artefacts, this runs at least in sharp contrast with any expansion of the copyright monopoly.

Reproduction and distribution costs' minimization affected also the traditional discourse over incentive to create. Reductions in the costs of producing and distributing original expressive works encourage non-professional authors to create.³¹ Therefore, the number of authors for whom the lucre of copyright proves a necessary stimulus should drop. Additionally, low marginal costs empower few authors to reach a broad audience. If decentralized and unprofessional authors will increasingly satisfy the market demand, because non-monetary incentives will suffice as a stimulus to create, a copyright

Brett Lunceford and Shane Lunceford, *The Irrelevance Of Copyright In The Public Mind*, 7 NW. J. TECH. & INTELL. PROP. 33 (2008).

²⁷ See Future of the Internet, Pew Research Center's Internet & American Life Project, <http://pewinternet.org/topics/Future-of-the-Internet.aspx>.

²⁸ David Lange, *Reimagining The Public Domain*, 66 LAW & CONTEMP. PROBS. 471 (2003).

²⁹ See Ku, *supra* note 1, at 300-305; Ku, Raymond S. R., *Consumers and Creative Destruction: Fair Use Beyond Market Failure*, 18 BERKELEY TECH. L. J. 539 (2003); see also Paul Ganley, *The Internet, Creativity and Copyright Incentives*, 10 J. INTELL. PROP. RTS. 188 (2005); John F. Duffy, *The Marginal Cost Controversy In Intellectual Property*, 71 U. CHI. L. REV. 37 (2004).

³⁰ Ku, *supra* note 1, at 304-305.

³¹ See Tom W. Bell, *The Specter of Copyism v. Blockheaded Authors: How User-Generated Content Affects Copyright Policy*, 10 VAND. J. ENT. & TECH. L. 841, 851-855 (2008).

monopoly will eventually prove superfluous at least for these works. In respect to creative works provided by decentralized and unprofessional authors, the burdens of a copyright monopoly will exceed its benefits.

This crisis of the notion of copyright propelled a cultural movement resisting copyright. Neelie Kroes stressed that copyright fundamentalism has prejudiced our capacity to explore new models in the digital age:

So new ideas which could benefit artists are killed before they can show their merit, dead on arrival. This needs to change. [. . .]. So that's my answer: it's not all about copyright. It is certainly important, but we need to stop obsessing about that. The life of an artist is tough: the crisis has made it tougher. Let's get back to basics, and deliver a system of recognition and reward that puts artists and creators at its heart.³²

The digital opportunity lead many to challenge the obsolescence of the traditional copyright monopoly, seeking more or less radical forms of reform. In 1994, John Perry Barlow laid out the manifesto of the necessity of re-thinking digitized intellectual property and radically noted that: “in the absence of the old containers, almost everything we think we know about intellectual property is wrong”.³³ Nicholas Negroponte reinforced Barlow’s point by stating that “copyright law is totally out of date [. . .] it is a Gutenberg artifact [. . .] since it is a reactive process, it will have to break down completely before it is corrected.”³⁴ Recently, the Hargreaves report noted that archaic copyright laws “obstruct innovation and economic growth.”³⁵ In a message delivered to the G20 leaders, the President of Russia Dmitry Medvedev pointed out that “[t]he old principles of intellectual property protection established in a completely different technological context do not work any longer in an emerging environment, and, therefore, new conceptual arrangements are required for international regulation of intellectual activities on the Internet.”³⁶

Many highlighted the necessity of re-shaping the present copyright law³⁷ or abolishing it altogether.³⁸ In particular, a growing copyright “abolitionism” online emerged in

³² Neelie Kroes, Who feeds the artist?, speech delivered at the Forum d'Avignon - Les Rencontres Internationales de la Culture, de l'Économie et des Medias, Avignon, France, SPEECH/11/777 (November 19, 2011), available at <http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH%2F11%2F777>.

³³ John Perry Barlow, *Selling Wine Without Bottles: The Economy of Mind on the Global Net*, WIRED 2.03 (1994).

³⁴ NICHOLAS NEGROPONTE, BEING DIGITAL 58 (Alfred A. Knopf 1995).

³⁵ See IAN HARGREAVES, DIGITAL OPPORTUNITY. A REVIEW OF INTELLECTUAL PROPERTY AND GROWTH 10 (May 2011).

³⁶ Dmitry Medvedev's message to the G20 leaders, President of Russia (November 3, 2011), <http://eng.krem lin.ru/news/3018>.

³⁷ See, e.g., in addition to many other authors already cited, Pamela Samuelson, *The Copyright Principles Project: Directions for Reform*, 25 BERKELEY TECH. L. J. 1175 (2010); WILLIAM PATRY, HOW TO FIX COPYRIGHT (Oxford U. Press 2012); Diane L. Zimmerman, *Finding New Paths Through The Internet, Content and Copyright*, 12 TUL. J. TECH. & INTELL. PROP. 145 (2009); Hannibal Travis, *Opting Out Of The Internet In The United States And The European Union: Copyright, Safe Harbors, And International Law*, 84 NOTRE DAME L. REV. 331 (2008); Guy Pessach, *Reciprocal Share-Alike Exemptions In Copyright Law*, 30 CARDOZO L. REV. 1245 (2008); Jessica Litman, *Sharing and Stealing*, 27 HASTINGS COMM. & ENT. L. J. 1 (Fall 2004); Mark Lemley and Anthony Reese, *Reducing Digital Copyright Infringement Without Restricting Innovation*, 56 STAN. L. REV. 1345 (May 2004); Landes William M. & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471 (2003).

response to a worrying tendency to criminalise the younger generation and new models of online digital creativity, such as mash-up, fanfiction, or machinima. The Committee on Intellectual Property Rights and the Emerging Information Infrastructure considered that the notion of copying might not be an appropriate mechanism for achieving the goals of copyright in the digital age. Among the reasons of the inadequacy of the notion, the Committee highlights that “in the digital world copying is such an essential action, so bound up with the way computers work, that control of copying provides, in the view of some, unexpectedly broad powers, considerably beyond those intended by the copyright law.”³⁹ Sharing is essential to the emerging digital culture. Young generations digitize, share, rip, mix, burn, and share again as a basic form of human interactions. Increasingly, many social forces maintain that full recognition of a non-commercial right to share creative works should be the goal of modern policies for digital creativity. At the same time, criminalization of Internet users by cultural conglomerates is a source of social tension. At the WIPO *Global Meeting on Emerging Copyright Licensing Modalities—Facilitating Access to Culture in the Digital Age*, Lessig has called overhaul of the copyright system which will “never work on the internet” and “[i]t’ll either cause people to stop creating or it’ll cause a revolution.”⁴⁰

Resistance to copyright lies at the crossroad between academic investigation, civic society involvement and political activity. As Michael Strangelove argued in the *Empire of Mind*, the Internet set in motion an anti-capitalistic movement resisting to authoritarian

³⁸ Legal scholars have long recognized that copyright and patent are not the only options. See, e.g., Professor Stephen Breyer notes that Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 282 (1970) (concluding “[i]t would be possible, for instance, to do without copyright, relying upon authors, publishers, and buyers to work out arrangements among themselves that would provide books’ creators with enough money to produce them.”); Jon M. Garon, *Normative Copyright: A Conceptual Framework for Copyright Philosophy and Ethics*, 88 CORNELL L. REV. 1278, 1283 (2003) (noting “[u]nless there is a valid conceptual basis for copyright laws, there can be no fundamental immorality in refusing to be bound by them”); MICHELE BOLDRIN AND DAVID K. LEVINE, *AGAINST INTELLECTUAL MONOPOLY* (Cambridge University Press 2008) (disputing the utility of intellectual property altogether); Martin Skladany, *Alienation by Copyright: Abolishing Copyright to Spur Individual Creativity*, 55 J. COPYRIGHT SOC’Y U.S.A. 361 (2008). Professor Joost Smiers has long taken to the extreme consequences the reaction to the commodification of culture by cultural conglomerates by arguing in favour of the abolition of copyright. See SMIERS AND VAN SCHIJNDEL, *supra* note **ERROR! BOOKMARK NOT DEFINED.**; JOOST SMIERS AND MARIEKE VAN SCHIJNDEL, *IMAGINE THERE IS NO COPYRIGHT AND NO CULTURAL CONGLOMERATES TOO* (Institute of Network Culture 2009); Joost Smiers, *Art without Copyright: A Proposal for Alternative Regulation*, in *FREEDOM OF CULTURE: REGULATION AND PRIVATIZATION OF INTELLECTUAL PROPERTY AND PUBLIC SPACE* 22-29 (NAi Publishers 2007); Joost Smiers and Marieke Van Schijndel, *Imagining a World Without Copyright: the Market and Temporary Protection, a Better Alternative for Artists and Public Domain*, in *COPYRIGHT AND OTHER FAIRY TALES: HANS CHRISTIAN ANDERSEN AND THE COMMODIFICATION OF CREATIVITY* 129 (Helle Porsdam ed., Edward Elgar Publishing Ltd. 2006). For an historical and empirical argument against copyright, see Frank Thadeusz, *No Copyright Law: The Real Reason for Germany’s Industrial Expansion?*, SPIEGEL ONLINE, August 18, 2010, <http://www.spiegel.de/international/zeitgeist/0,1518,710976,00.html>. Cf. Lior Zemer, *The Conceptual Game in Copyright*, 28 HASTINGS COMM. & ENT L. J. 409 (2006).

³⁹ NATIONAL RESEARCH BOARD, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 140 (National Academy Press, 2000).

⁴⁰ See Larry Lessig, speech at the WIPO Global Meeting on Emerging Copyright Licensing Modalities – Facilitating Access to Culture in the Digital Age, Geneva, Switzerland (November 4, 2010), available at http://www.freedomtodiffer.com/freedom_to_differ/2010/11/larry-lessig-calls-for-wipo-to-lead-radical-overhaul-of-copyright-law.html.

forms of consumer capitalism and globalization.⁴¹ This movement is “resisting the resistance” to change, resisting copyright, seeking access to knowledge and promoting the public domain. Creative Commons, the Free software Foundation and the Open Source movement,⁴² propelled the diffusion of viable market alternatives to traditional copyright management. The “power of open,” as Catherine Casserly and Joi Ito have termed creative commons, has spread fast with more than four hundred million CC-licensed works available on the Internet.⁴³ Again, mostly driven by scholarly efforts, an Access to Knowledge (A2K) Movement, an Open Access Publishing Movement, a Public Domain Project and Cultural Environmentalism lead the resistance to copyright over-expansion by seeking to re-define the hierarchy of priorities embedded in the traditional politics of intellectual property. Meanwhile, proposals for reform tackled the uneasy coexistence between copyright, digitization and the networked information economy. I will discuss these proposals first and later talk some more about the social movements resisting the resistance.

1. Copyright Terms, Formalities and Registration Systems

As suggested by some scholars, a potential solution to the weaknesses of the current copyright regime would be a setting in which published works are not copyrighted, unless the authors comply with some formalities which should be very simple, cheap and non-discriminatory with respect to national/foreign authors.⁴⁴ Formalities might become an opportunity for creativity in the digital era as technology overcame most discriminatory hurdles that persuaded the international community to abolish them in the analog world.⁴⁵

⁴¹ See MICHAEL STRANGELOVE, *THE EMPIRE OF MIND: DIGITAL PIRACY AND THE ANTI-CAPITALIST MOVEMENT* (University of Toronto Press 2005).

⁴² See, e.g., Moglen Eben, *Freeing the Mind: Free Software and the Death of Proprietary Culture*, June 29, 2003; Moglen Eben, *Anarchism Triumphant: Free Software and the Death of Copyright*, June 28, 1999, available at <http://emoglen.law.columbia.edu>.

⁴³ See CATHERINE CASSERLY AND JOI ITO, *THE POWER OF OPEN* (Creative Commons 2011), <http://thepowerofopen.org>; see also Niva Elkin-Koren, *Exploring Creative Commons: A Skeptical View of a Worthy Pursuit*, in *THE FUTURE OF THE PUBLIC DOMAIN: IDENTIFYING THE COMMONS IN INFORMATION LAW* 325-345 (Lucie Guibault and P. Bernt Hugenholtz eds., Kluwer Law International 2006).

⁴⁴ See, e.g., Lewis Hyde, *How to Reform Copyright*, *THE CHRONICLE*, October 9, 2011, <http://chronicle.com/article/How-to-Reform-Copyright/129280>; Christopher Sprigman, *Reform(aliz)ing Copyright*, 57 *STAN. L. REV.* 485 (2004) (proposing an optional registration system that subjects unregistered works to a default licence under which the use of the work would trigger only a modest statutory royalty liability); LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 140 (Penguin 2004); LAWRENCE LESSIG, *THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD* (Vintage Books 2002); see also Lawrence Lessig, *Recognizing the Fight We're In*, keynote speech delivered at the Open Rights Group Conference, London, UK (March 24, 2012), at 36:40-38:28, available at <http://vimeo.com/39188615>, (proposing the reintroduction of formalities at least to secure extensions of copyright, if legislators decide to introduce them).

⁴⁵ See Stef van Gompel, *Formalities in the digital era: an obstacle or opportunity?*, in *GLOBAL COPYRIGHT: THREE HUNDRED YEARS SINCE THE STATUTE OF ANNE, FROM 1709 TO CYBERSPACE* 395-424 (Lionel Bently, Uma Suthersanen and Paul Torremans eds., Edward Elgar 2010) (arguing that the pre-digital objections against copyright formalities cannot be sustained in the digital era); see also Takeshi Hishinuma, *The Scope of Formalities in International Copyright Law in a Digital Context*, in *GLOBAL*

The idea of a registration system for creative works through global online copyright registries is increasingly gaining momentum.⁴⁶ A carefully crafted registration system may enrich the public domain, enhance access and the reuse, and avoid transaction costs burdening digital creativity and digitization projects. Today, state-of-the art technology enables the creation of global digital repositories that ensure the integrity of digital works, render filings user-friendly and inexpensive, and enable searches on the status of any creative work.⁴⁷ Registration could be a precondition for protection by providing the creators with the full ownership rights, while, absent registration, the default level of protection would be limited to the moral right of attribution. Alternatively, if one were to consider that making registration into a global registry, rather than notice, a precondition for protection, is too harsh a requirement, then registration might at least be required as a precondition of extension of protection.

In particular, registries and data collection should ease the orphan works problem. The measures to improve the provision of rights management information range from encouraging metadata tagging of digital content, to promoting the use of creative commons-like licenses, and encouraging the voluntary registration of rights ownership information in databases established for that specific purpose.⁴⁸ Many projects aim at increasing the supply of rights management information to the public, merging unique sources of rights information, and establishing specific databases for orphan works. Notably, the EU mandated project ARROW (Accessible Registries of Rights Information and Orphan Works) includes national libraries, publishers, writers' organizations and collective management organizations and aspires to find ways of identifying rightholders, determining and clearing rights, and possibly confirming the public domain status of a work.⁴⁹

Marco Ricolfi's Copyright 2.0 proposal is a specific articulation of an alternative copyright default rule, coupled with the implementation of a formality and registration system.⁵⁰ Similar proposals have been made also by other scholars, such as Lessig.⁵¹ In

COPYRIGHT: THREE HUNDRED YEARS SINCE THE STATUTE OF ANNE, FROM 1709 TO CYBERSPACE 460-467 (Lionel Bently, Uma Suthersanen and Paul Torremans eds., Edward Elgar 2010).

⁴⁶ See ANDREW GOWERS, GOWERS REVIEW OF INTELLECTUAL PROPERTY (HM Treasury, November 2006), at Recommendation 14b (endorsing the establishment of a voluntary register of copyright).

⁴⁷ See, discussing copyright registers, Tanya Aplin, *A Global Digital Register for the Preservation and Access to Cultural Heritage: Problems, Challenges and Possibilities*, in COPYRIGHT AND CULTURAL HERITAGE: PRESERVATION AND ACCESS TO WORKS IN A DIGITAL WORLD 3-27 (Estelle Derclaye (ed.), Edward Elgar 2010); Caroline Colin, *Registers, Databases and Orphan Works*, in COPYRIGHT AND CULTURAL HERITAGE, *supra*, at 28-50; Steven Hetcher, *A Central Register of Copyrightable Works: a U.S. Perspective*, in COPYRIGHT AND CULTURAL HERITAGE, *supra*, at 156-176.

⁴⁸ See van Gompel, *supra* note, at 11-14 (noting that only voluntary supply of information would be compliant with the no-formalities prescription of the Berne Convention).

⁴⁹ See Accessible Registries of Rights Information and Orphan Works [ARROW], <http://www.arrow-net.eu> (creating registries of rights information and orphan works); BARBARA STRATTON, SEEKING NEW LANDSCAPES. A RIGHTS CLEARANCE STUDY IN THE CONTEXT OF MASS DIGITIZATION OF 140 BOOKS PUBLISHED BETWEEN 1870 AND 2010 5, 35-36 (British Library 2011) (showing that in contrast to the average four hours per book to undertake a diligent search, "the use of the ARROW system took less than 5 minutes per title to upload the catalogue records and check the results").

⁵⁰ See Marco Ricolfi, Copyright Policies for Digital Libraries in the Context of the i2010 Strategy, paper presented at the 1st COMMUNIA Conference (July 1, 2008), at 6, available at <http://www.communia->

Ricolfi' Copyright 2.0, traditional copyright, or Copyright 1.0, is still available. In order to be enjoyed, Copyright 1.0 has to be claimed by the creator at the onset, for example by inserting a copyright notice before the first publication of a work. At certain conditions, the Copyright 1.0 notice could also be added after the first publication, possibly during a specified and short grace period. The Copyright 1.0 protection given by the original notice is deemed withdrawn after a specified short period of time, unless an extension period is formally requested through an Internet based renewal and registration procedure, whose registration data will be accessible online. If no notice is given, Copyright 2.0 applies and this gives creators mainly one right, the right to attribution.

2. Mandatory Exceptions and Diligent Search for Orphan Works and UGC

Nellie Kroes warns against the welfare loss of the immense cultural riches unveiled by digitization, nevertheless locked behind the intricacies of an outdated copyright model.

Think of the treasures that are kept from the public because we can't identify the right-holders of certain works of art. These "orphan works" are stuck in the digital darkness when they could be on digital display for future generations. It is time for this dysfunction to end.⁵²

Institutional proposals in both Europe and the United States advocate the implementation of a system of diligent search as a defense to copyright infringement. A report from the United States Copyright Office recommended that Congress enact legislation to limit liability for copyright infringement if the author performed "a reasonable diligent search" before any use.⁵³ Additionally, the Copyright Office laid down several suggestions to promote privately-operated registries as a more efficient arrangement than government-operated registries. The Copyright Office's recommendations were included in the Orphan Works Act of 2006, and again in the Orphan Works Act of 2008.⁵⁴ So far, neither bill was adopted into law. The High Level Expert Group on the European Digital Libraries Initiative made similar recommendations:

Member States are encouraged to establish a mechanism to enable the use of such works for non-commercial and commercial purposes, against agreed terms and remuneration, when applicable, if diligent search in the country of origin prior to the use of the works has been performed in trying to identify the work and/or locate the rightholders.⁵⁵

project.eu/node/110; see also Marco Ricolfi, Making Copyright Fit for the Digital Agenda, in *IL DIRITTO D'AUTORE* 359-372 (2011).

⁵¹ See LAWRENCE LESSIG, *REMIX: MAKING ART AND COMMERCE THRIVE IN THE HYBRID ECONOMY* 253-265 (Bloomsbury 2008) (proposing different routes for professional, remix and amateur authors, registries, and the re-introduction of formalities and an opt-in system).

⁵² Nellie Kroes, Ending Fragmentation of the Digital Single Market, speech delivered at the Business for New Europe event, London, SPEECH/11/70 (February 7, 2010).

⁵³ See THE REGISTER OF COPYRIGHTS, REPORT ON ORPHAN WORKS 95 (2006).

⁵⁴ See Christian L. Castle and Amy E. Mitchell, *Unhand That Orphan: Evolving Orphan Works Solutions Require New Analysis*, 27-SPG ENT. & SPORTS L. 1 (2009).

⁵⁵ i2010 European Digital Libraries Initiative, High level Expert Group on Digital Libraries, Final Report, Digital Libraries: Recommendations and Challenges for the Future (December, 2009), available at http://ec.europa.eu/information_society/activities/digital_libraries/doc/hleg/reports/hlg_final_report09.pdf.

The mechanisms in the Member States must fulfill prescribed criteria: the solution should be applicable to any kind of copyrightable work; a bona fide/good faith user must conduct a diligent search prior to the use of the work in the country of origin; best practices or guidelines specific to particular categories of works should be devised by stakeholders in different fields. The system should be based on reciprocity so that Member States will recognize solutions in other Member States that fulfill the prescribed criteria. As a result, materials that are lawful to use in one Member State would also be lawful to use in another. Partially endorsing these principles, a Directive on certain permitted uses of orphan works has been recently enacted by the European Commission.⁵⁶

In Europe, the most comprehensive proposal for an orphan works' mandatory exception is outlined in a paper for the Gowers Review by the British Screen Advisory Committee (BSAC).⁵⁷ This proposal would set up a compensatory liability regime. First, to trigger the exception, a person is required to have made 'best endeavours' to locate the copyright owner of a work. Supposedly 'best endeavours' will be judged against the particular circumstances of each case. The work must also be marked as used under the exception to alert any potential rights owners. If a rights owner emerges, he is entitled to claim a 'reasonable royalty' agreed upon by negotiation, rather than sue for infringement. If the parties cannot reach agreement, a third party steps in to establish the royalty amount. The terms of use of the formerly-orphan work would need to be negotiated between the user and the rights owner according to the traditional copyright rules. However, users should be allowed to continue using the work that has been integrated or transformed into a derivative work, contingent upon payment of a reasonable royalty and sufficient attribution. Slightly modified versions of the U.S. and European model have been also investigated. For example, Canada established a compulsory licensing system based on diligent search to use orphan works.⁵⁸

As well as orphan works, user-generated content is also a massive phenomenon that struggles with present copyright law. Mandatory exceptions have been also claimed as a solution for user-generated content, together with the use of informal copyright practices.⁵⁹ Proposals have been made for introducing an exception for transformative use

⁵⁶ See European Parliament and Council Directive 2012/28/EU on Certain Permitted Uses of Orphan Works, 2012 O.J. (L 299)5 (October 25, 2012).

⁵⁷ BRITISH SCREEN ADVISORY COUNCIL, COPYRIGHT AND ORPHAN WORKS (August 31, 2006) (paper prepared for the Gowers Review).

⁵⁸ See Canadian Copyright Act, Art. 77 (Can.). Under the Canadian system, users can apply to an administrative body to obtain a license to use orphan works. In order to obtain the license the applicant must prove that they have conducted a serious search for the rightsholder. If the Canadian Copyright Board is satisfied that, despite the search, the rightsholders cannot be identified, it issues the applicant a non-exclusive license to use the work. *Id.* The license will shield the license holder from any liability for infringement. However, the license is limited to Canada.

⁵⁹ See, e.g., Edward Lee, *Warming Up To User-Generated Content*, 2008 U. ILL. L. REV. 1459, 1462 (2008) (noting that "informal copyright practices—i.e., practices that are not authorized by formal copyright licenses but whose legality falls within a gray area of copyright law—effectively serve as important gap fillers in our copyright system"); Steven A. Hetcher, *Using Social Norms to Regulate Fan Fiction and Remix Culture*, 157 U. PA. L. REV. 1869 (2009).

in user-generated works.⁶⁰ Both specific exceptions and general exception clauses have been under discussion.⁶¹ Canada introduced a specific exception to this effect. The Canadian copyright law now allows the use of a protected work—which has been published or otherwise made available to the public—in the creation of a new work, if the use is done solely for non-commercial purposes and does not have substantial adverse effects on the potential market for the original work.⁶² Likewise, European institutions and stakeholders have been recently discussing a specific exception for UGC, after sidelining proposals for micro-licensing arrangements.⁶³ In a narrower context, the U.S. Copyright Office rulemaking on the DMCA anti-circumvention provisions recently introduced an exception for the use of movie clips for transformative, non-commercial works, bringing a breath of fresh air in the world of vidding.⁶⁴ Also, general fair use exception clauses, if properly construed, may prove effective to give UGC creators some breathing space. In particular, recent U.S. case law protects UGC creators from bogus DMCA takedown notices in cases of blatant misrepresentation of fair use defences by copyright holders. In *Lenz v. Universal Music*, the 9th Circuit ruled that “the statute requires copyright holders to consider fair use before sending takedown notification.”⁶⁵ The Court also recognised the possible applicability of section 512(f) of the DMCA that allows for the recognition of damages in case of proved bad-faith, which would occur if the copyright holder did not consider fair use or paid “lip service to the consideration of fair use by claiming it formed a good faith belief when there is evidence to the contrary.”⁶⁶

⁶⁰ See Daniel Gervais, *The Tangled Web of UGC: Making Copyright Sense of User-Generated Content*, 11 VAND. J. ENT. & TECH. L. 841, 861-869 (2009); Debora Halbert, *Mass Culture and the Culture of the Masses: A Manifesto for User-Generated Rights*, 11 VAND. J. ENT. & TECH. L. 921, 934-953 (2009); Mary W. S. Wong, “Transformative” User-Generated Content in Copyright Law: *Infringing Derivative Works or Fair Use?*, 11 VAND. J. ENT. & TECH. L. 1075 (2009).

⁶¹ See, e.g., Yu Peter, *Can the Canadian UGC Exception Be Transplanted Abroad?*, 26 INTELL. PROP. J. 177 (2014) (discussing also a Hong Kong proposal for a UGC exception); Warren B. Chik, *Paying it Forward: The Case for a Specific Statutory Limitation on Exclusive Rights for User-Generated Content Under Copyright Law*, 11 J. MARSHALL REV. INTELL. PROP. L. 240 (2011).

⁶² See An Act to amend the Copyright Act, 2010, Bill C-32 (Can.), Art. 22, available at <http://www.parl.gc.ca/HousePublications/Publication.aspx?Docid=4580265&file=4> (introducing an exception for non-commercial UGC).

⁶³ See Commission, Report on the Responses to the Public Consultation on the Review of the EU Copyright Rules (July 2014), at 68 (EU), available at <https://www.yumpu.com/en/document/view/30151098/zzeia/69> (noting that respondents often favour a legislative intervention, which could be done “by making relevant existing exceptions (parody, quotation and incidental use and private copying are mentioned) mandatory across all Member States or by introducing a new exception to cover transformative uses”); see also Commission Communication on Content in the Digital Single Market, at 3-4, COM(2012) 789 final (December 18, 2012) (EU), available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52012DC0789> (proposing licencing arrangements).

⁶⁴ See United States Copyright Office, Rulemaking on Exemptions from Prohibition on Circumvention of Technological Measures that Control Access to Copyrighted Works (July 26, 2010), available at <http://www.copyright.gov/1201/2010>.

⁶⁵ *Stephanie Lenz v. Universal Music Corp.*, 5:07-cv-03783-JF (9th Cir. 2015), at 5.

⁶⁶ *Id.*, at 17-18 (noting also that there’s no liability under § 512(f), “[i]f, however, a copyright holder forms a subjective good faith belief the allegedly infringing material does not constitute fair use”).

3. Extended and Mandatory Collective Management

Extended Collective Licenses (ECL) are applied in various sectors in Denmark, Finland, Norway, Sweden and Iceland.⁶⁷ The ECL arrangement has become a tempting policy option in several jurisdictions both to tackle the orphan works problem and to deal at large with file sharing in digital networks.⁶⁸ In particular, a recent draft directive would like to apply this collective management mechanism to the use of out-of-commerce works by cultural heritage institutions.⁶⁹

The system combines the voluntary transfer of rights from rightholders to a collective society with the legal extension of the collective agreement to third parties who are not members of the collective society. However, to be extended to third parties of the same category, the collective society must represent a substantial number of rightholders. In any event, the legislation in Nordic countries provides the rightholders with the option of claiming individual remuneration or opting out from the system. Therefore, with the exception of the rightholders who opted out, the extended collective licence automatically applies to all domestic and foreign rights owners, unknown or untraceable rights holders, and deceased rights holders, in particular where estates have yet to be arranged. With an extended collective licencing scheme in place, a user may obtain a licence to use all the works included in a certain category with the only exception of the opted out works. Re-users of existing works will achieve the legal certainty that all the orphan works will be covered by the licence, also in consideration of the fact that opted out works instantly cease to be orphan. If ECL is to be applied to legitimize file-sharing, collective management bodies will negotiate the license with users' associations or ISPs. In exchange of the right of reproducing and making available content online, right holders will be remunerated by the proceedings collected through the extended collective license. Further related proposals would subject the right to "make available to the public" to mandatory collective management.⁷⁰ According to this proposal, the exercise of the right

⁶⁷ See, e.g., Zijian Zhang, *Transplantation of an Extended Collective Licensing System - Lessons from Denmark*, 47(6) IIC 640 (2016).

⁶⁸ See i2010 European Digital Libraries Initiative, High level Expert Group, Copyright Subgroup, Report on Digital Preservation, Orphan works and Out-of-Print Works. Selected Implementation Issues (April 18, 2008), at 5 (identifying ECL as a possible solution to the orphan works' problem); Jia Wang, *Should China Adopt an Extended Licensing System to Facilitate Collective Copyright Administration: Preliminary Thoughts*, 32 EUR. INTELL. PROP. REV. 283 (2010); MARCO CIURCINA, JUAN CARLOS DE MARTIN, THOMAS MARGONI, FEDERICO MORANDO, AND MARCO RICOLFI, CREATIVITÀ REMUNERATA, CONOSCENZA LIBERATA: FILE SHARING E LICENZE COLLETTIVE ESTESE [REMUNERATING CREATIVITY, FREEING KNOWLEDGE: FILE-SHARING AND EXTENDED COLLECTIVE LICENCES] (March 15, 2009) (position paper prepared for the NEXA Center for Internet and Society) (highlighting the positive externalities of the adoption an extended collective licensing scheme as the most appropriate tool to be used by a European Member State to legitimize the file-sharing of copyrighted content); JOHAN AXHAMN AND LUCIE GUIBAULT, CROSS-BORDER EXTENDED COLLECTIVE LICENSING: A SOLUTION TO ONLINE DISSEMINATION OF EUROPE'S CULTURAL HERITAGE? (final report prepared for EuropeanaConnect, IViR, August 2011).

⁶⁹ Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market, COM(2016) 593 final (September 14, 2016), Art. 7 [hereinafter DSM Directive Proposal].

⁷⁰ See SILKE VON LEWINSKI, MANDATORY COLLECTIVE ADMINISTRATION OF EXCLUSIVE RIGHTS – A CASE STUDY ON ITS COMPATIBILITY WITH INTERNATIONAL AND EC COPYRIGHT LAW (UNESCO e-Copyright Bulletin, January – March 2004), available at http://portal.unesco.org/culture/en/files/19552/11515904771/svl_e.pdf/svl_e.pdf (discussing a proposed amendment in the Hungarian Copyright Act). See CARINE

would be only limited by the obligation of resorting to collective management to enjoy the economic rights attached to the right of making available to the public. As a consequence, the internet service providers would have to pay a lump-sum or levy to the collective societies in exchange of the authorization to download and make available to the users the entire repertoire of the works managed by the collective society. The money collected will be then redistributed to the right holders.

Actually—as seen also in the Google books case—courts have expressed hesitations in endorsing the ECL opt-out mechanism. A recent ECJ decision has ruled against this arrangement, while reviewing a French law that regulated the digital exploitation of out-of-print 20th century books.⁷¹ This French law gave approved collecting societies the right to authorise the reproduction and the representation in digital form of out-of-print books. Meanwhile, the law provided authors—or their successors in title—with an opt-out mechanism subject to certain conditions. In *Soulier* the ECJ confirmed an opinion of the Advocate General and struck down the law, being against European Law,⁷² which provide authors—not collecting societies—with the right to authorise the reproduction and communication to the public of their works.⁷³ The *Soulier* decision might have far-reaching effects for the EU directive proposal—and more generally for all national systems of extended collective licensing that might be incompatible with EU law. Actually, the successful implementation of the directive proposal might remain the sole option to keep in place ECL arrangements by redressing this judicial interpretation.

4. Alternative Compensation Systems or Cultural Flat Rate

As Volker Grassmuck noted, “the world is going flat(-rate).”⁷⁴ In search of alternative remuneration systems, researchers, activists, consumer organizations, artist groups, and policy makers have proposed to finance creativity on a flat-rate base. In the past, levies on recording devices and media have been set up upon the acknowledgment that private copying cannot be prevented.⁷⁵ The same reasoning would apply to the introduction of a

BERNAULT AND AUDREY LÉBOIS UNDER THE SUPERVISION OF PROFESSOR ANDRÉ LUCAS, PEER-TO-PEER ET PROPRIÉTÉ LITTÉRAIRE ET ARTISTIQUE ETUDE DE FAISABILITÉ SUR UN SYSTÈME DE COMPENSATION POUR L'ÉCHANGE DES ŒUVRES SUR INTERNET [PEER-TO-PEER FILE SHARING AND LITERARY AND ARTISTIC PROPERTY. A FEASIBILITY STUDY REGARDING A SYSTEM OF COMPENSATION FOR THE EXCHANGE OF WORKS VIA THE INTERNET] (June 2005) (study prepared for ADAMI and SPEDIDAM) (with the same proposal endorsed by the French Alliance Public-Artistes, campaigning for the implementation of a Licence Globale).

⁷¹ See LOI n° 2012-287 du 1er mars 2012 relative à l'exploitation numérique des livres indisponibles du XXe siècle, available at <https://www.legifrance.gouv.fr/eli/loi/2012/3/1/2012-287/fo/texte>.

⁷² See InfoSoc Directive, *supra* note **Error! Bookmark not defined.**, at Art. 2(a) and 3(1).

⁷³ See *Marc Soulier Sara Doke v Ministre de la Culture et de la Communication Premier ministre*, C-301/15 (ECJ, November 16, 2016) (European Union).

⁷⁴ Volker Grassmuck, *The World is Going Flat(-Rate): A Study Showing Copyright Exception for Legalizing File-Sharing Feasible as a Cease-Fire in the “War on Copyright” Emerges*, INTELLECTUAL PROPERTY WATCH, May 11, 2009, <http://www.ip-watch.org/weblog/2009/05/11/the-world-is-going-flat-rate>.

⁷⁵ In the analog environment, many national legislations implemented quasi flat rate models and different arrangements of private copying levies that may be envisioned as a form of cultural tax. Private copying levies are special taxes, which are charged on purchases of recordable media and copying devices and then redistributed to the right holders by means of collecting societies. See, e.g., MARTIN KRETSCHMER,

legal permission to copy and make available copyrighted works by individuals for non-commercial purposes in the Internet.⁷⁶ Flat rate proposals would favour a sharing ecology that is best suited to the networked information economy. A recent study of the Institute of European Media Law has argued that this may be “nothing less than the logical consequence of the technical revolution introduced by the internet.”⁷⁷ This study also described the minimum requirements for a cultural flat-rate as follows: (i) a legal licence permitting private individuals to exchange copyright works for non-commercial purposes; (ii) a levy, possibly collected by the ISPs, flat, possibly differentiated by access speed; and (iii) a collective management, i.e. a mechanism for collecting the money and distributing it fairly.

Several flat-rate models have been proposed.⁷⁸ Some see the flat-rate payment by Internet subscribers as similar to private copying levies managed by collecting societies, while others want to put in place an entirely new reward system, giving the key role to Internet users themselves. A non-commercial use levy permitting non-commercial file sharing of any digitised work was firstly proposed by Professor Neil Netanel.⁷⁹ Such levy would be imposed on the sale of any consumer electronic devices used to copy, store, send or perform shared and downloaded files but also on the sale of internet access and p2p software and services. An *ad hoc* body would be in charge of determining the amount of the levy. The proceeds would be distributed to copyright holders by taking into consideration the popularity of the works to be measured by tracking and monitoring technologies. Users could freely copy, circulate and make non-commercial use of any works that the right holder has made available on the Internet. William Fisher followed up on Netanel with a more refined and comprehensive proposal.⁸⁰ Creators’ remuneration would still be collected through levies on media devices and Internet connection. In Fisher’s system, however, a governmentally administered registrar for digital content, or alternatively a private organization, would be in charge of the management of creative works in the digital environment. Digitised works would be registered with the Registrar and embedded with digital watermarks. Tracking technologies would measure the popularity of the works circulating online. The Registrar would then redistribute the proceedings to the registered right holders according to popularity of the works. Again, Philippe Aigrain proposed a “creative contribution” encompassing a global licence to share published digital works in the form of extended collective licensing, or, absent an

PRIVATE COPYING AND FAIR COMPENSATION: AN EMPIRICAL STUDY OF COPYRIGHT LEVIES IN EUROPE (October 2011) (report prepared for the UK Intellectual Property Office).

⁷⁶ See HUGENHOLTZ, BERNT, LUCIE GUIBAULT AND SJOERD VAN GEFFEN, *THE FUTURE OF LEVIES IN A DIGITAL ENVIRONMENT* (Institute for Information Law 2003).

⁷⁷ INSTITUT FÜR EUROPÄISCHES MEDIENRECHT [INSTITUTE OF EUROPEAN MEDIA LAW] (EML), *DIE ZULÄSSIGKEIT EINER KULTURFLATRATE NACH NATIONALEM UND EUROPÄISCHEM RECHT* [THE ADMISSIBILITY OF A CULTURAL FLAT RATE UNDER NATIONAL AND EUROPEAN LAW] 63 (March 13, 2009) (study prepared for the German and European Green Party).

⁷⁸ See ALAIN MODOT, HÉLOÏSE FONTANEL, NIC GARNETT, ERIK LAMBERT, ANDRÉ CHAUBEAU, JÉRÔME CHUNG AND PIERRE JALLADEAU, *THE “CONTENT FLAT-RATE”: A SOLUTION TO ILLEGAL FILE-SHARING? STUDY* (study prepared for the European Parliament) (July 2011).

⁷⁹ Netanel Neil W., *Impose A Noncommercial Use Levy To Allow Free Peer-To-Peer File Sharing*, 17 HARV. J. L. & TECH. 1 (2003).

⁸⁰ See WILLIAM W. FISHER, *PROMISES TO KEEP: TECHNOLOGY, LAW AND THE FUTURE OF ENTERTAINMENT* (Stanford Law and Politics 2004).

agreement, of legal licensing.⁸¹ Remuneration would be provided by a flat-rate contribution that will be paid by all Internet subscribers. Half of the money collected would be used for the remuneration of works that have been shared over the Internet according to their popularity. Measurement of popularity would be based on a large panel of voluntary Internet users transmitting anonymous data on their usage to collective management societies. The other half of the money collected would be devoted to funding the production of new works and the promotion of added-value intermediaries in the creative environment. Another suggestion to be included among flat-rates models is Peter Sunde's Flattr "micro-donations" scheme. An internet user would give between 2 and 100 euros per month and could then nominate works that they wish to reward or "flattr," a play on the words "flatter" and "flat-rate".⁸² Finally, the German and European Green Parties included in their policy agenda the promotion of a cultural flat rate to decriminalise P2P users, remunerate creativity and relieve the judicial system and the ISPs from mass-scale prosecution. The Green Party's proposal has been backed up by the mentioned EML study that found that a levy on Internet usage legalising non-commercial online exchanges of creative works conforms with German and European copyright law, even though it requires changes in both.

IV. THE ACCESS 2 KNOWLEDGE (A2K) MOVEMENT

As Nelson Mandela once noted, "eliminating the distinction between the information-rich and information-poor is . . . critical to eliminating economic and other inequalities between North and South, and to improving the life of all humanity."⁸³ "Access to learning and knowledge . . . [are] key elements towards the improvement of the situation of under privileged countries"⁸⁴ Extreme copyright expansion, constant cultural appropriation, together with a dysfunctional access to scientific and patented knowledge, had heightened the North-South cultural divide. The Global South has been exposed to the effects of a pernicious form of cultural imperialism, without the advantages of freely reusing that culture for its own growth. The Vatican noted that

[o]n the part of rich countries there is excessive zeal for protecting knowledge through an unduly rigid assertion of the right to intellectual property, especially in the field of health care. At the same time, in some poor countries, cultural models and social norms of behaviour persist which hinder the process of development.⁸⁵

⁸¹ See PHILIPPE AIGRAIN (WITH CONTRIBUTION OF SUZANNE AIGRAIN), *SHARING: CULTURE AND THE ECONOMY IN THE INTERNET AGE* 59-137 (Amsterdam University Press 2012).

⁸² See Flattr, Big change through small payments. Join the movement to support online creators, <http://flattr.com>.

⁸³ Nelson Mandela, speech delivered at TELECOM 95, Geneva (October 3, 1995), available at ERNEST J. WILSON, III, *THE INFORMATION REVOLUTION AND DEVELOPING COUNTRIES* 1 (2004) (quoting Nelson Mandela).

⁸⁴ World Intellectual Property Organization [WIPO], Draft Report of the Provisional Committee on Proposals Related to a WIPO Development Agenda of the World Intellectual Property Organization 6, available at http://www.wipo.int/edocs/mdocs/mdocs/en/pcda_4/pcda_4_3_prov_2.pdf (African Group Statement).

⁸⁵ ENCYCLICAL LETTER *CARITAS IN VERITATE* OF THE SUPREME PONTIFF BENEDICT XVI TO THE BISHOPS PRIESTS AND DEACONS MEN AND WOMEN RELIGIOUS THE LAY FAITHFUL AND ALL PEOPLE OF GOOD WILL

The issue of access to knowledge has been first expressed in public by the Brazilian government in a draft resolution of 1961.⁸⁶ Since then the restraint operated by intellectual property on access to knowledge has returned to be recently a question of major concern at the international level. Access to Knowledge (A2K) has become a globalized movement aimed at promoting redistribution of informational resources in favour of minorities and the Global South.⁸⁷ In 2006, the Yale Information Society Project held an A2K conference committed “to building a broad conceptual framework of ‘Access to Knowledge’ that can foster powerful coalitions between diverse groups.”⁸⁸ Yale’s 2007 A2K conference aimed to “further build the coalition amongst the institutions and stakeholders” from the 2006 conference.⁸⁹ The Consumer Project on Technology (CPT) says that A2K

takes concerns with copyright law and other regulations that affect knowledge and places them within an understandable social need and policy platform: access to knowledge goods [. . .] The rich and the poor can be more equal with regard to knowledge goods than to many other areas.⁹⁰

Under the umbrella of the Art 27 of the Universal Declaration of Human Rights, several working projects at the international level have been set up to address the request of the A2K movement. As part of the discussions leading to the adoption of the WIPO Development Agenda,⁹¹ activist produced a document to start negotiations on a Treaty on Access to Knowledge.⁹² The proposed treaty is based on the core idea that “restrictions on access ought to be the exception, not the other way around,” and that “both subject matter exclusions from, and exceptions and limitations to, intellectual property protection standards are mandatory rather than permissive.”⁹³ Unfortunately, consensus on the A2K

ON INTEGRAL HUMAN DEVELOPMENT IN CHARITY AND TRUTH, available at http://www.vatican.va/holy_father/benedict_xvi/encyclicals/documents/hf_ben-xvi_enc_20090629_caritas-in-veritate_en.html.

⁸⁶ See GRAHAM DUTFIELD AND UMA SUTHERSANEN, GLOBAL INTELLECTUAL PROPERTY LAW 277 (Edward Elgar 2008).

⁸⁷ See generally ACCESS TO KNOWLEDGE IN THE AGE OF INTELLECTUAL PROPERTY (Gaëlle Krikorian and Amy Kapczynski eds., Zone Books 2011); ACCESS TO KNOWLEDGE IN AFRICA: THE ROLE OF COPYRIGHT (Chris Armstrong, Jeremy de Beer, Dick Kawooya, Achal Prabhala, and Tobias Schonwetter eds., UCT Press 2010); Amy Kapczynski, *The Access to Knowledge Mobilization and The New Politics of Intellectual Property*, 117 YALE L. J. 804 (2008).

⁸⁸ Yale Information Society Project, Access to Knowledge Conference 2007 (A2K2), <http://www.law.yale.edu/intellecualife/7105.htm>.

⁸⁹ *Id.*

⁹⁰ Consumer Project on Technology, Access to Knowledge Movement, <http://www.cptech.org/a2k>.

⁹¹ See Development Agenda for WIPO, <http://www.wipo.int/ip-development/en/agenda>.

⁹² See Proposed World Intellectual Property Organization Treaty on Access to Knowledge (May 9, 2005) (Draft), available at www.cptech.org/a2k/a2k_treaty_may9.pdf.

⁹³ Laurence R. Helfer, *Toward a Human Rights Framework for Intellectual Property*, 40 U.C. DAVIS L. REV. 971, 1013 (2007); see also Proposed WIPO A2K Treaty, *supra* note 92 (mentioning other actions to achieve A2K goals, such as the use of the Internet as a tool for broader public participation; preservation of public domain; control of anticompetitive practices; restriction of the use of TPMs limiting A2K; use of educational material made available at an unreasonable price; and a new role of fair use, especially for purposes including but not limited to parody, reverse engineering and use of works by disabled person).

Treaty is still an ephemeral mirage, although, after a long battle,⁹⁴ a narrow version of the A2K Treaty, to promote the use of protected works by disabled persons, was signed in Marrakesh in 2013.⁹⁵

The quest for access to knowledge goes hand in hand with the desire of the Global South and minorities to reclaim cultural identity from imperialist power. The search for cultural distinctiveness and access to knowledge becomes a paradigm of equality.⁹⁶ Although international agreement from all stakeholders on an A2K Treaty may be hard to reach, grass-root civil society movements spearheaded similar goals through different routes. A quest for openness of access to academic knowledge occupied the recent agenda of a global network of institutions and stakeholders.

V. FROM “ELITE-NMENT” TO OPEN KNOWLEDGE ENVIRONMENTS

In a momentous speech at the European Organization for Nuclear Research (CERN) in Geneva, Professor Lawrence Lessig reminded the audience of scientist and researchers that most scientific knowledge is locked away for the general public and can only be accessed by professors and students in a university setting. Lessig pungently made the point that “if you are a member of the knowledge elite, then there is free access, but for the rest of the world, not so much [. . .] publisher restrictions do not achieve the objective of enlightenment, but rather the reality of ‘elite-nment.’”⁹⁷

Other authors have reinforced this point. John Willinsky, for example, suggested that, as its key contribution, open access publishing (OAP) models may move “knowledge from the closed cloisters of privileged, well-endowed universities to institutions worldwide.”⁹⁸ As Willinsky noted again, “open access could be the next step in a tradition that includes the printing press and penny post, public libraries and public schools. It is a tradition bent on increasing the democratic circulation of knowledge [. . .].”⁹⁹ There is a common understanding that the path to digital enlightenment may pass through open access to scientific knowledge.

⁹⁴See, e.g., Margot E. Kaminski and Shlomit Yanisky-Ravid, Addressing the Proposed WIPO International Instrument on Limitations and Exceptions for Persons with Print Disabilities: Recommendation or Mandatory Treaty? (Yale Information Society Project Working Paper, November 14, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1959694.

⁹⁵ See [Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled \(July 27, 2013\)](#).

⁹⁶ See JOOST SMIERS AND MARIEKE VAN SCHIJNDEL, ADIEU AUTEURSRECHT EN VAARWEL CULTURELE CONGLOMERATEN [ADIEU COPYRIGHT AND FARWELL CULTURAL CONGLOMERATES] 131 (2009); JOHANNA GIBSON, COMMUNITY RESOURCES: INTELLECTUAL PROPERTY, INTERNATIONAL TRADE AND PROTECTION OF TRADITIONAL KNOWLEDGE 127-153 (Ashgate 2005).

⁹⁷ Lawrence Lessig, The Architecture of Access to Scientific Knowledge: Just How Badly we Have Messed This Up (speech delivered at CERN Colloquium and Library Science Talk) (April 18, 2011), available at <http://cdsweb.cern.ch/record/1345337>; see also Lawrence Lessig, Recognizing the Fight We’re In, keynote speech delivered at the Open Rights Group Conference, London, UK (March 24, 2012), available at <http://vimeo.com/39188615>.

⁹⁸ JOHN WILLINSKY, THE ACCESS PRINCIPLE: THE CASE FOR OPEN ACCESS TO RESEARCH AND SCHOLARSHIP 33 (MIT PRESS 2006).

⁹⁹ *Id.*, at 30.

The open access movement in scholarly publishing was inspired by the dramatic increase in prices for journals and publisher restrictions to the reuse of information.¹⁰⁰ The academics' reaction against the 'cost of knowledge'—also known as the serial crisis—is on the rise, especially against the practice of charging 'exorbitant high prices for [. . .] journals' and of 'sell[ing] journals in very large bundles'.¹⁰¹ As Reto Hilty noted, the price increase of publishers' products—while publishers' costs have sunk dramatically—have forced the scientific community to react by implementing open access options, because antiquated copyright laws have failed to bring about reasonable balance of interests.¹⁰² George Monbiot stressed the unfairness of the system of academic publishing by noting, with specific reference to publishers such as Elsevier, Springer, or Wiley-Blackwell:

[w]hat we see here is pure rentier capitalism: monopolising a public resource then charging exorbitant fees to use it. Another term for it is economic parasitism. To obtain the knowledge for which we have already paid, we must surrender our feu to the lairds of learning.¹⁰³

The parasitism lies in a monopoly over a content that the academic publishers do not create and do not pay for. The researchers, willing to publish with reputable journals, surrender their copyrights for free. Most of the times, the production of that very content—now monopolized by the academic publishers—was funded by the public, through government research grants and academic incomes. This lead some authors to discuss the opportunity of abolishing copyright for academics works all together.¹⁰⁴ As history has highlighted from the ancient proverbial idea of *scientia donum dei est unde vendi non potest* to the emergence of the notion of 'open science', the normative structure of science presents an unresolvable tension with the exclusive and monopolistic structure of intellectual property entitlements. Merton powerfully emphasized the contrast between the ethos of science and intellectual property monopoly rights:

“Communism,” in the nontechnical and extended sense of common ownership of good, is a second integral element of scientific the ethos. The substantive findings of science are a

¹⁰⁰ See GIANCARLO F. FROSIO, OPEN ACCESS PUBLISHING: A LITERATURE REVIEW (study prepared for the RCUK Centre for Copyright and New Business Models in the Creative Economy) (2014), [available at http://www.create.ac.uk/publications/open-access-publishing-a-literature-review](http://www.create.ac.uk/publications/open-access-publishing-a-literature-review) (providing a book length overview of the OAP movement and several open access initiatives and projects, economics of academic publishing and copyright implications, OAP business models, and OAP policy initiatives).

¹⁰¹ See The Cost of Knowledge, Researchers Taking a Stand against Elsevier, <http://thecostofknowledge.com>; The Price of Information: Academics are Starting to Boycott a Big Publisher of Journals, THE ECONOMIST, February 4 2012, <http://www.economist.com/node/21545974>; see also Eyal Amiran, *The Open Access Debate*, 18(1/2) SYMPLOKE 251 (2011) (reporting several other example of these reactions and boycotts).

¹⁰² See Reto M. Hilty, *Copyright Law and the Information Society – Neglected Adjustments and Their Consequences*, 38(2) ICC 135 (2007).

¹⁰³ See George Monbiot, Academic Publishers Make Murdoch Look like a Socialist, THE GUARDIAN, August 29, 2011, <http://www.guardian.co.uk/commentisfree/2011/aug/29/academic-publishers-murdoch-socialist>; see also Richard Smith, *The Highly Profitable but Unethical Business of Publishing Medical Research*, 99 J. R. SOC. MED. 452 (2006) (discussing in similarly strong terms the unethical nature of the business of publishing medical research).

¹⁰⁴ See Steven Shavell, *Should Copyright of Academic Works Be Abolished?* 2 J. LEGAL ANALYSIS 301, 301-358 (2010).

product of social collaboration and are assigned to the community. They constitute a common heritage in which the equity of the individual producer is severely limited. An eponymous law or theory does not enter into the exclusive possession of the discoverer and heirs, nor do the mores bestow upon them special rights of use and disposition. *Property rights in science are whittled down to the bare minimum by the rationale of the scientific ethic.* Scientists claim to “their” intellectual “property” are limited to those of recognition and esteem which, if the institution functions with a modicum of efficiency, are roughly commensurate with the significance of the increments brought to the common fund of knowledge.¹⁰⁵

The major propulsion to open access at the European level was given by the so called Berlin Conferences. The first Berlin Conference was organized in 2003 by the Max Planck Society and the European Cultural Heritage Online (ECHO) project to discuss ways of providing access to research findings. Annual follow-up conferences have been organized ever since. The most significant result of the Berlin Conference was the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* (“Berlin Declaration”), including the goal of disseminating knowledge through the open access paradigm via the Internet.¹⁰⁶ The Berlin Declaration has been signed by hundreds of European and international institutions. OAP refers to a publishing model where the research institution or the party financing the research pays for publication and the article is then freely accessible. In particular, OAP refers to free and unrestricted world-wide electronic distribution and availability of peer-reviewed journal literature. The Budapest Open Access Initiative uses a definition that includes free reuse and redistribution of “open access” material by anyone.¹⁰⁷ According to Peter Suber, the *de facto* spokesperson of the OAP movement,

[o]pen access (OA) is free online access [. . .] OA literature is not only free of charge to everyone with an internet connection, but free of most copyright and licensing restrictions. OA literature is barrier-free literature produced by removing the price barriers and permission barriers that block access and limit usage of most conventionally published literature, whether in print or online.¹⁰⁸

Since the inception of the open-access initiative in 2001, there are now almost eleven thousand open access journals and their number is constantly on the rise.¹⁰⁹ In addition, several leading international academic institutions endorsed open-access policies and have been working towards mechanisms to cover open-access journals’ operating

¹⁰⁵ Robert K Merton, *The Normative Structure of Science*, in *THE SOCIOLOGY OF SCIENCE: THEORETICAL AND EMPIRICAL INVESTIGATIONS* 273 (U. Chicago Press 1979) (1942); see also James Boyle, *Mertonianism Unbound: Imagining Free, Decentralized Access to Most Cultural and Scientific Material*, in *UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE* 124 (Charlotte Hess and Elinor Ostrom eds., MIT Press 2006).

¹⁰⁶ See Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 22, 2003), Berlin Conference, Berlin, October 20-22, 2003, available at <http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung>.

¹⁰⁷ Budapest Open Access Initiative, Budapest, Hungary, February 14, 2002, <http://www.soros.org/openaccess/index.shtml>

¹⁰⁸ Peter Suber, *Creating an Intellectual Commons Through Open Access*, in *UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE* 171 (Charlotte Hess and Elinor Ostrom eds., MIT Press 2006).

¹⁰⁹ See DOAJ, Directory of Open Access Journals, <http://www.doaj.org>.

expenses.¹¹⁰ The same approach is increasingly followed by governmental institutions,¹¹¹ also in light of the fact that economic studies have been showing a positive net value of OAP models when compared to other publishing models.¹¹² The European Commission, for example, plans to make open-access publishing the norm for research receiving funding from its Horizon 2020 programme—the EU framework programme for research and innovation.¹¹³ As part of its *Innovation and Research Strategy for Growth*, the UK government has announced that all publicly funded scientific research must be published in open-access journals.¹¹⁴ In the US, several research funding agencies have instituted OA conditions.¹¹⁵ After an initial voluntary adoption in 2005, the Consolidated Appropriations Act of 2008¹¹⁶ instituted an OA mandate for research projects funded by the NIH.¹¹⁷ So far, the NIH has reported a compliance rate of 75%.¹¹⁸ Together with research articles, data, teaching materials, and the like, the importance of open access

¹¹⁰ See The Scholarly Publishing & Academic Resources Coalition [SPARC], Campus Open Access Policies, <http://www.arl.org/sparc/advocacy/campus>; see also ROARMap, <http://www.eprints.org/openaccess/policy> <http://www.sherpa.ac.uk/juliet/index.php>; Queensland University of Technology, F/1.3 QUT E–print repository for research output, http://www.mopp.qut.edu.au/F/F_01_03.jsp; Eric Priest, *Copyright and The Harvard Open Access Mandate*, 10 NW. J. TECH. & INTELL. PROP. 377 (2012).

¹¹¹ See FROSIO, *supra* note 100, at 163-180.

¹¹² See JOHN HOUGHTON, OPEN ACCESS – WHAT ARE THE ECONOMIC BENEFITS? A COMPARISON OF THE UNITED KINGDOM, NETHERLANDS AND DENMARK (June 23, 2009) (report prepared for Knowledge Exchange) (showing that adopting an open access model to scholarly publications could lead to annual savings of around €70 million in Denmark, €133 million in the Netherlands and €480 million in the United Kingdom); JOHN HOUGHTON WITH BRUCE RASMUSSEN AND PETER SHEEHAN, ECONOMIC AND SOCIAL RETURNS ON INVESTMENT IN OPEN ARCHIVING PUBLICLY FUNDED RESEARCH OUTPUTS (July 2010) (report prepared for The Scholarly Publishing & Academic Resources Coalition [SPARC]) (concluding that free access to U.S. taxpayer-funded research papers could yield \$1 billion in benefits)

¹¹³ See Horizon 2000, The Framework Programme for Research and Education, http://ec.europa.eu/research/horizon2020/index_en.cfm.

¹¹⁴ See INNOVATION AND RESEARCH STRATEGY FOR GROWTH 76-78 (prepared by the Department for Business Innovation and Skills) (December 2011), <http://www.bis.gov.uk/assets/biscore/innovation/docs/i/11-1387-innovation-and-research-strategy-for-growth.pdf>; see also WORKING GROUP ON EXPANDING ACCESS TO PUBLISHED RESEARCH FINDINGS, ACCESSIBILITY, SUSTAINABILITY, EXCELLENCE: HOW TO EXPAND ACCESS TO RESEARCH PUBLICATIONS (FINCH REPORT) (June 2012), available at <http://www.researchinfonet.org/publish/finch>.

¹¹⁵ See US Department of Education, Institute of Education Sciences (IES), Request for Application (IES 2009) 11, http://ies.ed.gov/funding/pdf/2010_84305G.pdf; National Center for Atmospheric Research, New Open Access Policy for NCAR Research, ATMOS NEWS, October 20, 2009, <https://www2.ucar.edu/atmosnews/news/1059/new-open-access-policy-ncar-research>; Howard Hughes Medical Institute, Research Policies: Public Access to Publications (SC-320) (June 11, 2007), <http://www.hhmi.org/sites/default/files/About/Policies/sc320.pdf>.

¹¹⁶ See Consolidated Appropriations Act of 2008 HR 2764; see also Eve Heafey, *Public Access to Science: The New Policy of The National Institutes of Health in Light of Copyright Protections in National and International Law*, 15 UCLA J. L. & Tech. 1 (2011).

¹¹⁷ See National Institutes of Health, Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research, <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html>; see also Peter Suber, *An Open Access Mandate for the National Institutes of Health*, 2(2) Open Medicine (2008), <http://www.openmedicine.ca/article/viewArticle/213/135>.

¹¹⁸ See Richard Poynder, Open Access Mandates: Ensuring Compliance, *Open and Shut*, May 18 2012) <http://poynder.blogspot.fi/2012/05/open-access-mandates-ensuring.html>.

models extends also to books. Millions of historic volumes are now openly accessible from various digitization projects such as Europeana, Google Books, or Hathi. In addition, many recent volumes are also available as open access from a variety of academic presses, government and nonprofit agencies, and other individuals and groups. Libraries cataloging data have been increasingly released under open access models.¹¹⁹

Criticizing the university for having become part of the problem of enclosure of scientific commons by “avidly defending their rights to patent their research results, and licence as they choose,” Richard Nelson has argued that “the key to assuring that a large portion of what comes out of future scientific research will be placed in the commons is staunch defense of the commons by universities.”¹²⁰ Nelson continues by arguing that if universities “have policies of laying their research results largely open, most of science will continue to be in the commons.”¹²¹ There is a true responsibility of the academic community towards expanding OAP. The role of universities in the OA and OAP movement is indeed critical and more than any other institutions they may promote the goals of “open science.” Willinsky again advocated the idea that scholars have a responsibility to make their work available OA globally by referring to an ‘access principle’ and noting that “*a commitment to the value and quality of research carries with it a responsibility to extend the circulation of such work as far as possible and ideally to all who are interested in it and all who might profit by it.*”¹²² In this sense, the true challenge ahead of the OAP movement is to turn university environments, and the knowledge produced therein, into a more easily and freely accessible public good, perhaps better integrating the OAP movement with Open University and Open Learning.

Seeking to reap the full value that open access can yield in the digital environment, Jerome Reichman and Paul Uhlir proposed a model of open knowledge environments (OKEs) for digitally networked scientific communication.¹²³ OKEs would “bring the scholarly communication function back into the universities” through “the development of interactive portals focused on knowledge production and on collaborative research and educational opportunities in specific thematic areas.”¹²⁴ Also, OKEs might reshape the role of libraries. As mentioned earlier, libraries as knowledge infrastructures should be one of the main drivers of access to knowledge in the digital networked society. However, extreme commodification of information, as propelled by the present legal

¹¹⁹ See, e.g., Open Bibliographic Projects, Principles for Open Bibliographic Data, October 15, 2010, <http://openbiblio.net/2010/10/15/principles-for-open-bibliographic-data>.

¹²⁰ Richard R Nelson, *The Market Economy, and the Scientific Commons*, 33 RESEARCH POLICY 455, 467 (2004).

¹²¹ *Id.*

¹²² WILLINSKY, *supra* note 98, at xii; see also SUBER, OPEN ACCESS (MIT Press 2012) (discussing the emergence of this principle).

¹²³ See JEROME H. REICHMAN, TOM DEDEURWAERDERE, AND PAUL F. UHLIR, GOVERNING DIGITALLY INTEGRATED GENETIC RESOURCES, DATA, AND LITERATURE: GLOBAL INTELLECTUAL PROPERTY STRATEGIES FOR A REDESIGNED MICROBIAL RESEARCH COMMONS (Cambridge U. Press, 2016).

¹²⁴ Paul F. Uhlir, Revolution and Evolution in Scientific Communication: Moving from Restricted Dissemination of Publicly-Funded Knowledge to Open Knowledge Environment, speech delivered at the 2nd COMMUNIA Conference (June 28, 2009).

framework, may drive libraries away from their function as knowledge infrastructures. As Guy Pessach noted,

libraries are increasingly consuming significant shares of their knowledge goods from globalized publishers according to the contractual and technological protection measures that these publishers impose on their digital content. Thus there is an unavoidable movement of enclosure regarding the provision of knowledge through libraries, all in a manner that practically compels libraries to take part in the privatization of knowledge supply and distribution.¹²⁵

Therefore, the road to global access to knowledge is to provide digital libraries with a better framework to support their independence from increasing commodification of knowledge goods. Several preliminary steps have been taken in the context of articles 3-1(V) and 3-1(VIII) of the WIPO A2K draft treaty and other legal instruments.¹²⁶ A World Digital Public Library that integrates OKEs will push forth the rediscovery of currently unused or inaccessible works, open up the riches of knowledge in formats that are accessible to persons with disabilities and, empower a superior democratic process by favoring access regardless of users' market power.

VI. THE EMERGENCE OF THE PUBLIC DOMAIN

As Jessica Litman noted, “a vigorous public domain is a crucial buttress to the copyright system; without the public domain, it might be impossible to tolerate copyright at all.”¹²⁷ The increasing enclosure of the public domain has contributed to the crisis of acceptance in which copyright law is fallen. The emergence and the recognition of the public domain, the development of a public domain project and the advent of a movement for cultural environmentalism are key elements to the resistance to copyright over-expansion. More fundamentally perhaps, the emphasis over the importance of the public domain has gained momentum together with the rise of the networked information economy and its ethical revolution emphasizing mass collaboration, sharing economy and gift exchange. In this respect, Daniel Drache noted that “the emergence of the public domain and public goods in the globalized society have increasingly troubled the future prospects of ‘market fundamentalism.’”¹²⁸

¹²⁵ Pessach Guy, *The Role Of Libraries In A2K: Taking Stock And Looking Ahead*, 2007 MICH. ST. L. REV. 257 (2007).

¹²⁶ See Proposed WIPO A2K Treaty, *supra* note 92. See also Orphan Works Directive, *supra* note 56 (enabling the use of orphan works after diligent search for public libraries digitization projects); Case C-117/13, Technische Universität Darmstadt v Eugen Ulmer KG, 2014 E.C.D.R. 23 (September 11, 2013) (stating that European libraries may digitize books in their collection without permission from the rightholders with caveats); Law of September 11, 2015 amending the Law on Copyright and Related Rights (Poland) (bringing library services in Poland into the twenty-first century by enabling digitization for socially beneficial purposes, such as education and preservation of cultural heritage).

¹²⁷ Jessica Litman, *The Public Domain*, 39 EMORY L. J. 965, 977 (1990).

¹²⁸ Daniel Drache, *Introduction: The Fundamentals of Our Time*, in *THE MARKET OR THE PUBLIC DOMAIN: GLOBAL GOVERNANCE AND ASYMMETRY OF POWER 1* (Daniel Drache ed., Routledge 2000).

Authors suggested that the Statute of Anne actually created the public domain, by limiting the duration of protected works and by introducing formalities.¹²⁹ However, in early copyright law, there was no positive term to affirmatively refer to the public domain, though terms like *publici juris* or *propriété publique* had been employed by 18th century jurists.¹³⁰ Nonetheless, the fact of the public domain was recognized, though no single locution captured that concept. Soon, the fact of the public domain was elaborated into a “discourse of the public domain—that is, the construction of a legal language to talk about public rights in writings.”¹³¹ Historically, the term public domain was firstly employed in France by the mid-19th century to mean the expiration of copyright.¹³² The English and American copyright discourse borrowed the term around the time of the drafting of the Berne Convention with the same meaning.¹³³ Traditionally, the public domain has been defined in relation to copyright as the opposite of property, as the “other side of the coin of copyright” that “is best defined in negative terms”.¹³⁴ This traditional definition regarded the public domain as a “wasteland of undeserving detritus” and did not “worry about ‘threats’ to this domain any more than [it] would worry about scavengers who go to garbage dumps to look for abandoned property.”¹³⁵ This is no more. This definitional approach has been discarded in the last thirty years.

In 1981, Professor David Lange published his seminal work, *Recognizing the Public Domain*, and departed from the traditional line of investigation of the public domain. Lange suggested that “recognition of new intellectual property interests should be offset today by equally deliberate recognition of individual rights in the public domain.”¹³⁶ Lange called for an affirmative recognition of the public domain and drafted the skeleton of a theory of the public domain. The public domain that Lange had in mind would become a “sanctuary conferring affirmative protection against the forces of private appropriation” that threatened creative expression.¹³⁷ The affirmative public domain was a powerfully attractive idea for the scholarly literature and civic society. Lange spearheaded a “conservancy model”, concerned with promoting the public domain and protecting it against any threats, that juxtaposed the traditional “cultural stewardship model” which regarded ownership as the prerequisite of productive management.¹³⁸ The

¹²⁹ See Jane C. Ginsburg, “*Une Chose Publique*”: *The Author's Domain and the Public Domain in Early British, French and US Copyright Law*, 65 CAMBRIDGE L. J. 636, 642 (2006).

¹³⁰ *Id.*, at 638.

¹³¹ Mark Rose, *Nine-Tenths of the Law: The English Copyright Debates and the Rhetoric of the Public Domain*, 66 LAW & CONTEMP. PROBS. 75, 77 (2003).

¹³² See Ginsburg, *supra* note 129, at 637.

¹³³ *Id.*

¹³⁴ William M. Krasilovsky, *Observations on Public Domain*, 14 BULL. COPYRIGHT SOC'Y 205 (1967).

¹³⁵ Pamela Samuelson, *The Public Domain: Mapping the Digital Public Domain: Threats and Opportunities*, 66 LAW & CONTEMP. PROB. 147, 147 (2003).

¹³⁶ David Lange, *Recognizing The Public Domain*, 44 LAW & CONTEMP. PROBS. 147, 147 (1981).

¹³⁷ Lange, *supra* note 28, at 466.

¹³⁸ Julie Cohen, *Copyright, Commodification, and Culture: Locating the Public Domain*, in *THE FUTURE OF THE PUBLIC DOMAIN: IDENTIFYING THE COMMONS IN INFORMATION LAW* 134-135 (Lucie Guibault and P. Bernt Hugenholtz eds., Kluwer Law International 2006).

positive identification of the public domain propelled the “public domain project,” as Michael Birnhack called it.¹³⁹

Many authors attempted to define, map, and explain the role of the public domain as an alternative to the commodification of information that threatened creativity. This ongoing public domain project offers many definitions that attempt to construe the public domain positively.¹⁴⁰ In any event, a positive, affirmative definition of the public domain is fluid by nature. An affirmative definition of the public domain is a political statement, the endorsement of a cause. In other words, “[t]he public domain will change its shape according to the hopes it embodies, the fears it tries to lay to rest, and the implicit vision of creativity on which it rests. There is not one public domain, but many.”¹⁴¹ Notwithstanding many complementing definitional approaches, consistency is to be found in the common idea that the “material that compose our cultural heritage must be free for all to use no less than matter necessary for biological survival.”¹⁴² As a corollary, the many modern definitions of the public domain are unified by concerns over recent copyright expansionism. The common understanding of the participants to the public domain project is that enclosure of the “material that compose our cultural heritage” is a welfare loss against which society at large must be guarded from. The modern definitional approach endorsed by the public domain project is intended to turn upside down the metaphor describing the public domain as what is “left over after intellectual property had finished satisfying its appetite”¹⁴³ by thinking at copyright as “a system designed to feed the public domain providing temporary and narrowly limited rights, [. . .] all with the ultimate goal of promoting free access.”¹⁴⁴ Moreover, the public domain envisioned by recent legal, public policy and economic analysis becomes the “place we quarry the building blocks of our culture.”¹⁴⁵ However, the construction of an affirmative idea of the public domain should always consider that the abstraction of the public domain is slippery.¹⁴⁶ That affirmative notion must be embodied in a physical space that may be immediately and positively protected and nourished. As Professor Lange puts it, “the problems will not be resolved until courts have come to see the public domain not merely as an unexplored abstraction but as a field of individual rights fully as important as any of the new property rights.”¹⁴⁷

¹³⁹ Michael D. Birnhack, *More or Better? Shaping the Public Domain*, in *THE FUTURE OF THE PUBLIC DOMAIN*, *supra* note 138, at 59, 60.

¹⁴⁰ See GIANCARLO F. FROSIO, *COMMUNIA FINAL REPORT ON THE DIGITAL PUBLIC DOMAIN* 52-53 (report prepared for the European Commission on behalf of the COMMUNIA Network and the NEXA Center) (2012), available at <http://communia-project.eu/final-report>.

¹⁴¹ James Boyle, *The Second Enclosure Movement and the Construction of the Public Domain*, 66 *LAW & CONTEMP. PROBS.* 33, 62 (2003).

¹⁴² RAY L. PATTERSON & STANLEY W. LINDBERG, *THE NATURE OF COPYRIGHT: A LAW OF USERS' RIGHTS* 51 (University of Georgia Press 1991).

¹⁴³ See Lange, *supra* note 28, at 465, n. 11 (for the “feeding” metaphor).

¹⁴⁴ Boyle, *supra* note 141, at 60.

¹⁴⁵ JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 40 (Yale University Press 2009).

¹⁴⁶ See RONAN DEAZLEY, *RETHINKING COPYRIGHT: HISTORY, THEORY, LANGUAGE* 105 (Edward Elgar Publishing 2008)

¹⁴⁷ Lange, *supra* note 136, at 180.

The modern public domain discourse owes much to the legal analysis of the governance of the commons, natural resources used by many individuals in common. Although public domain and commons are diverse concepts,¹⁴⁸ the similarities are many. Since the origin of the public domain discourse, the environmental metaphor has been largely used to refer to the cultural public domain.¹⁴⁹ Therefore, the traditional environmental conception of the commons was ported to the cultural domain and applied to intellectual property policy issues. Environmental and intellectual property scholars started to look at knowledge as a commons—a shared resource. In 2003, the Nobel Prize Elinor Ostrom and her colleague Charlotte Hesse discussed the applicability of their ideas on the governance and management of common pool resources to the new realm of the intellectual public domain.¹⁵⁰ The following literature continued to develop the concept of cultural commons in the footsteps of the Ostrom’s analyses.¹⁵¹ The application of the literature on governing the commons to cultural resources brings a shift in approach and methodology from the previous discourse of the public domain. This different approach has been described as follows:

[t]he old dividing line in the literature on the public domain had been between the realm of property and the realm of the free. The new dividing line, drawn as a palimpsest on the old, is between the realm of individual control and the realm of distributed creation, management, and enterprise.¹⁵²

Under this conceptual scheme, restraint on use may not be longer an evil but a necessity of a well-run commons. The individual, legal, and market based control of the property regime is juxtaposed to the collective and informal controls of the well-run commons.¹⁵³

¹⁴⁸ The main difference lies in the fact that a commons may be restrictive. The public domain is free of property rights and control. A commons, on the contrary, can be highly controlled, though the whole community has free access to the common resources. Free Software and Open Source Software are examples of intellectual commons. See YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 63-68 (Yale University Press 2007). The source code is available to anyone to copy, use and improve under the set of conditions imposed by the General Public License. However, this kind of control is different than under traditional property regimes because no permission or authorization is required to enjoy the resource. These resources are protected by a liability rule rather than a property rule. See Lawrence Lessig, *The Architecture of Innovation*, 51 DUKE L. J. 1783, 1788 (2002). A commons is defined by the notions of governance and sanctions, which may imply rewards, punishment, and boundaries. See Wendy J. Gordon, *Response, Discipline and Nourish: On Constructing Commons*, 95 Cornell L. Rev. 733, 736-749 (2010).

¹⁴⁹ See Mark Rose, *Copyright and Its Metaphors*, 50 UCLA L. REV. 1 (2002); William St Clair, *Metaphors of Intellectual Property*, in *PRIVILEGE AND PROPERTY. ESSAYS ON THE HISTORY OF COPYRIGHT* 391-392 (Ronan Deazley, Martin Kretschmer and Lionel Bently eds., Open Book Publishers 2010).

¹⁵⁰ Charlotte Hess and Elinor Ostrom, *Ideas, Artifacts, and Facilities: Information as a Common-Pool Resource*, 66 LAW & CONTEMP. PROBS. 111, 111 (2003); see also Michael J. Madison, Brett M. Frischmann and Katherine J. Strandburg, *The University as Constructed Cultural Commons*, 30 WASH. U. J. L. & POL’Y 365, 659 (2009).

¹⁵¹ See, e.g., Madison, Fisherman, and Strandburg, *supra* note **Error! Bookmark not defined.**, at 657; see also Elinor Ostrom and Charlotte Hess, *A Framework for Analyzing the Knowledge Commons*, in *UNDERSTANDING KNOWLEDGE AS A COMMONS: FROM THEORY TO PRACTICE* 41-81 (Charlotte Hess and Elinor Ostrom eds., MIT Press 2007).

¹⁵² Boyle, *supra* note 141, at 66.

¹⁵³ See James Boyle, *Foreword: The Opposite of Property*, 66 LAW & CONTEMP. PROB. 1, 8 (2003).

The well-run commons can avoid the tragedy of the commons without the need of single party ownership.

The movement to preserve the environmental commons inspired a new politics of intellectual property.¹⁵⁴ The environmental metaphor has propelled what can be termed as a cultural environmentalism.¹⁵⁵ Several authors spearheaded by Professor James Boyle have cast a defense of the public domain on the model of the environmental movement. Morphing the public domain into the commons, and casting the defense of the public domain on the model of the environmental movement, has the advantage of embodying the public domain in a much more physical idea, thus minimizing its abstraction and the related difficulty of affirmatively protecting it. The primary focus of cultural environmentalism is to develop an affirmative discourse that will make the public domain visible. The lesson from the environmentalist movement thought that, before the movement, the environment was invisible. Therefore, “like the environment”, Boyle suggests by echoing David Lange, “the public domain must be ‘invented’ before it can be saved.”¹⁵⁶ Today, the public domain has been “invented” as a positive concept and the “coalition that might protect it”, evoked if not called into being by scholars more than a decade ago, is formed.¹⁵⁷ Many academic and civil society endeavors have joined and propelled this coalition.¹⁵⁸ Civil advocacy of the public domain and access to knowledge has also been followed by several institutional variants, such as the World Intellectual Property Organization’s “Development Agenda.”¹⁵⁹ Recommendation 20 of the Development Agenda endorses the goal “[t]o promote norm-setting activities related to IP that support a robust public domain in WIPO’s Member States.” Europe put together a diversified network of projects for the protection and promotion of the public domain and open access.¹⁶⁰ As a flagship initiative, the European Union has promoted COMMUNIA, the European Thematic Network on the Digital Public Domain.¹⁶¹ Several COMMUNIA

¹⁵⁴ See James Boyle, *A Politics of Intellectual Property: Environmentalism for the Net?*, 47 DUKE L. J. 87, 110 (1997).

¹⁵⁵ See James Boyle, *Cultural Environmentalism and Beyond*, 70 LAW & CONTEMP. PROB. 5 (2007).

¹⁵⁶ Boyle, *supra* note 141, at 52.

¹⁵⁷ Boyle, *supra* note 154, at 113.

¹⁵⁸ See COMMUNIA, *Survey of Existing Public Domain Competence Centers*, Deliverable No. D6.01 (Draft, September 30, 2009) (survey prepared by Federico Morando and Juan Carlos De Martin for the European Commission) (on file with the author) (reviewing the current landscape of European competence and excellence centers that focus on the study of the public domain).

¹⁵⁹ See Development Agenda for WIPO, <http://www.wipo.int/ip-development/en/agenda>; see also SEVERINE DUSOLLIER, SCOPING STUDY ON COPYRIGHT AND THE PUBLIC DOMAIN 69 (prepared for the World Intellectual Property Organization) (April 30, 2010).

¹⁶⁰ Together with COMMUNIA, as part of the i2010 policy strategy, see Europeana: Think Culture, <http://www.europeana.eu/portal>; LAPSI: Legal Aspects of Public Sector Information, <http://www.lapsi-project.eu>; DRIVER, Digital Repository Infrastructure Vision for European Research, <http://www.driver-repository.eu>; ARROW, *supra* note 49; DARIAH, Digital Research Infrastructure for the Arts and Humanities, <http://www.dariah.eu> (aiming to enhance and support digitally-enabled research across the humanities and the arts).

¹⁶¹ See COMMUNIA, *The European Thematic Network on the Digital Public Domain*, <http://communia-project.eu>; see also FROSIO, *supra* note 140; Giancarlo F. Frosio, *COMMUNIA and the European Public Domain Project: A Politics of the Public Domain*, in COMMUNIA, THE DIGITAL PUBLIC DOMAIN (Juan Carlos De Martin and Melanie Dulong de Rosnay eds., OpenBooks Publishers, 2012).

members embodied their vision in the *Public Domain Manifesto*.¹⁶² In addition, other European policy statements endorsed the same core principles of the Public Domain Manifesto. The Europeana Foundation has published the *Public Domain Charter* to stress the value of public domain content in the knowledge economy.¹⁶³ The Free Culture Forum released the *Charter for Innovation, Creativity and Access to Knowledge* to plead for the expansion of the public domain, the accessibility of public domain works, the contraction of the copyright term, and the free availability of publicly funded research.”¹⁶⁴ Again, the Open Knowledge Foundation launched the *Panton Principles for Open Data in Science* to endorse the concept that “data related to published science should be explicitly placed in the public domain.”¹⁶⁵

The focus of cultural environmentalism has been magnified on online commons and the Internet as the “über-commons—the grand infrastructure that has enabled an unprecedented new era of sharing and collective action.”¹⁶⁶ In the last decade, we have witnessed the emergence of a “single intellectual movement, centered on the importance of the commons to information production and creativity generally, and to the digitally networked environment in particular.”¹⁶⁷ According to David Bollier, the commoners have emerged as a political movement committed to freedom and innovation.¹⁶⁸ The “commonist” movement created a new order that is embodied in countless collaborative online endeavors.

The emergence and growth of an environmental movement for the public domain and, in particular, the digital public domain, is morphing the public domain into the commons. The public domain is our cultural commons: it is like our air, water, and forests. We must look at it as a shared resource that cannot be commodified. As with the natural environment, the public domain and the cultural commons that it embodies must enjoy a sustainable development. As with our natural environment, the need to promote a “balanced and sustainable development” of our cultural environment is a fundamental right that is rooted in the Charter of Fundamental Rights of the European Union.¹⁶⁹ Overreaching property theory and overly protective copyright law disrupt the delicate tension between access and protection. Unsustainable cultural development, enclosure and commodification of our cultural commons will produce cultural catastrophes. As

¹⁶² See The Public Domain Manifesto, *supra* note 140.

¹⁶³ See The Europeana Public Domain Charter, <http://version1.europeana.eu/web/europeana-project/publications>.

¹⁶⁴ See Charter for Innovation, Creativity and Access to Knowledge: Citizens' and Artist's Rights in the Digital Age, Barcelona Free Culture Forum, <http://fcforum.net>.

¹⁶⁵ See Panton Principles: Principles for Open Data in Science, <http://pantonprinciples.org>.

¹⁶⁶ David Bollier, *The Commons as New Sector of Value Creation: It's Time to Recognize and Protect the Distinctive Wealth Generated by Online Commons*, Remarks at the Economies of the Commons: Strategies for Sustainable Access and Creative Reuse of Images and Sounds Online Conference (Amsterdam, April 12, 2008), available at <http://www.onthecommons.org/content.php?id=1813>.

¹⁶⁷ BENKLER, *supra* note 148, at 10.

¹⁶⁸ See DAVID BOLLIER, *VIRAL SPIRAL: HOW THE COMMONERS BUILT A DIGITAL REPUBLIC OF THEIR OWN* 3-14, 294-310 (New Press 2009).

¹⁶⁹ See Charter of Fundamental Rights of the European Union, December 18, 2000, 2000 O.J. (C364) 1, 8, 37.

unsustainable environmental development has polluted our air, contaminated our water, mutilated our forests, and disfigured our natural landscape, unsustainable cultural development will outrage and corrupt our cultural heritage and information landscape.

VI. CONCLUSIONS

I would like to conclude my review of this movement “resisting the resistance” to the Digital Revolution by sketching out a roadmap for reform that builds upon its vision. This roadmap would like to reshape the interplay between community, law, and market to envision a system that may fully exploit the digital opportunity by looking at history of creativity as a guidance.¹⁷⁰ This proposal revolves around the pivotal role of the users in a modern system for enhancing creativity. The coordinates of the roadmap correlate to four different but interlinked facets of a healthy creative paradigm: namely, (a) the necessity to rethink users’ rights, in particular users’ involvement in the legislative process; (b) the emergence of a politics of the public domain, rather than a politics of intellectual property; (c) the need to make cumulative and transformative creativity regain its role through the re-definition of the copyright permission paradigm; and (d) the transition to a consumer gift system or user patronage, through digital crowd-funding.

The roadmap for reform I envision would emphasize the role of the users. The Internet revolution is a bottom-up revolution. User-based culture defines the networked society, together with a novel concept of authorship mingling users and authors together. Therefore, the role of users in our legislative process and the relevance of user rights should be reinforced. So far, users have had very limited access to the bargaining table when copyright policies had to be enacted. This is due to the dominant mechanics of lobbying that largely excluded users from any policy decisions. This led to the implementation of a copyright system that is strongly protectionist and pro-distributors. In particular, the regulation of the Internet and the solutions given to the dilemmas posed by digitalization may undermine the potentialities of this momentous change and limit positive externalities for users.

In the networked, peer and mass productive environment, creativity seeks a politics of inclusive rights, rather than exclusive. This is a paradigmatic swift that would re-define the hierarchy of priorities by thinking in terms of “cultural policy” and developing a politics of the public domain, rather than a politics of intellectual property. Before the recognition of any intellectual property interests, a politics of the public domain must set up the “deliberate recognition of individual rights in the public domain.” It must provide positive protection of the public domain from appropriation. A politics of the public domain would reconnect policies for creativity with our past and our future, looking back

¹⁷⁰ Individual components of this roadmap for reform have been described in previous works of mine—to which I refer in this article. A more detailed review of this roadmap for reform—with each component of the proposal acting as a pillar for a metaphorical temple dedicated to the enhancement of creativity—will be the subject of Chapter 12, *The Temple of Digital Enlightenment*, of my forthcoming book *Cumulative Creativity: from the Oral-Formulaic Tradition to Digital Remix*.

at our tradition of cumulative creativity and looking forward at networked, mass collaborative, user-generated creativity.¹⁷¹

In order to reconnect the creative process with its traditional cumulative and collaborative nature, a politics of inclusive rights and a politics of the public domain seek the demise of copyright exclusivity.¹⁷² In my roadmap for reform, I argue for the implementation of additional mechanisms to provide an economic incentive to creation, such as a liability rule integrated into the system and an apportionment of profits. A politics of inclusivity would de-construe the post-romantic paradigm that over-emphasized creative individualism and absolute originality in order to adapt policies to networked and user-generated creativity.

Finally, I draw a parallel between traditional patronage, corporation patronage and neo-patronage or user patronage as a re-conceptualization of a patronage system in line with the exigencies of an interconnected digital society.¹⁷³ In the future, support for creativity may increasingly derive from a direct and unfiltered exchange between authors and the public, who would become the patrons of our creativity. Remuneration through attribution, self-financing through crowd-funding, ubiquity of digital technology and mass collaboration will keep the creative process in motion. This market transformation will facilitate a direct, unrestrained “discourse” between creators and the public. Yet, the role of distributors will be redefined and they may partially disappear, making the transition long and uncertain.

¹⁷¹ See, for further discussion of a politics of the public domain, Frosio, *supra* note 161; GIANCARLO F. FROSIO, COMMUNIA FINAL REPORT ON THE DIGITAL PUBLIC DOMAIN 1-194 (report prepared for the European Commission on behalf of the COMMUNIA Network and the NEXA Center) (2011), available at <http://www.communia-project.eu/final-report>.

¹⁷² This proposal—and the historical interdisciplinary research that serves as a background—has been discussed at length in previous works of mine to which I refer. See Frosio, *supra* note 10; Giancarlo F. Frosio, *A History of Aesthetics from Homer to Digital Mash-ups: Cumulative Creativity and the Demise of Copyright Exclusivity*, 9(2) LAW AND HUMANITIES 262-296 (2015), available at <http://www.tandfonline.com/doi/full/10.1080/17521483.2015.1093300>

¹⁷³ For a full discussion of the idea of user patronage—and a review of the economics of creativity from a historical perspective—see Frosio, *supra* note 11.