

COASE AND COPYRIGHT

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Abstract

The call for more copyright legislation and enforcement is controversial. It requires more state regulation and potentially undermines public values, economic efficiency, and fundamental rights. This seems the way forward because creative industries and governments frame copyright as an ordinary property right. This accords with pre-digital business models: business models based generally on exclusive and rival tokens (a token is an instance of a type or idea—thus, the idea of a chair is a type, whereas each individual chair in the world is a token) of expressions. Since new technologies have made those tokens in many cases obsolete, maintaining the copyright frame troubles the discussion. If we look at copyright as just a use or access right, we might better achieve what copyright was originally intended to do: provide remuneration to artists and allow access to culture and entertainment to the public. Access rights might be a more suitable approach, as Internet trends point toward access to information and because business models concerning access seem to achieve this dual objective of copyright. The harms done by the non-exclusivity and non-rivalness of expressions are an input cost we have to take into account, instead of a signal of market failure. That input cost might very well be high, but benefits are made in other areas and this market shift does not require the same infringement of fundamental values and rights, so it at least merits our attention and research. As transaction costs for digital goods are low, barriers to entry decrease, which could allow for a free and diverse market, if balanced appropriately with regulatory regimes.

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I. INTRODUCTION

In the 1950s, Ronald Coase suggested that market solutions were better at solving the economic allocation of radio spectra than were regulatory solutions. There is an interesting analogy between the rise of commercial radio in the 1950s and the rise of new information technologies in the past decades. In both cases, non-rival and non-exclusive goods are under pressure by new technological developments, leading governments to fear a “tragedy of the commons.” In both cases the reaction has been more regulation, with deleterious effects on public values, economic efficiency, and human rights. According to Coase, using terms relating to traditional manners of ownership made discussion on the allocation of radio frequencies difficult. He clarified that ownership is a bundle of rights and can be better explained as *use rights*. In the case of digital goods, most prominent discussion revolves around

ownership, whilst new technologies move away from traditional manners of ownership towards *access*. A new approach to digital goods focusing upon the notion of access could provide benefits as it has in the allocation of radio spectra. However, transaction costs and potential harms must also be taken into account. We will first look at the evolution and application of Coase's thought to radio spectra, then turn to digital goods and culture.

II. COASE AND THE FCC

During the beginning of the past century, the United States faced an economic allocation problem due to the increased use of a new technology: the radio. The broadcasting industry experienced tremendous growth during the Twenties and the number of radio stations increased exponentially.¹ At that time, the U.S. Secretary of Commerce was responsible for issuing licenses to radio stations.² The Secretary did not have the power to decide on the number of stations licensed or the power to refuse a license.³ As the number of applicants rapidly increased, a period ensued that has been described as "chaos in broadcasting."⁴ Radio stations would interfere with each other's broadcasts, which limited the quality of reception.⁵

In order to counter this interference, the Federal Radio Commission was created. This Commission was granted the power to issue licenses "if public interest, necessity or convenience would be served."⁶ Although the Commission was prohibited from censorship, it did have the power to restrict licenses for some reasons, including the use of profane language.⁷ In 1934, the Federal Radio Commission was renamed the Federal Communications Commission (FCC).⁸

This FCC was given the power to grant or refuse licenses.⁹ This power had many downsides, as the conditions under which licenses were granted remained vague, but also because it could be perceived as a clash with the freedom of the press. As Coase states in his article, if the federal government was given the power to refuse certain newspapers, this would never be tolerated and would be seen as a breach of fundamental rights.¹⁰ A strong case regarding how the freedom of the press was indeed under threat was later revealed when evidence emerged that license nonrenewal was used as a threat during the Nixon years if broadcasters didn't report on the president more favorably.¹¹

1. Ronald H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 4 (1959) [hereinafter Coase, *FCC*].

2. *See id.* at 4–5 (explaining the history of issuing licenses).

3. *Id.*

4. *Id.* at 5.

5. *Id.*

6. *Id.* at 6.

7. *Id.*

8. *Id.* at 7.

9. *Id.* at 6–7.

10. *Id.* at 7.

11. Thomas W. Hazlett et al., *Radio Spectrum and the Disruptive Clarity of Ronald Coase*, 54 J.L. &

According to the FCC and the federal government, stricter regulation was necessary to prevent “chaotic interference from destroying the great potential of [the radio] medium for public [enlightenment] . . . and entertainment.”¹² Its reasoning was that the number of available frequencies was limited, and people wanted to use more than was available, which would lead to an increased amount of interference: a tragedy of the commons.¹³ Also, the government needed to set aside frequencies in the public interest, which were thus assigned for governmental use exclusively.

Although the Commission published guidelines on the criteria for renewal of licenses, the exact effect the FCC has had on programming remains relatively unclear.¹⁴ Ultimately, this medium has been more strictly controlled by the state than previous media.¹⁵

According to Coase, the assumption that strict regulations were necessary was based on a misunderstanding of the nature of the problem.¹⁶ He argued that everything in the world is scarce and that people always want to use more resources than exist.¹⁷ The way allocation ordinarily takes place is through pricing in a free market.¹⁸ The distinction between ordinary property and radio spectra was that no clear rights could be established through ordinary means, such as cadastral registration or adverse possession.¹⁹ His example is that land is scarce, and the only way we can use the pricing mechanism to allocate land to an owner is by creating clear property rights.²⁰ The only way other people can use that resource is by paying or forming a contractual relationship with the owner.²¹

In radio spectra, the “scarce” features were frequency channels.²² Chicago law student Leo Herzel suggested that the pricing mechanism should be used to allocate frequencies, through an auction, by granting the frequency to the highest bidder.²³ The bidder with the most incentive to broadcast would be the one willing to pay the most.²⁴ According to Coase, the government should submit to competing in an auction as well, given that they compete for the same equipment for broadcasting.²⁵ Having an auction would not necessarily lead to more monopolies, as that same problem could arise when radio frequencies were assigned by the FCC, only through non-free-market mechanisms or corruption.²⁶ Moreover, it wouldn’t simply benefit people with

ECON. S125, S137 n.21 (2011).

12. Coase, *FCC*, *supra* note 1, at 10.

13. *Id.* at 12–13.

14. *Id.* at 12.

15. *Id.*

16. *Id.* at 38.

17. *Id.*

18. *Id.* at 16.

19. *Id.* at 14.

20. *Id.*

21. *Id.*

22. Hazlett et al., *supra* note 11, at S125.

23. Coase, *FCC*, *supra* note 1, at 14–15.

24. *Id.* at 19.

25. *Id.* at 21.

26. *Id.* at 15–16.

the most money, but rather secure certainty in the market for those who were *willing* to pay the most.²⁷

This approach would have many benefits: a state agency cannot have all the information on the business of broadcasting or consumer preferences, whilst the market is better suited at exactly determining the costs and benefits.²⁸ Competitive markets would also be better at rewarding entrepreneurial efforts or innovation.²⁹

It ought not to matter if the resource is scarce. None of the resources in economics are treated from the point of view of their total supply, but rather from the point of view of how much supply can be made available for a particular use.³⁰

In order to have this scheme work, private property rights would have to be created in order to create “the right to use a piece of equipment to transmit signals in a particular way.”³¹ By assigning use rights, rights holders could trade frequencies with each other and in effect, act like property owners.³² This makes sense if we understand that property rights do not define things, but rather the bundle of rights that economic agents have to do certain things.³³

According to Coase, an important misconception regards harm to others. Coase states that there is no analytical difference between using a resource without direct harm to others and using a resource that produces direct harm to others—as in the case of some interference due to use.³⁴ In each case something is denied to others: the use of a resource or a specific mode of operation because of the harm.³⁵ “All property rights interfere with the ability of others to use resources.”³⁶ The goal of a property law regime is to achieve a situation where the gains of interference outweigh the harms they produce.³⁷ That does not necessarily mean that a situation with no interference would be ideal.³⁸ Translated to radio frequencies, this could mean that operators whose broadcasts are interfered with would have an incentive to allow this interference, if those broadcasters would be paid an amount that would exceed the losses they make by the interference.³⁹ The other operator would be able to use the frequency for a limited amount of time by interfering if he had an economic incentive to do so.⁴⁰ According to Coase, this would solve allocation problems and make the allocation more efficient, as the aim of the radio regulation is not to minimize interference but to maximize output.⁴¹

27. *Id.* at 19.

28. *Id.* at 18.

29. Hazlett et al., *supra* note 11, at S133.

30. Coase, *FCC*, *supra* note 1, at 20.

31. *See id.* at 33 (explaining that the FCC’s allocation creates use rights).

32. Hazlett et al., *supra* note 11, at S130.

33. *Id.*

34. Coase, *FCC*, *supra* note 1, at 27.

35. *Id.*

36. *Id.*

37. *Id.*

38. *Id.*

39. *Id.* at 28.

40. *Id.*

41. *Id.* at 27.

Coase argues that harmful effects (also referred to as “externalities” or “social costs”) are rationally evaluated in markets, that both governments and markets can provide resource allocation, and that both need to be evaluated.⁴² As stated above, an important point Coase makes is that interference is not necessarily a “bad” externality, but the byproduct of a valuable activity and, in turn, the subject of the same cost-benefit analysis as other resources.⁴³ This means that the efficient outcome isn’t necessarily achieved by the State but can be achieved in many ways, and legal rules that create certainty in allocation could serve as the underlying mechanism for the market to achieve the most efficient situation.⁴⁴ Viewed this way, externalities are not special cases or “market failures,” but standard economic inputs or outputs.⁴⁵ The public goal is not to minimize negative effects, but to maximize economic welfare. Calling those problems “market failures” moves the discussion away from potential alternatives such as market solutions. Coase expected that economic incentives, through the invisible hand, would perform better than state regulation.⁴⁶

In his theories, Coase reserved special attention for transaction costs.⁴⁷ These are the costs of using the price mechanism and the costs of participating in the market. The market must ordinarily discover prices: negotiations have to be undertaken, contracts have to be drawn up, inspections have to be made to settle disputes, and so on. The existence of transaction costs suggests that methods of coordination outside of markets may sometimes be preferable to relying on the pricing mechanism.⁴⁸ A large amount of economic activity is aimed at reducing transaction costs and making exchanges more efficient.⁴⁹ Transaction costs do not have to be necessarily zero, but they must be taken into account, as a comparison has to be made between alternatives.⁵⁰ Coase recognized that it costs money to let the market do the work (because of transaction costs), but it also costs money to administer a state mechanism based on restrictions.⁵¹ These administrative costs may very well be higher than market mechanisms. All these costs should be taken into account and the situation with the least transaction should be pursued.⁵²

Even though Coase wrote his article in the middle of the last century, it took another forty years for the first radio spectrum auction to be held.⁵³ Now, competitive bidding is the normal tool to award licenses, which has not only

42. Hazlett et al., *supra* note 11, at S126.

43. Coase, *FCC*, *supra* note 1, at 27–28.

44. Hazlett et al., *supra* note 11, at S128.

45. *Id.*

46. *Id.* at S128–29.

47. R. H. Coase, *The Institutional Structure of Production*, 82 AM. ECON. REV. 713, 715 (1992) [hereinafter Coase, *Institutional Structure*].

48. *Id.*

49. *See id.* at 716 (“To have an efficient economic system it is necessary not only to have markets but also areas of planning within organizations of the appropriate size.”).

50. Hazlett et al., *supra* note 11, at S131–32.

51. *Id.* at S132–33.

52. R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 15–19 (1960) [hereinafter Coase, *Social Cost*].

53. Hazlett et al., *supra* note 11, at S125–27.

facilitated the assignment of frequencies, but has also avoided welfare loss and has meant billions of income for the state.⁵⁴

With his theory, Coase not only laid the groundwork for a more efficient allocation system of radio frequencies, but also for “new institutional economics,” an economic approach that focuses on social and legal norms that underlie economic activity.⁵⁵ According to Coase, the legal system has a large influence on the economic system, and legal norms have to be evaluated in ways that lead to the most efficient outcome.⁵⁶

A. *Applying Coase to Expressions*

There’s an interesting analogy between the rise of commercial radio in the 1950s and the rise of new information technologies in the past decades. Coase’s analysis was a complete change of perspective that eventually led to a more efficient infrastructure, less welfare loss, and more government income. Because both radio spectra and digital goods are generally considered non-exclusive and non-rivalrous domains, Coase’s approach could provide us with some insight in potential new ways to deal with the dilemma we face today regarding regulation or market approaches to protecting and encouraging the production and dissemination of digital goods.

1. *Non-rival and Non-excludable Goods*

Both frequency channels and digital objects are non-rival and non-excludable. A non-rival good is a good that can be used by an individual or other entity without affecting the ability of anyone else to use that same object—there is simply no rivalry involved in multiple, simultaneous uses of the object.⁵⁷ The marginal costs of producing an additional one of the same are zero.⁵⁸ Marginal costs are the extra costs incurred by increasing the amount of goods produced by one.⁵⁹ A rivalrous good does not have this characteristic; buying a shirt in a store means that other people cannot buy that specific shirt. Fabricating an extra shirt means that more resources are needed, and extra costs are required. This is not the case for non-rivalrous goods. Non-rivalrous goods include a broad range of things and activities. Air, for example, is a non-rival good. But the same goes for listening to a song or reading a book.

Frequency channels are non-rival first because more than one person can tune into the same frequency channel and consume whatever is broadcasted on it without depriving other listeners of the same opportunity. Additionally, radio spectra are non-rivalrous in the sense that it is technically possible for

54. *Id.* at S128.

55. Malcolm Rutherford, *Institutional Economics: Then and Now*, 15 J. ECON. PERSPS. 173, 173–74 (2001).

56. Coase, *Institutional Structure*, *supra* note 47, at 717–18.

57. DAVID EASLEY & JON KLEINBERG, NETWORKS, CROWDS AND MARKETS: REASONING ABOUT A HIGHLY CONNECTED WORLD 689 (2010).

58. RICHARD CORNES & TODD SANDLER, THE THEORY OF EXTERNALITIES, PUBLIC GOODS AND CLUB GOODS 8–10 (2d ed. 1996).

59. *Id.*

more than one person to broadcast on the same frequency channel.⁶⁰ This was the problem in the 1950s. The U.S. government feared that without government intervention, multiple parties would broadcast over the same frequency channels and create interference.⁶¹ This would lead to a “tragedy of the commons.” Digital goods share this characteristic. Downloading a song creates a perfect copy of the original file while keeping the original file available for others to download. The same goes for eBooks, downloading movies, or streaming movies. Digital goods are classically non-rivalrous.

A good is *non-excludable* when it is not possible to prevent other people from having access to it.⁶² Excludable goods are things like private goods. You can prevent other people from entering your car, for example. Tokens that hold expressions, like CDs, DVDs, and books, are also excludable. Non-excludable goods are things like sunlight, air, laws of nature, physical phenomena, etc.; there is no practical and often no logical means to exclude anyone from their use. Frequency channels are non-excludable. Different radio stations can broadcast on the same frequency without being able to stop others from broadcasting on that same frequency.⁶³ Digital goods are regarded as non-excludable as well. Once a person gains access to the type (the information behind the tokens) of a song, or even a movie, it is very difficult and potentially impossible to prevent that person from spreading that content to others. One way to make digital goods more excludable is through digital rights management (DRM) or legislation. DRM is a technological protection measure, designed to use technology to prevent certain uses of a digital good.⁶⁴ Intellectual property (IP) rights, like copyright, make digital goods legally exclusive as well.⁶⁵ IP excludes others from reproducing or making the first sale of any token instantiating a type that has been created by the rights holder.⁶⁶ This means that the author of a book can forbid others from selling a copy of his story without paying him royalties (according to the law, in the case of non-digital books—at least the first sale of the particular token expressing his story—used books and other media may be sold without paying royalties).⁶⁷

60. See Coase, *FCC*, *supra* note 1, at 13 (discussing efforts by rival broadcasters to broadcast on the same wavelength at the same time).

61. Hazlett et al., *supra* note 11, at S129.

62. See LAWRENCE LESSIG, *CODE VERSION 2.0*, at 182 (2006) [hereinafter *LESSIG, CODE VERSION 2.0*] (defining ideas as excludable because the holder of an idea can prevent others from accessing it).

63. See Coase, *FCC*, *supra* note 1, at 13 (discussing the inability of early radio broadcasters to prevent others from simultaneously broadcasting).

64. See LAWRENCE LESSIG, *FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY* 148 (2004) [hereinafter *LESSIG, FREE CULTURE*] (suggesting that DRM technologies would limit file-sharing).

65. BRUCE A. LEHMAN, *INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION STRUCTURE: THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS* 63 (1995).

66. *Id.* at 64, 90.

67. DAVID KOEPSSELL, *INNOVATION AND NANOTECHNOLOGY: CONVERGING TECHNOLOGIES AND THE END OF INTELLECTUAL PROPERTY* 176–77 (2011) [hereinafter *KOEPSSELL, INNOVATION AND NANOTECHNOLOGY*].

2. *Copyrights*

Copyrights give the author of an expression the exclusive right to copy, distribute, and adapt certain expressions for a certain period of time, after which the expression reverts to the public domain. Copyright thus provides authors of an expression a legal instrument to get remunerated for their creativity. This is intended to create an incentive and stimulate authors to release their expression to the public under the promise of a limited monopoly over that expression for some time period, which benefits culture and humanity in general.⁶⁸ That is why the World Intellectual Property Organization (WIPO) states that copyrights exist “to encourage a dynamic creative culture, while returning value to creators so that they can lead a dignified economic existence, and to provide widespread, affordable access to content for the public.”⁶⁹

Copyrights are not absolute. They give rights to expressions, yet the *ideas* behind the expressions are free. Also, a copyright holder never has complete control over all possible uses of his work. The rights only cover the first sale of tokens and protect against the appropriation of the types for all but a limited number of uses.⁷⁰ Copyrights apply only for a limited amount of time (originally fourteen years, but now the lifetime of the author plus an additional seventy years).⁷¹ In the United States, they are regulated in such a way that they balance individual rights (the right of the author) with societal rights or the “general good,” such as the public value of free information.⁷² That is why the United States law allows for fair use and fair dealing as they may benefit the public, without sacrificing the creators’ rights. In most of Europe, a broad fair use exception does not exist, but a category of uses are allowed.⁷³ They differ because copyright in common law countries has utilitarian roots, while copyright in civil law countries has natural rights roots.⁷⁴

In cases of copyright infringement, rights holders can file a civil law suit against people infringing.⁷⁵ In cases of large-scale piracy, the government can file a criminal suit against pirates.⁷⁶

68. LEHMAN, *supra* note 65, at 22.

69. *Copyright and Related Rights*, WORLD INTELLECTUAL PROP. ORG., <http://www.wipo.int/copyright/en/> (last visited Jan. 22, 2013).

70. LEHMAN, *supra* note 65, at 73–99 (listing and describing limitations on the rights of copyright holders).

71. GARTNERG2 & THE BERKMAN CTR. FOR INTERNET & SOC’Y AT HARVARD LAW SCH., *COPYRIGHT AND DIGITAL MEDIA IN A POST-NAPSTER WORLD* 4 (2005) [hereinafter GARTNERG2].

72. *Id.*

73. Tyler G. Newby, *What’s Fair Here Is Not Fair Everywhere: Does the American Fair Use Doctrine Violate International Copyright Law?*, 51 STAN. L. REV. 1633, 1648–49 (1999).

74. PAUL GOLDSTEIN & BERNT HUGENHOLTZ, *INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE* 7 (2010).

75. LEHMAN, *supra* note 65, at 124–25.

76. 17 U.S.C. § 506(a) (2006); 18 U.S.C. § 2319 (2006).

B. *The Problem*

1. *The Tragedy of the Commons*

Coase's approach to radio spectra was intended to avoid potential chaos. The fear was that leaving the allocation of radio frequencies up to the market alone would lead to a "tragedy of the commons." This is a term originally coined by Garrett Hardin. In an article in *Science*, he tells a story about a village with a "commons" (an old term that refers to a village green that is available for common use) that every herdsman can use to allow his cattle to graze freely.⁷⁷ Hardin explained that this will inevitably lead to overuse of the commons, with bad consequences for the villagers.⁷⁸ According to Hardin, the only way to solve this problem is to establish property rights that can be privately or publicly held.⁷⁹

In our case, governments fear a tragedy of the commons as well. The content industry originally relied on copyright to protect the entertainment business model from large-scale piracy.⁸⁰ As a legal instrument it was devised just after the invention of the printing press.⁸¹ However, innovative technologies have put pressure on the functioning of copyright as an effective instrument simply because the ease of large-scale copying and dissemination has increased.⁸²

Digitalization changed the economics and character of reproduction. It allowed for easier ways to compress and store information. It also liberated information from its traditional, physical media, which now undermines business models based on the sale of tokens like CDs, DVDs, or books. Now, information can flow through networks.⁸³ Digital information can be copied easily and perfectly, so an infinite number of perfect copies may be easily and cheaply made.⁸⁴

Networks in turn connect our computers and allow for rapid and inexpensive distribution and reproduction of information. Getting access to information means that it can be freely distributed to an unlimited number of people connected to the network.⁸⁵ Distribution happens through the click of a mouse and can reach any connected node within seconds.⁸⁶

77. Garrett Hardin, *The Tragedy of the Commons*, 162 *SCI.* 1243, 1244 (1968).

78. *Id.* at 1244–45.

79. *Id.* at 1245; EASLEY & KLEINBERG, *supra* note 57, at 687–88.

80. See *United States v. Moghadam*, 175 F.3d 1269, 1277 (11th Cir. 1999) (explaining the historic importance of intellectual property laws to the protection of certain businesses).

81. Laurie Richter, *Reproductive Freedom: Striking A Fair Balance Between Copyright and Other Intellectual Property Protections in Cartoon Characters*, 21 *ST. THOMAS L. REV.* 441, 456 (2009).

82. See Matthew C. Mousley, *Peer-to-Peer Combat: The Entertainment Industry's Arsenal in Its War on Digital Piracy*, 48 *VILL. L. REV.* 667, 669–74 (2003) (describing the impact of technology on the effectiveness of copyrights in the software, recording, and motion picture industries).

83. COMM. ON INTELLECTUAL PROP. RIGHTS AND THE EMERGING INFO. INFRASTRUCTURE, NAT'L RESEARCH COUNCIL, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 32 (2000) [hereinafter *DIGITAL DILEMMA*].

84. *Id.*

85. *Id.* at 38.

86. *Id.* at 39.

Consequently, the web provides the infrastructure on which computer users can search, exchange, organize, and publish information nearly instantaneously in numerous formats.⁸⁷ The web also makes the tools for production, replication, and distribution readily available to Internet users.⁸⁸ All these liberating technologies have also made copyright infringement very easy.

According to Lawrence Lessig, it was originally very difficult to regulate the Internet because in order to do so effectively, “you need to know (1) who someone is, (2) where they are, and (3) what they’re doing. But because of the way the [I]nternet was originally designed . . . there was no simple way to know (1) who someone is, (2) where they are, and (3) what they’re doing.”⁸⁹ Without knowledge of who has committed illegal acts on the Internet, it is challenging to enforce regulations in any meaningful way.⁹⁰

This complicates regulation of copyright. If a user infringes a copyright, enforcing it requires that rights-holders be able to identify infringers, and they can take the social context of content access or use into account.⁹¹ It is thus almost impossible to identify whether use falls under the “fair use” exemption to copyright law.⁹² The first sale doctrine is also difficult to apply, as selling a digital good once makes it potentially available to everyone, everywhere.⁹³

The Internet adds additional problems by *being worldwide*. Copyright infringement can transcend national boundaries, so it is sometimes unclear which jurisdiction applies to a case.⁹⁴ Furthermore, all countries have different perceptions of laws, views, and culture with regard to information and copyright.⁹⁵

The widespread adaptation of these technologies has made it even more difficult to counter copyright infringement.⁹⁶ Since its introduction, the Internet has become an integral part of everyday life. The Internet has grown at an incredible rate. It has doubled in size every fourteen months since its conception approximately forty years ago.⁹⁷ According to Pew Research, 81% of all American adults are using the Internet.⁹⁸ According to Eurostat, 67% of all the people within the European Union are using the Internet.⁹⁹

87. *Id.*

88. *Id.* at 40.

89. LESSIG, CODE VERSION 2.0, *supra* note 62, at 23.

90. *Id.*

91. *Id.* at 49. For example, the fair use doctrine permits use of copyright protections for educational purposes and other social goods. *Id.*

92. *Id.*

93. *See id.* at 51 (discussing how a digital good is easily reproducible and further distributed).

94. *Id.* at 49.

95. *Id.* at 54.

96. *See generally id.* at 32–42 (discussing the strengths and drawbacks of digital information).

97. DAVID G. POST, IN SEARCH OF JEFFERSON’S MOOSE: NOTES ON THE STATE OF CYBERSPACE 31 (2009).

98. *Demographics of Internet Users: % of American Adults Within Each Group Who Use the Internet*, PEW INTERNET, [http://pewinternet.org/Trend-Data-\(Adults\)/Whos-Online.aspx](http://pewinternet.org/Trend-Data-(Adults)/Whos-Online.aspx) (last visited Feb. 1, 2013).

99. VINCENT BOURGAEIS & HEIDI SEYBERT, EUROSTAT, INTERNET USE IN HOUSEHOLDS AND BY INDIVIDUALS IN 2012, at 2 (2012), available at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-12-050/EN/KS-SF-12-050-EN.PDF.

This feeds the fear of the tragedy of the commons, much in the same way as it applied to radio spectra.¹⁰⁰ In Hardin's example, and in the case of radio spectra, governments expected a tragedy of the commons because of overuse of the same resource.¹⁰¹ In this case, we're dealing with overuse of expressions, without supposedly providing the economic incentive, which would then harm the market.

2. *Massive Copyright Infringement Online*

Copyright infringement exploded with Napster and the rise of online file sharing. Founded by Shawn Fanning in 1999, Napster was the pioneering peer-to-peer (P2P) file-sharing platform that allowed users to swap MP3 files.¹⁰² Whereas before Napster, music was traded by exchanging the physical media on which it was stored, peer-to-peer software enables the creation of virtual peer-to-peer networks, a distributed system amongst computers that enables them to rapidly share and exchange content.¹⁰³ Instead of relying on one central server to distribute content to users, P2P decentralizes distribution to its users, which prevents network congestion, and increases capacity.¹⁰⁴ The only centralized control is a central index server that allows users to search for content.¹⁰⁵ Napster was so immensely popular that after one year running, 25% of all American adult Internet users had downloaded music online, and 54% of those people had used Napster to do it.¹⁰⁶ Because P2P does not differentiate between copyrighted and public-domain content, a large number of copyrighted works were also shared through Napster's services and software.¹⁰⁷ Many Intellectual Property Right (IPR) holders, record producers, and other content producers grew furious as they believed their rights had been violated and that they lost sales to free file-sharing.¹⁰⁸ Although rights holders sued Napster relatively quickly and shut it down for a while, it paved the way for new consumer attitudes and expectations about the social practice of downloading, uploading, and sharing digital content.¹⁰⁹

After Napster was forced to "legalize" its practice, similar programs quickly followed that allowed for the same level of copyright infringement and further decentralized the file-sharing architecture, like Grokster, KaZaA,

100. See Hazlett et al., *supra* note 11, at S157 (describing how U.S. policy makers are in control of radio spectrum allocations).

101. See EASLEY & KLEINBERG, *supra* note 57, at 685–86 (2010) (describing the tragedy of the commons).

102. MARY MADDEN, PEW INTERNET & AMERICAN LIFE PROJECT, THE STATE OF MUSIC ONLINE, TEN YEARS AFTER NAPSTER 6 (2009), available at <http://pewinternet.org/Reports/2009/9-The-State-of-Music-Online-Ten-Years-After-Napster.aspx>.

103. See Annemarie Bridy, *Is Online Copyright Enforcement Scalable?*, 13 VAND. J. ENT. & TECH. L. 695, 698–99 (2011) (explaining how Napster and P2P networks operate).

104. *Id.*

105. See *id.* at 699 (describing how Napster's central server was for indexing and query purposes).

106. MADDEN, *supra* note 102, at 6.

107. See *id.* at 5 (describing how the effect of Napster, also known as "Napsterization," has affected other works such as news, movies, and television shows).

108. See LESSIG, FREE CULTURE, *supra* note 64, at 17 (discussing how copyright owners have attempted to prevent piracy and the potential loss of profits).

109. MADDEN, *supra* note 102, at 5–6.

Morpheus, Vuze, and Limewire.¹¹⁰

According to industry reports, despite legal attempts to shut down numerous P2P file-sharing platforms and websites, the amount of file sharing is still increasing.¹¹¹ Consumer demand has grown in other areas of content access, mainly through HTTP.¹¹² This is largely due to the rise of content on demand systems, like iTunes, YouTube, Megavideo, Dailymotion, and Netflix (also called “Web 2.0” services), the rise of social media like Facebook, LinkedIn, and Twitter, and the move toward “cyber lockers,” like Rapidshare and Megaupload (recently also shut down).¹¹³ According to the research agency Envisional, 23.76% of all (non-pornographic)¹¹⁴ Internet traffic worldwide is infringing. This infringing traffic is generated by millions of users. According to PC Pitstop and Big Champagne, in 2008, 200 million computers worldwide had P2P applications installed.¹¹⁵ For example, BitTorrent has 100 million regular users worldwide and studies suggest that a large part of BitTorrent traffic consists of copyright-infringing material.¹¹⁶ Some say that two-thirds consists of copyright infringing material;¹¹⁷ others argue that this is in fact higher, up to 95%.¹¹⁸ So infringement happens on a large scale, and has been happening on a large scale consistently, despite regulatory efforts to contain it.

3. *The Damage of Copyright Infringement Online*

Although this copyright infringement happens on such a large scale, it is very difficult to predict the exact effects this infringement has on the market for entertainment. There is no scientific consensus on the way in which empirical research should be done to determine these economic effects or where they take effect.¹¹⁹ Some research focuses on a comparison between regions, some includes consumer surveys in which consumers are asked about their downloading and buying coupled with monitoring P2P networks and sales.¹²⁰ Nonetheless, there has been an enormous amount of research, which

110. See, e.g., Hisanari Harry Tanaka, *Post-Napster: Peer-to-Peer File Sharing Systems Current and Future Issues on Secondary Liability Under Copyright Laws in the United States and Japan*, 22 LOY. L.A. ENT. L. REV. 37, 49 (2001) (describing the sharing systems post-Napster).

111. Dan Graziano, *File-Sharing Prospers Despite Increased Legislation*, YAHOO! NEWS (May 23, 2012), <http://news.yahoo.com/file-sharing-prospers-despite-increased-legislation-170509275.html>.

112. Bridy, *supra* note 103, at 695, 704–06.

113. *Id.*

114. Pornography was left out of the results as it is difficult to establish whether online pornography is copyright-protected or not.

115. MADDEN, *supra* note 102, at 9.

116. Oliver Chiang, *BitTorrent Tops 100 Million Users*, FORBES (Jan. 3, 2011), <http://www.forbes.com/sites/oliverchiang/2011/01/03/bittorrent-tops-100-million-users/>.

117. DAVID PRICE, ENVISIONAL LTD, TECHNICAL REPORT: AN ESTIMATE OF INFRINGING USE OF THE INTERNET, 1, 4 (ver. 1.8, 2011), available at <http://documents.envisional.com/docs/Envisional-InternetUsage-Jan2011.pdf>.

118. ANNELIES HUYGEN ET AL., TNO INFO. & COMM’N TECH., UPS-AND-DOWNS: ECONOMIC AND CULTURAL EFFECTS OF FILE SHARING ON MUSIC, FILM AND GAMES 85 (2009), available at http://www.ivir.nl/publicaties/vaneijk/Ups_And_Downs_authorized_translation.pdf.

119. See generally Sylvain Dejean, *What Can We Learn From Empirical Studies About Piracy?*, 55 CESIFO ECON. STUD. 326 (2009).

120. *Id.*

has led to a great number of different, sometimes contradictory, outcomes.¹²¹

One of the main difficulties when establishing the economic effects of copyright infringement on a large scale is that there is no clear relation between illegal downloads and the rise or loss of sales.¹²² The relation is “endogenous,” so it is difficult to establish a causal link between the two. If a user downloads a music file, that doesn’t necessarily mean the user would have bought the file if there was only access to legal supplies of music files. There are many more factors that have to be taken into account that are often unclear to researchers. Another difficulty is that consumption patterns differ among types of content. Some users might actually prefer reading “paper” books over eBooks.¹²³ Although some studies suggest there are positive effects or none at all, the majority of economic studies suggest that copyright infringement has a negative influence on legal sales of tokens of expressions.¹²⁴ These figures have fueled the fire for rights holders and their representatives.

4. *Reactions to Copyright Infringement Online*

According to Hardin, the only way to solve a tragedy of the commons is to establish property rights that can be privately or publicly held.¹²⁵ This was exactly the reasoning of the U.S. government in the 1950s. The fear that broadcasters would interfere with each other’s radio frequencies made it necessary to regulate the radio more strictly than old media such as the printing press.¹²⁶ This is analogous to new and emerging information infrastructures as well. The traditional way to provide incentives to creators has been through copyright.¹²⁷ Because copyright has been difficult to enforce over the Internet, and massive infringement happens around the globe, the fear of a tragedy of the commons has made copyright more strictly enforced on the Internet than has been necessary in the physical world.¹²⁸ There have been a variety of measures and manners by which rights holders and governments have tried to guide behavior on the information infrastructure. According to Lawrence

121. Matthias Duenner, *The Impact of Legal and Illegal Downloading of Music on the Financial Performance of the Recording Companies* (May 2010) (unpublished honors thesis, California State University, Long Beach), available at <http://www.csulb.edu/colleges/cba/honors/thesis/documents/MatthiasDuennerThesis.pdf>.

122. *Id.*

123. Claudia Loebbecke, *The Emergence of eBooks: Just Another Media Industry Joining the Converging Digital World? An Explorative Study on User Preferences and Industry Structure Changes*, Presented at the 38th Research Conference on Communication, Information and Internet Policy, in Wash. D.C. (Oct. 7, 2010), available at <http://www.mm.uni-koeln.de/team-loebbecke-publications-conf-proceedings/Conf-142-2010-TheEmergenceOfeBooks.pdf>.

124. *Id.*

125. EASLEY & KLEINBERG, *supra* note 57, at 685.

126. See LESSIG, *CODE VERSION 2.0*, *supra* note 62, at 270 (discussing government allocation and regulation of radio frequencies).

127. See LESSIG, *FREE CULTURE*, *supra* note 64, at 11 (“At first slightly, then quite extensively, the law protected the incentives of creators by granting them exclusive rights to their creative work, so that they could sell those exclusive rights in a commercial marketplace.”).

128. See Jeremy A. Cubert et al., *Tragedy of the Copyright Commons*, NAT’L L.J. (May 7, 2012), http://www.dicksteinshapiro.com/files/Publication/e02a1206-ac94-40c3-ad82-18fc75e66ac7/Presentation/PublicationAttachment/a4f34721-d96f-49c9-9ae2-1ce559562076/Tragedy_Copyright_Commons.pdf (“More recently, copyright providers promoted legislation to put more teeth into copyright remedies.”).

Lessig, there are four different ways through which to do this: law, norms, market, and architecture (code).¹²⁹ Because technological development of the Internet and its related technologies has relaxed codes and the market, laws and norms have accumulated and now dominate.¹³⁰

a. Law

Both governments and rights holders, often working together, have found ways to use the law to guide online behavior. Governments have enacted various legal initiatives in an attempt to adapt copyright to the Internet. In 1995, the Working Group on Intellectual Property Rights of the Information Infrastructure in the United States stated that “[e]xisting copyright law needs only the fine tuning that technological advances necessitate, in order to maintain the balance of the law in the face of onrushing technology.”¹³¹ That “fine tuning” continues to this day in an attempt to combat piracy and stimulate the marketplace for digital goods. Over time, the general scope of copyright law has slowly been extended: in 1790 just maps, charts and books were covered.¹³² Copyright originally covered only the right to publish, and forbade republishing by others.¹³³ Derivative works were not protected.¹³⁴ As all use on the Internet concerns making copies, derivative use is now protected.¹³⁵ Transformative uses are regulated as well.¹³⁶

As anybody can now undertake these sorts of uses, the reach of copyright has also been extended; it first only regulated and benefited publishers, but now covers publishers, users, and authors, because all three make copies.¹³⁷ Copying is now necessary for legitimate usage due to the nature of the underlying technology itself.¹³⁸

The WIPO copyright treaties of 1996 formed the first significant change to facilitate copyright online.¹³⁹ These treaties have been implemented in the United States through the Digital Millennium Copyright Act (DMCA) and in the European Union through copyright directives, which extended copyright protection to computer programs.¹⁴⁰ These laws aimed to achieve a dual objective: to safeguard the important contribution of private players, such as

129. LESSIG, CODE VERSION 2.0, *supra* note 62, at 171.

130. See LESSIG, FREE CULTURE, *supra* note 64, at 91 (“As both the market and architecture relax the regulation of copyright, norms pile on.”).

131. BRUCE A. LEHMAN, INFO. INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE 17 (1995).

132. Copyright Act of 1790, 1 Stat. 124 § 3.

133. *Id.*

134. LESSIG, FREE CULTURE, *supra* note 64, at 100.

135. *Id.*

136. *Id.* at 102.

137. *Id.*

138. *Id.*

139. See generally WIPO Copyright Treaty pmbl., Dec. 20, 1996, S. Treaty Doc. No. 105-17 (“Recognizing the need to introduce new international rules and clarify the interpretation of certain existing rules in order to provide adequate solutions to the questions raised by new economic, social, cultural and technological developments.”).

140. Circumvention of Copyright Protection Systems, 17 U.S.C. § 1201(a)(1) (2006); Council Directive 2009/24, 2009 O.J. (L 111) 16 (EU).

intermediaries and Internet Service Providers (ISPs), to Internet growth, and to deal with massive copyright infringement by scaling up enforcement.¹⁴¹ To achieve this objective, the laws introduced “safe harbor” provisions and notice and takedown procedures.¹⁴² They also made it illegal to circumvent DRM, and criminalized production and dissemination of technology, devices, or services intended to circumvent those measures, whether or not there is actual infringement of copyright itself.¹⁴³ In addition, the DMCA heightened the penalties for copyright infringement on the Internet.¹⁴⁴

Content industries reacted to the advent of file sharing on the Internet through litigation; they sued users involved in file sharing and the intermediaries whose sole purpose it was to enable illegal file sharing, like Napster.¹⁴⁵ After Napster, Recording Industry Association of America (RIAA) sued other P2P platforms, like Scour, Aimster, AudioGalaxy, Morpheus, Grokster, KaZaA, iMesh, and LimeWire.¹⁴⁶ However, with the fall of each P2P file sharing platform, a new one has arisen, leading to a technological arms race.¹⁴⁷

Fortunately for the industry, the DMCA also created a provision that would allow rights holders the ability to serve subpoenas to ISP’s to release the identities of alleged file sharers.¹⁴⁸ Subpoenas must be accompanied by a notice of infringement.¹⁴⁹ Since the advent of file sharing over the Internet, the entertainment industry in the United States has filed thousands of lawsuits against individual file sharers in order to try to stop file sharing.¹⁵⁰ However, this mass subpoena campaign was eventually brought to a halt in the courts. In *RIAA v. Verizon*, the court stated that this subpoena provision was not intended for obtaining the identities of users involved in P2P file sharing, but only for determining when protected material was stored on the ISP’s own computers.¹⁵¹

The DMCA and the similar E.U. copyright directives recognized that any further individual litigation would be difficult on a large scale, so the first significant online copyright laws involved the help of Internet intermediaries in the enforcement process.¹⁵² These eventually became the safe harbor

141. LILIAN EDWARDS, *ROLE AND RESPONSIBILITY OF INTERNET INTERMEDIARIES IN THE FIELD OF COPYRIGHT AND RELATED RIGHTS* 7–8 (2011).

142. *Id.* at 6.

143. See 17 U.S.C. § 1201(a)(1) (1999) (“[N]o person shall circumvent a technological measure that effectively controls access [of a copyrighted work.]”); *id.* §§ 1201(a)(2), 1201(b)(1) (“[N]o person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, . . .”).

144. 17 U.S.C. § 1201(a)(1).

145. Brady W. Frazier, Comment, *Optimizing Copyright Duration for the Digital Age*, 15 SMU SCI. & TECH. L. REV. 209, 226 (2012).

146. See *RIAA vs. The People: Five Years Later*, ELECTRONIC FRONTIER FOUND. (Sept. 30, 2008), <https://www.eff.org/wp/riaa-v-people-five-years-later>.

147. EDWARDS, *supra* note 141, at 19–21.

148. *RIAA vs. The People: Five Years Later*, *supra* note 146.

149. Bridy, *supra* note 103, at 712–13.

150. EDWARDS, *supra* note 141, at 19–21.

151. *Recording Inds. Ass’n of Am., Inc. v. Verizon Internet Serv., Inc.*, 351 F.3d 1229, 1238 (D.C. Cir. 2003).

152. See EDWARDS, *supra* note 141, at 6–48 (describing the creation and evolution of online copyright

provisions that would absolve intermediaries of any liability if, upon gaining knowledge of copyright infringing activities by their customers or subscribers, they would act to prevent that infringement. The most familiar procedure incorporated in those models is the notice-and-takedown procedure.¹⁵³ Upon receiving a notice by a rights holder that one of the intermediaries' customers or subscribers is engaged in infringing activities, the intermediary is obligated to remove or takedown the website with the infringing content.¹⁵⁴

Bit Torrent and other P2P software has made enforcement difficult, allowing for decentralized protocols, which make it nearly impossible to identify and close down one central location to prevent users from accessing content.¹⁵⁵ Most modern torrent programs are now open source, instead of proprietary like Napster, which enables rapid dissemination and replication of new versions and forms when one is shut down.¹⁵⁶ Torrent software and sites have spread internationally. A well-known example of this is the Pirate Bay, a Swedish website hosting torrent links.¹⁵⁷ Even though the Pirate Bay lost a lawsuit in Sweden and was summoned to take the website down, the website is still up.¹⁵⁸ The Pirate Bay just moves its site to another jurisdiction after each takedown.¹⁵⁹

So rights holders have returned to mass lawsuits and governmental enforcement mechanisms.¹⁶⁰ As they could not use the DMCA provision to target individuals, they filed mass "John Doe" lawsuits.¹⁶¹ This means they sue unidentified users on the basis of their IP address. After suing, the rights holders ask the court to allow them to serve subpoenas to ISPs to obtain the identities of the users matching the IP addresses.¹⁶² Suing individual users has proven to be a PR failure. According to *Rolling Stone* magazine, it has made the content industry "the most hated industry since the tobacco industry."¹⁶³ This is partly because suing individual users has been prone to error. The industry filed "John Doe" lawsuits based on IP addresses in the hope of

law, which includes greater intermediary participation in enforcement).

153. Jeremy de Beer & Christopher D. Clemmer, *Global Trends in Online Copyright Enforcement: A Non-Neutral Role for Network Intermediaries?*, 49 JURIMETRICS J. 375, 385–86 (2009).

154. *Id.*

155. See EDWARDS, *supra* note 141, at 22–24 (discussing how structure of the programs make it difficult to close off access and the relative ease of relocating servers to other physical locations).

156. See *id.* at 22 (discussing how BitTorrent is open-source and easily cloned).

157. *Id.* at 23.

158. *Id.* at 23–24.

159. See *id.* at 24–25 (discussing how P2P websites keep coming back and are "[h]ydra-like" after being shut down).

160. See, e.g., Ernesto, *200,000 BitTorrent Users Sued in the United States*, TORRENTFREAK, (Aug. 8, 2011), <http://torrentfreak.com/200000-bittorrent-users-sued-in-the-united-states-110808/> (describing how numerous lawsuits have been filed against BitTorrent users recently).

161. See *id.* (discussing the numerous Doe lawsuits filed against alleged file-sharers); see also Peter K. Yu, *The Graduated Response*, 62 FLA. L. REV. 1373, 1403–04 (2010) (elaborating on the structure and application of the DMCA).

162. See EDWARDS, *supra* note 141, at 29 (discussing general framework of "[n]otice and notice" that partially shields the identity of the user).

163. Steve Knopper, *RIAs Gaze Turns From Users to ISPs in Piracy Fight*, ROLLING STONE (Dec. 19, 2008, 3:30 PM), <http://www.rollingstone.com/rockdaily/index.php/2008/12/19/riias-gaze-turns-from-users-to-isps-in-piracy-fight/>.

identifying infringing users through the legal process.¹⁶⁴ But an IP address is not a user.¹⁶⁵ IP addresses are easily “spoofed” and wifi is easily used surreptitiously.¹⁶⁶ This led to a number of eye-catching (and often hilarious) indictments, the most notable being the case that was filed against a dead grandmother with no access to the Internet,¹⁶⁷ a blind man for downloading pornography,¹⁶⁸ and recently, a hockey stadium.¹⁶⁹ Another reason for its lack of PR success has been the disproportionately high penalties that were awarded, and the fact that emphasizing copyright infringement by individual users on the Internet shifted attention away from large-scale piracy.¹⁷⁰

Some parts of the industry have been criticized as well for engaging in “copyright blackmail.” As most individual users do not have the financial means to defend themselves in court, they have often settled with the industries for smaller sums of money. According to TorrentFreak, since 2010, over 200,000 people have been sued for allegedly sharing copyrighted material online.¹⁷¹ Through these mass lawsuits, the copyright holders intended to obtain the personal details of users in order to settle with them for a few hundred or up to a couple of thousand dollars.¹⁷² This means users avoid trial and possibly larger fines. Even though 200,000 is a large number, none of these cases has actually made it to a verdict.¹⁷³ This deprives users of the procedural safeguards that are guaranteed in the legal process.¹⁷⁴ This also makes suing and settling very profitable for copyright holders and their attorneys who garner fees that are generally a percentage of the settlement, making such suits a sort of cottage industry for lawyers.¹⁷⁵

As copyright infringement persists on a large scale, rights holders have also shifted their focus toward intermediaries for enforcement.¹⁷⁶ Taking individual users to court is bad PR, expensive, and inefficient for curbing large-scale copyright infringement. Rights holders have looked toward more efficient ways to exert pressure on illegal file sharers online.¹⁷⁷ Internet

164. See Yu, *supra* note 161, at 1394–95 (describing the limitations of infringement-identifying technologies in order to provide notice to alleged infringing users).

165. See EDWARDS, *supra* note 141, at 38–39 (describing potential errors of using IP addresses to identify individuals).

166. *Id.* at 38.

167. Yu, *supra* note 161, at 1396.

168. Keegan Hamilton, *Porn, Piracy, & BitTorrent*, SEATTLE WEEKLY (Aug. 10, 2011), <http://www.seattleweekly.com/2011-08-10/news/porn-piracy-bittorrent/>.

169. Mike Masnick, *Hurt Locker File Sharing Lawsuit Lists Hockey Stadium IP Address*, TECHDIRT (Sept. 28, 2011, 1:27 PM), <http://www.techdirt.com/articles/20110928/02302616122/hurt-locker-file-sharing-lawsuit-lists-hockey-stadium-ip-address.shtml>.

170. EDWARDS, *supra* note 141, at 25.

171. Ernesto, *supra* note 160.

172. *Id.*

173. *Id.*

174. See EDWARDS, *supra* note 141, at 25 (noting how most parties accused of file sharing rarely go to court regardless of the merits of the underlying claim).

175. Ernesto, *supra* note 160.

176. See de Beer & Clemmer, *supra* note 153, at 375 (“[M]any intermediaries worldwide began to more actively police their networks, filter content, shape traffic, and otherwise cooperate in copyright enforcement efforts.”).

177. Eliot van Buskirk, *RIAA to Stop Suing Music Fans, Cut Them Off Instead*, WIRED (Dec. 19, 2008), <http://www.wired.com/epicenter/2008/12/riaa-says-it-pl/>; Fred Von Lohmann, *RIAA v. The People Turns*

intermediaries distribute, host, and locate content, and thus play a vital role in the information society.¹⁷⁸ This also makes them very suitable candidates to exercise control over what happens in their networks.

There are multiple ways in which more active cooperation between rights holders and intermediaries occur. First, intermediaries play an active role in regulating the behavior of their clients. They can send warnings to users who infringe upon copyrights, monitor traffic to and from users, cut down services to certain users—slowing their connection speeds, for example—or cut them off from the Internet all together.¹⁷⁹ Another way of cooperation is by blocking access to certain websites, such as cyber lockers.¹⁸⁰ The Organization of Economic Co-operation and Development (OECD) distinguishes four different ways of cooperation: notice and notice, notice and takedown, graduated response, and filtering.¹⁸¹

Filtering consists of blocking access to websites that infringe copyrights or by examining Internet traffic to see whether or not it contains copyright infringing content (through deep packet inspection).¹⁸² Both approaches have recently surfaced as ways to combat online copyright infringement.¹⁸³ Also, private agreements have emerged as a means to block cyber lockers and file-sharing websites.¹⁸⁴ Critics say this approach could harm free speech and be ineffective in curbing online infringement.¹⁸⁵

The graduated response procedure, the most far-reaching Internet enforcement procedure involving intermediaries, allows for slowing down or cutting off Internet access for consumers if they infringe on copyrights a number of times. Variations of this procedure have been adopted in France, the United Kingdom, South Korea, and the United States and are currently being adopted or debated in other countries.¹⁸⁶

b. Norms

According to Alain d'Astous, associations and recording companies have turned to a number of communication strategies to convince consumers not to engage in piracy behaviour.¹⁸⁷ First of all, they have tried to show that there

From Lawsuits to 3 Strikes, ELECTRONIC FRONTIER FOUND. (Dec. 19, 2008), <http://www.eff.org/deeplinks/2008/12/riaa-v-people-turns-lawsuits-3-strikes>.

178. EDWARDS, *supra* note 141, at 3.

179. *Id.* at 26.

180. *Id.*

181. *See id.* at 27–69 (discussing notice and notice, notice and takedown, graduated response, and filtering).

182. *Id.* at 63.

183. *See id.* (noting four different models for ISP cooperation which include blocking access to websites implicated in copyright infringement and deep packet inspection).

184. *UK ISP's to Block The Pirate Bay and Other File Sharing Sites*, PC TECHTALK (Mar. 22, 2011, 8:00 PM), http://pctechtalk.com/_/internet-news/uk-isps-to-block-the-pirate-bay-and-other-file-sharing-sites-r253.

185. Drew Wilson, *8 Technical Methods That Make the PROTECT IP Act Useless*, ZEROPAID (Aug. 7, 2011), <http://www.zeropaid.com/news/95013/8-technical-methods-that-make-the-protect-ip-act-useless/>.

186. de Beer & Clemmer, *supra* note 153, at 375–76.

187. Alain d'Astous et al., *Music Piracy on the Web—How Effective Are Anti-Piracy Arguments? Evidence From the Theory of Planned Behaviour*, 28 J. CONSUMER POL'Y 289, 289–90 (2005).

are negative personal consequences tied to piracy. By suing individual users, they have shown that pirating music on the web can get you into trouble with the law. They view regulation and litigation as part of an “education” campaign.¹⁸⁸ According to RIAA lawyer Cary Sherman, “Enforcement is a tough love form of education.”¹⁸⁹ They also aim to make warning and education part of the graduated response procedure.¹⁹⁰

Another strategy has been to show the negative consequences piracy has on society in general by stating the massive losses piracy creates.¹⁹¹ A third strategy is to simply make consumers consider the ethics of piracy through public awareness campaigns like the copyright awareness week,¹⁹² of which the copyright register stated that it is important that people know that “some uses of these technologies [digitalization and the Internet] can undermine the copyright system as a whole.”¹⁹³ This has worked to an extent, as research shows that most people know that P2P downloading is illegal.¹⁹⁴

c. Market

The market has changed fundamentally. Business models no longer require a content producer or distributor to control distribution through physical channels.¹⁹⁵ Napster not only undermined traditional entertainment business models, but also showed the potential benefits of digital distribution.¹⁹⁶ Modern networked technologies allow for direct contact between creators and consumers and allow for changing the role or eliminating the “middlemen” altogether. Distribution costs are cut to nearly nothing, and new costs for online advertising are now more important.¹⁹⁷

For music distribution, roughly two new business models have emerged: à la carte services like iTunes, which sell individual files in digital form and are usually protected by DRM, and subscription services like Spotify, which

188. See Chloe Albanesius, *ISP Piracy Warnings: What You Need to Know*, PCMAG.COM (July 8, 2011, 12:41 PM), <http://www.pcmag.com/article2/0,2817,2388261,00.asp> (noting that piracy warnings will be issued from copyright holders and ISPs in order to put consumers on notice).

189. Steve Knopper, *What Happens When the Record Biz Sues You*, ROLLING STONE, June 16, 2005, at 26, 27.

190. Enigmax, *MPAA, RIAA, Major ISPs Preparing ‘Graduated Response’ to Piracy*, TORRENTFREAK (June 23, 2011), <http://torrentfreak.com/mpaa-riaa-major-isps-preparing-graduated-response-to-piracy-110623/>.

191. *Who Music Theft Hurts*, RIAA, http://www.riaa.com/physicalpiracy.php?content_selector=piracy_details_online (last visited Feb. 1, 2013).

192. *Copyright Awareness Week March 21-25, 2005*, U.S. COPYRIGHT OFF., <http://www.copyright.gov/docs/awareness2005.html> (last visited Feb. 1, 2013).

193. *Register’s Statement on Copyright Awareness Week*, U.S. COPYRIGHT OFF., <http://www.copyright.gov/docs/awareness-2005statement.html> (last updated Mar. 9, 2005).

194. David McGuire, *Report: Kids Pirate Music Freely*, WASH. POST (May 18, 2004), <http://www.washingtonpost.com/wp-dyn/articles/A37231-2004May18.html>.

195. GARTNERG2, *supra* note 71, at 4.

196. See MADDEN, *supra* note 102, at 5 (“Napster and other peer-to-peer services ‘schooled’ users in the social practice of downloading, uploading, and sharing digital content, which, in turn, has contributed to increased demand for broadband, greater processing power, and mobile media devices.”).

197. COMM. ON THE INTELLECTUAL PROP. RIGHTS & THE EMERGING INFORMATIONAL INFRASTRUCTURE, NAT’L RESEARCH COUNCIL, *THE DIGITAL DILEMMA: INTELLECTUAL PROPERTY IN THE INFORMATION AGE* 41–42 (2000).

require users to pay a monthly fee to allow them access to streaming content.¹⁹⁸ Although Spotify is free in the starting period, users can get additional benefits by paying a monthly fee or free use can continue with restrictions.¹⁹⁹

Movies have also faced new challenges in the digital age, following up on past challenges such as TV and the VCR. New initiatives include subscription services like Netflix²⁰⁰ and other services where people can receive a movie file that they can access for only a limited time, like Movielink.²⁰¹

Books are being replaced by eBooks, which require modified business models and are strengthened by new distribution tools. Amazon.com sells books that can be read on an e-reader directly after downloading through the Internet, requiring no physical printing or distribution.²⁰² Some of these books are protected by DRM.²⁰³ Other print media rely on advertising, and the switch to the Internet does not fundamentally alter this model.²⁰⁴ Newspapers are gradually moving online too, like the *New York Times* is doing now.²⁰⁵ Meanwhile, consumer attitudes have changed.²⁰⁶ In “Free!,” *Wired* author Chris Anderson argues that producers should dramatically drop prices to appeal more to consumers, or offer free marginal services to make money by offering premium services (exactly what Spotify does).²⁰⁷ According to the Pew Internet & American Life Project, digital music consumers want five kinds of selling points: “1. Cost (zero or approaching zero);] 2. Portability (to any device);] 3. Mobility (wireless access to music);] 4. Choice (access to any song ever recorded);] and 5. Remixability (freedom to remix and mashup music).”²⁰⁸

Despite the rise of numerous new services, critics argue that the entertainment industry has done very little to use the information infrastructure to its benefit and facilitate new consumer demands. They argue that the entertainment industry should do more to facilitate the change instead of

198. GARTNERG2 ET AL., *supra* note 71, at 12.

199. See SPOTIFY, <http://www.spotify.com/us/#features> (last visited Feb. 1, 2013) (explaining that you can receive unlimited music for a monthly fee).

200. See *How Netflix Works*, NETFLIX, <https://signup.netflix.com/MediaCenter/HowNetflixWorks> (last visited Feb. 1, 2013) (explaining how a user can subscribe to Netflix).

201. GARTNERG2 ET AL., *supra* note 71, at 10.

202. See Ryan Block, *Amazon Kindle: Meet Amazon's e-Book Reader*, ENGADGET (Sept. 11, 2006), <http://www.engadget.com/2006/09/11/amazon-kindle-meet-amazons-e-book-reader/> (describing Amazon's eBook system).

203. See Dana Robinson, *A New Form of DRM: A Legal and Pragmatic Solution for Protection of E-books*, DBW (July 12, 2012), <http://www.digitalbookworld.com/2012/a-new-form-of-drm-a-legal-and-pragmatic-solution-for-protection-of-e-books/> (explaining that some publishers insist on having DRM).

204. See GARTNERG2 ET AL., *supra* note 71, at 14 (stating that subscriptions and newsstand sales are the primary revenue source for physical newspapers and magazines).

205. See *New York Times Article Archive*, N.Y. TIMES, <http://www.nytimes.com/ref/membercenter/nytarchive.html> (last visited Feb. 1, 2013) (stating that the complete archive of the New York Times can now be searched).

206. See GARTNERG2 ET AL., *supra* note 71 (explaining how new technologies have affected the consumers' preferences).

207. Chris Anderson, *Free! Why \$0.00 Is the Future of Business*, WIRED (Feb. 25, 2008), http://www.wired.com/techbiz/it/magazine/16-03/ff_free?currentPage=all.

208. MADDEN, *supra* note 102, at 4.

fighting it.²⁰⁹

d. Code

Another way to prevent Internet users from downloading copyrighted content without paying is through technological means.²¹⁰ As the Internet is based on routing information over a large number of links through packet switching, it is relatively easy to intercept information.²¹¹ This lack of architectural security can be overcome by encryption. It means that certain information is “locked” and can be opened only through a “decrypting key.” This technology also allows for authentication.²¹² Encryption can be used by those who wish to send and receive information through the insecure architecture of the Internet without it being intercepted and deciphered by others. It can also be used to lock up copyrighted information so only authorized users can access it.

An example of such an encryption mechanism is DRM. It makes works harder to copy or can make it easier to ensure payment for copying. This can be done through an encryption key or by only allowing centralized access to copyrighted material (a password for a database). A more sophisticated way would be to allow someone to read a bought novel by only granting access to it when connected to the source network.²¹³ Another way would be to allow fingerprinting or watermarking, only adjusting a small bit in digital material to “mark” it.²¹⁴

These methods can be seen as private mechanisms of technological rights enforcement. The software we use to access and use the Internet can shape and channel our online behavior. This has allowed for this sort of private enforcement where programmers themselves can create technological protection measures to limit free information. Before the Internet, the first sale doctrine protected the use of a work of authorship.²¹⁵ Once bought, a user would be free to do anything with the purchased token of the work.²¹⁶ But now, it has become possible to centralize control of access to content so that the token is never fully possessed by the end-user.²¹⁷ Once bought, the rights holders are still able to control their work.²¹⁸ This means that there has been

209. Barry Collins, *Big Six ISPs Capitulate to Music Industry*, PC PRO (July 24, 2008), <http://www.pcpo.co.uk/news/214620/big-six-isps-capitulate-to-music-industry>.

210. LESSIG, *FREE CULTURE*, *supra* note 64, at 112–14.

211. I. TROTTER HARDY, U.S. COPYRIGHT OFFICE, *PROJECT LOOKING FORWARD, SKETCHING THE FUTURE OF COPYRIGHT IN A NETWORKED WORLD* 61–62 (1998).

212. *Id.* at 61–68.

213. *Id.* at 69–70.

214. *Id.* at 78.

215. *See* LESSIG, *FREE CULTURE*, *supra* note 64, at 106 (“Before the Internet, if you purchased a book and read it ten times, there would be no plausible copyright-related argument that the copyright owner could make to control that use of her book.”).

216. *See id.* at 103 (“[After] the first sale of a book, the copyright owner can impose no further conditions on the disposition of the book.”).

217. *Id.* at 144.

218. *Id.*

an expansion of effective control by rights holders.²¹⁹ New media are regulated in a more strict sense than analog media. For example, an eBook is now regulated differently than a normal book.²²⁰

In his book *Code*, Lawrence Lessig suggests this could pose serious risks, as these private parties have not been democratically elected and can now steer our behavior online just as much or even more than the law can.²²¹

C. *The Threats of a State Approach*

In his article, Coase argued that the state approach to the allocation of radio frequencies made newer media more strictly regulated than old media like the printing press, and that this could have bad effects on human rights and economic efficiency. We should perhaps have the same concerns with digital media.

1. *The Threat to Public Values*

Its open structure makes the Internet difficult to regulate without infringing on important public values and fundamental rights. This has been the case especially in the field of copyrighted music.

Copyrights strike a balance between individual rights (the creator's rights) and the rights of free expression. As discussed above, regulation has upset this balance, diminishing rights of the general public in favor of state-created monopoly rights. The reach of copyright has been increased: copyrights are longer, apply to more uses, and are interpreted as reaching into every corner of valuable use.²²² They are no longer just applied to republishing, but also to transforming or building on a work to create something else.²²³ Law now controls and restricts creativity in favor of certain commercial enterprises.²²⁴ Having more monopolized information and less in the public domain restricts the general public's and creators' opportunities to access information and create new or derivative works, and it undermines one of the two purposes of copyright law.²²⁵

Lessig makes a distinction between two types of culture: commercial culture and non-commercial culture.²²⁶ Non-commercial culture was unregulated, and commercial culture was produced and sold or produced to be

219. *Id.* at 109.

220. *Id.* at 106–107 (“But the same book as an e-book is effectively governed by a different set of rules. Now, if the copyright owner says you may read the book only once or only once a month, then copyright law would aid the copyright owner in exercising this degree of control, because of the accidental feature of copyright law that triggers its application upon there being a copy. Now if you read the book ten times and the license says you may read it only five times, then whenever you read the book (or any portion of it) beyond the fifth time, you are making a copy of the book contrary to the copyright owner’s wish.”).

221. LESSIG, *CODE VERSION 2.0*, *supra* note 62, at 89.

222. YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 319 (2006).

223. LESSIG, *FREE CULTURE*, *supra* note 64, at 18.

224. *Id.*

225. *Id.* at 163.

226. *Id.* at 11.

sold and regulated.²²⁷ However, because of the Internet and stricter regulation, the divide between the free and commercial has evaporated. Therefore, less information is free, and a society has evolved that requires permission for the use of culture.²²⁸ In fact, Lessig says that hardly any unregulated culture remains.²²⁹ Some have called this the “tragedy of the anticommons,” because it has created a situation in which it is difficult to create something “new” without stepping on someone’s toes, with all the bad consequences.²³⁰ This is also acknowledged by Siva Vaidhyanathan, who suggests that more people are treating information just as a product.²³¹

Another problematic development is the increased reliance on technological protection measures such as DRM. These measures complicate fair use. Prohibiting circumvention technologies makes fair use impossible, and the DMCA has supported this phenomenon.²³²

But apart from a number of practical problems the Internet poses to regulators, there are a number of other problematic developments that have made increased copyright enforcement on the Internet controversial. For one, the fines that can be imposed are often quite high.²³³ Students, kids, and grandmothers have been ordered to pay tens of thousands of dollars to companies for copyright infringement.²³⁴ An extreme example is Jammie Thomas, the defendant in the first such lawsuit involving illegal downloading, who was fined \$2 million for downloading twenty-four songs.²³⁵ The website “Prefix” compared her fine with other crimes and concluded that her fine was higher than crimes including fines for abducting a child, stealing the actual CD, robbing your neighbor, burning a house down, stalking someone, starting a dogfighting ring, and murdering someone.²³⁶ Another extreme example is the recent case filed against Limewire. Thirteen record companies tried to sue Limewire for \$75 trillion.²³⁷ Even the New York City judge dealing with the

227. *Id.*

228. *Id.* at 12.

229. *Id.*

230. See Michael A. Heller, *The Tragedy of the Anticommons: Property in Transition From Marx to Markets*, 111 HARV. L. REV. 621, 624 (1998) (explaining that the tragedy of the anticommons occurs when parties are able to exclude others from using a resource; the result is that the resource is underused).

231. SIVA VAIDHYANATHAN, COPYRIGHTS AND COPYWRONGS, THE RISE OF INTELLECTUAL PROPERTY AND HOW IT THREATENS CREATIVITY 165–66 (2001).

232. LESSIG, FREE CULTURE, *supra* note 64, at 117.

233. See *id.* at 40 (noting that a typical copyright infringement claims will threaten \$150,000 in damages).

234. See *id.* at 155 (explaining infringement lawsuits maintained against students); see also John Borland, *RIAA Settles With 12-Year-Old Girl*, CNET NEWS (Sept. 9, 2003), http://news.cnet.com/RIAA-settles-with-12-year-old-girl/2100-1027_3-5073717.html (outlining a RIAA infringement suit against a twelve-year-old); *Grandmother Piracy Lawsuit Dropped*, BBC NEWS (Sept. 25, 2003), <http://news.bbc.co.uk/2/hi/entertainment/3140160.stm> (explaining a lawsuit against a grandmother based on mistaken identity).

235. Rick Burgess, *\$200,000 Award Upheld in RIAA v. Jammie Thomas-Rasset Lawsuit*, TECHSPOT (Sept. 12, 2012), <http://www.techspot.com/news/50132-220000-award-upheld-in-riaa-v-jammie-thomas-rasset-lawsuit.html>.

236. Andrew Winistorfer, *Seven Crimes That Will Get You a Smaller Fine Than File Sharing*, PREFIX MAGAZINE (Aug. 21, 2009, 11:15 AM), <http://www.prefixmag.com/news/seven-crimes-that-will-get-you-a-smaller-fine-than/32033/>.

237. Sarah Jacobsson Purewal, *RIAA Thinks LimeWire Owes \$75 Trillion in Damages*, PCWORLD (Mar. 26, 2011, 5:44 AM), http://www.peworld.com/article/223431/riaa_thinks_limewire_owes_75_trillion_in_

case called this “absurd.”²³⁸ One commentator explains that “[i]f plaintiffs were able to pursue a statutory damage theory predicated on the number of direct infringers per work, defendants’ damages could reach into the trillions.”²³⁹ Further, “[a]s defendants note, plaintiffs sought an award that is more than the entire music recording industry has made since Edison’s invention of the phonograph in 1877.”²⁴⁰

2. *The Threat to Economic Efficiency*

Closely connected to the threat to public values is the threat this increased enforcement and regulation has on economic efficiency. James Boyle argues that in order to create new entertainment and expressions, it is necessary to build on old expressions.²⁴¹ Information input is information output.²⁴² This is affirmed by artists like Aesop Rock,²⁴³ T.S. Elliot,²⁴⁴ and Pablo Picasso.²⁴⁵ Reducing information in the public domain would thus undermine creativity and new economic opportunities. The tragedy of the anti-commons in fact diminishes more and more diverse expressions.

Meanwhile, attacking or denying new, interesting distribution platforms or platforms that employ innovative business models that involve ignoring copyrights could undermine economic efficiency or the potential of this new distribution channel. The entertainment industry still holds the power, and its cooperation is necessary in order for new business models to work. It can just withhold access to its library or force price increases on new platforms once they become successful. This happened to Netflix to the dismay of its subscribers.²⁴⁶ Artificial monopolies, supported by states, are typically seen as anathema to free markets and prone to inefficiency.²⁴⁷

Barriers to entry and transaction costs are also higher because of legal uncertainty.²⁴⁸ It is often unclear which rights have to be cleared, and who the actual rights owners are.²⁴⁹ For amateurs, failing to do so properly could result

damages.html.

238. Victor Li, *Manhattan Federal Judge Kimba Wood Calls Record Companies’ Request for \$75 Trillion in Damages ‘Absurd’ in Lime Wire Copyright Case*, CORPORATE COUNSEL (Mar. 15, 2011), http://www.law.com/corporatecounsel/PubArticleCC.jsp?id=1202486102650&Manhattan_Federal_Judge_Kimba_Wood_Calls_Record_Companies_Request_for__Trillion_in_Damages_Absurd_in_Lime_Wire_Copyright_Case&slreturn=20130022215330.

239. *Id.*

240. Purewal, *supra* note 237.

241. JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 48 (2008).

242. *Id.*

243. Mike Masnick, *Aesop Rock Admits That Copying Others Is How He Makes Music*, TECHDIRT (Nov. 8, 2011, 1:39 PM), <http://www.techdirt.com/articles/20111107/03125416654/aesop-rock-admits-that-copying-others-is-how-he-makes-music.shtml>.

244. *Id.*

245. *Id.*

246. James Allworth, *Why I’m Not Going Near Spotify (and Why You Shouldn’t Either)*, HARV. BUS. REV. BLOG (July 22, 2011, 10:53 AM), http://blogs.hbr.org/cs/2011/07/why_im_not_going_near_spotify.html.

247. See Harry G. Johnson, *Some Economic Aspect of Science*, in *CIVILIZATION AND SCIENCE: IN CONFLICT OR COLLABORATION?*, 11, 15 (G. E. W. Wolstenholme & Maeve O’Connor eds., 1972) (“[T]he patenting process itself creates an artificial monopoly where none ought to exist . . .”).

248. LESSIG, *FREE CULTURE*, *supra* note 64, at 140.

249. See *id.* at 160 (“To know who owns what [rights], you would have to hire a private detective.”).

in massive fines.²⁵⁰ It has caused Professor Benkler to argue that strong copyrights “are particularly helpful to organizations that own large inventories of existing information and cultural goods”²⁵¹

From an international perspective, Michael Geist, Canada’s copyright law guru and law professor at the University of Ottawa, has stated that piracy is *caused* by market failure.²⁵² He argues that prices are simply unaffordable for digital goods through legal distribution channels.²⁵³ This is because rights holders are interested in keeping the prices high in domestic markets instead of tailoring to local needs.²⁵⁴

3. *The Threat to Human Rights*

Legal scholars, politicians, and other commentators fear that new copyright enforcement initiatives may jeopardize the ability of citizens to participate in political dialogue because those initiatives necessarily restrict free speech and the ability to access information, which could have implications for users’ privacy.²⁵⁵

Freedom of expression is a value that allows people to speak freely without censure or any other sort of limitation, whether or not that expression is unique or original. The same freedom also encompasses the freedom to receive information, expressions, and ideas. This value has also been recognized as a fundamental principle of Western society and closely linked to democracy and the rule of law. Recently, countries have moved to graduated response systems and proposed filtering systems that could have severe consequences on access and free expression rights.²⁵⁶ Other initiatives involve the monitoring of Internet traffic through deep packet inspection, which has consequences for users’ privacy.²⁵⁷

The breach of those fundamental rights becomes even more troubling given examples of inaccurate lawsuits against individuals and examples of “notice and takedown procedures” that were not properly scrutinized.²⁵⁸ The

250. See *id.* at 131 (“We could prosecute families for millions of dollars in damages . . .”).

251. Yochai Benkler, *Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain*, 66 L. & CONTEMP. PROBS. 173, 181 (2003).

252. Michael Geist, *Canadian-backed Report Says Music, Movie and Software Piracy Is a Market Failure, Not a Legal One*, THESTAR.COM (Mar. 18, 2011), <http://www.thestar.com/business/article/956637--geist-canadian-backed-report-says-music-movie-and-software-piracy-is-a-market-failure-not-a-legal-one>.

253. *Id.*

254. *Id.*

255. Human Rights Council, *Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, Frank La Rue*, ¶ 30, U.N. DOC. A/HRC/17/27 (May 16, 2011).

256. See Press Release, Article 19, Landmark Digital Free Speech Ruling at European Court of Justice (Nov. 24, 2011), available at <http://www.article19.org/resources.php/resource/2872/en/landmark-digital-free-speech-ruling-at-european-court-of-justice> (providing background on the graduated response and filtering systems responses systems).

257. Ralph Bentrath, *DPI as an Integrated Technology of Control—Potential and Reality*, OFF. OF THE PRIVACY COMMISSIONER OF CANADA, <http://dpi.priv.gc.ca/index.php/essays/dpi-as-an-integrated-technology-of-control-potential-and-reality> (last visited Feb. 1, 2013).

258. A study done by Oxford researchers concluded that the incentives to take down alleged copyright-infringing content were far greater than the potential costs of not taking it down. See Christian Ahlert et al., *How Liberty Disappeared From Cyberspace: The Mystery Shopper Tests Internet Content Self-Regulation* (unpublished), available at <http://pcmlp.socleg.ox.ac.uk/sites/pcmlp.socleg.ox.ac.uk/files/liberty.pdf>

Western “rule of law” legal system provides a defense against inaccuracy and abuse of the law through procedural safeguards,²⁵⁹ but these enforcement procedures seem to offer very few means of recourse for unjust applications. Article 19, a global civil society group for freedom of expression, has appealed for a notice and takedown regime that involves judicial review.²⁶⁰

In light of new, more stringent initiatives like the graduated response or “three strikes” initiatives, commentators have focused on copyright enforcement initiatives that involve intermediaries and due process concerns.²⁶¹ A recent U.N. report on the freedom of expression on the Internet not only highlights the threats new copyright enforcement initiatives could have on the right to freely access information online, but also addresses the lack of procedural safeguards.²⁶² The special rapporteur writes that in notice and takedown procedures, content is often blocked without the intervention of or possibility for judicial review, or review by an independent body.²⁶³ He adds that users who are notified by the service provider that their content is unlawful have very few options to challenge the takedown.²⁶⁴ He is especially alarmed by the new graduated response proposals that could cut off users from the Internet after repeated intellectual property rights violations.²⁶⁵ That could have chilling effects on free speech.

One of the problems with graduated response is that its sanctions are administered through a system of administrative procedures instead of through ordinary courts. According to Lilian Edwards, “[o]nly in this way it can scale to deal with thousands or even millions of file sharers.”²⁶⁶ Normally, copyrights are enforced in civil (or criminal) courts that allow some guarantees of due process or fair trial.²⁶⁷ These guarantees are ensured by a number of international treaties and national constitutions and require, for example, the right to have a fair hearing, certain standards of evidence, the presumption of innocence, some rights to legal assistance, transparency, oversight, accountability, and appeal.²⁶⁸ The British Digital Economy Act, which includes a graduated response approach, does not allow for any judicial review in its procedure.²⁶⁹ The French HADOPI law, which also includes a graduated

(discussing the notice and takedown procedure on the basis of the DMCA in the USA); see also Jennifer M. Urban & Laura Quilter, *Efficient Process or “Chilling Effects”? Takedown Notices Under Section 512 of the Digital Millennium Copyright Act*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 621, 651, 667 (2006) (showing that a third of all takedown requests were flawed or unjustified, and half of the demands for removal came from competitors).

259. Urban & Quilter, *supra* note 258, at 621–22.

260. Press Release, Article 19, European Commission: Freedom of Expression Needs Better Protection in Digital Communications (Nov. 9, 2010), available at www.article19.org/pdfs/press/european-commission-freedom-of-expression-needs-better-protection-in-digital.pdf.

261. See *id.* (advocating for greater protection for intermediaries as well as raising concerns with the current scheme, which requires automatic takedown of material without any review).

262. See generally Human Rights Council, *supra* 255.

263. *Id.* ¶ 31.

264. *Id.* ¶ 42.

265. *Id.* ¶ 49.

266. EDWARDS, *supra* note 141, at 36.

267. *Id.*

268. *Id.* at 36–37.

269. *Id.* at 37.

response mechanism, allows for some judicial review at the end of the process,²⁷⁰ but it is unclear how it will deal with the large scale of alleged infringement. In a leaked report, the French privacy commissioner admitted that because of the volume of alleged infringement, accuracy could not be assured.²⁷¹ This means the authority will simply accept the complaints by rights holders and request that ISPs issue the first warning.²⁷²

ISPs in the United States have now voluntarily moved toward a graduated response system, which includes six strikes and proposes limiting Internet access and bandwidth speed if users fail to comply with copyright rules.²⁷³ The fact that they have formed a private agreement is important as this diminishes the legal requirement for procedural safeguards. Wendy Seltzer, a scholar at Princeton's Center for Information Technology and the head of the Chilling Effects clearinghouse, thinks it is wrong for ISPs to engage in content management instead of being just a carrier.²⁷⁴

That separation is important . . . because it preserves the presumption of innocence that is the foundation of our legal system. Users shouldn't have to explain to their ISPs what they're doing with their Internet connections, . . . and they certainly shouldn't have to pay \$35 (the appeals fee for those challenging a "mitigation" measure). Indeed, they shouldn't face any "mitigation measures" at all until their use of the network has been ruled unlawful in court²⁷⁵

Copyright can be abused and undermine democracy in other ways. In March of 2011, Republican representative Sean Duffy committed a political error: in a videotaped town hall meeting he complained how he struggled to get by on his salary, with six kids, and the healthcare payments and student loans he had to pay.²⁷⁶ Soon, criticism poured his way, as he earned a \$174,000 salary and had a second home, and Wisconsin Republicans ordered that no one could republish the footage without their permission.²⁷⁷ They based this claim on copyright.²⁷⁸

Stricter copyright control has also led to changes in media businesses. These changes are visible in the scope of media business concentration and in

270. *Id.*

271. Mike Masnick, *Leaked Report Admits That Hadopi First Strike Accusations Won't Be Reviewed for Accuracy*, TECHDIRT (Sept. 22, 2010, 1:30 PM), <http://www.techdirt.com/articles/20100920/11092911078/leaked-report-admits-that-hadopi-first-strike-accusations-won-t-be-reviewed-for-accuracy.shtm>.

272. *Id.*

273. Timothy B. Lee, *ISP Flip-Flops: Why Do They Now Support "Six Strikes" Plan?*, ARS TECHNICA (July 10, 2011, 6:30 PM), <http://arstechnica.com/tech-policy/2011/07/why-did-telcos-flip-flop-and-support-six-strikes-plan/>.

274. *See id.* (ISPs are "breaching the useful separation of layers between carriage and content.").

275. *Id.*

276. Ryan Witt, *GOP Works to Cover Up Video They Previously Published on Internet*, EXAMINER.COM (Mar. 30, 2011), <http://www.examiner.com/political-buzz-in-national/gop-trying-desperately-to-cover-up-video-they-previously-published-on-internet>.

277. *Id.*

278. *See id.* ("The Polk County Republicans claim that no one else can republish the video without their permission, even though they originally released the video on YouTube for the whole world to see.").

their natures.²⁷⁹ Media company ownership concentration has increased, and the numbers of media conglomerates have fallen with mergers.²⁸⁰ This also threatens free speech, as it limits diversity and can be a threat to the non-dominant opinion.²⁸¹

This criticism seems to imply a tradeoff between fundamental rights and copyright. In fact, it has inspired Pirate Party head Christian Engstrom to say that “[a]s long as there are ways for citizens to communicate in private, they will be used to share copyrighted materials.”²⁸² French President Nicolas Sarkozy seems to have made his choice: copyright is more important than fundamental rights.²⁸³ Thankfully, in the case of HADOPI, the French constitutional court disagreed.²⁸⁴

D. Reframing Copyright

Coase differentiated between ownership of frequency channels and how those frequency channels were to be used. According to Coase, U.S. policy was aimed too much at awarding licenses that would grant temporary “ownership.”²⁸⁵ The term ownership made policy and discussion difficult, as ownership is the most absolute right someone can have over things, and ownership over frequency channels is something very difficult to grasp or define. Coase said it would help allocation if the discussion would shift away from ownership in its traditional sense, as this was about the right “to use a piece of equipment to transmit signals in a particular way.”²⁸⁶ His view was that property rights are a bundle of rights to do certain things.²⁸⁷ Redefining rights over radio spectra as *use* rights would allow rights holders to trade the right to use a frequency for a period of time as if they were property owners, but without the remaining bundle of proprietary rights ordinarily encompassed by claims of ownership over tokens.

1. Framing the Copyright Debate

In the case of digital goods, economic rights holders have been very effective at framing²⁸⁸ the copyright debate. A recent study by Stefan Larsson

279. LESSIG, *FREE CULTURE*, *supra* note 64, at 120.

280. *Id.* at 121–23.

281. *Id.* at 125.

282. Christian Engstrom, *Copyright Law Turns Kids Into Criminals—Reform Will Enrich Artists and the Public*, NEW EUROPE ONLINE (Oct 1, 2011, 11:23 AM), <http://www.neurope.eu/blog/copyright-law-turns-kids-criminals-reform-will-enrich-artists-and-public>.

283. Mike Masnick, *France: Copyright Is More Important Than Human Rights*, TECHDIRT (Sept. 6, 2011, 10:37 AM), <http://www.techdirt.com/articles/20110902/15025715798/france-copyright-is-more-important-than-human-rights.shtml>.

284. Peggy Hollinger, *French Anti-Piracy Drive Ruled Illegal*, FIN. TIMES (June 11, 2009, 3:00 AM), <http://www.ft.com/intl/cms/s/0/986d8406-5620-11de-ab7e-00144feabdc0.html>.

285. Coase, *FCC*, *supra* note 1, at 33.

286. *Id.* at 32–33.

287. Hazlett et al., *supra* note 11, at 12.

288. *Glossary*, SPEAKS, <http://www.speaksoc.org/glossary/> (last visited Feb. 2, 2013) (A frame in social theory consists of “a schema of interpretation—that is, a collection of anecdotes and stereotypes—that individuals rely on to understand and respond to events.”).

of Lund University reveals many misleading metaphors in the copyright debate and why they are problematic.²⁸⁹

First of all, rights holders have framed copyright on par with ordinary property. The RIAA refers to illegal downloading as “stealing.”²⁹⁰ The Motion Picture Association of America (MPAA) strongly encourages everyone and pressures governments to protect and enforce intellectual property rights.²⁹¹ It makes a certain sense, and certainly fits with the business models built on the sale of tokens in the analog world. You can own a CD, and someone can steal your CD and deprive you of your rightfully purchased token. But the natures of ordinary property and IP differ significantly, and casting the copying of the contents of a CD with theft of a CD ignores the fact that in copying those contents, the token remains intact and in possession of the original possessor. Nothing has been “stolen,” but only a perfect copy has been made, and the nature of rights to the types that are copied are wholly created by the positive law, rather than emerging out of states of affairs that have existed regarding ordinary property, possession, and excludability since long before laws protecting property were ever conceived.²⁹²

Consequently, the movie and music industries have been determined to portray music and movie pirates as “profiteers” that only subtract economic value. A recent study by the GfK group actually suggested the opposite, but an anonymous source within the market research company told Telepolis that the client who ordered the research thought the outcome was “unpleasant” and prevented its official release.²⁹³

Furthermore, Annemarie Bridy mentions that the language used by content industries has been effective at framing the problem as a large-scale problem that costs money, and this language has seeped through the debates and case law with little criticism.²⁹⁴ We all know now, for instance, that copyright infringement happens on a “massive scale” and costs “billions of dollars” and “countless jobs.”²⁹⁵

2. Copyrights

Copyrights are the primary allocation instruments used to allocate profits to artists/creators of creative expressions including movies, videogames, books, software, and music. They are a specific category of intellectual property rights that apply to creative expressions. They were devised to

289. See generally Stefan Larsson, *Metaphors and Norms: Understanding Copyright Law in a Digital Society*, 36 LUND STUD. SOC. L. 5, 94–98 (2011).

290. *Frequently Asked Questions*, RIAA, <http://www.riaa.com/faq.php> (last visited Feb. 2, 2013).

291. *Types of Content Theft*, MPAA, <http://www.mpa.org/contentprotection/types-of-content-theft> (last visited Feb. 2, 2013).

292. DAVID KOEPESELL, *THE ONTOLOGY OF CYBERSPACE: PHILOSOPHY, LAW, AND THE FUTURE OF INTELLECTUAL PROPERTY* 29–30 (2000).

293. Matthew Humphries, *Movie Industry Buries Report Proving Pirates Are Great Consumers*, GEEK.COM (July 20, 2011, 9:00 AM), <http://www.geek.com/articles/geek-cetera/movie-industry-bins-report-proving-pirates-are-great-consumers-20110720/>.

294. Bridy, *supra* note 103, at 706–07.

295. *Id.* at 706–08.

achieve a utilitarian outcome: stimulating content creators to create new content, while maintaining some degree of accessibility of content to the larger public and creating an open and vibrant market of expressions.²⁹⁶

Copyrights were introduced around the sixteenth century when the crown granted the London Stationers company the exclusive right to print books, an economic power, in exchange for censorship powers.²⁹⁷ After criticism of this practice, the Statute of Anne transformed this publisher's right into certain monopolistic claims for authors over their work for a term of years.²⁹⁸ Legislators recognized the economic incentive needed for the book trade, but refused to give in to heavy stationers lobbying for more enforcement and monopoly powers.²⁹⁹ The eighteenth century saw copyright develop itself into the form we know today. The struggle for freedom during the French revolution included a struggle to move away from vertical systems of government control to a system that included individual rights that could be traded in the market.³⁰⁰ The main argument behind copyrights was to stimulate creators to disseminate their works to the public and be creative, by granting them remuneration for their work.³⁰¹

Such copyrights take the form of a legal monopoly.³⁰² They are, by their very nature, economically inefficient. This is because there is no cost to society if more people consume the good, so prohibiting them from doing so is wasteful.³⁰³ However, this inefficiency is deemed necessary, as having no possessory mechanism over a non-rival good limits the ability for a creator to ensure profit from his creation.³⁰⁴ This profit is assumed to be for the general good, as without guaranteed returns on investment (of time or money) authors would not take the risk of innovating or creating.³⁰⁵

In continental Europe, another moral justification for copyright surfaced based on natural rights. This "author's right" developed under the influence of Locke's theory of property.³⁰⁶ Under that theory, man was regarded by nature as the owner of the fruits of his labor.³⁰⁷ Some argued that this meant that the creation of expressions constituted the same type of labor that would grant

296. L. Ray Patterson, *Understanding Fair Use*, 55 LAW & CONTEMP. PROBS. 249, 262–63 (1992).

297. MONICA HORTEN, THE COPYRIGHT ENFORCEMENT ENIGMA: INTERNET POLITICS AND THE 'TELECOMS PACKAGE' 16–19 (2012).

298. *Id.*

299. *Id.*

300. Daniel Bécourt, *The French Revolution and Authors' Rights: Towards a New Universalism*, COPYRIGHT BULLETIN, no. 4, 1990 at 4–5.

301. BERNT HUGENHOLTZ & PAUL GOLDSTEIN, INTERNATIONAL COPYRIGHT: PRINCIPLES, LAW, AND PRACTICE 7 (2d ed. 2010).

302. Michael O'Hare, *Copyright: When Is Monopoly Efficient?*, 4 J. OF POL'Y ANALYSIS & MGMT. 407, 407 (1985).

303. See DEAN BAKER, CTR. FOR ECON. & POLICY RESEARCH, ARE COPYRIGHTS A TEXTBOOK SCAM? ALTERNATIVES TO FINANCING TEXTBOOK PRODUCTION IN THE 21ST CENTURY 3 (1995) (explaining the economic incentives provided by copyright monopolies to textbook publishers).

304. EASLEY & KLEINBERG, *supra* note 57, at 784.

305. *But see* KOEPESELL, INNOVATION AND NANOTECHNOLOGY, *supra* note 67, at 155 (arguing that the correlation between innovation and increasing IP rights may lack causation).

306. Lior Zemer, *The Making of a New Copyright Lockean*, 29 HARV. J.L. & PUB. POL'Y 891, 894–96 (2006).

307. *Id.* at 929.

ownership over their expressions.³⁰⁸ Although an economic right, authors do not necessarily have to be the owner of the information economically. Even if the economic property is not in the owner's hands, he remains the intellectual originator of the information.³⁰⁹

3. *The Difference With Ordinary Property*

Copyrights are part of the legal family of “*intellectual property rights*,” and the industry has been very successful in framing them that way. However, they are very different from ordinary property rights.

In fact, copyright is not just property, but also regulation.³¹⁰ It regulates specific behaviors amongst those who have an interest in copyrighted works, including users and creators. Granted, this is connected to the property side of the story. Through regulation, copyrights are created, and they regulate our behavior. But constantly emphasizing the “property” part of copyright makes copyrighted goods seem more exclusive than they really are or can be.

A big difference with ordinary property is that copyrights have specific limitations. This is because copyright balances the rights of the author with the general good.³¹¹ One of these limitations is the fact that ideas by themselves cannot be copyrighted, only expressions can.³¹² Another limitation is the fact that copyrights exist only for a limited time. This used to be only fourteen years, and authors needed to apply for renewal of their right.³¹³ Currently, this right lasts for the lifetime of a creator plus seventy years.³¹⁴ Another limitation on copyrights is in the fact that they allow for a variety of fair uses.³¹⁵ The fact that we allow for these fair uses already has a broader meaning: if we accept that we as a people can decide that certain uses can be considered “fair,” we accept the fact that government has the power to shrink the “property” rights as laid down in copyrights.³¹⁶

Another difference is that IP is not grounded in brute facts.³¹⁷ Brute facts differentiate themselves from institutional facts, in that they exist regardless of

308. *Id.* at 945.

309. HORTEN, *supra* note 297, at 16–19.

310. Patterson, *supra* note 296, at 249.

311. Daniel J. Cohen & Roy Rosenzweig, *Owning the Past: A Brief History of Copyright*, DIGITAL HIST.: A GUIDE TO GATHERING, PRESERVING, & PRESENTING THE PAST ON THE WEB, <http://chnm.gmu.edu/digitalhistory/copyright/1.php> (last visited Mar. 7, 2013).

312. See *Baker v. Selden*, 101 U.S. 99, 105 (1879) (“The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured, if it can be secured at all, by letters-patent.”).

313. Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124 (repealed 1831).

314. 17 U.S.C. § 302(a) (2012).

315. See generally C.T. Drechsler, Annotation, *Extent of Doctrine of “Fair Use” Under Federal Copyright Act*, 23 A.L.R.3d 139 (1969) (explaining the various ways the fair use doctrine is used in copyright law).

316. Sara K. Stadler, *Copyright as Trade Regulation*, 155 U. PA. L. REV. 899, 911 (2007).

317. John Searle divides reality into the world of “brute facts,” which exist with or without human intentions, and the world of “social reality,” which is composed of the institutions, predicated upon brute facts, depending upon them in part, but founded ultimately upon human intentionality. JOHN R. SEARLE, *THE CONSTRUCTION OF SOCIAL REALITY* 190–91 (1997).

our institutional arrangements, whereas institutional facts rely on collective intentionality.³¹⁸ IP is thus “a *reaction* to the brute fact that ideas are non-rival and non-exclusive, and thus freely available to all to capitalize upon once expressed.”³¹⁹ Again, this emphasizes the regulatory basis of copyright as a legal instrument instead of being “just property.”

Framing IP as property rights, just as in the case with radio frequencies, complicates the discussion. It frames the debate toward the business model built on tokens: things that can be solely possessed to the exclusion of others. But copyrights are in fact already “use rights” as in the case of radio spectra, hence the name “copy”-right, and give the rights holders the right to do certain things, like copy and distribute their expression, though without any possessory right over tokens.

That doesn’t mean we don’t accept the entitlement that is so rooted in the naturalistic view of copyright or “authors’” rights. People that create deserve credit for that. It does mean that we need to critically evaluate the regulatory and utilitarian aspect of copyright, which is to stimulate culture by economic incentives, whilst providing affordable access to creative expressions for the public. Right now, policy makers seem to take copyright as economic entitlements as a “given,” and do not look at alternative structures of entitlements.³²⁰

4. *What Is Copyright for and Does It Live up to the Promise?*

As a regulatory instrument, copyright is relatively new and aims to induce creation by helping artists get remuneration for their works and to encourage the free flow of information by allowing access to those creations for consumers and by creating a vibrant and open market for expressions.³²¹ The question is whether it lives up to that promise. To answer that question in part, we must see to what extent creators have been dependent on copyright to be remunerated for their work. We hypothesize that before the digital dilemma, this was not the case. For example, musicians were and are dependent on multiple sources of income—music sales, performances, merchandise, and more. Pre-digital music sales involved the sale of tokens such as vinyl discs or CDs. It was quite difficult to breach copyrights because of high transaction costs. Moreover, copyright did not even apply to recorded music sales until the mid-1970s due to the “direct perception” doctrine established by the *White-Smith Music Publishing* case.³²² As James Boyle put it: “[i]magine someone walking up to you in 1950, handing you a book or a record or a movie reel and saying ‘Quick! Do something the law of intellectual property might forbid.’ . . . You would have been hard-pressed to do so. . . . Like an antitank mine, it would not be triggered by the footsteps of individuals. It was reserved for

318. *Id.* at 27.

319. KOEPESELL, *INNOVATION AND NANOTECHNOLOGY*, *supra* note 67, at 192–93.

320. Julie E. Cohen, *Lochner in Cyberspace: The New Economic Orthodoxy of “Rights Management,”* 97 MICH. L. REV. 462, 492 (1998).

321. Stadler, *supra* note 316, at 911–12.

322. *White-Smith Music Pub. Co. v. Apollo Co.*, 209 U.S. 1, 18 (1908).

bigger game.”³²³

It seems that new technologies have made certain creators more dependent on copyright to hold on to their traditional business model. The public interest in copyright has increasingly become the private interest of certain large industry copyright owners.³²⁴ The operating rationale behind current regulatory and enforcement regimes is that modern digital business models can only function if piracy is combated. But there is scant evidence that this is the case, and there are significant changes brought about by the Internet and digital media that suggest that radically new approaches, independent of IP, may be better suited for profiting and benefiting from content production in the future.

Merely strengthening copyrights to hold to a business model that primarily dealt with physical copies has many disadvantages, as we have seen above. Copyrights are only efficient under certain technological and economic circumstances, like when there are high fixed costs for reproduction.³²⁵ In the end, the only way to use copyright to completely avoid a tragedy of the commons is to create a tragedy of the anti-commons, enable absolute control for rights holders and potentially infringe on fundamental values. This simply will not do and undermines the original purposes of copyright law.

With regards to access for consumers, copyright now creates access after some time (when the copyright expires), but that time has been greatly extended.³²⁶ Access is also allowed through the exceptions, but we have seen above how those fair uses have increasingly come under pressure by new enforcement initiatives.³²⁷ The other goal, a vibrant and open market, has been made harder by high transaction costs and by the attack on innovative new ways to produce and distribute culture, as also mentioned above.³²⁸

5. *From Ownership to Access*

Coase said that ownership troubled the discussion and differentiated between ordinary property rights and *use* rights in radio frequencies.³²⁹ The same might be applicable to information and expressions. Let’s see if we could shift the discussion toward the regulatory and utilitarian aspect of copyright. Rather than use rights, which copyright already is in a sense, let us call them *access* rights. Our goal is to have creators remunerated for their content, a fair amount of access to creative content for the general public, and a vibrant and open market. Perhaps *access* rights could accomplish that same goal in a free market place by viewing access as a service and receiving

323. JAMES BOYLE, *THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND* 50 (2008).

324. Stadler, *supra* note 316, at 908.

325. O’Hare, *supra* note 302, at 417.

326. See generally *Duration of Copyright*, COPYRIGHT CIRCULAR 15A (U.S. Copyright Office, Wash., D.C.), Aug. 2011 (explaining the duration of copyright depending on when the work was created), available at <http://www.copyright.gov/circs/circ15a.pdf>.

327. *Supra* Part II.C.3.

328. *Supra* Part II.C.2.

329. Coase, *FCC*, *supra* note 1, at 30–33.

remuneration for that service. In fact, this was also suggested by Sara Stadler. She argued that rights holders should not be allowed the right to control reproduction by, for example, excluding others from engaging in acts of private copying, but that they should just be able to control distribution to the public.³³⁰ Acts that seek to publicly distribute content are the sorts of acts that potentially cause harmful anticompetitive behavior. By looking at examples of successful business models that do not rely on copyright, we might find some evidence as to whether access rights can be the predominant application of copyright law.

But first a word on access itself. What is it, and does it make sense to choose access over ownership? Apart from the fact that copyright is not ownership in the traditional sense, technology trends point more rationally toward access. Cloud computing is an interesting example of this. Instead of saving information on a hard drive, information is stored remotely on computer networks that can be accessed through the Internet.³³¹ The files are stored not in any one place, but in redundant locations, frequently backed up, on far away and dispersed servers.³³² Cloud storage is a service, rather than an object like a hard drive. Another example of these developments is the increased use of streaming to access content. Both illegal and legal streaming sites are immensely popular on the Internet for watching movies and television shows and streaming music. Those streaming sites do not rely on copyright protection for their income, and guarantee some remuneration to artists.³³³ Spotify has paid over \$100 million to rights holders since its launch, a large portion of which went to the independent music community.³³⁴

Wired magazine calls it the “neo-Napster transformation,” “in which music is streamed from a collection of servers, rather than stored on local hard drives.”³³⁵ In the last year, every major Internet company, including Apple, Amazon, and Google, has launched services similar to the Facebook and Spotify connection.³³⁶ All these cloud services might “clear . . . the psychological attachment that people have to owning their music. Once songs live in the cloud—hand customers pay rent to store them (which Apple intends to launch)—it’s a small step to do away with the concept of ownership all together.”³³⁷

Netflix is already so popular that it accounted for 29.7% of all information downloads during peak usage hours by North American broadband

330. Stadler, *supra* note 316, at 942.

331. Jonathan Strickland, *How Cloud Storage Works*, HOWSTUFFWORKS, <http://computer.howstuffworks.com/cloud-computing/cloud-storage.htm> (last visited Feb. 1, 2013),

332. *Id.*

333. See Bruce Houghton, *Spotify Offers Additional Response to Independent Label Defections*, HYPEBOT.COM (Sept. 20, 2011), <http://www.hypebot.com/hypebot/2011/09/spotify-offers-additional-response-to-independent-label-defections.html> (referencing Spotify’s remuneration to independent artists).

334. *Id.*

335. *The Second Coming*, *Wired Magazine* (Nov. 7, 2011), (downloaded at <http://castroller.com/Podcasts/WiredFeatures/2678827>).

336. *Id.*

337. *Id.*

connected households.³³⁸ This made Netflix, a legal service, traffic even greater than Bit Torrent's mostly illegal traffic.³³⁹

But an access paradigm is bigger than streaming and the cloud. As digital goods are non-exclusive, selling them as if they were ordinary property would mean they could be passed on to other users. So selling them is like giving permanent access to a larger group, just as selling a book means losing control of that token after the first sale. The Apple iTunes store has abandoned the DRM protection it had on its music files after user complaints.³⁴⁰ The Amazon mp3 store followed suit,³⁴¹ so it seems as if both companies have come to terms with the idea that their files are spread freely after being sold once. That hasn't necessarily reflected in sales, however. Apple's iTunes sold its 100 millionth song some time ago and Apple is currently negotiating with Hollywood to stream movies through iTunes.³⁴² The online content world is burgeoning, and companies are learning how to profit. Kindle books (e-books) are already outselling ordinary books in the Amazon store,³⁴³ and new platforms similar to iTunes are being launched for eBooks, like CalibrE and Apple's own iBooks 2.³⁴⁴

The access to free content has apparently in some cases increased sales or aided remuneration of artists through parallel sales. Spotify has apparently increased iTunes sales.³⁴⁵ YouTube has actually devised new ways to allow artists to make money, including through partner programs for very visible channels and sharing advertising revenues.³⁴⁶ It has also created a "Merch" store that will allow fans to buy merchandise directly on their channels, as well as digital downloads, concert tickets, or possibly meetups.³⁴⁷

Companies like Amazon, Sony, Google, Verizon, and others have started their cloud-based online streaming and on-demand services.³⁴⁸ BlackBerry wants to create a music store as well.³⁴⁹ So content ownership is ready to

338. Jameson Berkow, *Netflix Proclaimed 'King' of North American Internet Use*, FIN. POST (May 17, 2011), <http://business.financialpost.com/2011/05/17/netflix-named-king-of-north-american-internet/>.

339. *Id.*

340. Rob Pegoraro, *DRM Ends, Variable Pricing Begins for iTunes Music*, WASH. POST (Apr. 7, 2009), http://voices.washingtonpost.com/fasterforward/2009/04/the_drm_era_ends_for_itunes_mu.html.

341. *Id.*

342. Ben Fritz, *Apple Prepping Movie Cloud Service*, L.A. TIMES (Oct. 12, 2011, 3:42 PM), <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2011/10/apple-prepping-movie-cloud-service-devices-may-work-with-ultraviolet.html>.

343. Brandon Griggs, *Amazon e-Books Now Outselling Print Books*, CNN (May 19, 2011), <http://edition.cnn.com/2011/TECH/gaming.gadgets/05/19/kindle.outsells.books/index.html?hpt=T2>.

344. CALIBRE EBOOK MGMT, <http://calibre-ebook.com/> (last visited Mar. 7, 2013); *iBooks 2 Brings New Multi-Touch Textbooks to iPad*, INSIDE iTUNES (Jan. 30, 2012), <http://www.apple.com/itunes/inside-itunes/2012/01/ibooks-2-brings-new-multi-touch-textbooks-to-ipad.html>.

345. See Zach Shaw, *Earache Records Responds to Spotify Press Release*, METAL INSIDER (Aug. 10, 2011, 12:47 PM), <http://www.metalinsider.net/digital-media/exclusive-earache-records-responds-to-spotify-press-release> (explaining that Earache Records had its best sales on iTunes the same month Spotify launched).

346. Christian Weitenberner, *New YouTube Features for Music Artists*, THE OFFICIAL YOUTUBE BLOG (Oct. 16, 2011), <http://youtube-global.blogspot.com/2011/10/new-youtube-features-for-music-artists.html>.

347. *Id.*

348. Lance Ulanoff, *The End of Content Ownership*, PC MAG.COM (Apr. 11, 2011), <http://www.pcmag.com/article2/0,2817,2383373,00.asp>.

349. Ian Austen, *RIM to Start a Music-Sharing Service*, BITS (Aug. 25, 2011, 4:30 PM), <http://bits.blogs.nytimes.com/2011/08/25/rim-to-start-a-music-sharing-service/>.

transform into content *access*, meaning consumers become producers, as companies increasingly want you to stream your own content as well.

6. *Intermediaries and the Market for Access Rights*

These new business models do not rely on copyright, allow for remuneration to creators, and are warmly embraced by the public.³⁵⁰ They demonstrate the growing power of a new form of intermediaries, like Apple and Amazon, which provide access to content for consumers.³⁵¹ Those intermediaries themselves make agreements with rights holders to provide remuneration and access to consumers at the same time through private contract law.³⁵² These intermediaries reap the benefits of the new infrastructure economically but do not rely on the exclusivity of their product to receive remuneration.³⁵³ They recognize that content is a *service* made possible through unique and valued forms of access, rather than relying on the exchange of tokens protected by state monopolies.³⁵⁴

In a changing market that revolves around access, intermediaries will compete over access rights by offering remuneration to creators. At the same time, those intermediaries will compete with each other by offering content to consumers. Some intermediaries might be more popular by offering better quality to consumers, and some intermediaries might be more popular to creators by offering better marketing or a better price to creators.

In order for those access rights to work, copyrights should focus on limiting unfair competition or “competitive harm.”³⁵⁵ So intermediaries that have not bargained with other intermediaries for the spread of content and seek to benefit from it financially would potentially be liable for copyright infringement. This would make copyright as it was again: reserved for the big fish, not the little ones.

That means that the Internet does not necessarily kill middlemen, as has often been suggested, but changes their role from “gatekeepers” to “enablers.” This is beneficial because gatekeepers have centralized control over what happens on the entertainment market, but enablers merely facilitate distribution between buyers and sellers.³⁵⁶ The net result could be a larger and more diverse market. Taking its cue from Coase, the market dictates prices rather than monopolistic mechanisms supported by states.³⁵⁷

350. Wendy Bernfeld, *Brave New World: Digital Distribution Beyond the Old World*, SUNDANCE INST. (Apr. 23, 2012, 9:04 PM), <http://www.sundance.org/artistservices/distribution/article/brave-new-world-digital-distribution-beyond-the-old-world/>.

351. *Id.*

352. *Id.*

353. *Id.*

354. *Id.*

355. Stadler, *supra* note 316, at 912.

356. Mike Masnick, *No the Internet Doesn't Do Away With Middlemen—It Just Changes Their Role*, TECHDIRT (Sept. 28, 2011, 10:54 AM), <http://www.techdirt.com/articles/20110927/01281116105/no-InternetInternet-doesnt-do-away-with-middlemen-it-just-changes-their-role.shtml>.

357. Jodi Beggs, *The Coase Theorem*, ECONOMICS-ABOUT.COM, <http://economics.about.com/od/externalities/a/The-Coase-Theorem.htm> (last visited Feb. 11, 2013).

By creating such a market for access rights, we can accomplish one of the goals copyright aims to achieve: to afford widespread and affordable access to expressions for the public, and create an economic incentive to create.³⁵⁸

7. *Transaction Costs*

Coase reserved special attention for transaction costs. Transaction costs do not necessarily have to be zero.³⁵⁹ They must be taken into account, as a comparison has to be made among different systems.³⁶⁰ Coase recognized that this way it costs money to let the market do the work (because of transaction costs), but it would also cost money to administer a state mechanism based on restrictions.³⁶¹ These administrative costs may very well be higher than market mechanisms. All these costs should be taken into account. A situation with the least transaction costs is the more efficient one.³⁶²

In the case of digital goods, the IP system itself involves a huge bureaucracy, lawyers, special courts and judges, fear of litigation, settlements, and disputes. This drives up both administrative and transaction costs, making the content infrastructure less efficient.³⁶³ The emergence of digital and networked technologies may finally have pushed transaction costs to their limit, and the growth of file sharing may well indicate a market failure. New regulatory initiatives threaten to increase those administrative costs. For example, Section 205 of the proposed Stop Online Piracy Act aimed to include a large copyright administration in the diplomatic core of the United States.³⁶⁴

Switching over to just distribution and access will dramatically drop transaction costs, making the market open and efficient again. As the website Techdirt puts it, when referring to the proposed Stop Online Piracy Act as a symbol for the old situation: “Rather than two guys in a garage coming up with the next great thing, they need two guys and a dozen lawyers. That makes the garage crowded. And expensive. And it means the venture capitalists, who fund innovation, will be a lot less likely to invest.”³⁶⁵

8. *Harms (Negative Externalities)*

As mentioned above, the content industry has been very effective at framing these new distribution platforms as leading to massive losses for the

358. *What Is the Purpose of Copyright Law*, U. DEL. (Mar. 1998), <http://www.udel.edu/topics/techtalk/Issue/Current/purpose.html>.

359. Hazlett et al., *supra* note 11, at S131.

360. *Id.* at S132.

361. *Id.*

362. See Coase, *Social Cost*, *supra* note 52, at 15–16 (discussing transaction costs and their impact on efficiency).

363. KOEPSSELL, INNOVATION AND NANOTECHNOLOGY, *supra* note 67, at 199.

364. Mike Masnick, *Not to Be Overlooked in SOPA: Massive Expansion of Copyright Maximalist Diplomatic Corp*, TECHDIRT (Nov. 10, 2011, 9:34 AM), <http://www.techdirt.com/articles/20111109/00025716689/not-to-be-overlooked-sopa-massive-expansion-copyright-maximalist-diplomatic-corp.shtml>.

365. Mike Masnick, *Why Protect IP/SOPA Is the Exact Wrong Approach to Dealing With Infringement Online*, TECHDIRT (Nov. 8, 2011, 11:22 AM), <http://www.techdirt.com/articles/20111108/00553216676/why-protect-ipsopa-is-exact-wrong-approach-to-dealing-with-infringement-online.shtml>.

industry and costing thousands of jobs.³⁶⁶ There have been various attempts to prove this, but, as there is no clear, proven relation between illegal downloads and a loss in revenue for artists, these attempts have so far failed.³⁶⁷ According to the Open Rights Group, when they requested information on the scale of industry losses as a result of piracy, the U.K. government claimed not to have the information requested.³⁶⁸ That is strange because it is its main stated consideration when initiating new legislation to protect the interests of the copyright industry.³⁶⁹ According to the *Guardian*, the U.K. cinema industry is currently in its “golden age” in terms of revenue, but also in terms of variety.³⁷⁰ PRS for Music and others say that the music industry is actually still growing (in spite of analog record sales falling).³⁷¹ One reason for this could be the recent introduction of 3D cinema, creating a new movie experience.

So it is not as straightforward as it seems to be, but perhaps the losses in analog sales by digital piracy should not be our focus. Another fundamental insight provided in Coase’s analysis is that negative externalities were not necessarily proof of market failure.³⁷² “The social goal is not to eliminate (or maximize) [externalities], but to maximize economic value.”³⁷³

Applied to digital goods, this could mean two things. First of all, it could mean a decline in analog sales. While it remains to be seen whether or not this would be the definite result, shifting the market toward access to digital content is already happening and doesn’t necessarily have to be bad for remuneration to artists and creativity in general. It could also mean that the free spread of content to third parties by consumers could be a negative externality. Digital goods are after all non-exclusive.³⁷⁴ This could be a regular input cost to take into account. Potential benefits of this approach

366. See Brad Plumer, *SOPA: How Much Does Online Piracy Really Cost the Economy?*, WASH. POST WONKBLOG (Jan. 5, 2012, 4:49 PM), http://www.washingtonpost.com/blogs/wonkblog/post/how-much-does-online-piracy-really-cost-the-economy/2012/01/05/gIQAXknNdP_blog.html (“For example, the Motion Picture Association of America estimates that piracy costs the U.S. movie industry some \$20.5 billion per year.”).

367. Peter Bradwell, *Evidence Please*, OPEN RTS. GROUP BLOG (Oct. 13, 2011), <http://www.openrightsgroup.org/blog/2011/the-need-for-evidence>.

368. *Id.* See generally Nate Anderson, *US Government Finally Admits Most Piracy Estimates Are Bogus*, ARSTECHNICA (Apr. 13, 2010, 12:35 PM), <http://arstechnica.com/tech-policy/2010/04/us-government-finally-admits-most-piracy-estimates-are-bogus/> (stating that the U.S. Government Accountability Office has likewise claimed that there is little information to quantify the scale of industry losses resulting from piracy).

369. See HM GOVERNMENT, GOVERNMENT POLICY STATEMENT: CONSULTATION ON MODERNISING COPYRIGHT 5 (2012), available at <http://www.ipo.gov.uk/response-2011-copyright.pdf> (explaining the importance of the “copyright investment” to the U.K. economy).

370. Andrew Pulver, *British Cinema’s Golden Age is Now*, GUARDIAN (Oct. 13, 2011), <http://www.guardian.co.uk/film/2011/oct/13/british-cinema-golden-age>.

371. WILL PAGE & CHRIS CAREY, ADDING UP THE MUSIC INDUSTRY FOR 2008, at 5 (2009), available at [http://www.prsformusic.com/creators/news/research/Documents/Will%20Page%20and%20Chris%20Carey%20\(2009\)%20Adding%20Up%20The%20Music%20Industry%20for%202008.pdf](http://www.prsformusic.com/creators/news/research/Documents/Will%20Page%20and%20Chris%20Carey%20(2009)%20Adding%20Up%20The%20Music%20Industry%20for%202008.pdf).

372. See Hazlett et al., *supra* note 11, at S128–29 (explaining that treating externalities as market failures is unhelpful unless that market is evaluated against a market with an alternative set of rules).

373. *Id.* at S128.

374. See Sarah Abelson, *An Emerging Secondary Market for Digital Music: The Legality of ReDigi and the Extent of the First Sale Doctrine*, 29 ENT. & SPORTS LAW. 8, 10 n.31 (2012) (“A good is non-rivalrous if the use of the good by one individual does not limit the amount of that good available in the market” and that “digital goods are non-rivalrous, while physical goods are rivalrous.”).

would include that spreading free content could have an advertisement function, and actually stimulate consumers who become acquainted with the content for free so that they then *buy* that content. A study by the Swedish Internet Infrastructure Foundation suggests that file sharers might actually buy *more* music.³⁷⁵ Other new businesses believe that they have increased revenue in the games market because of piracy.³⁷⁶

Artists themselves have limited income from analog sales, of which only a small amount enters their own pockets; in fact, they receive the majority of their income from other sources. In fact, the Future of Music Coalition recently concluded a survey of musicians, which found that only 6% of artist revenue comes from sound recordings; two-thirds of respondents received zero income from recordings.³⁷⁷ Perhaps free content can perform an advertisement function and stimulate those other revenue streams. Artists can grow in fame through free content distribution, and earn money by performing at concerts or by selling merchandise.

Coase said that the goal of radio regulation should not be to minimize interference, but to maximize output.³⁷⁸ In other words, the public goal is not to minimize negative effects, but to maximize economic welfare. Calling those problems “market failures” may draw away the discussion from potential alternatives such as market solutions. Perhaps we should focus on what artists do make when we switch to an *access* model, instead of trying to minimize the loss of analog sales based on an old business model.

9. *The Industry and Innovation*

In order for that to work, the content industry must cooperate. Professor Benkler argues that what the creative industries want is to hinder the autonomy of content “users.”³⁷⁹ A category of stakeholders, “users,” are individuals who simultaneously engage in both production and consumption of content.³⁸⁰ Unfortunately, the industry has a terrible reputation when it comes to innovation. It has faced many challenges and seemingly fought the tides of change each time. At the beginning of the last century, Arthur Steuart, Chairman of the Copyright Committee of the American Bar Association, also suggested controlling the uses of books in much the same way DRM is used for books now. He suggested that the first page of every book should contain a

375. Tim Curshing, *Swedish Study Shows File Sharing and Music Buying Go Hand-in-Hand*, TECHDIRT (Nov. 18, 2011, 7:39 PM), <http://www.techdirt.com/articles/20111118/02101616810/swedish-study-shows-file-sharing-music-buying-go-hand-in-hand.shtml>.

376. Zachary Knight, *Gaming Company Sees Massive User & Revenue Growth Because of Piracy*, TECHDIRT (Oct. 3, 2011, 12:28 PM), <http://www.techdirt.com/articles/20110930/09182316149/gaming-company-sees-massive-user-revenue-growth-because-piracy.shtml>.

377. *Mythbusting: Data Driven Answers to Four Common Assumptions About How Musicians Make Money*, FUTURE OF MUSIC COALITION (Dec. 13, 2012), <http://money.futureofmusic.org/mythbusting/4/>.

378. Coase, *FCC*, *supra* note 1, at 27.

379. See Yochai Benkler, *Freedom in the Commons: Towards a Political Economy of Information*, 52 DUKE L.J. 1245, 1272 (2003) (“Stakeholders from the older industrial information economy are using legislation, litigation, and international treaties to retain the old structure of organizing production so that they can continue to control the empires they built in the old production system.”).

380. *Id.* at 1268.

contract clause that would prohibit any buyers of the book from doing anything other than reading it themselves.³⁸¹

The music industry initially rejected the radio, which was perceived as a threat to music, as well as player pianos, home taping of music, and mp3 players for the same reason. Only when the technologies triumphed did the music industry learn to use these new technologies as a very profitable new way to do business.³⁸² The movie industry has seen constant change in the past century as well. It strongly resisted cable TV, and then the VCR came, leading the former boss of the MPAA (Movie Picture Association of America), Jack Valenti, to state: “I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone.”³⁸³ According to one writer, ordinary book publishers feel “threatened” by online self-publishing.³⁸⁴

In his book, *The Innovators Dilemma*, Clayton Christensen says that leading businesses have been very slow at adapting to new disruptive technologies because they have little incentive to do so, protected as they are by age-old regulatory models around which they have erected their solid business models.³⁸⁵ Failing to do so, however, could ultimately cost them their leading business position.³⁸⁶ Unfortunately in this case, instead of having a true free market that punishes those businesses that fail to adapt, those industries are backed by regulation that has other negative effects. According to the Miramax CEO, digital monopolies are a bigger threat to the entertainment industry than piracy.³⁸⁷ The industry motto should be to “innovate or die,” and to listen to consumers.³⁸⁸

The industries in turn argue that they cannot innovate without having adequate protection of their rights.³⁸⁹ However, a recent study suggests it is the other way around. In Sweden, piracy has dropped by 25% since the 2009 introduction of Spotify.³⁹⁰ So, legal services can have an effect on illegal

381. Stadler, *supra* note 316, at 913.

382. See Mike Masnick, *A History of Hyperbolic Overreaction to Copyright Issues: The Entertainment Industry and Technology*, INNOVATION BY TECHDIRT (Nov. 9, 2011, 10:01 AM), <http://www.techdirt.com/blog/innovation/articles/20111108/17562016686/history-hyperbolic-overreaction-to-copyright-issues-entertainment-industry-technology.shtml> (describing how the entertainment industry has historically adapted to technological changes).

383. *Home Recording of Copyrighted Works: Hearings on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488, and H.R. 5705 Before the H. Subcomm. on Courts, Civil Liberties, and the Admin. of Justice Comm. on the Judiciary*, 97th Cong. (1982) (testimony of Jack Valenti, President, Motion Picture Association of America).

384. Chris Meadows, *Publishers Find Amazon Self-publishing ‘Threatening’, Self-published Writer Suggests*, TELEREAD (Sept. 11, 2011, 10:34 PM), <http://www.teleread.com/ebooks/publishers-find-amazon-self-publishing-threatening-self-published-writer-suggests/>.

385. See generally CLAYTON M. CHRISTENSEN, *THE INNOVATORS DILEMMA: WHEN NEW TECHNOLOGIES CAUSE GREAT FIRMS TO FAIL* (1997).

386. See generally *id.*

387. Ernesto, *Digital Monopolies a Bigger Threat Than Piracy, Says Miramax CEO*, TORRENTFREAK (Oct. 4, 2011), <http://torrentfreak.com/digital-monopolies-a-bigger-threat-than-piracy-says-miramax-ceo-111004>.

388. *Id.*

389. See Masnick, *supra* note 365 (stating that industries overreact to new technology by pushing for stronger copyright protection).

390. Ernesto, *Music Piracy Continues to Decline Thanks to Spotify*, TORRENTFREAK (Sept. 28, 2011),

services. In fact, Valve CEO Gabe Newell says that piracy isn't about price, but about poor customer service.³⁹¹ Rene Summer, Director of Government and Industry Relations at the Ericsson group, says that piracy is a symptom of a wider problem—the inadequate supply of legal alternatives to illegal file sharing.³⁹² He says it's understandable that economic rights holders want to protect their positions and revenue streams, but doesn't understand why regulators meet these demands by ever-stricter copyright laws that support specific business models.³⁹³

So, what legal alternatives are there to illegal distribution platforms? The Open Rights Group recently looked at the availability of films online. From its report:

Only 43% of the top 50 British films can be bought or rented online. Similarly, only 58% of the BAFTA Best Film award winners since 1960 have been made available. The situation looks worse if iTunes is discounted. Excluding iTunes, only 27% of the BAFTA award winners are available, with 29% of the best British films. Only 6% of the best 50 British films are on Film4 OD or Virgin Media, with 14% available through a LoveFilm subscription and 4% through pay per view on LoveFilm.³⁹⁴

A study done in Australia revealed that a large number of the people who download illegally do so for convenience or lack of legal alternatives.³⁹⁵

Businesses have to adapt to the technological transitions that necessitate new business models. Instead, they do the opposite and seek the government's support against innovation.³⁹⁶ When Netflix became successful, Starz (a TV channel) decided not to renew its contract with Netflix because of its strategy to “protect the premium nature of our brand by preserving the appropriate pricing and packaging of our exclusive and highly valuable content.”³⁹⁷ Warner Brothers recently decided to make Netflix wait longer for newly released movies.³⁹⁸ As professors Michael Smith and Rahul Telang from

<http://torrentfreak.com/music-piracy-continues-to-decline-thanks-to-spotify-110928>.

391. Colin Campbell, *Gabe Says Piracy Isn't About Price*, IGN (Nov. 25, 2011), <http://uk.games.ign.com/articles/121/1213357p1.html>.

392. Ernesto, *Ericsson: File Sharing Is a Symptom Not the Problem*, TORRENTFREAK (June 29, 2011), <http://torrentfreak.com/file-sharing-symptom-not-problem-110629/>.

393. *Id.*

394. Peter Bradwell, *Can't Look Now: Finding Film Online*, OPEN RIGHTS GROUP (Oct. 19, 2011), <http://www.openrightsgroup.org/blog/2011/cant-look-now:-finding-film-online>.

395. Andrew Ramadge, *Top Three Reasons We Choose Illegal Downloads*, NEWS.COM.AU (May 7, 2010), <http://www.news.com.au/technology/why-do-australians-choose-illegal-downloads/story-e6f1rfo0-1225863649562>.

396. See Michael D. Smith & Rahul Telang, *Delaying Content Leaves Money on the Table*, HILL (Nov. 29, 2011, 6:34 PM), <http://thehill.com/opinion/op-ed/196051-delaying-content-leaves-money-on-the-table> (stating that Hollywood is attempting to get the Stop Online Privacy Act passed in order to combat piracy and that the Motion Picture Association of America spoke to Congress on how the VCR threatened their industry).

397. Tim Cushing, *Starz, Netflix and How Industry Jealousies Strangle a Golden Goose*, TECHDIRT (Sept. 2, 2011, 3:25 PM), <http://www.techdirt.com/articles/20110901/20203315773/starz-netflix-how-industry-jealousies-strangle-golden-goose.shtml>.

398. Peter Kafka, *Warner Brothers Will Make Netflix, Redbox, Blockbuster Wait Longer for New Movies*, ALL THINGS D (Jan. 5, 2012, 2:21 PM), <http://allthingsd.com/20120105/warner-brothers-will-make-netflix-redbox-blockbuster-wait-longer-for-new-movies>.

Carnegie Mellon University note, this just “leaves money on the table,” because it will not increase sales, but will increase *infringement*.³⁹⁹ Meanwhile, HBO also stopped providing DVDs of its shows to Netflix, which means Netflix will have to go somewhere else for those same DVDs.⁴⁰⁰ But there is also positive news: Disney recently announced that it has chosen Netflix as its exclusive distributor starting in 2016.⁴⁰¹

This suggests we should reform copyright to what it initially was intended to do: to protect against large-scale piracy and to allow for *access* to content for consumers.⁴⁰² We need to support these new initiatives by not granting the disproportional protection of old fashioned business models. We should instead focus on *access*. European Commissioner Neelie Kroes says that industries need to embrace new technological ways of distributing creative expressions, instead of fighting them.⁴⁰³ Copyright just doesn’t work this way. “Sadly, many see the current system as a tool to punish and withhold, not a tool to recognise and reward.”⁴⁰⁴

Does that mean that this will be the end of the DVD? Maybe. But according to Eric Garland, the exact same thing happened to the floppy disc.⁴⁰⁵ When Apple decided not to include the floppy drive in its first Blueberry iMac, there was public outcry.⁴⁰⁶ However, no one under eighteen has even seen a floppy disc.

III. CONCLUSION

Coase proposed what Hazlett, Porter, and Smith call a “symmetric evaluation of resource appropriation rules.”⁴⁰⁷ He argued that negative externalities or damaging spillovers were not proof of market failure, but should be taken into account as regular input costs.⁴⁰⁸ That view allows us to see the problem from a viewpoint of institutional symmetry. Instead of assuming a perfect functioning government and market failure, both government approaches and market approaches should be tested and evaluated in economic terms, to see which approach is the most efficient.

399. Smith & Telang, *supra* note 396.

400. Greg Sandoval, *HBO Forces Netflix to Go Elsewhere for Its DVDs*, CNET NEWS (Jan. 5, 2012, 10:35 AM), http://news.cnet.com/8301-31001_3-57353134-261/hbo-forces-netflix-to-go-elsewhere-for-its-dvds/.

401. Cyrus Farivar, *Disney Anoints Netflix as Its Exclusive Distributor Starting in 2016*, ARS TECHNICA (Dec. 4, 2012, 7:45 PM), <http://arstechnica.com/business/2012/12/disney-anoints-netflix-as-its-exclusive-distributor-starting-in-2016>.

402. See LEHMAN, *supra* note 65, at 19–20 (describing the purpose of copyright law as explained by the Supreme Court and the Constitution of the United States).

403. David Meyer, *Copyright Isn’t Working, Says European Commission*, ZDNET (Nov. 19, 2011, 8:47 AM), <http://www.zdnet.co.uk/blogs/communication-breakdown-10000030/copyright-isnt-working-says-european-commission-10024835/>.

404. *Id.* (quoting Commissioner Kroes).

405. Greg Sandoval, *Is Netflix Killing DVDs Like Apple Killed Floppies? (Q&A)*, CNET NEWS (July 18, 2011, 9:18 AM), http://news.cnet.com/8301-31001_3-20080346-261/is-netflix-killing-dvds-like-apple-killed-floppies-q-a/.

406. *Id.*

407. Hazlett et al., *supra* note 11, at S128.

408. *Id.*

In the case of digital goods, we have established that strictly enforcing copyright is the state approach to a tragedy of the commons problem.⁴⁰⁹ Copyright involves a government-sponsored monopoly to provide remuneration to artists.⁴¹⁰ The market approach is the approach we have tried to construct in the past and upon which the content industries have relied for more than a century.⁴¹¹ But this model is failing, as we have discussed at length above.

This does not mean we should necessarily invoke a Coasian auction for intellectual property rights or Internet bandwidth. What it does mean is that it can be valuable to shift the discussion away from an enforcement perspective to an economic perspective and ask ourselves: what is the most efficient way? Our solution is an *access* model for content.

Framing copyright as a property right fits to the business model as it was before the digitalization and the Internet, a business model based on exclusive and rival tokens of expressions. Since new technologies have made those tokens obsolete, the only way to maintain that business model is by state regulation. However, that state regulation potentially undermines public values, economic efficiency, and fundamental rights. If we look at copyright as a use right or *access* right, we can return to what copyright originally was intended to do: provide remuneration to artists and allow access to culture and entertainment to the public. Access rights might be a more suitable approach, as Internet trends point toward access to information and because business models around access seem to achieve the dual objective of copyright. The non-exclusivity and non-rivalness of expressions are input costs we have to take into account, instead of necessarily signals of market failure. Those input costs might very well be high, but that doesn't matter if the economic output is higher, and because this "market" approach does not require the same infringement of fundamental values and rights. As transaction costs are low, barriers to entry decrease, which could allow for a free and more diverse market. Such a free market at least merits our attention and research, and is supported by both a Coasian approach and our fundamental values and rights to free expression.

409. See *supra* Part II.C. (describing the dangers of the state approach).

410. See LEHMAN, *supra* note 65, at 20 (describing the purpose of copyright law as explained by the Supreme Court of the United States).

411. See *supra* Part II.D.1. (describing how the music and movie industries have attempted to frame the issue).