

THE CRIMINAL COPYRIGHT GAP

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CITE AS: 18 STAN. TECH. L. REV. 247 (2015)
<http://stlr.stanford.edu/pdf/criminalcopyright.pdf>

ABSTRACT

Copyright law undergoes a criminalization process. Since the birth of criminal copyright in the 19th century, there has been a substantial increase in criminal copyright legislation. Copyright criminalization could lead to a paradigm shift toward a criminal-oriented law. However, legislation alone is insufficient to change the perception of copyright to a criminal-oriented law, as it also depends on practice. Thus, if enforcement is sporadic and relatively low, an increase of criminal legislation in copyright law does not mark a paradigmatic change towards a criminal copyright perception. Analyzing statistical data regarding criminal copyright prosecutions reveals that criminal prosecutions are still relatively rare. Although the massive increase of criminal copyright legislation should have led to a higher scale of enforcement, the current reality is that criminal prosecutions are scant, leading to a criminal copyright gap between legislation and enforcement.

This Article introduces the criminal copyright gap. It reviews the legislative history of copyright criminalization since its birth in 1897, while dividing the process into two separate phases: The Low-Tech Phase that took place in the end of the 19th century, and the High-Tech Phase. The High-Tech Phase is further divided into two sub-phases: an analog phase, which occurred in the beginning of the 1970s and lasted until 1992, and a digital phase, which occurred in the beginning of 1992 and is ongoing.

* Postdoctoral Research Fellow, Haifa Center for Law & Technology, Faculty of Law, Haifa University. I am most grateful to Michael Birnhack for his insightful guidance, suggestions, and comments. I am also grateful for the valuable input of Peter Menell. Both Michael and Peter's suggestions and comments profoundly improved the quality of this work. For helpful feedback at various stages of this project, I am grateful to many colleagues, in particular Barton Beebe, Yochai Benkler, Niva Elkin-Koren, Orit Fishman-Afori, Olga Frishman, Khalid Ghanayim, Eric Goldman, Leah Chan Grinvald, Asaf Harduf, Tyler T. Ochoa, and Rebecca Tushnet for their suggestions and comments. In addition, I thank the participants at the Annual IP Scholars Conference (Berkeley, August 2014). Finally, I thank the Zvi Meitar Center for Advanced Legal Studies, Faculty of Law, Tel-Aviv University. This Article derives from my PhD dissertation on "Copyright Criminalization," written under the supervision of Michael Birnhack at the Zvi Meitar Center for Advanced Legal Studies, Faculty of Law, Tel-Aviv University. This research was also supported by the I-CORE Program of the Planning and Budgeting Committee and The Israel Science Foundation (1716/12).

After reviewing that history, I examine the practical aspects of copyright criminalization by analyzing statistical data on criminal copyright filings. I argue that statistical data reveal that the ongoing legislative process of copyright criminalization is not applied in practice, and thus I search for possible explanations of this criminal copyright gap. I opine that the criminal copyright gap leads to the conclusion that currently criminal copyright is not undergoing a paradigm shift. Finally, I conclude that although copyright law is not yet criminal-oriented, a paradigmatic shift toward a criminal copyright regime could occur in the near future, if enforcement of copyright infringements becomes more substantial.

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INTRODUCTION

Modern copyright, emerging in the 18th century, was initially a matter of civil law and did not contain criminal sanctions. Only in 1897, Congress criminalized copyright for the first time. This was the birth of *criminal copyright*. Ever since various countries first introduced criminal copyright there has been a substantial increase in criminal copyright legislation, leading to a criminalization of copyright law. The expansion of civil copyright laws to criminal laws. Since 1897, when Congress introduced criminal copyright for the first time, it has extended repeatedly and extensively to cover more types of works, more types of actions, and raised monetary and non-monetary sanctions.

The criminalization of copyright law is not disputed in academic literature. This process could possess various meanings. For example it could possibly lead to a paradigm shift towards a criminal-oriented law. Nevertheless, as this Article further argues, legislation is insufficient to change the perception of copyright as a criminal-oriented law. As the perception of criminal copyright also depends on practice and not solely on legislation, the increase of criminal legislation in copyright law could have different meanings, not necessarily resulting in a change of perception, or a paradigm shift, which will be difficult to achieve.

Statistical data regarding criminal copyright prosecutions between the fiscal years 1955 and 2012 reveals that criminal prosecutions are still relatively rare. Although the massive increase of criminal copyright legislation should

have led to more enforcement, the current reality is that criminal prosecutions are scant. This is the *criminal copyright gap*.

Apart from locating the criminal copyright gap, this Article strives to understand the various meanings of the gap and the reasons behind it. In order to evaluate the findings that criminal copyright prosecutions do not always align with legislation, I compare the findings to other possible trends which could explain this gap: decrease in overall criminal prosecution; increase of the number of individuals prosecuted; and an overall decrease in civil and criminal litigation. However, comparing further statistical data to address these hypotheses reveals that the criminal copyright gap is not linked to other possible trends and therefore exists on its own.

I thus offer several possible explanations of the criminal copyright gap, in accordance with political, economic, and social theories related to copyright infringement and enforcement: *First*, criminal legislation could be the result of international pressure to legislate but not necessarily enforce. *Second*, while criminal legislation could result from the lobbying of interest groups, such groups have less power to influence enforcement. *Third*, criminal copyright legislation aims to achieve deterrence simply or mostly by the legislative act, and the fact that criminal litigation does not increase does not necessarily indicate that criminalization failed. *Fourth*, criminal copyright is not designed to eliminate illegal infringements, but rather reduce them to a profitable level. *Fifth*, enforcement is problematic as the digital environment possesses many difficulties to enforcement agencies, such as detection, identifying suspects, cross-over jurisdictions, overseas operators, and prosecuting juveniles. *Sixth*, governmental guidelines of criminal copyright prosecutions either don't exist or are too vague for prosecutors. *Finally*, enforcement agencies might feel conflicted about criminal copyright, and individual feelings may override professionalism and "rule of law" norms. Thus, the criminal copyright gap is most likely caused by under-enforcement and is a result of various reasons, which most likely overlap in some instances. This Article strives to scrutinize the criminal copyright gap and understand its ramifications on the criminalization process of copyright law.

The Article proceeds as follows: Part I examines the history of copyright criminalization. I divide the criminalization process into two separate phases: The *Low-Tech Phase* that took place in the end of the 19th century; and the *High-Tech Phase*, which is further divided into two sub-phases: an *analog phase*, which occurred in the beginning of the 1970s and lasted until 1992, and a *digital phase*, which occurred in the beginning of 1992 and continues today. Part II examines the practical aspects of copyright criminalization. By analyzing statistical data on criminal copyright filings since 1955, I argue that the on-going legislative process of copyright criminalization is not applied in practice, and I search for the possible explanations of this *criminal copyright gap*. Finally, the last Part summarizes the discussion and concludes that criminal copyright is not currently undergoing a paradigm shift, but future changes in enforcement of copyright infringements could change this outcome.

I. COPYRIGHT CRIMINALIZATION

American copyright law grants right holders exclusive rights in their work, subject to several limitations and exceptions. If a person violates any of the exclusive rights, he or she is considered an infringer of the copyright.¹ Currently, copyright law provides both civil and criminal remedies to compensate right holders. The first federal copyright statute in 1790,² as amended in the course of the years, provided only civil remedies. Criminal provisions made their debut more than a century later,³ and even then, infringements were considered a private, economic wrongs, which should usually be handled through civil remedies.⁴

The introduction of criminal law into copyright occurred in two steps, which I call the *Low-Tech* and the *High-Tech Phases*. The *Low-Tech Phase* took place at the end of the 19th century, adding criminal procedures for profitable commercial-based infringements. The *High-Tech Phase* comprises of two sub-phases: an *analog phase*, that occurred in the beginning of the 1970s and lasted until 1992, mostly extending copyright protection to sound recordings and restructuring criminal rationales in copyright such as the mens rea requirement;⁵ and a *digital phase* that began in 1992, which mainly

1. 17 U.S.C. § 501(a) (2012).

2. See 1790 Copyright Act (Act of May 31, 1790), ch. 15, 1 Stat. 124 (repealed 1831). Under the 1790 Copyright Act, civil remedies included injunctions, destruction of infringing copies, and damages.

3. Although the 1790 Act did not contain a criminal provision per se, it contained a criminal-like provision which addressed unauthorized copying (“recording the title”) of a copyrighted map, chart, or book resulting in a civil fine of fifty cents for every sheet which was found in possession, with one-half of the penalties being paid to the United States. See *id.* § 2 (“[i]f any other person or persons, from and after the recording the title of any map, chart, book or books. . . shall also forfeit and pay the sum of fifty cents for every sheet which shall be found in his or their possession, either printed or printing, published, imported or exposed to sale, contrary to the true intent and meaning of this act, the one moiety thereof to the author or proprietor of such map, chart, book or books, who shall sue for the same, and the other moiety thereof to and for the use of the United States . . .”). See also Lori A. Morea, *The Future of Music in a Digital Age: The Ongoing Conflict Between Copyright Law and Peer-to-Peer Technology*, 28 CAMPBELL L. REV. 195, 209-10 (2006); James Lincoln Young, *Criminal Copyright Infringement and a Step Beyond: 17 U.S.C. § 506 (1976)*, 30 COPYRIGHT L. SYMP. (ASCAP) 157, 158 (1983) (referring to §2 of the 1790 Act as a “limited criminal infringement [provision]”).

4. See Steven Penney, *Crime, Copyright, and the Digital Age*, in WHAT IS A CRIME? CRIMINAL CONDUCT IN CONTEMPORARY SOCIETY 61, 61 (Law Comm’n of Canada ed., 2004) (arguing that copyright infringement was generally considered a private, economic wrong – pursued by copyright owners through private lawsuits and remedied by injunctions, damages, and other civil remedies); see also Alan N. Young, *Catching Copyright Criminals: R. v. Miles of Music Ltd.*, 5 I.P.J. 257, 257 (1990); ANDREW A. KEYES & CLAUDE BRUNET, COPYRIGHT IN CANADA: PROPOSALS FOR A REVISION OF THE LAW 185 (1977); Cal Becker, *Criminal Enforcement of Intellectual Property Rights*, 19 C.I.P.R. 183, 183 (2003).

5. See Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (codified as amended at 17 U.S.C. § 506(a) (2012), restructuring the criminal sanctions available under Title 17 and providing felony punishments for certain types of offenses under Title 18); Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified

addresses criminal aspects of copyright-related activities on the Internet. During the low-tech phase and the analog high-tech phase, criminal copyright mainly targeted large-scale infringers, while the digital high-tech phase mainly targets relatively small-scale infringers. We are still within the digital phase.⁶

A. *The Low-Tech Phase*

Copyright criminalization began in 1897, when Congress passed three acts related to copyright law, one of which introduced criminal penalties for the first time.⁷ The Musical Public Performance Right Act addressed a public performance right for musical compositions, prescribing civil damages of \$100 for the first infringement and \$50 for subsequent infringements.⁸ The Act did not stop there. Introducing criminal penalties for the first time, the Act inserted a liability provision of willful unlawful performance or representation of a dramatic or musical composition for profit.⁹ The Act prescribed a

as amended at 17 U.S.C. § 506(a) (2012), changing the mens rea to “willfully and for purposes of commercial advantage or private financial gain” and increasing the penalties for criminal infringement); Sound Recording Act of 1971, Pub. L. No. 92-140, 85 Stat. 391 (extending copyright protection to sound recordings); Act of Dec. 31, 1974, Pub. L. No. 93-573, tit. I, § 102, 88 Stat. 1873 (1974) (adding criminal liability for knowingly and willfully aiding and abetting an infringement).

6. Further attempts to add additional copyright criminal layers followed, though not all were successful. *See, e.g.*, Stop Online Piracy Act (SOPA), H.R. 3261, 112th Cong. (2011). The bill would have imposed criminal penalties for infringing by means of digital networks the rights associated with public performances with a retail value of more than \$1000, and felony penalties if the retail value was more than \$2500, while under current copyright law, infringing public performances rights are subject to lower criminal penalties than reproductions or distributions rights. However, the bill was withdrawn. *See also* the 2010 Joint Strategic Plan on Intellectual Property Enforcement as an indicator of governmental efforts to “combat intellectual property theft”: Victoria Espinel, *Releasing the Joint Strategic Plan to Combat Intellectual Property Theft* (June 22, 2010, 11:15 AM), <http://www.whitehouse.gov/blog/2010/06/22/releasing-joint-strategic-plan-combat-intellectual-property-theft>; Todd Wasserman, *SOPA Is Dead: Smith Pulls Bill*, MASHABLE (Jan. 20, 2012), <http://mashable.com/2012/01/20/sopa-is-dead-smith-pulls-bill>.

7. The second Act, the Act of February 19, 1897, 29 Stat. 545, established the position of Register of Copyrights. The third Act, the Act of March 3, 1897, 2d Sess., 29 Stat. 694, amended the provisions on affixation of a false notice of copyright, so that the previous penalty of \$100 was also applied to anyone who knowingly issued, sold, or imported articles bearing a false notice of copyright. *See* WILLIAM F. PATRY, *PATRY ON COPYRIGHT* 284-85 (2009); Dorothy Schrader, *Music Licensing Copyright Proposals: An Overview of H.R. 789 and S. 28*, CRS REPORT FOR CONGRESS 2 (1998).

8. Musical Public Performance Right Act of Jan. 6, 1897, ch. 4, 29 Stat. 481 (1897). For the origins of the Musical Public Performance Right Act of 1897, see Zvi Rosen, *The Twilight of the Opera Pirates: A Prehistory of the Exclusive Right of Public Performance for Musical Compositions*, 24 *CARDOZO ARTS & ENT. L.J.* 1157 (2007). A public performance right in dramatic works was first enacted in 1856 (Act of August 18, 1856, 11 Stat. 138).

9. *See* Musical Public Performance Right Act, *supra* note 8. Criminal infringement was differentiated from civil infringement when it was pursued for purposes of commercial exploitation. In addition, the 1897 Act requirement of criminal intent, i.e., mens rea, requires a showing that the conduct was “willful” and for profit. *See* Mary Jane Saunders, *Criminal Copyright Infringement and the Copyright Felony Act*, 71 *DENV. U. L. REV.* 671, 673 (1994);

misdemeanor¹⁰ sanction of imprisonment for up to one year.¹¹

In 1909, as part of copyright law's general revision which repealed previous copyright legislation,¹² Congress continued its criminalization of copyright law, by extending criminal provisions to all copyright works, rather than just public performances, representations, or infringement of copyrighted dramatic or musical compositions, with the exception of sound recordings,¹³ and broadened the scope of liability to include any person who willfully aids or abets such infringement. The 1909 Act kept the mens rea requirement¹⁴ and added misdemeanor penalties to willful and for-profit infringement of all types of copyrighted works with up to one-year imprisonment and fines between \$100 and \$1000.¹⁵ In addition, in order to address concerns regarding making

Note, *The Criminalization of Copyright Infringement in the Digital Era*, 112 HARV. L. REV. 1705, 1706-07 (1999). Note that Congress chose to criminalize unauthorized performances of music and plays and not older media in United States copyright law such as books, maps and charts. See I. Trotter Hardy, *Criminal Copyright Infringement*, 11 WM. & MARY BILL RTS. J. 305, 315 (2002). Also note that other forms of copyright infringement, i.e., the unauthorized reproduction or distribution of a copyrighted work, were still resolved through civil litigation. See Lanier Saperstein, *Copyrights, Criminal Sanctions and Economic Rents: Applying the Rent Seeking Model to the Criminal Law Formulation Process*, 87 J. CRIM. L. & CRIMINOLOGY 1470, 1474 (1997) (citing Saunders, *supra* note 9, at 673).

10. Criminal acts in the United States fall into two categories: felonies and misdemeanors. Misdemeanors carry sentences of one year or less while felonies may result in prison sentences of more than one year. For more on the sentencing classification of offenses in the United States, see 18 U.S.C. § 3559 (2012).

11. See Musical Public Performance Right Act § 4966 (stating that “[i]f the unlawful performance and representation be willful and for profit, such person or persons shall be guilty of a misdemeanor and upon conviction be imprisoned for a period not exceeding one year.”); see also PATRY, *supra* note 7, at § 1:41.

12. See Copyright Act of 1909, ch. 320, 33 Stat. 1075-82 (1909).

13. *Id.* § 5. Although copyright protection for sound recordings was considered during the 1909 revision, it was eventually rejected. See Saunders, *supra* note 9, at 673.

14. See *supra* note 9 (the mens rea requirement of the Musical Public Performance Right Act of 1897).

15. The Copyright Act of 1909 § 28 provides,

Any person who willfully and for profit shall infringe any copyright secured by this Act, or who shall knowingly and willfully aid or abet such infringement, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by imprisonment for not exceeding one year or by a fine of not less than one hundred dollars nor more than one thousand dollars) or both, in the discretion of the court: Provided, however, that nothing in this Act shall be so construed as to prevent the performance of religious or secular works, such as oratorios, cantatas, masses, or octavo choruses by public schools, church choirs, or vocal societies, rented, borrowed, or obtained from some public library, public school, church choir, school choir, or vocal society, provided the performance is given for charitable or educational purposes and not for profit.

Section 29 of the Act states,

Any person who, with fraudulent intent, shall insert or impress any notice of copyright required by this Act, or words of the same purport, in or upon any uncopyrighted article, or with fraudulent intent shall remove or alter the copyright notice upon any article duly copyrighted shall be guilty of a misdemeanor, punishable by a fine of not less than one hundred dollars and not more than one thousand dollars. Any person who shall knowingly issue or sell any article bearing a notice of United States copyright which has not been copyrighted in this country, or who shall knowingly import any article bearing such notice or words of the same purport, which has not been copyrighted in this country, shall be liable to a fine of one

innocent infringers, such as school-children, accessories to criminal infringements, Congress reserved the “aiding and abetting” offense to cases of knowing and willfully infringements, and adopted a “for-profit” limitation.¹⁶

After 1909, copyright criminalization was on hold for a relatively long period. Between 1909 and 1971, despite various bills that proposed to revise the Copyright Act while suggesting the addition of criminal sanctions, criminal copyright remained unchanged.¹⁷ As technology continued to evolve in this time period, the reasons for this legislative gap are unknown. Until the high-tech phase, even though criminal copyright existed, it only provided relatively light punishments as it was classified as a misdemeanor (up to \$1000 fine or up to one-year imprisonment or both).¹⁸ In practice, law enforcers did not give criminal copyright a high priority.¹⁹

Within the broader context of copyright enforcement, the low-tech criminalization phase marks an attempt to use criminal sanctions to protect mainly against infringement of the public performance right. At that time, copyright enforcement played a modest role in the copyright regime.²⁰ To a large extent, copyright enforcement was manageable due to the high costs of infringement and the relatively high visibility of infringers.²¹ However, along with the technological advances, the copyright industry began to face another problem: unauthorized copying, commonly referred to as “piracy.” In the mid 1950s, Congress reacted to the new enforcement problem by drafting a comprehensive copyright reform to address the new enforcement measures needed to better protect content owners. This reform took over twenty years, mainly due to various controversies,²² which partially explains why Congress

hundred dollars.

16. See Schrader, *supra* note 7, at 3. However, as interpreted later by federal courts, the profit requirement need only be for the purpose of profit; actual profit need not be realized. See *United States v. Cross*, 816 F.2d 297, 301 (7th Cir. 1987) (stating that a conviction does not require that a defendant actually realize either a commercial advantage or private financial gain; it need only be for the purpose of financial gain or benefit, citing *United States v. Moore*, 757 F.2d 1228 (9th Cir. 1979), and stating that it is irrelevant whether there was an exchange for value so long as there existed the hope of some pecuniary gain); Hardy, *supra* note 9, at 316.

17. For a summary of such proposals, see Robert S. Gawthrop, *An Inquiry into Criminal Copyright Infringement*, reprinted in 20 COPYRIGHT L. SYMP. (ASCAP) 154, 156-57 (1972). For examples of criminal copyright proposed provisions between 1909 and 1971, see H.R. 12549, 71st Cong., (3d Sess. 1931); S. 5687, 71st Cong. (3d Sess. 1931); H.R. 10364, 72nd Cong., (1st Sess. 1932); S. 3043, 76th Cong. (3d Sess. 1940).

18. See Penney, *supra* note 4, at 62.

19. *Id.* at 62-63 (arguing that police did not make copyright infringers a high priority, and prosecutors were reluctant to proceed with charge); Kent Walker, *Federal Remedies for the Theft of Intellectual Property*, 16 HASTINGS COMM. & ENT. L.J. 681 (1994); Note, *supra* note 9, at 1710.

20. Peter S. Menell, *This American Copyright Life: Reflections on Re-Equilibrating Copyright for the Internet Age*, 62 J. COPYRIGHT SOC'Y U.S.A. 201, 210-14 (2014) (exploring copyright enforcement in the “analog age”).

21. *Id.*

22. For the full legislative history of the 1976 Copyright Act, see GEORGE S.

was silent on criminal copyright for such a long period.

B. *The High-Tech Phase*

The high-tech criminalization phase marks a change in criminal copyright perception. It was seemingly triggered by the growth of the record industry and the increase of “piracy,” counterfeiting, and bootlegging of music recordings.²³ Both the record companies and motion picture industries lobbied Congress to strengthen copyright protection and enforcement,²⁴ which resulted in the beginning of the high-tech criminalization phase, reintroducing criminal copyright legislation. For the purposes of the discussion here, I differentiate between two different stages of the high-tech criminalization phase: analog and digital, as they possess several different characteristics.

1. *Analog Phase*

In 1971, Congress awarded copyright protection to sound recordings,²⁵ while also reintroducing criminal copyright. Congress passed the Sound Recording Act of 1971, which criminalized willful, for-profit infringement of sound recordings, in order to reduce right holders’ perceived deprivation of income, and governmental tax revenues.²⁶

Congress further increased penalties for unauthorized copying of sound recordings in 1974.²⁷ The Act provided that a willful and for-profit infringement of copyright in sound recordings, or knowingly and willfully

GROSSMAN, *OMNIBUS COPYRIGHT REVISION LEGISLATIVE HISTORY* (2001); Peter S. Menell, *In Search of Copyright’s Lost Ark: Interpreting the Right to Distribute in the Internet Age*, 59 J. COPYRIGHT SOC’Y U.S.A. 1, 30-51 (2011) (exploring the legislative history of the 1976 Act).

23. Charles H. McCaghy & S. Serge Denisoff, *Pirates and Politics: An Analysis of Interest Group Conflict*, in *DEVIANCE, CONFLICT, AND CRIMINALITY* 297, 301-03 (S. Serge Denisoff & Charles H. McCaghy eds., 1973); Penney, *supra* note 4, at 63 (arguing that legislative attitudes toward infringement began to change in the 1970s due to the growth of the record industry in the postwar decades and which had resulted in substantial increases in the piracy, counterfeiting, and bootlegging of music recordings).

24. See Penney, *supra* note 4, at 61 (arguing that some copyright owners have pressed legislatures to adopt more punitive criminal sanctions for copyright infringement); Saunders, *supra* note 9, at 674-75.

25. See Sound Recording Act of 1971. United States Courts protected sound recordings even prior to legislation. See *Capitol Records, Inc. v. Spies*, 264 N.E.2d 874 (Ill. App. Ct. 1970) (holding that prevention of record piracy under state law was precluded by federal preemption doctrines); Robert P. Merges, *One Hundred Years of Solicitude: Intellectual Property Law, 1900-2000*, 88 CALIF. L. REV. 2187, 2197 (2000) (arguing that lobbying led to a series of court decisions protected sound recordings by the early 1970s).

26. See H.R. REP. NO. 487 (1971) at 2 (“The pirating of records and tapes is not only depriving legitimate manufacturers of substantial income, but of equal importance is denying performing artists and musicians of royalties and contributions to pension and welfare funds and Federal and State governments are losing tax revenues.”).

27. Act of Dec. 31, 1974, Pub. L. No. 93-573, 88 Stat. 1873 (1974); *Dowling v. United States*, 473 U.S. 207 (1985); Note, *supra* note 9, at 1708.

aiding or abetting such infringement, was subject to a fine of up to \$25,000 and/or imprisonment for up to one year. In addition, the Act provided that any subsequent offense was subject to a fine of up to \$50,000 and/or imprisonment for up to two years,²⁸ making a subsequent offense a felony.²⁹ However, as Congress perceived record “piracy” to primarily be an economic offense, it rejected a proposal to increase the available term of imprisonment to three years for a first offense and seven years for a subsequent offense.³⁰

As part of the new Copyright Act of 1976, Congress further criminalized copyright law.³¹ Under the Act’s criminalization, Congress loosened the mens rea requirement for criminal copyright infringement by replacing the “for profit” requirement to “for purposes of commercial advantage or private financial gain.”³² In addition, the Act increased criminal sanctions for copyright infringement.³³ Under a new section, a misdemeanor conviction of a criminal infringement, except those of sound recordings and motion pictures, is subject to a \$10,000 fine and/or up to one-year imprisonment.³⁴ As for the

28. The 1974 Act inserted a new subsection (b) to section 104, which stated that: Any person who willfully and for profit shall infringe any copyright provided by section 1(f) of this title [i.e., The Exclusive right to reproduce and distribute to the public by sale or other transfer of ownership, or by rental, lease, or lending, reproductions of the copyrighted work if it be a sound recording], or who should knowingly and willfully aid or abet such infringement, shall be fined not more than \$25,000 or imprisoned not more than one year, or both, for the first offense and shall be fined not more than \$50,000 or imprisoned not more than two years, or both, for any subsequent offense.

29. See Young, *supra* note 3, at 163 (noting that the 1974 copyright amendments of sound recordings meant that a willful and profit-motivated infringement was no longer merely a misdemeanor in all cases).

30. See H.R. REP. NO. 93-1581, at z. (1974), reprinted in 1974 U.S.C.C.A.N. 6849, 6852; *Dowling*, 473 U.S. 207 (1985); Note, *supra* note 9, at 1708.

31. Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541.

32. 17 U.S.C. § 506(a) (1978). The 1976 Act clarified that a desire of financial gain is sufficient to qualify for criminal copyright infringement, and that the actual receipt of financial benefit is irrelevant. See Karen J. Bernstein, *Net Zero: The Evisceration of the Sentencing Guidelines Under the No Electronic Theft Act*, 27 N.E. J. ON CRIM. & CIV. CONFINEMENT 57, 67-69 (2001); *United States v. Cross*, 816 F.2d 297, 301 (7th Cir. 1987); Saperstein, *supra* note 9, at 1478; Saunders, *supra* note 9, at 674. However, some United States Courts rejected the defense that the defendant did not actually receive a benefit. See *United States v. Taxe*, 380 F. Supp. 1010, 1018 (C.D. Cal. 1974) (rejecting the defense of lack of realization of profit); Note, *supra* note 9, at 1708. Moreover, other scholars opine that the 1976 Act only changed the wording of the mens rea standard for criminal culpability, not actually altering or “loosening” the proof requirement. See, e.g., Lydia Pallas-Loren, *Digitization, Commodification, Criminalization: The Evolution of Criminal Copyright Infringement and The Importance of the Willfulness Requirement*, 77 WASH. U. L.Q. 835, 841 (1999) (arguing that “it is debatable whether this change in phraseology actually altered the proof required for criminal liability,” while referring to 4 NIMMER § 15.01 n.1.2 (1999)); Young, *supra* note 3, at 167 (arguing that the two phrases are meant to be substantially equivalent).

33. The increase of criminal copyright infringement fines is, among other things, argued to be linked to the prevailing inflation the United States economy at that time. For this argument, see Young, *supra* note 3, at 170.

34. 17 U.S.C. § 506(a) (1978). Note that minimum fines are absent from the United States Copyright Act as Congress wished to create conformity with the general pattern of the

infringement of sound recordings or motion pictures, the fine could rise to \$25,000. Convicted repeat infringers of sound recordings or motion pictures could face a \$50,000 fine and/or imprisonment for not more than two years.³⁵ Finally, upon conviction of criminal copyright infringement, the Act provided for the mandatory forfeiture, destruction, or disposition of all infringing copies or phonorecords and all implements, devices, or equipment used in the manufacture of such infringing copies or phonorecords.³⁶ Seemingly, the 1976 Act included a limited de-criminalization of copyright, as it eliminated the offense of aiding and abetting infringement.³⁷ However, it seems that Congress did so, as aiding and abetting was already governed by the provisions of U.S. Criminal Code.³⁸ Thus, the elimination of aiding and abetting infringement does not actually de-criminalized copyright law, but rather results from practical considerations.

In 1982, Congress introduced the Piracy and Counterfeiting Amendments Act.³⁹ Under the Act, Congress enacted copyright felony penalties for the first time for a first offense,⁴⁰ while removing criminal penalties from the Copyright Act and placing them in the criminal code.⁴¹ Felonies were imposed on “mass piracy” of sound recordings and audiovisual works. Mass piracy was linked to the reproduction or distribution of at least 1,000 phonorecords or copies infringing the copyright in one or more sound recordings over a 180-day period and for the reproduction or distribution of at least sixty-five copies of audiovisual works.⁴² Congress raised the penalty from a maximum fine of \$10,000 to a maximum fine of \$250,000 and/or up to five years’ imprisonment. Moreover, infringements involving between 100 to 999 copies of sound recordings, or seven to sixty-four audiovisual works, over a six-month period,

United States Criminal Code (18 U.S.C.). *See House Comm. On the Judiciary, Copyright Law Revision*, H.R. REP. NO. 1476, 94th Cong., 2d Sess. 163 (1976).

35. 17 U.S.C. § 506(a) (1978).

36. *See id.* § 506(b); Saperstein, *supra* note 9, at 1478. In a civil infringement, under 17 U.S.C. § 503(b) (2012), the destruction of infringing copies is in the court's discretion, while in a criminal infringement, the destruction is mandatory. *See Young, supra* note 3, at 128 (discussing the differences between the civil and criminal “destruction” provision in the 1976 Copyright Act); Saunders, *supra* note 9, at 675.

37. *See Saunders, supra* note 9, at 674.

38. 18 U.S.C. § 2 (1976) (“Whoever commits an offense against the United States or aids, abets, counsels, commands, induces or procures its commission, is punishable as a principal.”); *see Young, supra* note 3, at 169 (discussing the lack of the “aid or abet” provision in the 1976 Copyright Act).

39. Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (1982).

40. Prior to this Act, only a subsequent offense of copyright infringement which exceeded a one year imprisonment term was considered an offense. Saunders, *supra* note 9, at 674.

41. Copyright penalties shifted to 18 U.S.C. § 2319 (1982). Hardy, *supra* note 9, at 317.

42. 18 U.S.C. § 2319(b)(1)(A)-(B) (1982).

were subjected to up to \$250,000 and/or up to two years' imprisonment.⁴³ The mens rea element remained unchanged, requiring proof of commercial advantage or private financial gain. However, even after the 1982 amendments, the Copyright Act still considered most criminal offenses misdemeanors,⁴⁴ subject to a fine of up to \$25,000, and/or imprisonment for not more than one year.⁴⁵

In 1984, Congress passed legislation, which led to the creation of the Federal sentencing guidelines.⁴⁶ In the realm of Copyright law, the Sentencing Reform Act lowered the threshold requirement of the number of infringing copies to one copy of a sound recording, or between seven and sixty-five copies in motion pictures.⁴⁷ In addition, the Act raised the maximum prison sentence to five years if at least one thousand sound recordings or motion pictures were infringed.⁴⁸

In 1988, Congress introduced an amendment to the Money Laundering Control Act.⁴⁹ The 1988 amendment added copyright infringement as a specified unlawful activity for money laundering and created liability for any person who conducts a monetary transaction knowing that the funds derived through unlawful activity.⁵⁰ While the original 1986 Act did not list copyright infringement as a specified unlawful activity for money laundering, amendments made in 1988 targeted a broad range of illicit activities, including copyright infringement.⁵¹

2. Digital Phase

The digital criminalization sub-phase marks an increase of Congressional

43. Copyright infringements that do not fall into these categories remained the same, i.e., classified as misdemeanors and carrying fines of up to \$25,000 or up to one year imprisonment, or both. See Penney, *supra* note 4, at 63.

44. Except "mass piracy" of sound recordings and audiovisual works and a subsequent offense of willful and for profit copyright infringement in sound recordings.

45. 18 U.S.C. § 2319(b)(3) (1988); Saperstein, *supra* note 9, at 1480.

46. Sentencing Reform Act of 1984, Pub. L. No. 98-473, 98 Stat. 1987 (1984). See Lisa M. Seghetti & Alison M. Smith, *Federal Sentencing Guidelines: Background, Legal Analysis, and Policy Options*, CRS REPORT FOR CONGRESS 13 (2007).

47. Sentencing Reform Act of 1984.

48. See 18 U.S.C. 2319(b)(1) (1984); Bernstein, *supra* note 32, at 69.

49. In 1986, Congress enacted the Money Laundering Control Act as part of the Anti-Drug Abuse Act. See Money Laundering Control Act of 1986, Pub. L. No. 99-570, 100 Stat. 3207-22 (1986).

50. See Anna Driggers, *Money Laundering*, 48 AM. CRIM. L. REV. 929, 930 (2011) (describing the Money Laundering Control Act of 1986).

51. Anti-Drug Abuse Act of 1988, Pub. L. No. 100-690, § 6466, 102 Stat. 4181 (1988) (codified as amended at 18 U.S.C. § 1956 (2012)). For more information regarding the broad range of activities targeted by this Act, see James D. Harmon, Jr., *United States Money Laundering Laws: International Implications*, 9 N.Y.L. SCH. J. INT'L & COMP. L. 1, 10-12 (1988); More on money laundering and copyright infringement, see Ronald D. Coenen Jr., Jonathan H. Greenberg & Patrick K. Reisinger, *Intellectual Property Crimes*, 48 AM. CRIM. L. 849, 884 (2011).

involvement in copyright criminalization, both in actual legislation and in proposed bills.⁵² Moreover, the digital sub-phase reflects a crucial change in Congress's approach towards copyright infringers: Unlike the low-tech phase and the analog phase, the digital phase marks a legislative change from targeting large-scale to small-scale infringers.

The digital phase begins in 1992, when Congress introduced the Copyright Felony Act.⁵³ Congress imposed felony penalties for mass piracy of all types of copyrighted works,⁵⁴ including computer programs.⁵⁵ The Copyright Felony

52. To demonstrate the scope of proposed criminal copyright bills in the digital criminalization second phase, see, e.g., Intellectual Property Protection Act of 2002, H.R. 5057, 107th Cong. (2002) (targeted to amend the Federal criminal code to prohibit trafficking in a physical authentication feature that: is genuine but has been tampered with or altered without the authorization of the copyright owner to induce a third party to reproduce or accept distribution of a phono-record, a copy of a computer program, a copy of a motion picture or other audiovisual work, or documentation or packaging, where such reproduction or distribution violates the rights of the copyright owner; is genuine but has been or is intended to be distributed without the authorization of the copyright owner and not in connection with the lawfully made copy or phono-record to which it was intended to be affixed or embedded by the copyright owner; or appears to be genuine but is not); Author, Consumer, and Computer Owner Protection and Security (ACCOPS) Act of 2003, H.R. 2752, 108th Cong. (2003) (which, among other things, was designed to insert criminal penalties for placing works on computer networks, i.e., to criminalize willful infringement through P2P file-sharing networks); Artists' Rights and Theft Protection Act of 2003, S. 1932, 108th Cong. (2003) (proposing, among other things, to make the placement of a single copy of a prerelease copyrighted work in a P2P file-sharing software's share directory a felony); Piracy Deterrence and Education Act of 2004, H.R. 4077, 108th Cong. §§ 108-110 (2004) (proposed to "[E]nhance criminal enforcement of the copyright laws, to educate the public about the application of copyright law to the Internet, and for other purposes."); Intellectual Property Enhanced Criminal Enforcement Act of 2007, H.R. 3155, 110th Cong. § 5 (2007) (proposed to establish criminal violations for any attempt or conspiracy to commit criminal copyright infringement, with the same penalties as prescribed for the offense; and to increase the penalties for criminal copyright offenses, including: criminal copyright infringement; unauthorized recording of a motion picture; and trafficking in counterfeit goods or services); The Stop Online Piracy Act of 2011, H.R. 3261, 112th Cong. (2011) (proposed to expand the offense of criminal copyright infringement to include public performances of: copyrighted work by digital transmission, and work intended for commercial dissemination by making it available on a computer network; and expands the criminal offenses of trafficking in inherently dangerous goods or services to include: counterfeit drugs; and goods or services falsely identified as meeting military standards or intended for use in a national security, law enforcement, or critical infrastructure application).

53. Copyright Felony Act of 1992, Pub. L. No. 102-561, 106 Stat. 4233 (1992).

54. Except motion pictures and sound recordings that had required proof that the defendant had made at least one hundred copies. See Copyright Felony Act of 1992; Hardy, *supra* note 9, at 318.

55. The Senate proposed Bill 893 to impose criminal sanctions for willful violation of software copyright (S. 893, 102d Cong. (1991)). The bill was initiated by Senators Orrin Hatch and Dennis DeConcini, and at first was as part of an omnibus crime package. Applying only to software, the proposed bill provided that reproduction or distribution of fifty or more copies infringing the copyright in one or more computer programs (including any tape, disk, or other medium embodying such programs) over a 180-day period would be punishable with up to a five-year prison term and a \$250,000 fine, or a ten-year prison term

Act of 1992 lowered the thresholds for felony penalties: making of at least ten copies valued at more than \$2500 over a period of 180 days, increasing fines for individuals to \$250,000 and for organizations to \$500,000, or twice the gains from the offense.⁵⁶ First-time offenders could face five years imprisonment and repeat offenders could face up to ten years.⁵⁷ In case of criminal copyright infringement, which does not amount to mass piracy according to the law, the Act prescribed a misdemeanor sentence of up to one year.⁵⁸

In 1996, Congress enacted the Anticounterfeiting Consumer Protection Act.⁵⁹ The Act made trafficking in counterfeit goods or services an offense under the Racketeer Influenced and Corrupt Organizations Act (RICO), by adding to the list of racketeering activities:⁶⁰ section 2318 (trafficking in counterfeit labels for phonorecords, computer programs or computer program documentation or packaging and copies of motion pictures or other audiovisual works), section 2319 (criminal infringement of a copyright), and section 2319A (unauthorized fixation of and trafficking in sound recordings and music videos of live musical performances).⁶¹ The insertion of criminal copyright into RICO, increased the penalties for criminal organizations engaging in criminal copyright under the Copyright Act; conviction could amount to additional \$250,000 fine and an additional 20 years of imprisonment.⁶² In addition, the Act enabled law enforcement officials to prosecute large-scale organizations and instigate the seizure and forfeiture of nonmonetary personal and tangible property of the infringers.⁶³ Moreover, the 1996 Act amended section 2318 of

if the offense is a second or subsequent offense. The reproduction of more than ten but less than fifty copies within that same period would be punishable by a fine of up to \$250,000 and/or one year in prison. After a hearing by the Subcommittee on Intellectual Property and Judicial Administration, Representative Hughes suggested to expand the scope of the proposed bill, by an amendment to the Copyright Act, to apply felony provisions to willful infringement of all types of copyrighted works, and lowering the thresholds for imposing a felony liability. *See* Saunders, *supra* note 9, at 679; Saperstein, *supra* note 9, at 1481-82; H.R. REP. NO. 102-997, 102d Cong. (1992), *reprinted in* 1992 U.S.C.C.A.N. 3569.

56. Fines are set under 18 U.S.C. § 3571 (1992).

57. *Id.* §§ 2319(b)(1)-(2). *See also* S. REP. NO. 102-268 (1992); Penney, *supra* note 4, at 63; Note, *supra* note 9, at 1711.

58. 18 U.S.C. § 2319(b)(3) (1994).

59. Anticounterfeiting Consumer Protection Act of 1996, Pub. L. No. 104-153, 110 Stat. 1386 (1996).

60. 18 U.S.C. §1961(1)(B) (1996). In an effort to fight organized crime in the United States, RICO was enacted as title IX of the Organized Crime Control Act, Pub. L. 91-452, 84 Stat. 941 (1970).

61. Anticounterfeiting Consumer Protection Act of 1996.

62. 18 U.S.C. §§ 1963(a), 3571(b)(3) (1996). A criminal RICO violation is a separate offense from criminal copyright infringement. *See generally*, Julie L. Ross, *A Generation of Racketeers? Eliminating Civil RICO Liability for Copyright Infringement*, 13 VAND. J. ENT. & TECH. L. 55 (2010) (describing civil and criminal copyright infringement under RICO).

63. Grace Pyun, *The 2008 Pro-IP Act: The Inadequacy of the Property Paradigm in Criminal Intellectual Property Law and its Effect on Prosecutorial Boundaries*, 19 DEPAUL J. ART TECH. & INTELL. PROP. L. 355, 363-64 (2009).

the Federal criminal code, by extending trafficking in counterfeit labels to computer programs; computer program documentation; and packaging existing prohibitions and penalties applicable to trafficking in counterfeit labels affixed or designed to be affixed to phonorecords or copies of a motion picture or other audiovisual work.⁶⁴

Prior to 1997, in order to prosecute copyright infringement, the law required that the infringement be undertaken for commercial advantage or private financial gain. A landmark case on this matter proved that this provision was highly problematic for the enforcement of online activities involving copyright infringements, and ultimately had enormous ramifications for criminal copyright legislation.⁶⁵

In the early 1990s, David LaMacchia was a twenty-one year old student at the Massachusetts Institute of Technology (MIT). Between 1993 and 1994, using MIT's computer network, LaMacchia set up an electronic bulletin board ("BBS") named Cynosure (which had two versions), without commercial advantage or private financial gain.⁶⁶ LaMacchia encouraged his correspondents to upload popular software applications and computer games, which he transferred to a second encrypted address and made them accessible to download by other users with access to Cynosure, and by that, allegedly caused some right holders lost revenues.⁶⁷ As LaMacchia did not derive any financial benefit from his actions, he could not be prosecuted for criminal copyright infringement because the law required the infringement to be undertaken for commercial advantage or private financial gain. Unable to charge LaMacchia with criminal copyright infringement, on April 7, 1994, he was charged by a federal grand jury with conspiring with "persons unknown" to violate the wire fraud statute.⁶⁸ On September 30, 1994, LaMacchia brought

64. 18 U.S.C. § 2318 (1996).

65. *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994).

66. See Eric Goldman, *A Road to No Warez: The No Electronic Theft Act and Criminal Copyright Infringement*, 82 OR. L. REV. 369, 372 (2003) (discussing the LaMacchia case).

67. According to the indictment, LaMacchia's bulletin board system had as its object the facilitation "on an international scale" of the "illegal copying and distribution of copyrighted software" without payment of licensing fees and royalties to software manufacturers and vendors. The prosecutors alleged that LaMacchia's scheme caused losses of more than \$1,000,000 to software copyright holders. However, the prosecutor's loss estimate was unsupported. See *id.* at 372; Joseph F. Savage, Jr. & Kristina E. Barclay, *When the Heartland is "Outside the Heartland:" the New Guidelines for NET Act Sentencing*, 9 GEO. MASON L. REV. 373, 377 (2000).

68. 18 U.S.C. § 1343 (1994):

Whoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate or foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both. If the violation occurs in relation to, or involving any benefit authorized, transported, transmitted, transferred, disbursed, or paid in connection with, a presidentially declared major disaster or emergency (as those terms are defined in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act

a motion to dismiss, arguing that the government had improperly resorted to the wire fraud statute as a copyright enforcement tool, referring to the Supreme Court's decision in *Dowling v. United States*.⁶⁹ The Massachusetts District Court dismissed the case against LaMacchia, while criticizing LaMacchia's actions,⁷⁰ holding that Congress never envisioned protecting copyrights under the wire fraud statute and indicating that it is the legislature, not the court, which is to define a crime and ordain its punishment.⁷¹

Following the LaMacchia case, Senator Leahy proposed the Criminal Copyright Improvement Act of 1995,⁷² which suggested criminal infringement sanctions for non-financial gain or commercial advantage use. The Criminal Copyright Improvement Bill aimed to impose criminal liability on copyright infringement for non-financial gain or commercial advantage use,⁷³ and also included an amendment to Section 2319 of Title 18, which expanded the types of activities for criminal copyright and increased the possible fine and imprisonment terms.⁷⁴ However, Congress never passed the bill because as the

(42 U.S.C. 5122)), or affects a financial institution, such person shall be fined not more than \$1,000,000 or imprisoned not more than 30 years, or both.

69. 473 U.S. 207 (1985). In *Dowling*, the Supreme Court held that a copyrighted musical composition impressed on a bootleg phonograph record is not property that is "stolen, converted, or taken by fraud" within the meaning of the National Stolen Property Act of 1934 (Pub. L. No. 73-246, 48 Stat. 794 (1934)). See, e.g., Elizabeth Blakey, *Criminal Copyright Infringement: Music Pirates Don't Sing the Jailhouse Rock When They Steal from the King*, 7 LOY. ENT. L.J. 417 (1987) (analyzing the United States Supreme Court decision in *Dowling*, while suggesting that the Court ignored the economic philosophy underlying United States copyright law). Prior to *Dowling*, United States courts extended the protections of the National Stolen Property Act to copyrighted goods. See, e.g., *United States v. Drebin*, 557 F.2d 1316, 1328 (9th Cir. 1977) (holding that copies of copyrighted motion pictures are considered goods or merchandise for purposes of the National Stolen Property Act); Coenen Jr., Greenberg & Reisinger, *supra* note 51, at 882-83 (discussing United States courts' rulings regarding copyright and the National Stolen Property Act).

70. LaMacchia's behavior was described as "heedlessly irresponsible, and at worst as nihilistic self-indulgent, and lacking in any fundamental sense of values." See *LaMacchia*, 871 F. Supp. at 545.

71. *Id.* at 545 (quoting *United States v. Wiltberger*, 18 U.S. 76 (1820)). The Court noted that it is Congress's prerogative to change the law if it wishes to criminalize such a behavior ("[c]riminal as well as civil penalties should probably attach to willful, multiple infringements of copyrighted software even absent a commercial motive on the part of the infringer. One can envision ways that the copyright law could be modified to permit such prosecution. But, it is the legislature, not the Court, which is to define a crime, and ordain its punishment."). *Id.*

72. Criminal Copyright Improvement Act of 1995, S. 1122, 104th Cong. (1995).

73. Mostly, the bill aimed to impose criminal liability on copyright infringement, by amending Section 506(a) of title 17, criminalizing acts of reproduction or distribution, including by transmission, or assisting others in such activities, of one or more copyrighted works, which have a total retail value of \$5000 or more.

74. Under the new proposed section, a person who committed an offense under section 506(a)(2) of title 17, regarding reproduction or distribution, including by transmission, or assisting others in such reproduction or distribution of one or more copyrighted works, which have a total retail value of more than \$10,000, could be imprisoned up to five years, and/or fined. Other infringers could face an imprisonment of up to one year, and/or a fine. In addition, in a second or subsequent felony offense, the bill set a punishment of up to ten

Senate Judiciary Committee failed to act upon it.⁷⁵

Along this line, the computer software industry, outraged by the acquittal of LaMacchia, lobbied for a legislative response so as to criminalize “computer theft” of copyrighted works, by the elimination of the profit requirement, in order to prevent the destruction of businesses, especially small ones, that depend on licensing agreements and royalties for survival.⁷⁶

After failing to enact the Criminal Copyright Improvement Act of 1995, Congress passed a similar statute entitled the No Electronic Theft (NET) Act,⁷⁷ which was signed by President Clinton on December 16, 1997, with a clear purpose to close the “loophole” highlighted in *United States v. LaMacchia*.⁷⁸

The NET Act addressed criminal copyright in several ways. First, it changed the definition of financial gain set in 17 U.S.C. § 101, to include the receipt (or expectation of receipt) of anything of value, including other copyrighted works, by inserting the following paragraph: “The term ‘financial gain’ includes receipt, or expectation of receipt, of anything of value, including the receipt of other copyrighted works.”⁷⁹

Second, the NET Act amended 17 U.S.C. § 506(a), which deals with criminal infringements.⁸⁰ Under the new section, criminal infringement was defined as any person who infringes a copyright willfully,⁸¹ either for purposes

years of imprisonment, and/or a fine. See Criminal Copyright Improvement Act of 1995, S. 1122, 104th Cong. § 2(d) (1995).

75. Another version of the Act was proposed again in 1997 in the United States Senate, but did not pass. See Criminal Copyright Improvement Act of 1997, S. 1044, 105th Cong. (1997); Note, *supra* note 9, at 1715.

76. See H.R. REP. NO. 105-339 (1996); *Copyright Piracy, and H.R. 2265, the No Electronic Theft (NET) Act: Hearings on H.R. 2265 Before the Subcomm. on Courts and Intellectual Prop. of the House Comm. on the Judiciary*, 105th Cong. (1997) (witnesses speaking before the committee included Greg Wrenn, Senior Corporate Counsel with Adobe System and Brad Smith of Microsoft, both speaking on behalf of the Business Software Alliance (BSA) and Sandra Sellers, Vice President of Intellectual Property Education and Enforcement for the Software Publishers Association); Michael Coblenz, *Intellectual Property Crimes*, 9 ALB. L.J. SCI. & TECH. 235, 249-50 (1999).

77. No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997) (17 U.S.C. §§ 101, 506, 507; 18 U.S.C. §§ 2319, 2320; 28 U.S.C. § 1498 (1997)). The NET Act was not identical to the Criminal Copyright Improvement Act of 1995. For example, the Criminal Copyright Improvement Act of 1995 set a monetary threshold for non-commercially motivated criminal infringement at \$5000 and a felony threshold for a retail value in excess of \$10,000, both much higher than the No Electronic Theft (NET) Act provisions.

78. 871 F. Supp. 535 (D. Mass. 1994). The House Report, in the first draft of the NET Act (H.R. REP. NO. 105-339, at 3 (1997)), indicated:

The purpose of H.R. 2265, as amended, is to reverse the practical consequences of *United States v. LaMacchia*, 871 F. Supp. 535 (D. Mass. 1994) [hereinafter: LaMacchia], which held, inter alia, that electronic piracy of copyrighted works may not be prosecuted under the federal wire fraud statute; and that criminal sanctions available under Titles 17 and 18 of the U.S. Code for copyright infringement do not apply in instances in which a defendant does not realize a commercial advantage or private financial gain.

79. See No Electronic Theft (NET) Act § 2(a).

80. *Id.* § 2(b).

81. Although the NET Act states that evidence of reproducing and distributing

of commercial advantage or private financial gain, or by the reproduction or distribution, including by electronic means, during any 180-day period, of one or more copies or phonorecords of one or more copyrighted works, which have a total retail value of more than \$1000.⁸²

Third, the NET Act expanded the statute of limitation on criminal proceedings set in 17 U.S.C. § 507(a) by two years from three to five, in order to be consistent with most other criminal statutes.⁸³

Fourth, the NET Act clarified that reproduction or distribution by electronic means was included in the felony provisions and clarified that the retail value of \$2500 is a total retail value.⁸⁴ Doing so, the NET Act made explicit that reproduction and distribution of electronic copies via the Internet can qualify for criminal sanctions.⁸⁵

Fifth, the NET Act changed the punishments for criminal infringement. Under the Act, for infringements of more than \$1000, the punishment is imprisonment of up to one year and a fine, and for infringements of \$2500 or more, the punishment is imprisonment of up to three years and a fine. In case of a second or subsequent offense, which involves commercial advantage or private financial gain, the punishment includes imprisonment of up to six years.⁸⁶

Sixth, the NET Act enabled victims of copyright infringement to submit victim impact statements.⁸⁷ Under this provision, victims of copyright

copyrighted works does not, by itself, establish willfulness (*id.* § 2(b); Goldman, *supra* note 66, at 373), the interpretation of the term “willfully” is still unclear. Many Courts interpreted the language of the term “willfully” in the Copyright Act as proving that the accused specifically intended to violate copyright law. Other Courts held that the term “willful” refers only to intent to copy, not intent to infringe. For example, see *United States v. Moran*, 757 F. Supp. 1046 (D. Neb. 1991) (citing *United States v. Rose*, 149 U.S.P.Q. (BNA) 820 (S.D.N.Y. 1966) and holding that “willfully” means that in order to be criminal the infringement must have been a “voluntary, intentional violation of a known legal duty); Saunders, *supra* note 9, at 688; Hardy, *supra* note 9, at 319-20.

82. The punishment for this section is as provided under 18 U.S.C. § 2319 (1997).

83. DAVID GOLDSTONE, PROSECUTING INTELLECTUAL PROPERTY CRIMES 64 (2001) (arguing that the statute of limitations in the NET Act is consistent with most other United States criminal statutes).

84. By striking “with a retail value of more than \$2,500” and inserting “which have a total retail value of more than \$2,500.” See No Electronic Theft (NET) Act § 2(d)(2)(A); Pallas-Loren, *supra* note 32, at 846.

85. *Copyright Piracy, and H.R. 2265, the No Electronic Theft (NET) Act*, *supra* note 76, at 13.

86. See No Electronic Theft (NET) Act § 2(d); Goldman, *supra* note 66, at 373-74.

87. See No Electronic Theft (NET) Act § 3; 18 U.S.C. § 2319(d) (Supp. III 1997). Victims of a crime may introduce a victim impact statement, which describes the crime’s impact upon them and upon their family, at the sentencing or disposition of a trial. Victims include both producers and sellers of legitimate works affected by the defendant’s conduct. For more on victim impact statements, see, e.g., Phillip A. Talbert, *The Relevance of Victim Impact Statements to the Criminal Sentencing Decision*, 36 UCLA L. REV. 199 (1988); Kristin Henning, *What’s Wrong with Victims’ Rights in Juvenile Court?: Retributive Versus Rehabilitative Systems of Justice*, 97 CALIF. L. REV. 1107 (2009).

infringement can include information identifying the scope of injury and loss suffered, including an estimate of the economic impact of the offense on that victim. This information can be used as evidence for purposes of the sentencing guidelines.⁸⁸

Finally, the Act instructed the Sentencing Commission⁸⁹ to ensure that the applicable guideline range for a defendant convicted of a crime against intellectual property is sufficiently stringent to deter such a crime, and to ensure that the guidelines provide for consideration of the retail value and quantity of the items with respect to which the crime against IP was committed.⁹⁰

The NET Act marked a dramatic change in criminal copyright. Prior to the NET Act, copyright infringements for non-commercial purposes were not subject to criminal penalties. At least one scholar argued that the NET Act marks a paradigm shift in copyright law: Criminal copyright infringement is similar to physical theft, and the public should come to realize that.⁹¹

88. Pallas-Loren, *supra* note 32, at 849 (describing the NET Act criminal provisions).

89. Under the authority of the Sentencing Reform Act of 1984, Pub. L. No. 98-473, 98 Stat. 1987 (1984); and of the Sentencing Act of 1987, Pub. L. No. 100-182, § 21, 101 Stat. 1271 (1987) (including the authority to amend the sentencing guidelines and policy statements)

90. No Electronic Theft (NET) Act § 2(g) instructed the U.S. Sentencing Commission to ensure that the applicable guideline range for a defendant convicted of a crime against IP is sufficiently stringent to deter such a crime and ensure that the guidelines provide for consideration of the retail value and quantity of the items with respect to which the crime against IP was committed. Congress implemented § 2(g) in 1999, by enacting the Digital Theft Deterrence and Copyright Damages Improvement Act of 1999, Pub. L. No. 106-160, 113 Stat. 1774 (1999). Mostly, under the amendments, Congress increased the base level offense from a Level 6 to a Level 8, directed courts to consider the value of the infringed-upon item in calculating the loss in all cases, provided a two-level upward adjustment for cases involving manufacture, importation, and uploading of infringing items and impose mandatory offense levels of 12 in such cases, provided a two-level upward adjustment based on use of special skill in cases involving circumvention of technical protection measures to protect copyrighted works, and gave courts discretion in any case to apply an upward departure where the ordinary calculation would substantially understate the seriousness of the offense. See United States Sentencing Commission, *Intellectual Property/Copyright Infringement: Group Breakout Session Two*, 242 (2000), http://www.ussc.gov/Research_and_Statistics/Research_Projects/Economic_Crimes/200010_12_Symposium/tGroupTwoDayTwo.PDF. For more information regarding the Digital Theft Deterrence and Copyright Damages Improvement Act, see Coenen Jr., Greenberg & Reisinger, *supra* note 51, at 880-81; Goldman, *supra* note 66, at 378-81.

91. See Goldman, *supra* note 66, at 370 (arguing that by enacting the NET Act, Congress adopted a paradigm that criminal copyright infringement is like physical-space theft, specifically shoplifting, while citing 143 CONG. REC. S12689, S12691 (daily ed. Nov. 13, 1997) (statement of Sen. Leahy): "By passing this legislation, we send a strong message that we value intellectual property . . . in the same way that we value the real and personal property of our citizens. Just as we will not tolerate the theft of software, CD's, books, or movie cassettes from a store, so will we not permit the stealing of intellectual property over the Internet."). See also 143 CONG. REC. H9883, H9885 (daily ed. Nov. 4, 1997) (statement of Rep. Goodlatte) ("[i]magine the same situation occurring with tangible goods that could not be transmitted over the Internet, such as copying popular movies onto hundreds of blank tapes and passing them out on every street corner or copying personal software onto blank disks and freely distributing them throughout the world. Few would disagree that such

In 1998, Congress enacted the Digital Millennium Copyright Act (DMCA),⁹² which along with civil amendments to copyright statute, introduced new anti-circumventions rules, that affect both civil and criminal law.⁹³ The DMCA included several prohibitions: It required that no person shall circumvent a technological measure that effectively controls access to a protected work;⁹⁴ it provided limited exceptions to circumventions for academic institutions, nonprofit libraries, archives, law enforcement and other government activities,⁹⁵ as well as reverse engineering and encryption research exemptions to a list of activities;⁹⁶ and it prohibited trafficking in circumvention technology⁹⁷ and tampering with copyright management

activities are illegal and should be prosecuted. We should be no less vigilant when such activities occur on the Internet. We cannot allow the Internet to become the Home Shoplifting Network.”); and 143 CONG. REC. E1527 (daily ed. July 25, 1997) (statement of Hon. Howard Coble) (“[T]he public must come to understand that intellectual property rights, while abstract and arcane, are no less deserving of protection than personal or real property rights.”).

92. Digital Millennium Copyright Act (DMCA), Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended at 17 U.S.C. §§ 512, 1201-1205, 1301-1332 and 28 U.S.C. § 4001 (2012)).

93. For instance, the DMCA inserted limitations on liability, often referred to as “safe harbors,” which shelter service providers from copyright infringement lawsuits. *See* 17 U.S.C. § 512 (1998). The first effort to regulate digital copying through U.S. copyright law was prior to the DMCA enactment, by the Audio Home Recording Act of 1992 (Pub. L. No. 102-563, 106 Stat. 4237 (1992)). However, this Audio Home Recording Act only established a technological solution to multi-generational digital copying while not generally prohibiting the circumvention of protective technology. *See* Stephen M. Kramarsky, *Copyright Enforcement in the Internet Age: The Law and Technology of Digital Rights Management*, 11 DEPAUL-LCA J. ART & ENT. L. & POL’Y 1, 17-22 (2001) (describing the Audio Home Recording Act of 1992 provisions).

94. To circumvent a technological measure means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner. *See* 17 U.S.C. § 1201(a)(3)(A) (1998). For criticism on the anti-circumvention rules in the DMCA, see Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519 (1999). However, the DMCA also notes that the prohibition will not apply to persons who are users of a copyrighted work which is in a particular class of works, if such persons are, or are likely to be in the succeeding three-year period, adversely affected by virtue of such prohibition in their ability to make non-infringing uses of that particular class of works set by the Librarian of Congress regulations exemptions. In addition, Libraries and educational institutions are permitted to circumvent protective measures prior to purchasing a work, and law enforcement and intelligence operations are also exempt from liability for the purpose of achieving the interoperability of computer programs and encryption research. *See* 17 U.S.C. § 1201 (2012); Penney, *supra* note 4, at 86.

95. 17 U.S.C. §§ 1201(d)-(j) (1998).

96. *Id.* §§ 1201(f)-(g). In addition, based on rulemaking recommendations from the Register of Copyrights, the DMCA provides for the Librarian of Congress to adopt three-year renewable exemptions for particular classes of copyrighted works from the DMCA’s prohibition on circumvention. *See id.* §§ 1201(a)(1)(B)-(E).

97. *See id.* § 1201(a)(2):

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that —

information.⁹⁸

These provisions may be compensated by civil remedies such as injunctions, actual damages, and statutory damages.⁹⁹ However, the DMCA went further. It provided criminal sanctions, limited to entities acting willfully, and for purposes of commercial advantage or private financial gain.¹⁰⁰ The maximum criminal penalties are \$500,000 and/or imprisonment for not more than five years, for a first offense, and \$1,000,000 and/or imprisonment for not more than ten years, for any subsequent offense. The DMCA sets an exception for criminal liability on a nonprofit library, archives, or educational institution,¹⁰¹ and sets a statute of limitation if a proceeding is commenced within five years after the cause of action arose.¹⁰²

In 2004, Congress enacted the Intellectual Property Protection and Courts Amendments Act.¹⁰³ The 2004 Act expanded criminal provisions to combat the trafficking of counterfeit IP products.¹⁰⁴ Specifically, the Act criminalized knowingly and unlawfully trafficking in a counterfeit or illicit label affixed to copyrighted goods, such as a phonorecord; a copy of a computer program; motion picture (or other audiovisual work); literary work; pictorial, graphic, or sculptural work; a work of visual art; counterfeit documentation or packaging.¹⁰⁵ Such offenses could be committed in the United States in

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title; (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title; or (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title.

And *id.* § 1201(b)(1):

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that —

(A) is primarily designed or produced for the purpose of circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; (B) has only limited commercially significant purpose or use other than to circumvent protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof; or (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing protection afforded by a technological measure that effectively protects a right of a copyright owner under this title in a work or a portion thereof.

98. *Id.* § 1202; Penney, *supra* note 4, at 65.

99. 17 U.S.C. § 1203 (1998).

100. *Id.* § 1204(a).

101. *Id.* § 1204(b).

102. *Id.* § 1204(c).

103. Intellectual Property Protection and Courts Amendments Act, Pub. L. No. 108-482, 118 Stat. 3912 (2004) (amending 18 U.S.C. § 2318); Miriam Bitton, *Rethinking the Anti-Counterfeiting Trade Agreement's Criminal Copyright Enforcement Measures*, 102 J. CRIM. L. & CRIMINOLOGY 67, 88 (2012); John R. Grimm, Stephen F. Guzzi & Kathleen Elizabeth Rupp, *Intellectual Property Crimes*, 47 AM. CRIM. L. REV. 741, 766 (2010) (describing the Act).

104. H.R. REP. NO. 108-600, at 4-5 (2004).

105. *See* Intellectual Property Protection and Courts Amendments Act. *See also* Grimm,

addition to those facilitated through the use of the mail or a facility of interstate or foreign commerce.¹⁰⁶ In addition, the Act provided for authorized forfeiture of equipment, devices, or materials used to manufacture, reproduce, or assemble counterfeit or illicit labels.¹⁰⁷ Under the criminal sanctions of the Act, counterfeit documentation or packaging is subject to a fine or imprisonment for not more than five years, or both.¹⁰⁸

In 2005, Congress enacted the Family Entertainment and Copyright Act.¹⁰⁹ The Act created a criminal penalty for the willful distribution of works being prepared for commercial distribution. Specifically, it prohibits any person from knowingly using or attempting to use an audiovisual recording device to transmit or make a copy of a motion picture or other audiovisual copyright protected work without the authorization of the copyright owner, from a performance of such work in a motion picture exhibition facility. The criminal sanctions for these actions were set to a fine and/or up to a three-year imprisonment. In cases of a second or subsequent offense, a convicted criminal infringer could face a fine and/or up to a six-year imprisonment.¹¹⁰

In 2008, following various propositions to amend the Copyright Act, Congress enacted the Prioritizing Resources and Organization for Intellectual Property Act of 2008 (PRO-IP Act).¹¹¹ The PRO-IP Act addressed criminal copyright by replacing the term “offense” with “felony,” eliminating IP misdemeanors.¹¹² In addition, the Act mandated a convicted offender to pay

Guzzi & Rupp, *supra* note 103, at 766 (describing the Intellectual Property Protection and Courts Amendments Act).

106. See 18 U.S.C. § 2318(c) (2004); Grimm, Guzzi & Rupp, *supra* note 103, at 766 (describing the Intellectual Property Protection and Courts Amendments Act).

107. 18 U.S.C. § 2318(d) (2004).

108. *Id.* § 2318(a)(1)(B).

109. Family Entertainment and Copyright Act of 2005, Pub. L. No. 109-9, 119 Stat. 218 (2005) (codified as 18 U.S.C. § 2319B (2012)). The Family Entertainment and Copyright Act of 2005 is divided into the Artist’s Rights and Theft Prevention Act of 2005 and Family Home Movie Act of 2005.

110. See 18 U.S.C. § 2319B(a) (2006).

111. Prioritizing Resources and Organization for Intellectual Property Act (PRO-IP Act), Pub. L. No. 110-403, 122 Stat. 4256 (2008). For examples of various propositions to amend the copyright Act, see the Intellectual Property Protection Act of 2007, proposed to Congress by Attorney General Alberto Gonzales in May 2007: Letter from Richard A. Hertling, Principal Deputy Assistant Att’y Gen., U.S. Dep’t of Justice, to Nancy Pelosi, Speaker, U.S. House of Representatives (May 14, 2007), http://www.justice.gov/archive/olp/pdf/ip_protection_act_2007.pdf. Although the proposition only advanced to a committee referral, some provisions were inserted in the 2008 Act. See Pyun, *supra* note 63, at 372-73 (describing the Intellectual Property Protection Act of 2007).

112. See PRO-IP Act § 208 (amending 17 U.S.C. § 506 (2008)). Regarding criminal IP, the Act broadened penalties for bodily harm and death resulting in criminal trafficking of counterfeit goods by adding a provision whereby an offender who knowingly or recklessly causes or attempts to cause serious bodily injury from intentionally trafficking counterfeit goods could face a fine, or up to twenty years’ imprisonment, or both. In addition, an offender who knowingly or recklessly causes or attempts to cause death from intentionally trafficking counterfeit goods, could face a fine, or up to a life sentence, or both. In

restitution to any victim of the offense as an offense against property and mandated restitution across the board for all IP crimes including unauthorized recordings of motion pictures and trade secrets under the Economic Espionage Act.¹¹³

Hence, criminal copyright in the United States has dramatically increased since it was first introduced in 1897. As described, the low-tech criminalization phase between 1897-1909, which marks the beginning of the process, did not make a significant change to U.S. copyright law, as criminal copyright did not extend to all copyrighted materials and was considered a misdemeanor. However, the high-tech criminalization phase, both analog and digital, marks a significant change toward a more criminal-oriented copyright law, as the scope and sanctions increased. More specifically, the digital criminalization phase is the most significant, both by the increase of penalties and the scope of the offenses. I argue that we are still within this phase, as criminalization of copyright law is likely to continue in the following years.

II. CRIMINAL COPYRIGHT PRACTICAL CHANGE

The on-going legislative process of copyright criminalization could lead to the assumption that copyright law is in the midst of a paradigm shift from civil to criminal copyright.¹¹⁴ Despite the ongoing legislative process of copyright criminalization, which—one could expect—would have led to an increase of criminal copyright litigation, practice might suggest that copyright in practice

addition, the Act extended forfeiture from counterfeiting items and all property used to commit the offenses to any property “constituting or derived from any proceeds obtained directly or indirectly as a result of the commission of” any criminal or civil counterfeiting offense. See PRO-IP Act §§ 205-206, (amending 18 U.S.C. §§ 2318, 2323 (2008)); Pyun, *supra* note 63, at 376-77 (describing the PRO-IP Act).

113. PRO-IP Act §§ 201, 207. In addition, Title III creates an IP Enforcement Coordinator (IPEC) to oversee an interagency IP enforcement advisory committee; Title IV provides the DOJ with a grant to assist them in investigating IP crimes, provide specialized training, and to promote the sharing of information and analyses between federal and state agencies concerning investigations and prosecutions of criminal copyright infringement. In addition, Title IV adds more specialized personnel in the CHIP and CCIP units of the DOJ and U.S. Attorney’s Office and requires that the FBI and Attorney General submit an annual report that includes statistics of investigations, arrests, prosecutions, and imposed penalties. Title V mandates a study conducted by the GAO to “help determine how the Federal Government could better protect the intellectual property of manufacturers.” See Pyun, *supra* note 63, at 377-79 (summarizing the PRO-IP Act Titles).

114. Paradigms are what the members of a scientific community share and conversely, a scientific community consists of men who share a paradigm. In the words of Thomas Kuhn:

[Paradigms] are the source of the methods, problem-field, and standards of solution accepted by any mature scientific community at any given time. As a result, the reception of a new paradigm often necessitates a redefinition of the corresponding science. Some old problems may be relegated to another science or declared entirely “unscientific.” Others that were previously non-existent or trivial may, with a new paradigm, become the very archetypes of significant scientific achievement.

THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* 176 (2d ed. 1970).

not only remains mostly a matter of civil law,¹¹⁵ but that criminal prosecutions are still relatively rare.¹¹⁶ It is important to note that criminalizing copyright does not necessarily imply that criminal copyright becomes the only responsive measure to copyright infringements, as it is not designed to be the sole or even primary tool to resolve the copyright infringement scheme. As noted by then-U.S. Attorney General Janet Reno, “Civil and administrative remedies will continue to be the primary tool for enforcement of IP rights. That makes sense. But there are some cases where the seriousness of the violation and the egregiousness of the conduct require imposition of a criminal penalty.”¹¹⁷ However, as a general argument, the increase of criminal copyright legislation should lead to a higher scale of enforcement, if copyright infringement does not cease, or at least substantially diminish.

In order to assess whether copyright law is undergoing a paradigm shift towards a criminal copyright paradigm, I seek to figure out whether the governmental understanding of copyright law has changed from a civil to a criminal perspective, by examining whether the enforcement of criminal copyright has increased in accordance with legislation. For this purpose, I

115. See Timothy D. Howell, *Intellectual Property Pirates: Congress Raises the Stakes in the Modern Battle to Protect Copyrights and Safeguard the United States Economy*, 27 ST. MARY'S L.J. 613, 646-47 (1996) (arguing that although criminal copyright laws have broadened in both their scope and use in the United States since 1897, the treatment of copyright infringement as a crime has remained less utilized than traditional civil remedies); Saperstein, *supra* note 9, at 1506 (arguing the imposition of criminal sanctions continues to remain the exception rather than the rule); Sharon B. Soffer, *Criminal Copyright Infringement*, 24 AM. CRIM. L. REV. 491 (1987) (arguing that prosecutions under the criminal statute have been relatively infrequent and are usually reserved for the most egregious violations); U.S. DEP'T OF JUSTICE, PROSECUTING INTELLECTUAL PROPERTY CRIMES 15-16 (4th ed. 2013), available at http://www.justice.gov/criminal/cybercrime/docs/prosecuting_ip_crimes_manual_2013.pdf (also arguing that “criminal copyright penalties have always been the exception rather than the rule”). For an argument that criminal copyright litigation should have increased due to criminal copyright legislation, see Hardy, *supra* note 9, at 305 (arguing that criminal copyright legislation will probably result in a substantial increase of criminal copyright cases).

116. See Kim F. Natividad, *Stepping It Up and Taking It to the Streets: Changing Civil & Criminal Copyright Enforcement Tactics*, 23 BERKELEY TECH. L.J. 469, 480 (2008) (arguing that the scale of criminal enforcement of copyright crime pales in comparison to civil enforcement efforts, as U.S. Department of Justice only files about 100 criminal IP cases per year). For this data, see JOHN GANTZ & JACK B. ROCHESTER, *THE PIRATES OF THE DIGITAL MILLENNIUM 207-08* (2005); Maggie Heim & Greg Geockner, *International Anti-Piracy and Market Entry*, 17 WHITTIER L. REV. 261, 267 (1995) (listing possible reasons why criminal actions is ineffective in some countries: a lack of criminal enforcement provisions in the copyright law; the police are corrupt or have other priorities; the prosecutors do not move cases through the courts; or the penalties are insignificant). See also Hardy, *supra* note 9, at 305 (arguing that, “To date, the bulk of the copyright case law has remained heavily a matter of civil law, with private party copyright owners as plaintiffs.”); Penney, *supra* note 4, at 61 (arguing that criminal copyright prosecutions are rare).

117. Janet Reno, *Statement by the Attorney General Symposium of the Americas: Protecting Intellectual Property in the Digital Age* (Sept. 12, 2000), <http://www.justice.gov/archive/ag/speeches/2000/91200agintellectualprop.htm>.

analyze and compare available statistical data regarding criminal and civil copyright litigation since criminal copyright was introduced.

A. *Criminal Copyright Prosecutions*

A possible indicator for the argument that thus far, the criminalization process in copyright could be merely a legislative act, is based on statistical data regarding criminal copyright prosecutions between the fiscal years 1955 and 2012.¹¹⁸ The data was gathered by applying two methods. First, data for 1955-2008 is based on the U.S. Attorneys' Annual Statistical Reports, which provide statistics of overall criminal prosecutions, and *inter alia*, criminal copyright prosecutions, including the number of defendants.¹¹⁹ Second, data for 2008-2012 is based on the Department of Justice's Annual Performance and Accountability Report,¹²⁰ which provides statistics of criminal copyright prosecutions including the number of defendants.

One caveat is that there are various factors to take into consideration when analyzing the findings. The data for 1897-1954 is absent, and thus the evaluation of criminal copyright prosecutions at that time is limited. However, the lack of official data for 1897-1954 does not hold a great significance for my evaluation, as although there are no official statistics on the number of criminal copyright prosecutions at that time, there are some indications that criminal copyright prosecutions were highly rare under the 1909 Act. For example, as the Supreme Court noted:

The first full-fledged criminal provisions appeared in the Copyright Act of 1909, and specified that misdemeanor penalties of up to one year in jail or a fine between \$100 and \$1,000, or both, be imposed upon "any person who

118. When criminal copyright was introduced in 1897, the fiscal year started on July 1, 1896, and ended in June 30, 1897. From the fiscal year of 1977, a fiscal year starts in October 1 and ends on September 30 of the next calendar year (Congressional Budget Act of 1974, Pub. L. 93-344, 88 Stat. 297 (1974) (currently codified at 31 U.S.C. § 1102) (2012)). The data refers to criminal copyright infringement, prosecuted under 17 U.S.C. § 104 (1955-1978, due to the Act of July 30, 1947, 61 Stat. 652 which codified the Copyright Act of 1909); 17 U.S.C. § 506 (1978-2011); and 18 U.S.C. § 2319 (1982-2011).

119. United States Attorneys' Annual Statistical Reports for 1955-2013 are available at *Annual Statistical Reports*, U.S. DEP'T OF JUSTICE, <http://www.justice.gov/usao/resources/annual-statistical-reports> (last visited Oct. 1, 2013). As the Reports stopped indicating criminal copyright infringements prosecutions in 2008 (they only mark zero), I only use the data until 2008.

120. Since 1996, Congress mandated a report of Department of Justice prosecutions of IP crimes brought under §§ 2318, 2319, 2319A and 2320 (2012) of Title 18 of the U.S. Code. *See* Anticounterfeiting Consumer Protection Act of 1996, Pub. L. No. 104-153, 110 Stat. 1386 (1996) (codified originally as 18 U.S.C. §2320(e), currently under 18 U.S.C. §2320(h) (2012); *see, e.g.*, U.S. DEP'T OF JUSTICE, FY 2004 PERFORMANCE AND ACCOUNTABILITY REPORT, APP. C (2004), <http://www.justice.gov/archive/ag/annualreports/pr2004/Appd/A-c.pdf> (last visited Oct. 1, 2013); U.S. DEP'T OF JUSTICE, FY 2012 PERFORMANCE AND ACCOUNTABILITY REPORT, APP. D (2012), <http://www.justice.gov/ag/annualreports/pr2012/app-d.pdf> (last visited Oct. 1, 2013).

willfully and for profit” infringed a protected copyright. This provision was little used.¹²¹

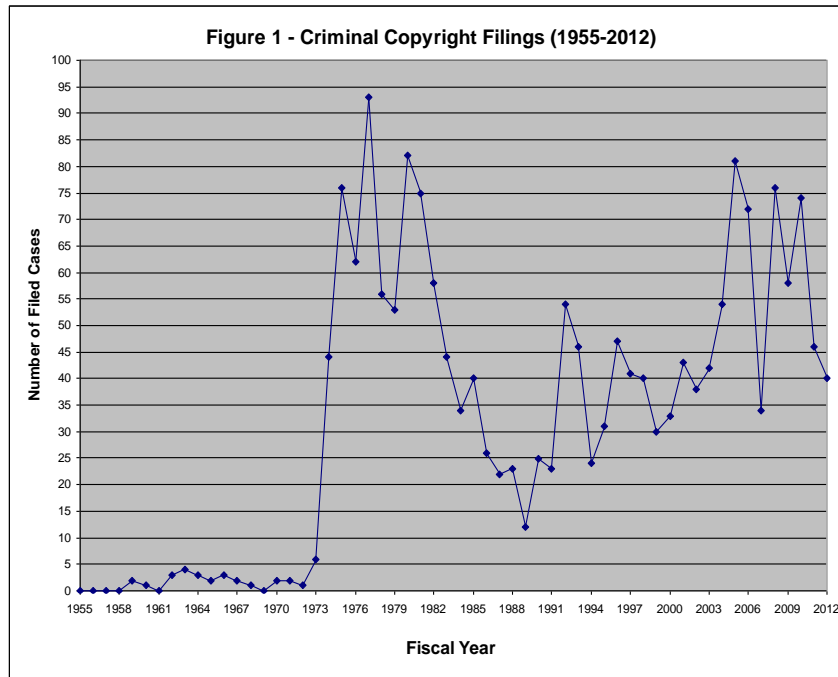
Also, as noted by Donald C. Curran, Register of Copyrights in 1985 in a Congressional hearing: “Although criminal sanctions have been available for copyright infringement since the 1909 Act, and in a quite limited way even before, these sanctions were seldom invoked before the 1970s.”¹²²

Thus, the official statistics between 1955-2012 are sufficient for the discussion of the criminal copyright gap, as prior to 1955 (and actually prior to 1970s) criminal prosecutions were very rare. The statistics are presented in Figure 1 (criminal copyright filings in the United States 1955-2012) (Aug. 31, 2012).¹²³

121. See *Dowling v. United States*, 473 U.S. 207, 221-22 (1985).

122. See *Civil and Criminal Enforcement of the Copyright Laws: Hearing on the Authority and Responsibility of the Federal Government to Protect Intellectual Property Before the Subcomm. on Patents, Copyrights and Trademarks of the S. Comm. on the Judiciary*, 99th Cong. 35 (1985) (statement of Donald C. Curran, active Register of Copyrights); see also WILLIAM STRAUSS, COMMITTEE ON THE JUDICIARY SUBCOMMITTEE ON PATENTS, TRADEMARKS, AND COPYRIGHTS, REMEDIES OTHER THAN DAMAGES FOR COPYRIGHT INFRINGEMENT 124 (March 1959), available at <http://www.copyright.gov/history/studies/study24.pdf> (arguing that the criminal section of the copyright act “has rarely been invoked” prior to 1959).

123. Figure 1 is processed from the statistical data I extracted from the United States Attorneys’ Annual Statistical Reports (1955-2008); and the Department of Justice’ Annual Performance and Accountability Report (2008-2012).



Analyzing the data reveals interesting results. First, during the low-tech criminalization phase, and up until the beginning of the analog high-tech phase (1955-1971), criminal copyright prosecutions were rare. Approximately twenty-six lawsuits were filed during a sixteen-year period. Donald C. Curran, as active Register of Copyrights of 1985, in a statement before the Subcommittee on Patents, Copyrights and Trademarks of the Committee on the Judiciary of the Senate, stated that the failure to use the 1897 and 1909 criminal sanctions until 1970, were due to four reasons: first, there was little legislative history to guide attorneys; second, due to a belief that federal civil remedies provided sufficient punishment to copyright infringers; third, due to a belief that criminal penalties are too slight to be effective deterrents; and finally, that liberalizing the right of defendants increased the burdens of criminal prosecutions, causing lawyers to opt for the surer civil field when possible.¹²⁴ I further analyze these and other possible reasons of the relatively low-rate of criminal copyright prosecutions in the section below.

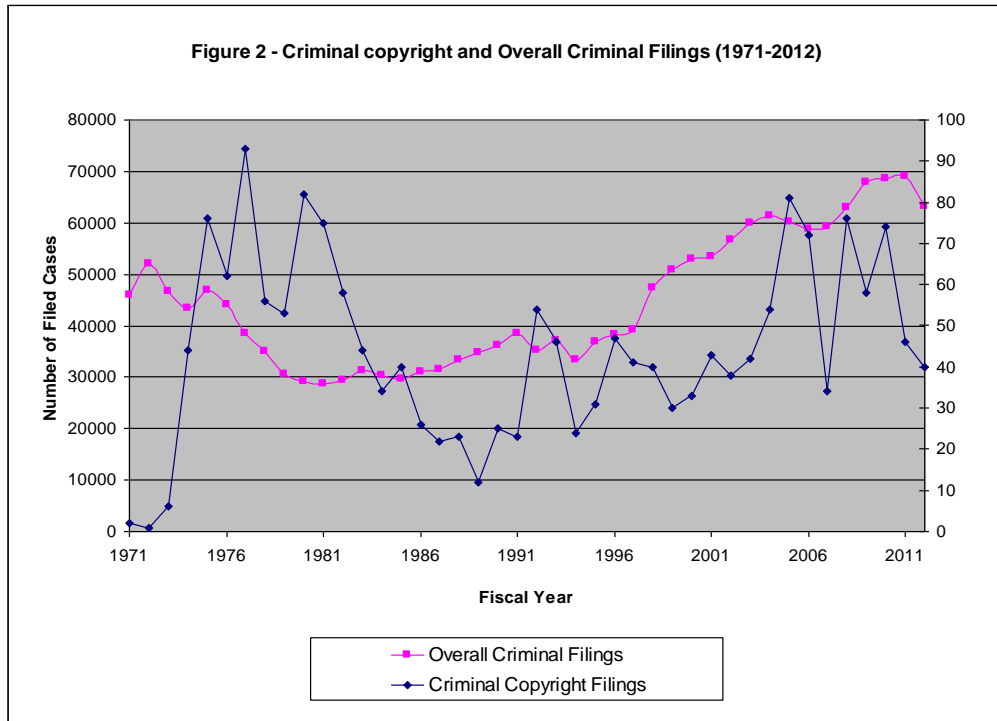
The rise in criminal prosecutions started in 1974, with the filing of forty-four criminal lawsuits in response to the legislation of the analog high-tech criminalization phase—that is, between 1971-1988—and continued to remain at the same level of prosecutions until 1985. However, between 1986-1991 there was a decrease in criminal copyright prosecutions. Moreover, the beginning of the digital high-tech phase in 1992 did not mark an increase in copyright prosecutions. Especially noteworthy, is that there was no substantial

124. See *Civil and Criminal Enforcement of the Copyright Laws*, *supra* note 122, at 35-36.

increase of litigation under the NET Act of 1997, contrary to what we could have expected from the massive lobbying that preceded the Act. It is not until 2005 that we can identify an increase in criminal copyright prosecutions, but only to resemble criminal prosecutions in the analog phase and not exceeding it.

In order to evaluate the findings that criminal copyright prosecutions do not always align with legislation, it is important to compare the findings to other possible trends which could explain this gap.

First, a decrease in criminal litigation could be a result of a decrease in overall criminal prosecution, due to, for example, governmental resources to prosecute in the same fiscal year. Hence, it is likely that a reduction of overall U.S. prosecutions led to a reduction of criminal copyright prosecutions. However, analyzing statistical data from the U.S. Attorneys' Annual Statistical Reports, which provides statistics of overall criminal prosecutions, illustrates that this is hardly the case.¹²⁵ As Figure 2 shows:

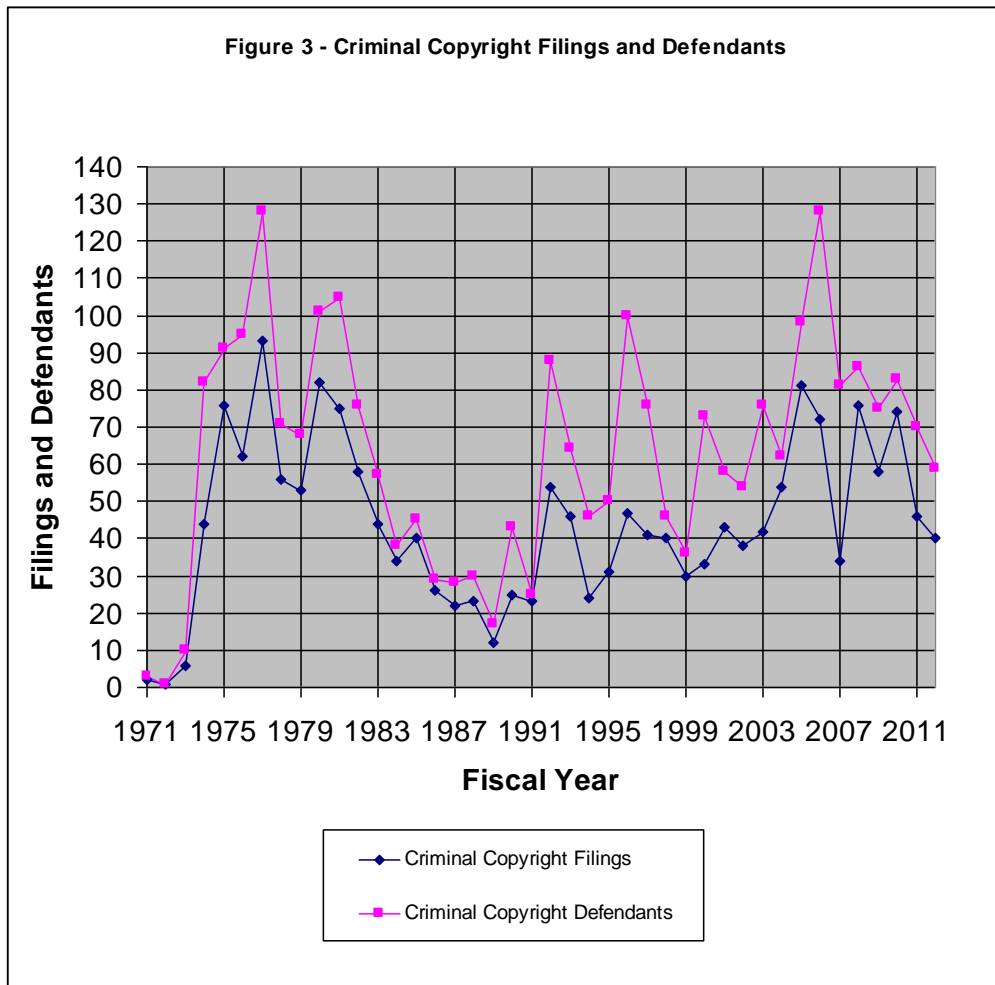


As Figure 2 indicates, criminal copyright prosecutions and overall criminal prosecutions in the high-tech criminalization phase do not overlap. Thus, this does not explain the reduction in criminal copyright prosecutions.

Second, since Figure 1 illustrates the number of filings rather than the number of individuals prosecuted, it is possible that although fewer cases were

125. United States Attorneys' Annual Statistical Reports for 1955-2012 are available at <http://www.justice.gov/usao/resources/annual-statistical-reports>.

filed, the filed cases contained more defendants, leading to a numerical rise in prosecuted defendants. For example, it is plausible that prosecutors did not increase the actual number of filed cases, but rather targeted larger operations of criminal copyright, and the filed cases involved more defendants than before. Thus, it is likely that prosecutions were targeted against large-scale operations of criminal copyright, leading to more convictions. However, as illustrated in Figure 3,¹²⁶ this is not the case:

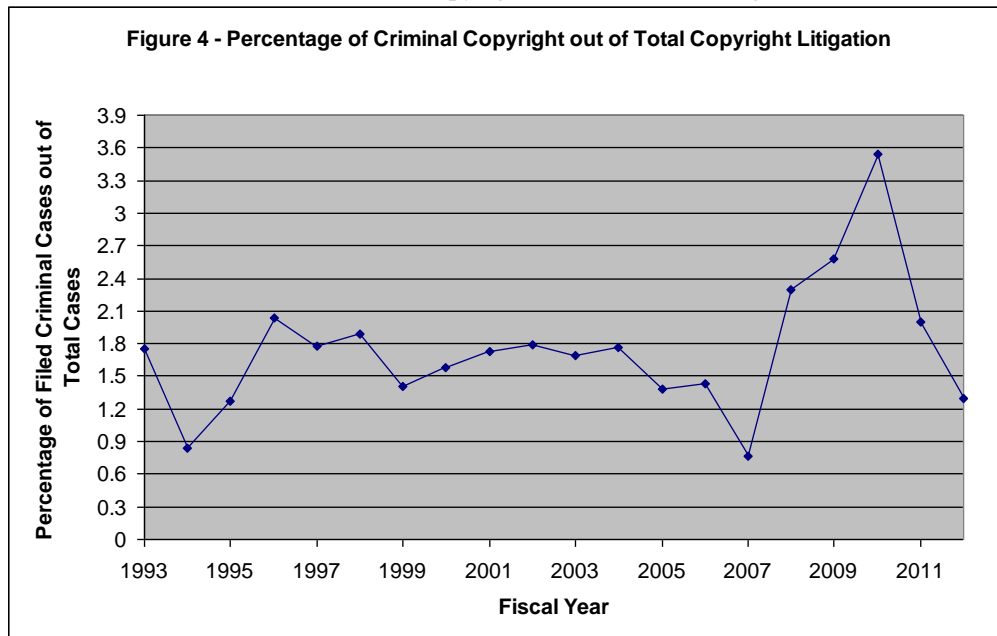


Although there is a rise in the number of accused in some fiscal years, namely, that some prosecutions involved more defendants. For example in 1974-1981, the number of defendants in fiscal years with lower filings were not higher than the number of defendants from previous fiscal years. Moreover,

126. Figure 3 is an illustration of processing the statistical data, which I obtained from two resources: The 1971-2007 statistical data is based on the United States Attorneys' Annual Statistical Reports. The data for 2008-2012 is based on the Department of Justice's Annual Performance and Accountability Report.

Figure 3 highlights that the number of defendants in 1977, which only marks the beginning of the high-tech criminalization phase, is higher than any other fiscal year.

Third, the decrease in criminal litigation could be the result of an overall decrease of civil and criminal litigation in those years. Hence, analyzing the ratio between civil and criminal copyright lawsuits should reveal whether criminal copyright takes a larger part of overall litigation annually and thus leads to the assumption that copyright is moving towards a paradigmatic change. Statistical data on civil copyright cases is taken from the *Judicial Business of the U.S. Courts* annual reports of 1997-2012, which provides data for the fiscal year ending on September 30 for the U.S. courts of appeal, district courts, and bankruptcy courts; the probation and pretrial services system; and other components of the federal Judiciary.¹²⁷ Analysis of statistical data from 1993-2012 of filed civil and criminal copyright are illustrated in Figure 4:



From 1996 to 2007, there was a decrease in the ratio between criminal copyright and civil copyright, suggesting that criminal copyright decreased during these years. On the other hand, between 2007-2010, there was an increase in the ratio between criminal copyright and civil copyright. These findings suggest that although there was an increase in the *civil-criminal copyright ratio* in recent years, it was only limited to a few years, while in other years, this ratio was in stagnation or even decreased. Thus, the decrease in criminal litigation is not a result of an overall decrease of civil and criminal litigation.

127. See *Judicial Business of the U.S. Courts*, U.S. COURTS (2013), <http://www.uscourts.gov/Statistics/JudicialBusiness.aspx> (last visited Oct. 1, 2013).

To conclude, using statistical data, I have examined criminal copyright prosecutions, in order to examine whether the criminalization process in copyright are merely or mostly a legislative act. The statistical data revealed interesting results. Part of the low-tech criminalization phase (1955-1971) was insignificant for criminal copyright perception, as both legislative acts and criminal enforcement measures were scarce. The more meaningful criminalization began with the high-tech criminalization phase, when along with the rise of criminal copyright legislative acts, there was a substantial rise in criminal prosecutions since 1974. Surprisingly, the insertion of the most criminal-oriented provisions into the copyright code with the passage of the NET Act, which was designed to “enable DOJ to prosecute several additional copyright infringement cases each year,”¹²⁸ along with the formation of more IP enforcement agencies and allocation of financial resources for the purposes of responding to copyright infringements via criminal law,¹²⁹ prosecutions did not rise (considering that implementing and enforcing the law is not immediate). After eliminating possible explanations of the criminal copyright gap such as a decrease in overall criminal prosecution; numerical rise in prosecuted defendants; and an overall decrease of civil and criminal copyright litigation, I conclude that there is a gap between the scope of criminal copyright liability and penalties and the infrequency of prosecution and punishment. I

128. The NET Act (No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997)) was enacted in an expectancy to increase prosecutions of criminal copyright infringers. See the first draft of the NET Act (H.R. REP. NO. 105-339, at 6 (1997)): “based on information from the Department of Justice (DOJ), CBO expects that enacting this bill would enable DOJ to prosecute several additional copyright infringement cases each year.”

129. It appears that the Department of Justice actively tries to combat intellectual property criminal infringements. For example, as part of the DOJ strategy to combat intellectual property crimes, the DOJ has developed a team of specially-trained prosecutors who focus specifically on intellectual property crimes. First, a team of specialists which serve as a coordinating hub for national and international efforts against intellectual property theft, entitled the Criminal Division’s Computer Crime and Intellectual Property Section (CCIPS). Second, assigning specialized prosecutors entitled “Computer and Telecommunications Coordinators” (CTCs) to different United States Attorney’s Offices. Third, adding a “Computer Hacking and Intellectual Property” (CHIP) units in different cities where IP enforcement is especially critical. Fourth, creating the National Intellectual Property Law Enforcement Coordination Counsel (NIPLECC) to improve coordination of the different law enforcement agencies. In 2004, CCIPS, CHIP, and NIPLECC, along with other investigating and enforcement agencies developed the Strategy Targeting Organized Piracy (“STOP!”) Initiative, “to prosecute organized criminal networks that steal creative works from U.S. businesses and develop international interest in and commitment to the protection of intellectual property,” resulting in global large-scale action against piracy and counterfeiting networks. See *Finding and Fighting Fakes: Reviewing the Strategy Targeting Organized Piracy: Hearing Before the S. Subcomm. on Oversight of Government Management, the Fed. Workforce, and the District of Columbia of the S. Comm. on Homeland Security and Governmental Affairs*, 109th Cong. 76, 79-80 (2005); Hardy, *supra* note 9, at 323 (describing the growth of new programs in executive branch law enforcement agencies); Pyun, *supra* note 63, at 368-71 (describing the Department of Justice initiatives); U.S. DEP’T OF JUSTICE, REPORT OF THE DEPARTMENT OF JUSTICE’S TASK FORCE ON INTELLECTUAL PROPERTY 13 (Oct. 2004), http://www.justice.gov/olp/ip_task_force_report.pdf (last visited Oct. 1, 2013).

now turn to unveil the possible reasons for the criminal copyright gap, attempting to obtain better understandings of the criminalization process and of the gap.

B. *The Criminal Copyright Gap*

Statistical data indicates that the annual amount of criminal litigation is inconsistent. For example, criminal copyright litigation does not rise each year as expected from the massive criminal copyright legislation. I now turn to analyze this *criminal copyright gap* to understand its reasoning and possible ramifications.

The *criminal copyright gap* is a possible result of under-enforcement of criminal copyright law by the authorized law enforcement agencies. The reasons for under-enforcement of criminal activities in various legal fields are diverse.¹³⁰ Under-enforcement of criminal law can be a result of various reasons including favoritism or hostility to a specific group;¹³¹ official neglect; prioritizing resources/economic considerations; a conflict between enforcers and legislators over the meaning of the law and its appropriateness.¹³² Focusing on general reasons for under-enforcement of criminal law is insufficient on its own to provide a full understating of the criminal copyright gap. As each law has its unique characteristics, the criminal copyright gap should be examined through the uniqueness of copyright enforcement. Accordingly, I offer several possible explanations of the criminal copyright gap, in accordance with political, economic, and social theories related to copyright infringement and enforcement.

First, criminal legislation could be the result of an international pressure to legislate but not necessarily enforce the legislation. For example, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) requires member states to provide for criminal procedures and penalties, along with enforcement procedures, but does not address the scale of enforcement.¹³³

130. For a comprehensive analysis of under-enforcement in criminal law, see Alexandra Natapof, *Underenforcement*, 75 FORDHAM L. REV. 1715, 1722-75 (2006).

131. Darryl K. Brown, *Street Crime, Corporate Crime, and the Contingency of Criminal Liability*, 149 U. PA. L. REV. 1295, 1302 (2001) (listing “race” as an example of discriminatory street crime enforcement); Tom Stacy & Kim Dayton, *The Underfederalization of Crime*, 6 CORNELL J.L. & PUB. POL’Y 247, 292 (1997) (describing the effects of the “race-to-the-bottom” theory, arguing, e.g., that poor neighborhoods are under policed);

132. For these, and more examples, see Natapof, *supra* note 130, at 1722.

133. Agreement on Trade-Related Aspects of Intellectual Property Rights art. 3, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) [hereinafter TRIPs], which requires member states to provide for criminal procedures and penalties, which should apply at least in cases of copyright piracy on a commercial scale. Although art. 41 obliges Member States to ensure that enforcement procedures are available under their law so as to permit effective action against any act of infringement of IP rights covered by the Agreement, it does not address the scale of enforcement. In addition, art. 41.5 of TRIPs states that “this Part does not create

Enforcement provisions in international agreements are either ineffective,¹³⁴ or crafted as broad legal standards rather than concrete rules that member states can interpret¹³⁵ and implement differently.¹³⁶ As long as international treaties and agreements focus mostly on legislation and refrain from obligatory enforcement measures, or do not craft obligatory narrow legal rules on IP enforcement, criminal legislation may to some extent become a dead letter, at least in some countries.¹³⁷ It is important to mention the existence of non-traditional international IP forums, usually private or public-private partnership, which are mostly aimed at IP enforcement.¹³⁸ Thus, there is also an international pressure to enforce the International Agreements and even add additional IP enforcement requirements to the existing agreements.

Second, criminal legislation is partly initiated by the lobbying of interest groups that influence legislation, and have little or no power to influence enforcement of legislation.¹³⁹ Thus, the lobbying of interest groups to impose

any obligation to put in place a judicial system for the enforcement of intellectual property rights distinct from that for the enforcement of law in general, nor does it affect the capacity of Members to enforce their law in general.”

134. For more on international IP agreements, e.g., TRIPs, and the reasons why they sometimes fail to provide effective global enforcement of IP rights, see Peter K. Yu, *TRIPs and Its Achilles' Heel*, 18 J. INTELL. PROP. L. 479 (2011).

135. Jerome H. Reichman & David Lange, *Bargaining Around the TRIPs Agreement: The Case for Ongoing Public-Private Initiatives to Facilitate Worldwide Intellectual Property Transactions*, 9 DUKE J. COMP. & INT'L L. 11, 35 (1998) (arguing that TRIPs “enforcement provisions are crafted as broad legal standards, rather than as narrow rules, and their inherent ambiguity will make it harder for mediators or dispute-settlement panels to pin down clear-cut violations of international law.”).

136. See, e.g., *id.* at 36 (arguing that the TRIPs enforcement level will probably disappoint rights holders in developed countries).

137. But see Peter K. Yu, *Enforcement, Economics and Estimates*, 2 W.I.P.O. J. 1, 1 (2010) (arguing that in recent years there is an increasing focus on IP enforcement standards at the international level which led to the negotiations of ACTA).

138. For example, The Global Congress on Combating Counterfeiting and Piracy is designed to produce recommendations mainly aimed at government authorities to step up enforcement mechanism and action. The Global Congress on Combating Counterfeiting and Piracy is convened by a public-private partnership with representatives from INTERPOL, the World Customs Organization (WCO), the World Intellectual Property Organization (WIPO), the International Chamber of Commerce/BASCAP initiative (ICC/BASCAP) and the International Trademark Association (INTA). See *About the Global Congress*, GLOBAL CONGRESS, <http://www.ccapcongress.net/about.htm> (last visited Oct. 1, 2013). For more examples of IP enforcement initiatives, see Viviana Muñoz Tellez, *The Changing Global Governance of Intellectual Property Enforcement: A New Challenge for Developing Countries*, in *INTELLECTUAL PROPERTY ENFORCEMENT: INTERNATIONAL PERSPECTIVES* 3, 9-10 (Li Xuan & Carlos M. Correa eds., 2009).

139. Different interest groups lobby for copyright criminalization. For example, the music, motion picture and computer industries lobbied Congress to strengthen copyright protection and enforcement in the high-tech criminalization phase, resulting in, e.g., the Sound Recording Act of 1971, Pub. L. No. 92-140, 85 Stat. 391 (1971), the Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976), the Piracy and Counterfeiting Amendments Act of 1982, Pub. L. No. 97-180, 96 Stat. 91 (1982), and the No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997). See Penney, *supra* note 4, at 63; Saunders, *supra* note 9, at 674-75. For a general review of the local and global political process of copyright

criminal sanctions on society is not necessarily applicable to enforcement agencies. As reported by a representative of right holders, at least until 2000 in the United States, the Walt Disney Company urged the federal prosecutors to prosecute criminal copyright and was rejected, even after the enactment of the NET Act in 1997.¹⁴⁰ As Peter Nolan, Senior Vice President/Assistant General Counsel of the Walt Disney Company indicated (after being asked, “has Disney actually sought a prosecutor to bring a case?”):

Oh, yes, and been declined on quite a few cases. In large part, it wasn't necessarily anything other than the offices having limited resources. I think this is, by the way, normal human thinking or management thinking. The U.S. Attorney says, “I have limited resources. I want to go after the person who is causing violence to my fellow citizens in my locality. I'm going to go after them rather than a copyright infringement which has a comparatively low guideline level, and as a result, I'm not going to bring it. I just don't have the manpower to do it or the money.” And then we as copyright owners decide to go civilly.¹⁴¹

However, there are few reports that indicate that some interest groups, such as the RIAA, meet with law enforcement agencies on a regular basis to assist them in copyright infringements detection. Thus, it seems that interest groups, to some extent, influence law enforcement agencies in combating copyright and trademark infringements.¹⁴²

Another political explanation for criminal copyright gap, although lacking any official evidence, is that the under-enforcement of copyright law is a result of intentional governmental instructions, as a compromise between political pressure by industries that desire strong copyright protection and industries that do not.¹⁴³ The under-enforcement of copyright law could also be a result of an intentional policy to refrain from public pressure and the formation of a “police state,” due to the nature of copyright infringements detection (which I further

protection, see Michael Birnhack, *Trading Copyright: Global Pressure on Local Culture, in THE DEVELOPMENT AGENDA: GLOBAL INTELLECTUAL PROPERTY AND DEVELOPING COUNTRIES* 363 (Neil Netanel ed., 2008).

140. No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997).

141. *Intellectual Property/Copyright Infringement*, UNITED STATES SENTENCING COMMISSION 233 (2000), <http://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-projects-and-surveys/economic-crimes/20001012-symposium/tGroupTwoDayTwo.pdf>.

142. See PAUL R. PARADISE, TRADEMARK COUNTERFEITING: PRODUCT PIRACY, AND THE BILLION DOLLAR THREAT TO THE U.S. ECONOMY 256 (1999) (arguing that the RIAA assist law enforcement, such as the Organized Crime Investigative Division (OCID) and “trains law enforcement and customs inspectors on how to identify counterfeit products, how to get in touch with the RIAA, and what legislation and statutes apply to music piracy”).

143. See Natapof, *supra* note 130, at 1741 (arguing that “the official choice to over- or under-police is subject as much to democratic pressures as technological ones and reflects governmental responsiveness to competing, legitimate claims over the Internet”); Edward K. Cheng, *Structural Laws and the Puzzle of Regulating Behavior*, 100 NW. U. L. REV. 655, 714-15 (2006) (arguing that “regulation of music piracy can be cast as a struggle between the music industry and electronic equipment manufacturers”).

explain), and the need to allocate many resources.¹⁴⁴

Third, it is plausible that copyright criminal legislation aims to achieve deterrence simply or mostly by the legislative act, and the fact that criminal litigation did not increase, does not necessarily indicate that criminalization failed.¹⁴⁵ For example, according to the House Report on the enactment of the NET Act, it was only expected to “enable DOJ to prosecute several additional copyright infringement cases each year.”¹⁴⁶ Hence, criminal copyright litigation was not supposed to increase dramatically even after the insertion of many criminal provision to copyright law. It might be the case that criminal legislation does deter copyright crimes, resulting in less litigation.

Moreover, achieving a deterrent effect from committing copyright crimes is not only quantitative but also qualitative; that is, even if the State does not raise its prosecution rate (quantities), or only slightly raises it, media attention on a single “newsworthy” case could potentially achieve the deterrence of committing copyright infringement,¹⁴⁷ and longer periods of imprisonment for every case could achieve the deterrent effect.¹⁴⁸ As Kevin Di Gregory, a DOJ representative, noted in Congress:

Even a handful of appropriate and well-publicized prosecutions under the NET Act is likely to have a strong deterrent impact, particularly because the crime in question is a hobby, and not a means to make a living. If these prosecutions are accompanied by a vigorous anti-piracy educational campaign sponsored by industry, and by technological advances designed to make illegal

144. Cheng, *supra* note 143, at 659 (arguing that “achieving enforcement levels necessary for effective deterrence may require unacceptably oppressive methods . . . [and] [h]aving thousands of traffic officers monitoring the streets (or the Internet) for illegal activity—essentially, the imposition of constant surveillance—conjures images of a police state”).

145. See Strauss, *supra* note 122, at 124 (arguing that the infrequency of criminal copyright prosecutions prior to 1959 “does not disprove its efficacy as a deterrent to willful and reckless infringements”). *But see* Hardy, *supra* note 9, at 323 (arguing that “whatever [criminal copyright] penalties and punishments are legislated must be enforced, or they will amount to little”).

146. See H.R. REP. NO. 105-339, at 6 (1997).

147. See Salil K. Mehra, *Software as Crime: Japan, the United States, and Contributory Copyright Infringement*, 79 TUL. L. REV. 265, 294 (2004) (arguing that criminal prosecutions for copyright infringement often get significant media attention and what tend to get the most attention are prosecutions whose target elicits surprise). In addition, criminal arrests, followed by media coverage, could potentially be sufficient to create deterrence due to fear of damage to reputation. *See id.* at 297. The author refers to an incident of criminal copyright infringement in Japan, in which the defendant lost her job and her home but only served twenty-two days in detention and paid a fine of less than \$1000. *Id.* (arguing that in Japan, where much of the penalty of criminal arrest is damage to reputation and collateral harm, the arrest itself tends to serve as the prosecution, which creates a substantial chilling affect before guilt or innocence is assessed); *see also* Aaron M. Bailey, *A Nation of Felons: Napster, the Net Act, and the Criminal Prosecution of File-Sharing*, 50 AM. U. L. REV. 473, 476 (2000) (“Prosecuting a select few infringers to set an “example” may discourage other potential infringers.”).

148. See, e.g., *Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 43 (arguing that a trend towards longer periods of incarceration may exist).

copying more difficult, we are hopeful that a real dent can be made in the practice of digital piracy.¹⁴⁹

Qualitatively, criminal copyright succeeded to some extent. Consistent with Congress' objectives for the NET Act to prosecute commercial-scale "pirates,"¹⁵⁰ federal agents brought down "Pirates With Attitude" in 1999;¹⁵¹ broke the "DrinkorDie" software piracy ring in 2001;¹⁵² and prosecuted other computer software and motion pictures infringers.¹⁵³ Thus, under this reasoning, focusing on large-scale operations partly fulfill the intention behind criminal copyright legislation and, furthermore, could be sufficient to create deterrence against infringement. Moreover, targeting large-scale operations could emphasize the argument that criminal copyright mainly serves to complement the civil enforcement system.¹⁵⁴

However, it seems that this reasoning does not align with the current reality that criminal copyright legislation and copyright infringements have not ceased. Whether or not copyright infringements and counterfeiting rates are increasing annually is debatable and highly difficult to measure, if at all possible. Some data indicates that copyright infringements and counterfeiting rates are growing annually worldwide and specifically in the United States. For example, a study conducted by the International Planning and Research Corporation (IPRC), for the Software Alliance (BSA), a trade association mainly representing the software industry, showed that "software piracy" did not decrease in the U.S. from 1997 through 1999, and that global revenue losses to software piracy increased from \$11.3 billion in 1997 to \$12.2 billion in 1999.¹⁵⁵ Nevertheless, it is safe to argue that criminal legislation does not fully achieve deterrence simply by the legislative act, or at least not enough deterrence.¹⁵⁶

149. *Implementation of the "Net" Act and Enforcement Against Internet Piracy: Oversight Hearing Before the Subcomm. on Courts and Intellectual Prop., House Comm. on the Judiciary*, 106th Cong. 22 (1999) (statement of Kevin Di Gregory of the United States Department of Justice).

150. 143 CONG. REC. S12, 689 (daily ed. Nov. 13, 1997) (statement of Sen. Hatch) ("Again, the purpose of the bill is to prosecute commercial-scale pirates who do not have commercial advantage or private financial gain from their illegal activities. But if an overzealous prosecutor should bring and win a case against a college prankster, I am confident that the judge would exercise the discretion that he or she may have under the Sentencing Guidelines to be lenient. If the practical effect of the bill turns out to be draconian, we may have to revisit the issue.").

151. "Pirates With Attitude" operated 13 FTP (file transfer protocol) servers hosting over 30,000 software programs. Menell, *supra* note 20, at 323.

152. *Id.*

153. *Id.*; Goldman, *supra* note 66, at 381-92.

154. *See* Menell, *supra* note 20, at 329-30 (arguing that we should view public enforcement as complementary to civil enforcement).

155. *See* INT'L PLANNING & RESEARCH CORP., SEVENTH ANNUAL BSA GLOBAL SOFTWARE PIRACY STUDY 6 (2002), available at http://www.bsa.org/~media/Files/Research%20Papers/GlobalStudy/2002/Global_Piracy_Study_2002.pdf; Goldman, *supra* note 66, at 398-99 (discussing the IPRC study).

156. *See, e.g.*, Bitton, *supra* note 103, at 67-68 (arguing that the fact that in recent years counterfeiting rates have continuously grown suggest that the criminal enforcement systems

Fourth, criminal copyright is not designed to eliminate illegal infringements, but rather reduce them to a profitable level. Under this argument, enforcement of copyright does not rise, at least not substantially, as there is a “tolerance rate” in which copyright is still profitable for its right holders, and criminal copyright only aids in maintaining this rate.¹⁵⁷ Under this argument, right holders are not perusing actual enforcement as long as civil remedies are more appealing.¹⁵⁸ However, this is a weak argument in favor of under-enforcement, as even if such tolerance rate exists, it is unknown and unquantifiable, as this rate will vary between different right holders. Even if such tolerance rate could be measured, it will most likely be highly inaccurate and expensive to measure, as infringements rates most likely change rapidly.

Fifth, despite governmental efforts to increase the involvement of enforcement agencies in enforcement of criminal copyright offenses, actual enforcement is problematic as the digital environment poses many difficulties

in place have not significantly deterred or affected people’s behavior in this field); Elysia McMahan, *Top 5 Most Counterfeited Products in the World*, FIRST TO KNOW (Nov. 13, 2014), <http://firsttoknow.com/top-5-most-counterfeited-products-in-the-world> (last visited Feb. 15, 2015) (“Since 1982, the global trade in illegitimate goods has increased from \$5.5 billion to approximately \$600 billion annually.”). In the United Kingdom, file-sharing was reported to increase from £278 million in lost sales in 2003 to £414 million in lost sales in 2005. See ANDREW GOWERS, GOWERS REVIEW OF INTELLECTUAL PROPERTY (2006), available at <http://www.official-documents.gov.uk/document/other/0118404830/0118404830.pdf>. However, the true rates of copyright infringement are extremely difficult, if not impossible, to estimate, thus, this data should be examined carefully. See United States Government Accountability Office, *Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods*, REPORT TO CONGRESSIONAL COMMITTEES (2010), <http://www.gao.gov/new.items/d10423.pdf> (last visited Oct. 1, 2013) (“Generally, the illicit nature of counterfeiting and piracy makes estimating the economic impact of IP infringements extremely difficult, so assumptions must be used to offset the lack of data. Efforts to estimate losses involve assumptions such as the rate at which consumers would substitute counterfeit for legitimate products, which can have enormous impacts on the resulting estimates. Because of the significant differences in types of counterfeited and pirated goods and industries involved, no single method can be used to develop estimates. Each method has limitations, and most experts observed that it is difficult, if not impossible, to quantify the economy-wide impact.”); see also the 2010 Annual report by the International Federation of the Phonographic Industry (IFPI), which states that: although P2P piracy is the single biggest problem and did not diminish in 2009, the illegal distribution of infringing music through non-P2P channels is growing considerably. The research showed the biggest increases in usage for overseas unlicensed MP3 pay sites (47%) and newsgroups (42%). Other significant rises included MP3 search engines (28%) and forum, blog and board links to cyberlockers (18%). *IFPI Digital Music Report*, IFPI (2010), <http://www.ifpi.org/content/library/DMR2010.pdf> (last visited Oct. 1, 2013). See also Robin Fry, *Copyright Infringement and Collective Enforcement*, 2002 E.I.P.R. 516, 522 (2002) (“Given the fact that the legal protection is sufficient, the increasing presence of counterfeiting and piracy can only be explained by an insufficient enforcement situation.”).

157. See Ariel Katz, *A Network Effects Perspective on Software Piracy*, 55 U. TORONTO L.J. 155, 191 (2005) (arguing that “tolerating piracy can be profitable only as long as the rate of piracy is controlled . . . [and] may be profitable only as long as there are enough paying customers”).

158. See Strauss, *supra* note 122, at 124 (arguing that civil actions could be preferred by injured copyright owners since they offer a more lucrative result).

to enforcement agencies, such as detection,¹⁵⁹ identifying suspects,¹⁶⁰ cross-over jurisdictions, overseas operators and prosecuting juveniles.¹⁶¹ Take detection, for example. Detection of illegal file-sharing is not necessarily an easy task. It is important to first differentiate between civil and criminal detection, because they hold significant differences. In order to detect illegal file-sharing, right holders will usually connect to a peer-to-peer (P2P) network and search for their copyrighted materials. Once found, the right holders track the user's IP address. On the civil aspect, the right holder can apply for a subpoena to reveal the identity of the file-sharer to file a civil lawsuit.¹⁶² Even if some courts will not easily reveal the identity of the file-sharer, I still consider it a relatively easy and cheap method of detecting and filing a civil lawsuit.

Criminal actions are different. In order to pass the threshold of criminal liability, sharing a single song online will probably not be sufficient for prosecution. In order to pass the threshold, the file-sharer will have to be linked to other infringements in a set period, and only then, he or she could be liable for criminal prosecution. This raises three main problems.

The first problem is that it is almost impossible to analyze the file-sharer's

159. In a different context, see Cheng, *supra* note 143, at 656 (arguing that enforcement of sporadic and victimless offenses are extremely difficult to detect); Robert A. Kagan, *On the Visibility of Income Tax Violations*, in *TAXPAYER COMPLIANCE: SOCIAL SCIENCE PERSPECTIVES* 76, 76-78 (Jeffrey A. Roth & John T. Scholz eds., 1989) (suggesting the term "low-visibility" offenses).

160. Identifying criminal infringers could be proven as a challenge to potential prosecution: ISPs are currently not obliged to monitor their users online, as to protect their privacy; identifying infringing uses necessitates financial resources which are limited and are more complex: they need to pass a threshold of infringements to be considered criminal. "Protection of Privacy.—Nothing in this section shall be construed to condition the applicability of subsections (a) through (d) on—(1) a service provider monitoring its service or affirmatively seeking facts indicating infringing activity, except to the extent consistent with a standard technical measure complying with the provisions of subsection (i); or (2) a service provider gaining access to, removing, or disabling access to material in cases in which such conduct is prohibited by law." 17 U.S.C. § 512(m) (2012); Bailey, *supra* note 147, at 514-15 (arguing that identifying users for prosecution may raise much more complex legal questions than those raised by civil litigation, as the evidentiary standards for a criminal conviction are stricter than in civil suits); see also David R. Johnson & David Post, *Law and Borders: The Rise of Law In Cyberspace*, 48 *STAN. L. REV.* 1367 (1996).

161. The United States Department of Justice terminated federal criminal investigations under the NET Act, when it found the perpetrator was a juvenile and therefore not normally subject to federal prosecution. See *Implementation of the "Net" Act and Enforcement Against Internet Piracy*, *supra* note 149; see also Reno, *supra* note 117 (finding that "pirates" and counterfeiters have formed "transnational organized networks that are difficult to identify and require significant resources to investigate and prosecute").

162. See 17 U.S.C. § 512(h) (2012). However, it is not an easy task for courts to decide, due to a possible risk to fundamental human rights, such as free speech and the right to privacy. See Michael Birnhack, *Unmasking Anonymous Online Users in Israel*, 2 *HUKIM* 51, 82 (2010) [Hebrew]; see generally Eldar Haber, *The French Revolution 2.0: Copyright and the Three Strikes Policy*, 2 *HARV. J. SPORTS & ENT. L.* 297, 317 (2011); Lyrrisa Barnett Lidsky & Thomas F. Cotter, *Authorship, Audiences, and Anonymous Speech*, 82 *NOTRE DAME L. REV.* 1537 (2007).

allegedly illegal activities to see whether it amounts to criminal activity, without a database. Under this scenario, enforcement agencies must maintain and operate a database that contains information regarding every file-sharer's allegedly illegal activities. For this database to be effective, as detection of infringers is highly expensive, right holders must be willing and able to provide enforcement agencies with details on the alleged infringements and infringers, such as IP addresses. Only then, enforcement agencies might be able to decide whether an end-user passes a threshold for criminal prosecution.

The second problem is that an IP address relates usually to a household, meaning that there is no technological differentiation among different members of the household, it is almost impossible to analyze the database for members passing the threshold of infringement. If criminal prosecution will be filed against any household IP address that passes the threshold, then each alleged illegal activity must be analyzed separately, by different members of the household, to identify whether one of them passes the criminal threshold. This task is of course expensive and problematic,¹⁶³ and could perhaps be overcome by setting a very high threshold for the entire household, which will ensure that at least one of the household was engaging in criminal activity.¹⁶⁴

The third problem is that this method of detecting infringements is almost solely reserved for tracking P2P infringers. Thus, the perceivable outcome of the success of criminal prosecutions occurring by database identification is that users will either encrypt their actions or their IP addresses using various technologies and thus avoid getting caught, or use other methods of downloading and data consumption, such as websites that offer streaming of copyrighted materials, direct access to copyrighted materials, and instant messaging and chat software.¹⁶⁵

Thus, finding criminal infringers is a difficult task for law enforcement agencies, often lacking the ability to increase detection of criminal infringers.¹⁶⁶ In this case, the need for interest groups' private investigation and

163. It may require, for example, summoning of witnesses, searches in houses, seizures and examination of computers, etc. For this argument, see Alexander Peukert, *Why Do 'Good People' Disregard Copyright on the Internet?*, in *CRIMINAL ENFORCEMENT OF INTELLECTUAL PROPERTY LAW* 151, 160 (Christophe Geiger ed., 2012).

164. In Germany for example, criminal proceedings regarding copyright infringement only begins when a relatively high threshold is reached. As indicated by the German Ministry of Justice, public prosecutors investigate only if more than 700 works had been made available, and if a person without prior convictions had not uploaded more than 2500 works, "he or she would not be dispensed with preferment of public charges by a payment of a lump sum because 'the degree of guilt' would not require the opening of main proceedings." See *id.* at 160.

165. See Haber, *supra* note 162, at 323-24 (describing methods of avoiding copyright infringement detection over the Internet).

166. For example, after lack of convictions under the NET Act, No Electronic Theft (NET) Act, Pub. L. No. 105-47, 111 Stat. 2678 (1997), during the first eighteen months following its enactment, in a hearing of the House Judiciary Committee's Subcommittee on Courts and Intellectual Property in May 1999, Kevin Di Gregory of the United States Department of Justice pointed out several significant challenges to law enforcement: first,

cooperation with law enforcement agencies is crucial (much like in other criminal offenses), but, when it comes to taking active part in prosecution, the interest groups choose to be less active compared to their lobbying efforts to criminalize copyright.¹⁶⁷ Moreover, interest groups might be more interested to use the criminal law as leverage to settle civil lawsuits, without actual usage of the criminal sanctions; they can file a complaint on a person to law authorities, and meanwhile file a civil suit against that person, pressuring him to settle. After such settlement, some interest groups might be less motivated to aid law enforcement agencies in bringing that person to criminal justice.

It is worth noting that despite the difficulties posed by the digital environment, it is probably easier to catch a larger amount of criminal infringers than in the physical environment, due to detection technologies and methods.¹⁶⁸ Thus, this reason is insufficient on its own to explain the criminal

unlike physical-world copyright “piracy,” which requires expensive manufacturing equipment, storage facilities, and a distribution chain, including middlemen and retailers, illegal digital distribution of copyrighted works requires only a computer and an Internet account. *Implementation of the “Net” Act and Enforcement Against Internet Piracy*, *supra* note 149; *see also* Goldman, *supra* note 66, at 377-78 (describing the implementation of the NET Act hearing). Thus, the Internet “pirate” is a less obvious focus for a criminal investigation. *Implementation of the “Net” Act and Enforcement Against Internet Piracy*, *supra* note 149. Second, it is difficult to count the number of illegitimate copies made over the Internet and therefore calculate damages and losses. *Id.* Third, when copyright crimes occur over the Internet, where no specific United States Attorney has primary responsibility or jurisdiction, prosecutions often cut across prosecutors’ territories, leaving them without a crime to prosecute in their own district. *Id.* Fourth, investigating digital copyright piracy requires agents that are not only experienced criminal investigators, but also possess special technical skills, and thus are hard to retain. *Id.*

167. See, e.g., a reported telephone conversation with Joel Schoenfield, RIAA special antipiracy counsel that took place on April 9th, 1984. Schoenfield stated that “RIAA is selective in what they refer to Justice, turning over only the most egregious cases.” *See Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 41; *id.* at 3 (statement of Victoria Toensing, Deputy Assistant Attorney General at the criminal division) (stating that “there has been a history of interest in copyright prosecutions in the Criminal Division,” and that Julian Greenspun, a member of the General Litigation Section “communicated to each industry [i.e., the record industry, the motion picture industry and the computer industry] an offer that if for some reason they found a certain U.S. attorney’s office was unable or did not wish to bring a certain prosecution that we had an offer in the Criminal Division, in the General Litigation Section, to review that case to see if it merited prosecution”). On the other hand, *see* Gregor Urbas, *Criminal Enforcement of Intellectual Property Rights: Interaction Between Public Authorities and Private Interests*, in *NEW FRONTIERS OF INTELLECTUAL PROPERTY LAW: IP AND CULTURAL HERITAGE, GEOGRAPHICAL INDICATIONS, ENFORCEMENT AND OVERPROTECTION* 303, 305 (Christopher Heath & Anselm Kamperman Sanders eds., 2005) (arguing that many industry bodies, e.g., the Motion Picture Association, the International Federation of Phonographic Industries and the Business Software Alliance, take an active role in providing intelligence and operational support in public enforcement activities).

168. In the digital environment, there are many ways to catch copyright infringers. For example, using port-based analysis that is based on the concept that many P2P applications have default ports on which they function, and administrators “observe the network traffic and check whether there are connection records using these ports.” Yimin Gong, *Identifying P2P Users Using Traffic Analysis*, SYMANTEC (July 20, 2005),

copyright gap.

Sixth, governmental guidelines of criminal copyright prosecutions either don't exist, or are too vague for prosecutors. Take the United States Attorneys Manual as an example: the Executive Office for United States Attorneys (EOUSA) publishes and maintains an internal manual for attorneys and other organizational units of the department concerned with litigation.¹⁶⁹ Until 1985, the manual did not guide criminal prosecutors to pursue criminal copyright infringements, at least not at a high-scale. For example, the 1984 revision to the manual stated that, "the existing Federal statutory scheme clearly contemplates enforcement primarily by civil means." In other words, the manual perceived criminal remedies as merely supplementary to civil copyright.¹⁷⁰

Due to concerns raised by representatives of the motion picture and recording industries that the 1984 manual might be constructed to permit declination of criminal copyright cases in favor of civil remedies,¹⁷¹ the Department of Justice revised the manual. The 1985 revision stated that, "all criminal copyright matters should receive careful attention by the United States Attorney." The revised section did not change since.¹⁷² However, it seems that this argument does not align with United States statistics of criminal copyright prosecutions; since 1985, there should have been a substantial rise in prosecutions, but no such rise is shown.

Seventh, enforcement agencies might feel conflicted about criminal copyright, exercising their prosecutorial discretion, and individual feelings may override professionalism and "rule of law" norms. As some parts of the public have little interest in imprisoning infringers without a profit motive,¹⁷³ especially when the infringers are young,¹⁷⁴ enforcement agencies might

<http://www.symantec.com/connect/articles/identifying-p2p-users-using-traffic-analysis>. The second method, known as protocol analysis, uses "an application or piece of equipment [that] monitors traffic passing through the network and inspects the data payload of the packets according to some previously defined P2P application signatures." *Id.*; see also Haber, *supra* note 162, at 323. Another method is by using DRM steganography, such as watermarks that can aid detect the Internet identity of the User Internet Protocol (IP) address. See *Information Hiding: Steganography & Digital Watermarking*, JJTC (last visited Jan. 15, 2014), <http://www.jjtc.com/Steganography>.

169. See *Mission and Functions*, UNITED STATES DEPARTMENT OF JUSTICE (last visited Oct. 1, 2013), <http://www.justice.gov/usao/eousa/mission.html>.

170. See *Civil and criminal enforcement of the copyright laws*, *supra* note 122, at 8 (statement of Senator Mathias).

171. *Id.* at 15-16 (statement of Victoria Toensing, deputy assistant attorney general at the criminal division).

172. United States Attorneys' Manual § 9-71.010 (2012).

173. See Jonathan Band & Masanobu Katoh, *Members of Congress Declare War on P2P Networks*, J. INTERNET L. (2003), <http://www.policybandwidth.com/publications/JBand-CongressP2PWar.pdf> (noting that enforcement of criminal copyright against non-commercial infringers has not been a priority for the Justice Department, which perceives that the public has little interest in seeing college students sent to prison merely because they traded songs on the Internet).

174. The United States Department of Justice recognized that the "NET Act defendants—because they tend to be young and acting without a profit motive—tend to

abstain from prosecuting most copyright infringement activities. Under these arguments, the criminal copyright gap occurs due to possible confliction with social and/or moral norms.¹⁷⁵

This possible explanation of the criminal copyright gap could be best explained from Meir Dan-Cohen's distinction between conduct and decision rules.¹⁷⁶ In his seminal work, Dan-Cohen identifies and distinguishes between two sets of legal rules: first, conduct rules, designed to guide the general public's behavior and second, decision rules, directed to the officials who apply conduct rules. By offering a model of *Acoustic Separation*,¹⁷⁷ Dan-Cohen exemplifies how society accommodates competing values at stake in criminal law and raises the issue of the legitimacy of selective transmission.

The criminal copyright gap could be explained to some extent under this model. Criminal copyright infringement, as a conduct rule, tells society not to infringe copyright, and that upon infringement, they could face a criminal sanction. Criminal copyright infringement, as a decision rule, should instruct law enforcement agencies on how to enforce infringements. But in this case, the two sets of rules are not necessarily in harmony, creating selective transmission. In other words, if the public and the officials receive different normative messages regarding criminal copyright infringements, selective transmission could occur. This could possibly explain the existence of low enforcement and, inter alia, the criminal copyright gap.

Thus, the criminal copyright gap is most likely caused by under-enforcement and is the result of many different reasons, which most likely overlap in some instances. The criminal copyright gap might have various ramifications on copyright criminalization. Mainly and most importantly, the

make more sympathetic defendants than those in most criminal cases, and that U.S. Attorney's Offices are naturally reluctant to bring such prosecutions." *Implementation of the "Net" Act and Enforcement Against Internet Piracy*, *supra* note 149. See, e.g., *Draft for a second act on copyright in the information society*, GERMANY MINISTRY OF JUSTICE 12 (Sept. 27, 2004), <http://www.urheberrecht.org/topic/Korb-2/bmj/760.pdf> (stating that "schoolyards should not be criminalized.").

175. See, e.g., Dan Kahan's explanation of the "sticky norms" problem. Kahan argues that a law which conflicts with a social norm could be counter-productive. Kahan further argues that severe penalties, in oppose to weak penalties, could likely cause governmental actors to override professionalism and "rule of law" norms due to individual feelings. See Dan M. Kahan, *Gentle Nudges vs. Hard Shoves: Solving the Sticky Norms Problem*, 67 U. CHI. L. REV. 607, 608 (2000); Cheng, *supra* note 143, at 660 (arguing "[d]isproportionate penalties provoke community outrage and ultimately may cause even greater underenforcement as police and prosecutors feel increasingly conflicted about the law's advisability").

176. See Meir Dan-Cohen, *Decisions Rules and Conduct Rules: On Acoustic Separation in Criminal Law*, 97 HARV. L. REV. 625 (1984). I am extremely grateful to Peter S. Menell for this suggestion.

177. Dan-Cohen exemplifies the Acoustic Separation model through an imaginary universe, in which two types of people exist: the public and officials. Each of the groups occupies a different, acoustically sealed chamber. The law is directed to both groups. In a different manner: the public is guided by conduct rules, while the officials provide guidelines for their decisions based on the law (decision rules). See *id.* at 630.

gap could turn criminal copyright legislation into almost a dead letter. As long as enforcement measures do not align with legislation, achieving criminal copyright goals will most likely be futile.

CONCLUSION

Whether the increase of criminal copyright legislation leads to a paradigm shift in copyright law is open to dispute. I argue that thus far, because the legal community's understanding of copyright law has not changed from a civil to a criminal perspective on copyright, a paradigm shift is not currently occurring. I argue that a paradigm shift cannot be merely legislative. Changing the perception of copyright law from civil to criminal requires structural changes in practice. Criminal copyright cannot be mostly a legislative act. Statistics reveal that criminal prosecution does not match the relatively massive insertion of criminal copyright in legislation. This criminal copyright gap between the scope of criminal copyright liability and the infrequency of prosecution and punishment, could be attributed to various reasons: international pressure to legislate criminal copyright without obliging its enforcement; political barriers and considerations; achieving deterrence through legislation and other means, or a "tolerance rate" of copyright infringements; difficulties to enforcement agencies; social, moral and economic considerations; and prioritization of law enforcement agencies.

This Article unveils the criminal copyright gap between legislation and enforcement of criminal copyright infringements. Among various ramifications of the criminal copyright gap, it mainly demonstrates one important issue: legislation alone is insufficient to create a paradigm shift, as enforcement of criminal copyright plays an important role in a paradigmatic change to criminal copyright.¹⁷⁸ Thus, copyright law is not yet criminal-oriented. Nevertheless, if enforcement of copyright infringement becomes more substantial in the following years, a paradigmatic shift towards a criminal copyright regime could occur.

178. Yu, *supra* note 137, at 1 (arguing that meaningful IP protection must be effectively enforced).