

SOFTWARE COPYRIGHT LAW AND THE DIGITAL MILLENNIUM COPYRIGHT ACT UNDER THE MICROSCOPE: *BLIZZARD V. BNETD* AS THE LENS

I. INTRODUCTION

Since the Digital Millennium Copyright Act took effect in 1998, there has been much judicial confusion over its relationship to existing legal regimes. *Davidson & Associates v. Jung*,¹ popularly called “Blizzard v. Bnetd,” provides the perfect lens through which to analyze the continuing difficulties in reconciling the Digital Millennium Copyright Act with the traditional copyright law regime.

This Recent Development identifies and analyzes these struggles by examining how the *Davidson* court, in order to reach the correct outcome in the case before it, was myopically forced to support a potentially inefficient and improper result within the American copyright regime. The court’s opinion demonstrated truth in the converse of the now clichéd quote that “[g]reat cases, like hard cases, make bad law.”² That is, bad law makes for hard cases. The decision as to whether Defendants’ actions should have been permitted was an easy one; they should not have been. Yet the court was forced to publish a possibly dangerous opinion despite its pragmatic attempts to adapt to the legislative scheme. This legislative scheme, in light of existing judicial precedents, creates a regulatory system that is incomplete and often defective in addressing the emerging issues of software copyright law. Even if the court’s decision is deemed to have been an easy one, it was only made so at the expense of the simplicity of future cases, which will have to contend with the potentially alarming applications of the court’s rulings. Thus, bad law makes for hard, or at least unnecessarily hard, cases.

II. FACTUAL BACKGROUND IN *DAVIDSON*

In *Davidson & Associates v. Jung*, more commonly referred to as “Blizzard v. Bnetd,” (but hereinafter “*Davidson*”), Davidson & Associates, doing business as Blizzard Entertainment (hereinafter

¹ *Davidson & Assocs. v. Jung*, 422 F.3d 630, 633 (8th Cir. 2005).

² *Northern Sec. Co. v. United States*, 193 U.S. 197, 400-401 (1904) (Holmes, J., dissenting).

“Blizzard” or “Plaintiffs”), developed and sold software games for personal computers. The purchasers of these CD-ROM games were able to play on their own computers and against others on local area networks. In order to play the games, purchasers had to install the game onto a computer and agree to the terms of the End User License Agreement (hereinafter “EULA”) and Terms of Use (hereinafter “TOU”), both of which prohibited reverse engineering.³ To supplement the game modes on personal computers and LANs, Blizzard created “Battle.net,” a free online service available exclusively to purchasers of its games.⁴ Battle.net allowed purchasers to play for free online against other purchasers and featured certain advanced features.⁵ Each authorized version of a Blizzard CD-ROM game came with a password, called a CD Key.⁶ Purchasers had to enter the CD Key to complete the installation process on their computers.⁷ Additionally, in order to access Battle.net, players had to have the game they wished to play installed on their computer and had to enter in a valid CD Key online that was not currently being used online by anyone else.⁸ The requirement of a CD Key, in both the installation process and in accessing the Battle.net mode, was meant to guard against piracy.⁹

Blizzard games became extremely popular and, as a consequence, so too did Battle.net.¹⁰ Nevertheless, many users of the Battle.net forum became frustrated with performance of the service.¹¹ In response, a group of hobbyist programmers formed a group called the “bnetd project,” which developed a program called the “bnetd.org server” that offered an alternate free forum for online play of Blizzard games. The bnetd project’s online forum was hosted by a website¹² that was made available to the

³ *Davidson*, 422 F.3d at 634.

For a definition of “reverse engineering,” see BLACK’S LAW DICTIONARY (8th ed. 2004) (Reverse engineering may be defined as “[t]he process of discovering how an invention works by inspecting and studying it, esp. by taking it apart in order to learn how it works and how to copy it and improve it.”).

⁴ *Davidson*, 422 F.3d at 633.

⁵ *Id.*

⁶ *Id.*

⁷ *Id.* at 634.

⁸ *Id.* at 636.

⁹ *Id.* at 633.

¹⁰ *Id.* (pointing out that “[t]he Battle.net service has nearly 12 million active users who spend more than[sic] 2.1 million hours online per day.”).

¹¹ *Davidson*, 422 F.3d 630, 635 (“The users of Bttle.net have occasionally experienced difficulties with the service”). *Id.* at n.6 (“Blizzard has also received complaints about user profanity and users who win games by modifying Blizzard’s software (“client hacks”).”).

¹² www.bnetd.org was the website which hosted the Defendants’ forum as an alternative to Battle.net.

public through equipment provided by a company called Internet Gateway. Blizzard sued Internet Gateway and the three lead developers¹³ of the bnetd project (hereinafter “Defendants”) for copyright and DMCA infringement and for breach of certain provisions of a license agreement contract.

In order for bnetd.org to serve as a viable alternative to Battle.net, Defendants needed to make their forum compatible with Blizzard’s software. Compatibility required that bnetd.org use the same protocol language as, and be interoperable with, Battle.net. To ensure such interoperability, Defendants needed to use reverse engineering¹⁴ to learn Blizzard’s protocol language.

Whether players logged onto Battle.net or bnetd.org, they perceived little or no difference in their playing experiences. The bnetd.org forum was designed to look extremely similar to Battle.net, including the placement of ad banners. However, there were some differences in the two forums. Unlike Battle.net, bnetd.org allowed users to become server administrators, thereby choosing which features of bnetd.org to utilize. This enabled users of bnetd.org to create a distinct gaming environment, different from Battle.net, the features of which are controlled solely by Blizzard. The key difference, however, between the two forums, and the impetus of this case, was that bnetd.org did not check the validity of the CD Keys entered by its users. Thus, users of pirated Blizzard games were able to utilize the online gaming mode by accessing bnetd.org and thereby circumvented the CD Key authentication process between Blizzard games and Battle.net.

III. ISSUES PRESENTED FOR REVIEW IN *DAVIDSON*

The primary issues in the case can be divided into two related questions. The first addresses whether Defendants violated the anti-circumvention provision¹⁵ and anti-trafficking provisions¹⁶ of the Digital Millennium Copyright Act (hereinafter “DMCA”), and

¹³ Tim Jung, Rob Crittenden and Ross Combs led the bnetd project.

¹⁴ See *supra* note 3.

¹⁵ 17 U.S.C. § 1201(a)(1) (2000) provides that “[n]o person shall circumvent a technological measure that effectively controls access to a work protected under this title.” Circumventing a technological measure, as defined by 17 U.S.C. § 1201(3)(A) (2000), “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.” As defined in 17 U.S.C. § 1201(3)(B), a technological measure effectively controls access to a work “if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.”

¹⁶ 17 U.S.C. § 1201(a)(2) (2000) prohibits trafficking in technology that can circumvent “a technological measure that effectively controls access to a work protected under this title.” 17 U.S.C. § 1201(b)(1) prohibits trafficking in technology that can

if so, whether they could have been absolved through either the DMCA's interoperability exception¹⁷ or traditional copyright law's fair use defense.¹⁸ The second issue concerns the licensing agreement, specifically whether the Plaintiffs EULA and TOU, and their anti-reverse engineering provisions, were enforceable, and if so, whether Defendants' reverse engineering was a breach of contract. This latter issue is somewhat outside of the scope of this Recent Development, however much has been written elsewhere about it.¹⁹ As such, this piece will focus only on the issue of infringement under copyright law.

IV. THE EIGHTH CIRCUIT COURT RULED FOR PLAINTIFF ON ALL CONSIDERED ISSUES

The Eighth Circuit (or hereinafter "the court" or the "*Davidson* court") held that Plaintiff's EULA and TOU were enforceable and, as a result, Defendants were liable for breach of contract. The Court further ruled that Defendants were liable for infringement under DMCA's anti-circumvention provision (17 U.S.C. § 1201(a)(1)) and one of its anti-trafficking provisions (17 U.S.C. § 1201(a)(2)), though it did not specifically rule on the other anti-trafficking provision (17 U.S.C. § 1201(b)(1)) or the basic copyright infringement claim that Plaintiff raised in the lower

circumvent "protection afforded by a technological measure that effectively protects a right of a copyright owner under" Title 17.

¹⁷ 17 U.S.C. § 1201(f)(1) absolves potential infringers under this title to the extent that when a person "has lawfully obtained the right to use a copy of a computer program [that person] may circumvent a technological measure that effectively controls access to a particular portion of that program for the sole purpose of identifying and analyzing those elements of the program that are necessary to achieve interoperability of an independently created computer program with other programs, and that have not previously been readily available to the person engaging in the circumvention, to the extent any such acts of identification and analysis do not constitute infringement under this title." 17 U.S.C. § 1201(f)(4) defines interoperability as "the ability of computer programs to exchange information, and of such programs mutually to use the information which has been exchanged."

¹⁸ Fair Use is codified in 17 U.S.C. § 107 (2000), *infra* note 44.

¹⁹ For a more comprehensive survey of the intersection of copyright and contract law and the problems unique to this area, see Daniel Cahoy, *Oasis or Mirage?: Efficient Breach as Relief to the Burden of Contractual Recapture of Patent and Copyright Limitations*, 17 HARV. J.L. & TECH. 135 (2003); Robert W. Gomulkiewicz, *The License is the Product: Comments on the Promise of Article 2B for Software and Information Licensing*, 13 BERKELEY TECH. L.J. 891 (1998); Deanna L. Kwong, *The Copyright-Contract Intersection: Softman Products Co. v. Abode Systems, Inc. & Bowers v. Baystate Technologies, Inc.*, 18 BERKELEY TECH. L.J. 349, 356 (2003); Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239 (1995); Kathleen K. Olson, *Preserving The Copyright Balance: Statutory And Constitutional Preemption Of Contract-Based Claims*, 11 COMM. L. & POL'Y 83 (2006). For a comparison of U.S. law versus foreign law in this area, see Jacques De Werra, *Moving Beyond The Conflict Between Freedom Of Contract And Copyright Policies: In Search Of A New Global Policy For On-Line Information Licensing Transactions*, 25 COLUM. J.L. & ARTS 239 (2003).

court under 17 U.S.C. § 501.²⁰

V. DISCUSSION

This Recent Development uses the *Davidson* court's opinion, which itself is demonstrative of the judicial conduit between statute and application, to pose a hypothetical situation ("the Hypothetical"), closely related to the fact pattern of *Davidson*, that elucidates the tension between the DMCA and its judicial construction:

What if Plaintiffs' CD Key authentication process was employed not as a check against bootlegging their games, in either purpose of effect, but rather as a barrier to competition or as means to pursue a wholly non-interoperable business strategy?²¹

In highly technological industries, like the one for computer software, traditional legal regimes are continually being updated to adjust to emerging issues.²² When this occurs, it is often the goal of Congress, as it was with the DMCA, to fit the new legislation within the existing regime.²³ As such, it is instructive to analyze these issues in light of both the traditional doctrines and the revised regulation, in order to assess potential discrepancies between the analyses.

A. *Applying DMCA Definitions To The Davidson Fact Pattern*

In identifying the protected work, the technological measure that protects that work and the act of circumvention, the Court applied a necessarily broad construction of the DMCA provisions at issue. A narrow view of these provisions may have focused on the source and object codes of the computer programs, which are the

²⁰ Plaintiff included a violation under this section in their second amended complaint. *Davidson*, 422 F.3d 630, 637. 17 U.S.C. § 501(a) provides, in pertinent part, that "[a]nyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 122 or of the author as provided in section 106A(a) . . . is an infringer of the copyright or right of the author, as the case may be."

²¹ See Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 YALE L.J. 1575, 1617 (2002) (guarding the details of the system's interoperability gives "the platform developer considerable control over applications available for the platform . . . The platform owner can ensure exclusivity either by developing the applications in-house or by making exclusivity a condition of licensing.").

²² See, e.g., Molly Torsen, *Lexmark, Watermarks, Skylink and Marketplaces: Misuse and Misperception of the Digital Millennium Copyright Act's Anticircumvention Provision*, 4 CHI-KENT J. INTELL. PROP. 117, 128 (2004) ("[T]he DMCA was meant to help copyright law adjust to some of the new issues brought to the forefront by new technology.").

²³ See *id.* ("[B]asic tenets of copyright law, including reverse engineering and fair use provisions, were not meant to be altered.").

keys to interoperability. The source code is the “human-readable list of instructions to a computer that tell the computer how to perform a task.”²⁴ The object code, on the other hand, is code upon which the computer actually runs.²⁵ Manufacturers of computer software release the object code along with their products; however, it is the source code that a reverse engineer seeks to discover and modify. This code is regularly protected by the license agreement and often by other built-in encryption,²⁶ such as technological protection measures, or TPM code, which is often used to guard the interoperability code.²⁷ As such, a narrow view of the DMCA provisions might have defined this interoperability code as the “protected work.” In *Davidson*, however, there were no real technological measures or TPM code protecting the interoperability code, which was available to anyone with the technical knowledge and ability to reverse engineer the code. Thus, there would have been no DMCA violation as there was no technical protection measure that was circumvented. Such a narrow construction of the DMCA would have set a poor precedent with the potential of absolving future violators of the spirit and purpose of the DMCA and copyright law.

Instead, the court sagaciously drew a broader view, defining the online mode of Blizzard’s game software as the protected work and the CD Key authentication process, which determined whether a game was bootlegged or already in use on another computer, as the technological measure protecting it.²⁸ Under this definition, Defendants certainly circumvented the technological protection measure of the CD Key authentication process and made the circumvention available to others, in violation of the anti-circumvention and anti-trafficking provisions of the DMCA, respectively. The discussion of the issue then turned to the consideration of the interoperability exception, an analysis with which the court struggled. It “settled” the issue in one conclusory sentence: “Appellants’s [sic] circumvention in this case constitutes

²⁴ See Mitchell L. Stoltz, *The Penguin Paradox: How the Scope of Derivative Works in Copyright Affects the Effectiveness of the Gnu GPL*, 85 B.U.L. REV. 1439, 1445 (2005).

²⁵ See *id.* at 1448.

²⁶ See generally Matthew D. Satchwell, *The Tao of Open Source: Minimum Action for Maximum Gain*, 20 BERKELEY TECH. L.J. 1757 (2005).

²⁷ See Jacqueline Lipton, *The Law of Unintended Consequences: The Digital Millennium Act and Interoperability*, 62 WASH. & LEE L. REV. 487, 496-97 (2005) (“The technological protection measures will generally be in the form of software code (TPM code). These measures can serve to encrypt other software code (interoperability code) . . .”).

²⁸ *Davidson & Assocs. v. Jung*, 422 F.3d 630, 642 (8th Cir. 2005) (“Blizzard’s secret handshake between Blizzard games and Battle.net effectively controlled access to Battle.net mode within its games.”).

infringement.”²⁹ While it is true that the interoperability exception only applies “to the extent any such acts of identification and analysis do not constitute infringement under this title,”³⁰ the court circularly determined that the interoperability exception to DMCA infringement did not apply because there was DMCA infringement. Such an application of the DMCA renders its interoperability exception superfluous; either there is no DMCA violation and so no need for the interoperability exception, or there is a DMCA violation and so the interoperability exception does not apply.

B. *The Disjoint Between The DMCA And Copyright Law*

The aforementioned circular and conclusory nature of the court’s treatment of the DMCA suggests that the DMCA, and judicial interpretations of it, may well be too disjointed from the rest of the copyright regime. The DMCA was “meant to help copyright law adjust to some of the new issues brought to the forefront by new technology. However, the basic tenets of copyright law, including reverse-engineering and fair use provisions, were not meant to be altered.”³¹

The problem of the disjoint between the DMCA and the copyright regime, within which it is meant to fit, may be further exposed in considering the Hypothetical. Here, it is assumed that the plaintiffs had included a similar CD Key authentication process, not to prevent bootlegged games from being played on its platform, but rather to prevent its games from being played on other platforms. It is further postulated that the defendants created a similar platform to that of its bnetd.org and that this platform did not include a CD Key authentication process, such that the plaintiffs’ games could be played on this platform as well. Using the *Davidson* court’s own DMCA analysis, the CD Key authentication process would constitute the “technological measure that effectively controls access,”³² the exclusion of the CD Key authentication process on the defendants’ platform would be the requisite circumvention, and the protected work would be the online mode of the game software. Thus, the defendants in the Hypothetical would be in violation of the same anti-circumvention and anti-trafficking provisions of the DMCA that Defendants in *Davidson* were. Although the actual Defendants were rightly found

²⁹ *Id.*

³⁰ 17 U.S.C. § 1201(f)(1).

³¹ Torsen, *supra* note 22, at 128.

³² See 17 U.S.C. § 1201(a)(1) (2000), *supra* note 15.

in violation, such a finding as to the hypothetical defendants would conflict with traditional copyright law, which was not meant to be altered by the DMCA.³³

C. *Copyright Law Prior To The DMCA Would Permit the Hypothetical*

The DMCA makes clear that it was chiefly enacted to combat growing concerns over digital piracy.³⁴ However, as commentators have noted, “Congress did not intend for the DMCA to adversely impact existing limitations on copyright infringement and defenses to copyright infringement.”³⁵ It is practical then to survey the relevant case law, existing before the DMCA’s implementation, to ascertain exactly what rights and remedies it was intended to leave unmolested. Long before the DMCA, there was recognized a legal right to reverse engineer to discover a trade secret fixed in a commercial product.³⁶ More specifically, two key cases, both prior to the enactment of the DMCA, provided authoritative statements on the potential for infringement in the type of activities in question in *Davidson*. Both cases used the fair use defense to absolve defendants from the otherwise infringing nature of the intermediate copying necessitated by their reverse engineering.³⁷ In the first case, *Sega Enterprises Ltd. v. Accolade, Inc.*,³⁸ Accolade was a manufacturer of video games that sought to develop software which was interoperable with Sega’s platform, but refused to comply with Sega’s licensing terms that required third-party game manufacturers to refrain from furnishing products to competing hardware systems. As such, Accolade reverse engineered certain aspects of the Sega platform to learn its interoperability code. In what remains perhaps the most commanding statement on the fair use of reverse engineering, the *Accolade* court concluded that:

[B]ased on the policies underlying the Copyright Act that disassembly of copyrighted object code is, as a matter of law, a fair use of the copyrighted work if such disassembly provides the

³³ See Torsen, *supra* note 22, at 128.

³⁴ See Dan I. Burk, *Anti-Circumvention Misuse*, 50 UCLA L. REV. 1095, 1135 (2003) (“Fortunately, the legislative history behind the DMCA anticircumvention provisions is fairly clear, if not repetitious, regarding congressional intent on this point. The legislative record of the DMCA is replete with references to the need for anticircumvention measures to prevent ‘piracy.’”).

³⁵ Lipton, *supra* note 27, at 494, citing 17 U.S.C. § 1201(c)(1) (2000) (“Nothing in this section affects rights, remedies, limitations, or defenses to copyright infringement, including fair use, under this title.”).

³⁶ See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 160 (1989).

³⁷ The actions in question would have been otherwise infringing under 17 U.S.C. § 501, one of the claims brought by Plaintiffs in *Davidson*.

³⁸ *Sega Enterprises Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992).

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only means of access to those elements of the code that are not protected by copyright and the copier has a legitimate reason for seeking such access.³⁹

The unprotected elements of the code, to which that court referred, were comprised of the functional aspects of interoperability. The court further stated that “Accolade ha[d] a legitimate interest, in gaining such access (in order to determine how to make its cartridges compatible with the Genesis console) . . . ”⁴⁰

Though it remains very relevant, the *Accolade* case concerned “game-to-platform” interoperability. In *Davidson*, the issue technically concerned “platform-to-game” interoperability. A more closely related case is therefore *Sony Computer Entertainment, Inc. v. Connectix Corporation*,⁴¹ in which the defendant sought to create a program that would allow Sony games to be played on personal computers rather than on the Sony console. In its own finding of fair use, the *Connectix* court stated:

[Sony may lose console sales and profits.] But because the Virtual Game Station is transformative, and does not merely supplant the PlayStation console, the Virtual Game Station is a legitimate competitor in the market for platforms on which Sony and Sony-licensed games can be played. For this reason, some economic loss by Sony as a result of this competition does not compel a finding of no fair use. Sony understandably seeks control over the market for devices that play games Sony produces or licenses. The copyright law, however, does not confer such a monopoly.⁴²

The above holdings of these two cases provide a fairly comprehensive look at the state of the legality of fair use in reverse engineering before the DMCA, which was not intended to alter these existing rights. Of course, this is not to say that all similar forms of reverse engineering constitute a fair use as a matter of law.⁴³ The four-part fair use test⁴⁴ must still be employed. In

³⁹ *Id.* at 1518.

⁴⁰ *Id.* at 1520.

⁴¹ *Sony Computer Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir. 2000).

⁴² *Id.* at 607.

⁴³ *See Accolade*, 977 F.2d at 1522 (“Fair use is a mixed question of law and fact.”).

⁴⁴ 17 U.S.C. § 107 (2000) (“Notwithstanding the provisions of sections 106 and 106A, the fair use of a copyrighted work . . . is not an infringement of copyright. In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include—(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation

Accolade, the court noted that “only the third [factor of the fair use test] weighs in favor of Sega, and even then only slightly.”⁴⁵ The *Connectix* court came to the exact same determination, finding that “three of the factors favor Connectix; one favors Sony, and it is of little weight.”⁴⁶

D. *Pre- And Post-DMCA Findings of Infringement Diverge For the Hypothetical*

The assessment of the four statutory factors of fair use is meant to achieve a balance between the rights of the copyright holder and those of the public.⁴⁷ Some form of a cost-benefit or economic inquiry is thus necessarily required. As noted above, the *Accolade* court noted that Sony may well lose console sales and profits, however it dually noted that *Accolade*’s reverse engineering:

led to an increase in the number of independently designed video game programs offered for use with the Genesis console. It is precisely this growth in creative expression, based on the dissemination of other creative works and the unprotected ideas contained in those works, that the Copyright Act was intended to promote.⁴⁸

The recognized benefits of *Accolade*’s innovations swung the first factor of the fair use analysis—the purpose and character of the use, heavily in *Accolade*’s favor, while only slightly adding to Sony’s unsuccessful bid for the fourth factor—the effect on the potential market for the original work.

In utilizing a fair use analysis, it is also important to recognize that the economics of the software gaming industry are different for platform and game developers. Within this industry “platform developers typically lose money on sale of consoles, making up losses on sales of games and peripherals.”⁴⁹ Reverse engineering therefore causes far less harm to platform manufacturers than it does to game manufacturers. However, these losses are due to the great expenses of the many hardware components of game

to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.”).

⁴⁵ *Accolade*, 977 F.2d at 1527.

⁴⁶ *Connectix*, 203 F.3d at 608.

⁴⁷ Cathy Nowlen, Edelman v. N2H2: *Copyright Infringement? Reverse Engineering of Filtering Software Under the Digital Millennium Copyright Act*, 10 J. INTELL. PROP. L. 409, 412 (2003) (“[T]he purpose of the fair use exception is to balance the interests of the copyright owner with the constitutional goal of promoting science . . .”).

⁴⁸ *Accolade*, 977 F.2d at 1523.

⁴⁹ Samuelson & Scotchmer, *supra* note 21, at 1618-1619.

consoles.⁵⁰ Hardware costs are not as prevalent in creating the online platforms at issue in *Davidson*; however, there are programming costs and it must be remembered that Plaintiffs in *Davidson* offered their platform for free, only deriving income therefrom with ad banners on the website. As such, for both traditional platform developers, who lose money on platform sales, and developers like Plaintiffs in *Davidson* and plaintiffs in the Hypothetical, who only derive income from ad sales, the fourth fair use factor—the effect on the potential market of the original work, will generally not be in their favor.

A pre-DMCA fair use analysis buttresses this piece's approval of the *Davidson* court's prohibition of Defendants' actions. It may fairly be conceded that the third factor—the amount and substantiality used, must weigh in Plaintiffs' favor, as it did in both *Accolade* and *Connectix*. However, Defendants in *Davidson* significantly contributed to the propagation of bootlegged copies of Plaintiffs' games. This seems to swing both the first factor—the purpose and character of the use, and the fourth factor—the effect upon the potential market, in Plaintiffs' favor. It should be noted, however, that though the defendant in *Connectix* did not directly allow bootlegged copies of Sony's games to be played, a third party wrote a patch for their system just one day after its release that did allow bootlegged copies to be played.⁵¹ The *Connectix* court did not address this issue in its calculus of fair use. In *Davidson*, however, Defendants themselves directly allowed the use of bootlegged copies, which would weigh against them in consideration of the first and fourth factor of fair use. One somewhat mitigating trait of the bnetd project was that it was initiated as open source software.⁵² Arguably, use of open source software greatly increased the potential for innovation and public benefit, thereby positively affecting the first fair use factor for Defendants. However, when weighed against the significant harm to the proprietary claims of Plaintiffs, it is of little help to Defendants. Thus, there is little problem in denying fair use in *Davidson* pre-DMCA because this fourth factor, which weighed

⁵⁰ See *id.* at 1619 n.207.

⁵¹ MacWindows News Archives, <http://www.macwindows.com/news0199.html> ("A day after Connectix Virtual Game station was released, someone wrote a VGS patch that gets around Connectix protections that prevent the use of VGS to play illegal copies of Sony's games. According to a source, the patch enables the Sony PlayStation emulator to play non-U.S. games, as well as bootleg copies on CDR discs of Sony PlayStation discs.").

⁵² See BLACK'S LAW DICTIONARY (8th ed. 2004) (Open Source Software is "Software that is usually not sold for profit" and that "includes both human-readable source code and machine-readable object code, and allows users to freely copy, modify, or distribute the software.").

heavily against Defendants, “is undoubtedly the single most important element of fair use.”⁵³ A denial is even less problematic post-DMCA because that legislation was intended to combat the type of digital piracy that Defendants enabled.⁵⁴ It is then clear that the Defendants’ precise actions in *Davidson* would be prohibited before and after the DMCA. As a result, there is no tension in the pre- and post-DMCA copyright regimes as they relate to Defendants’ actions.

However, similar pre- and post-DMCA fair use analyses of the Hypothetical expose just such a tension. Here, Plaintiffs include an authentication process in their game code to allow the games only to be played on their own platform and not to guard against piracy. Because there is no direct enabling of bootlegging, the pre-DMCA fair use analysis should be concluded exactly as it was in *Connectix*, a pre-DMCA case with a fact pattern legally akin to the Hypothetical. That is, only the third factor should favor the plaintiffs, and the defendants’ actions should then qualify as fair use. The hypothetical defendants created, in fair use terms, a complementary, rather than a substitutional product, and such complementary products have generally been considered fair use.⁵⁵ In fact, the case for permitting the actions in the Hypothetical is even stronger than for those in *Connectix*, because the aforementioned benefits of the open source nature of the bnetd project are not negated by direct bootlegging as they were in *Davidson*. But if the Hypothetical were brought to suit after the DMCA’s effect, an opposite result would presumably occur. In fact, under the analysis of *Davidson*, the defendants in the Hypothetical would be in violation of the same DMCA provisions as were Defendants in *Davidson*. Because the hypothetical defendants created and provided a platform which effectively circumvented the authentication process of the games, they would be found to have infringed under the same anti-circumvention and anti-trafficking provisions of the DMCA. This is true even though in the Hypothetical the authentication process did not, and was not meant to, guard against piracy and even though the defendants’

⁵³ *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539, 566 (1985).

⁵⁴ See Burk, *supra* note 34.

⁵⁵ See, e.g., *Ty, Inc. v. Publ’ns Int’l Ltd.*, 292 F.3d 512, 517 (7th Cir. 2002) (“[W]e may say that copying that is complementary to the copyrighted work (in the sense that nails are complements of hammers) is fair use, but copying that is a substitute for the copyrighted work (in the sense that nails are substitutes for pegs or screws), or for derivative works from the copyrighted work is not fair use. If the price of nails fell, the demand for hammers would rise but the demand for pegs would fall. The hammer manufacturer *wants* there to be an abundant supply of cheap nails . . . ” (citation omitted)).

actions would have been excused by the fair use defense before the DMCA. It seems illogical that the very same actions would be determined to be non-infringing before the DMCA and infringing after the DMCA, given that the DMCA was not meant to alter the “rights, remedies, limitations, or defenses to copyright infringement, including fair use, under [Title 17]”⁵⁶ and that these actions were not of the character that the DMCA was intended to combat.⁵⁷

E. *Reasons For The Conflict Between These Findings of Infringement*

The roots of this illogical result lie in the relative impotence of the DMCA’s interoperability exception and the refusal to recognize a fair use defense to certain DMCA violations. The fair use defense is certainly available in traditional copyright infringement actions, but is usually unavailable for DMCA anti-circumvention and anti-trafficking violations.⁵⁸ In scenarios, such as in the Hypothetical, a fair use defense would have absolved them from liability prior to the DMCA, but not after the legislation’s effect. This runs afoul of the DMCA’s express wording and intent not to alter the defenses, including the fair use defense, to infringement.

F. *The DMCA’s Application May Also Upset Copyright Law’s Concern with FCS Monopolies*

It has been argued that the DMCA has been used by many courts, in a manner contrary to Congress’ intent, to stop valid activities, rather than to prevent digital piracy, and has, as such, become a menace to many of the policies underlying the copyright and other long-standing legal regimes.⁵⁹ It is clear, however, that there is at least a potential for monopoly power exceeding that granted by copyright law to be realized through enforcement of the DMCA. As seen in the Hypothetical, a manufacturer may include a protective code in its software, not to prevent piracy, but rather to pursue a non-interoperable business strategy, or even

⁵⁶ Lipton, *supra* note 27.

⁵⁷ See Burk, *supra* note 34.

⁵⁸ Lipton, *supra* note 27, at 532 (“[A]s legislation currently stands, the fair use defense clearly can be raised in a copyright infringement action, but cannot generally be raised as a defense against DMCA liability for unauthorized circumvention or trafficking in a circumvention device, even, in many cases, where the resulting use of a copyright work could be excused as a fair use.”).

⁵⁹ See, e.g., Electronic Frontier Foundation, *Unintended Consequences: Five Years Under the DMCA* (Sept. 24, 2003), http://www.eff.org/IP/DMCA/unintended_consequences.pdf (arguing that the DMCA stands as a threat to free expression and scientific research, fair use, competition and innovation, and access to computer networks.).

more underhandedly, simply to manipulate the DMCA into a barrier to legitimate competition. There has been some judicial response to this problem, but it has primarily been expounded in dicta. For example, one judge opined in a concurrence that, “[w]e should make clear that in the future companies like Lexmark cannot use the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves just by tweaking the facts of this case . . . ”⁶⁰

VI. SUGGESTIONS

Very recently, France has taken strides toward a sweeping legislative solution that would force interoperability within the digital music market. On March 21, the French Parliament passed a copyright bill, which would “force digitally sold music to work with any digital music player or software,” and would mandate “that digital rights management developers make public all information needed to reach interoperability.”⁶¹ The legislation, that still requires approval from the French Senate, would place France in accord with the European Union’s 2001 Copyright Directive.⁶² However, such a broad legislative response seems unlikely in the United States for the digital music market, let alone for the larger software industry.⁶³

A more realistic suggestion for an American response has been to grant more leeway to plaintiffs to argue copyright infringement in cases that straddle the line between possible copyright infringement and DMCA infringement, so that the defendant is able to utilize copyright defenses, such as fair use, that would otherwise be unavailable.⁶⁴ Perhaps a more appropriate step would be for courts to be wary of the attempted use of the DMCA as an anti-competitive measure, and when they suspect such attempts, to be more lenient in allowing defenses. As to both questions of fair use and improper monopoly power in a case where the DMCA applies, it may be helpful for courts to conduct an assessment of both issues as they would have before the enactment of the DMCA. If a defendant’s actions would have been

⁶⁰ Lexmark Int’l, Inc. v. Static Control Components, Inc., 387 F.3d 522, 551 (6th Cir. 2004) (Merritt, J., concurring).

⁶¹ Aymeric Pichevin, *Apple Sour As French Opt For Interoperability*, BILLBOARD, Apr. 1, 2006, at 11.

⁶² See *id.*

⁶³ Should this French legislation be fully enacted, it will be interesting to see how the United States will react to concerns that mandated interoperability in France will frustrate non-interoperable business strategies domestically.

⁶⁴ See Lipton, *supra* note 27, at 531.

sanctioned before the DMCA, courts should only permit findings of DMCA violations when these violations are of the character that the DMCA was meant to curb, namely piracy. Otherwise, courts should rely on traditional copyright tenets, such as a fair use analysis, in deciding the issue before them.

More broadly, *Davidson* illustrates that rigid rules, promulgated either by the Legislature or the Judiciary, are particularly unsuitable for handling the perpetual evolution of the software market and its related markets. New methods to develop, produce and use technologies in these markets are common and new questions for courts arising therefrom are nearly as frequent. Congress does not have the time nor the structural flexibility to properly regulate these rapid developments and it would be inappropriate for the Judiciary to do so without legislative supervision. While Congress is the appropriate body to espouse the guiding principles of regulation of the software and related markets, the judicial system is best suited to apply these principles pragmatically to the ever-changing field.⁶⁵ Thus, *Davidson* demonstrates the truth in a second clichéd legal allegory: that courts must act as more than pharmacists, merely dispensing the legal doctrine recommended in reaction to the diagnosis of Congress. When Congress attempts to regulate a quickly evolving market such as that for software, it is often unable to comprehensively anticipate even simple extensions outside of the narrow scope of what is trying to regulate. In such circumstances, courts should view the applicable legislation, not as literal rules, but rather as codified manifestations of underlying principles. New laws that keep the existing legal regime current, like the DMCA, should similarly be interpreted to fit within the Legislature's intent in the overarching regulatory scheme.⁶⁶ Courts must chiefly concern themselves with achieving the optimal arrangement between all involved interests and in so doing must look first to the ramifications of possible applications of the appropriate principles. It is often beneficial for courts to look at the actual effects of a considered legal outcome before they formulaically administer what seems like the applicable doctrine.⁶⁷

⁶⁵ See Torsen, *supra* note 22, at 126 ("As new technologies develop, courts generally have the first opportunity to apply copyright law to them, and Congress has the opportunity to change law as a result of unforeseen outcomes.").

⁶⁶ *Id.* at 128 ("It is important to remember that the DMCA was meant to help copyright law adjust to some of the new issues brought to the forefront by new technology. However, basic tenets of copyright law, including reverse engineering and fair use provisions, were not meant to be altered.").

⁶⁷ See Cahoy, *supra* note 19, at 159-60 ("It is perhaps then more constructive to consider

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In this way, courts can refrain from regulating too much, or in a way contrary to the intent of Congress, the nascent and dynamic market for software.

Davidson takes place in just such an environment. In implementing the DMCA, Congress sought chiefly to address issues of software piracy. However, it could not have been expected to conceive each and every potential application of its codified doctrine within this continually evolving market. Given this limitation, Congress situated the DMCA within the larger context of the copyright regime. This allows courts to rely on long-standing copyright tenets in addressing issues that move toward and outside the edges of the DMCA's scope. *Davidson* furnishes narrow legal issues, that when viewed more broadly, show the necessity of a *narrow* judicial interpretation of the DMCA. When dealing with this legislation in infringement actions, courts should look first to whether their considered outcomes fit within the primary scope of Congress' intended DMCA applications, and when they do not, courts should instead rely on traditional copyright doctrine. This process ultimately allows courts, in allocating legal rights and remedies, to reach the most societally beneficial and efficient solution consistent with the principles championed by Congress.

VII. CONCLUSION

It is clear that Defendants' actions in creating a forum on which pirated versions of Plaintiff's games could be easily used to their full capacity, frustrating the purpose of Plaintiffs' protection measures, should be prohibited. Legally, these actions were in violation of both the wording and the spirit of the DMCA and in conflict with traditional copyright tenets. Empirically, Defendants' actions have unfair negative economic effects on Plaintiffs and the market as a whole. Since the crux of the claim is piracy, the optimal and most legally viable solution in this instance would be to proscribe these actions under the DMCA, yet also to encourage Defendants in the future to include protections, at least as effective as those implemented by Plaintiffs, against bootlegged games. In this scenario, Defendants' maintenance of an alternative platform does not take away any business from Plaintiffs, as Plaintiffs offer their online platform for free. It does, however, provide an incentive to purchase Plaintiffs' software games, in that it creates

the real world consequences of enforceability in assessing the existing contractual regime and possible reforms.").

more ways for purchasers to utilize Plaintiffs' products. As a corollary, it benefits the customers, who now have more and better ways to utilize their purchases. It similarly benefits Defendants, as they have a viable online business, and benefits society as a whole through increased innovation. Such a situation is often described in fair-use terms as a complementary or transformative, rather than a substitutional or superseding, use.⁶⁸ It is in the economic interest of a manufacturer for there to be an abundance of complementary products, while it may be harmful to them for there to be competing, superseding products on the market.⁶⁹ An alternative platform, such as bnetd.org, had it included a CD Key authentication process, is a complementary product and its existence is economically beneficial to the software game manufacturer. With respect to infringement claims, courts should generally strive to encourage complementary uses, while engaging in a much more cautious allowance of superseding uses.

When, however, the root of an infringement action is not piracy, as it was not in the Hypothetical, courts should refrain from applying the DMCA. In the Hypothetical, the plaintiffs may have anticipated actions such as those of Defendants, and in wanting their games to be played online only on their platform, included a similar CD Key authentication process to prevent their games from functioning on alternate platforms. Though this is a legally valid strategy, it is wholly dependent on the ability of the manufacturer to keep the details of interoperability a secret, an endeavor that should not be accomplished by a legal regime. More subversively, the plaintiffs may have included the authentication process simply to manipulate the DMCA into a tool against legitimate competition. Courts should neither relieve manufacturers of the work necessary to guard components of their products, nor aid them in achieving invalid monopoly power.

Much remains to be done to fully resolve the DMCA's position

⁶⁸ See, e.g., *Ty, Inc. v. Publ'ns Int'l Ltd.*, 292 F.3d 512, 518 (7th Cir. 2002) ("The distinction between complementary and substitutional copying (sometimes—though as it seems to us, confusingly—said to be between "transformative" and "superseding" copies) is illustrated not only by the difference between quotations from a book in a book review and the book itself, but also by the difference between parody (fair use) and burlesque (often not fair use)" (citations omitted)).

⁶⁹ See *id.* at 517 ("[W]e may say that copying that is complementary to the copyrighted work (in the sense that nails are complements of hammers) is fair use, but copying that is a substitute for the copyrighted work (in the sense that nails are substitutes for pegs or screws), or for derivative works from the copyrighted work is not fair use. If the price of nails fell, the demand for hammers would rise but the demand for pegs would fall. The hammer manufacturer *wants* there to be an abundant supply of cheap nails . . ." (citation omitted)).

within the American copyright system. This is to be expected for a statute that is less than a decade old and which loftily proposes to deal with some of the most advanced legal issues of new technologies. As U.S. courts continue to struggle with these questions, it may be appropriate for Congress to lend further guidance. Until then, it is imperative that courts become particularly vigilant in identifying and rejecting the attempted use of the DMCA in conflict with the traditional copyright regime or solely as an anti-competitive mechanism.

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