

A SIMPLE SOLUTION TO THE NORMATIVE PRACTICES OF COPYRIGHT INFRINGEMENT IN THE VIDEO GAME STREAMING COMMUNITY

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I. INTRODUCTION.....	326
II. BACKGROUND.....	329
A. <i>Application of Copyright Law to Video Games</i>	330
B. <i>Fair Use Defense</i>	332
C. <i>End User License Agreements</i>	333
D. <i>The Digital Millennium Copyright Act</i>	334
III. CONTEMPORARY COPYRIGHT LAW ANALYZED.....	335
A. <i>What Incentivizes the Dissemination and Creation of Knowledge?</i>	336
B. <i>The True Nature of the Exclusive Rights of a Copyright Holder; Defenses to Infringement</i>	339
C. <i>Normative Issues with the Exclusionary Right of Public Performance</i>	341
D. <i>End User License Agreement Consequences, and Why Modifying Them Decrease the Usefulness of Video Games</i>	343
IV. SO, THERE IS A GLITCH IN THE SYSTEM. HOW DO WE TROUBLESHOOT IT?.....	344
A. <i>Pro-Streamer Solutions</i>	344
B. <i>Pro-Rights Holder Proposals</i>	345
C. <i>The Simple Solution that Allows Comprehensive Change to Occur</i>	346
V. CONCLUSION.....	349

“[I]t does suck to have someone else making revenue off your work.”¹

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¹ Patrick Klepek, *Not Every Developer Is Convinced Let's Play Videos Are A Good Thing*, KOTAKU (Mar. 26, 2016, 9:00 AM), <https://www.kotaku.com.au/2016/03/not-every-developer-is-convinced-lets->

I. INTRODUCTION

Imagine a small group of people coming together after they graduate college to develop a video game. The group's members all want to make a game that conveys what their passions are. They decide that the best way to do this is by designing a story-based game. They spend two years writing code, creating characters, and animating the game. After the two years, they decide to publish the game on the gaming platform Steam so that PC gamers can download and play the game and so the group can distribute the game for sale. Shortly after the game releases on Steam, the group discovers that a few large video game streamers have streamed the game on Twitch and YouTube, and the videos of the stream are available to view for two weeks after they stream. The group gets excited because these videos get a few million views and hopes that these views turn into purchases on Steam. Much to the group's chagrin, those who watched the streams and videos of the stream instead chose not to purchase the game because they already experienced the story.

The group with almost no money must now take on the streamer who uploaded their game to Twitch and YouTube, but this streamer is much better situated financially. The group decides to leave the venture of developing video games because they do not believe they can profit from it and because they cannot protect their work from being used without permission.

As illustrated above, video game developers take a substantial risk when they begin working on a new project.² Developing a game often takes years of time, money, and resources, which can end in little or even no payoff.³ No payoff is what happened to the developer of *That Dragon, Cancer*, who had his story-based game posted to YouTube and saw no money from sales afterward.⁴ Millions of people watched the YouTube video in which a player uploaded a complete playthrough or "Let's Play," but this did not translate into people buying the game.⁵ Ryan Green, the developer of *That Dragon, Cancer*, encouraged "Let's Play" creators to share their experience with the game, but not in a way that just rebroadcasts the game.⁶

Video game streaming is the transmission of a player's real-time footage through a streaming service, such as Twitch.tv or YouTube Gaming.⁷

play-videos-are-a-good-thing/ (explaining the developer spent years on making the video game to see no revenue from sales).

² See *id.*

³ See *id.*

⁴ *Id.*

⁵ *Id.*; *What Is a Let's Play on YouTube?*, MEDIKIX (Feb. 3, 2016), <http://mediakix.com/2016/02/what-is-a-youtube-lets-play-video/#gs.03t9pb> (defining "Let's Play" as "a video screen recording of a user playing a game while providing voice-over commentary").

⁶ Allegra Frank, *That Dragon, Cancer Dev Calls Out Let's Plays for Why Game Hasn't Turned a Profit*, POLYGON (Mar. 25, 2016, 5:45 PM), <https://www.polygon.com/2016/3/25/11305862/that-dragon-cancer-lets-play>.

⁷ Nathan Edge, *Evolution of the Gaming Experience: Live Video Streaming and the Emergence of a New Web Community*, 4 ELON J. OF UNDERGRADUATE RES. IN COMM. 1, (2013) <http://www.inquiries>

The streaming of video games has been incredibly popular since the early 2010s. For instance, in 2013, Twitch drew in over 34 million unique users per month.⁸ Streaming has also been gaining popularity at an astounding rate since 2016.⁹ Hosting a streaming service is something so popular that both YouTube and Microsoft have launched their streaming sites alongside Twitch.¹⁰ Streamers clearly believe that their streams can be profitable.¹¹ For instance, one of the most popular streamers, “Ninja,” makes 500,000 dollars per month, primarily through video game streaming services.¹²

Streaming, however, creates problems for start-up video game developers who are trying to break into the market. The possibility that someone may upload a video or stream a game and substantially take away from the potential profit (thus, infringing on their rights) may create too high of a risk for start-up game developers.¹³ The way to combat the uncertainty developers may have about trying something new in video games is to protect their rights.¹⁴

Creators are deterred from entering the market or disseminating their works, which contradicts current copyright law and its origin in the Constitution.¹⁵ Additionally, requiring a developer to encourage people to do more than just rebroadcast a game raises a normative problem.¹⁶ Specifically, under current community norms, rather than carefully contemplating whether fair use applies before uploading a stream, there is a presumption that uploading someone else’s copyrighted materials is always fair use.¹⁷ Thus, the community norm and the copyright law may be at odds with one another, leaving the potential creator in limbo about the scope of his rights.¹⁸

journal.com/articles/821/evolution-of-the-gaming-experience-live-video-streaming-and-the-emergence-of-a-new-web-community. See generally, TWITCH, <https://www.twitch.tv/> (last visited May 25, 2021); YOUTUBE: GAMING, <https://www.youtube.com/gaming/> (last visited May 25, 2021).

⁸ Edge, *supra* note 7.

⁹ Joshua Fruhlinger, *You Won’t Find the New Pop Stars in Movies. You’ll Find Them on Twitch*, DIGITAL TRENDS (June 9, 2018, 6:00 AM), <https://www.digitaltrends.com/gaming/the-popularity-of-twitch-youtube-gaming-other-streaming-sites-on-the-rise/> (graphing the growth of concurrent streamers on twitch from 2016 to 2018).

¹⁰ *Id.*

¹¹ Tae Kim, *Tyler ‘Ninja’ Blevins Explains how He Makes More Than \$500,000 a Month Playing Video Game ‘Fortnite’*, CNBC (Mar. 19, 2018, 4:18PM), <https://www.cnbc.com/2018/03/19/tyler-ninja-blevins-explains-how-he-makes-more-than-500000-a-month-playing-video-game-fortnite.html> (explaining that most of his income comes from Twitch and YouTube subscribers).

¹² *Id.*

¹³ See Klepek, *supra* note 1.

¹⁴ See PETER THIEL & BLAKE MASTERS, ZERO TO ONE: NOTES ON STARTUPS, OR HOW TO BUILD THE FUTURE 107 (2014) (“[A] startup messed up at its foundation cannot be fixed.”).

¹⁵ U.S. CONST. art. 1, § 8, cl. 8; see Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976).

¹⁶ See Klepek, *supra* note 1.

¹⁷ See, e.g., Klepek, *supra* note 1; see also Willie Clark, *The (Still) Uncertain State of Video Game Streaming Online*, ARSTECHNICA (Jan. 28, 2018, 9:00 AM), <https://arstechnica.com/gaming/2018/01/to-stream-or-not-to-stream-how-online-streaming-game-videos-exist-in-an-ip-world/>.

¹⁸ When this Comment discusses rights regarding video games, the specific type of right it is referring to is in rem rights. Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L. J. 357, 359 (2001). In rem rights are a right in a thing, held against all others

Traditional property theorists support the theoretical framework of having one's intellectual creation protected in rem.¹⁹ Adam Smith characterized copyrights in things such as books as "real rights" for as long as the copyright is held.²⁰ Further, Merrill and Smith, in their landmark article, characterized property rights as creating duties against all others, which allows for a basis of security to plan for the future.²¹ The ability to prepare for the future is precisely where current copyright jurisprudence regarding video game streaming is sparse compared with the number of streamers potentially infringing.²² The uncertainty of the rights leads to the problem that if a product has so few rights that it cannot sustain itself, then no utilitarian innovation will occur.²³

Copyrights in the United States must be clear for innovation to occur.²⁴ Although game developers are currently allowing streamers to use their games for profit, this acquiesced use should not write away the rights of all who hold video game copyrights.²⁵ Developers presently in the market, therefore, control the types of content created.²⁶

Copyrights in video game streaming must favor creators so that innovation can pave the way for new and improved video games. The constitutional clause empowering Congress to create copyrights secures exclusive rights to authors of original works.²⁷ Combining the lack of jurisprudence, the norms of the streaming community, and the vast expansion of video game streaming leaves creators uncertain as to the true scope of their "exclusive right."²⁸

This Comment discusses the gaps in the current copyright law as applied to live streaming video games. Part II will discuss the background of copyright law as applied to video games. Part III will analyze current

(as compared to rights between two individuals), in copyright law, that makes the author the sole holder of those rights. *Id.*; see 17 U.S.C. § 106. The copyright regime does limit the scope of these rights through defenses to infringement; however, these will be discussed in greater detail later. *See infra* Part II.B.

¹⁹ See ADAM SMITH, LECTURES ON JURISPRUDENCE 20 (1981); Merrill & Smith, *supra* note 18, at 359.

²⁰ See SMITH, *supra* note 19, at 19–20.

²¹ Merrill & Smith, *supra* note 18, at 359.

²² See Kyle Coogan, *Let's Play: A Walkthrough of Quarter-Century-Old Copyright Precedent as Applied to Modern Video Games*, 28 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 381, 405–409 (2018) (highlighting that video games are a rising industry, and the closest thing to litigation was a DMCA takedown issued by a video game developer).

²³ See generally THIEL & MASTERS, *supra* note 14 (explaining that startups must be able to ask where their business will fit into the world 10 and 20 years from now in order to explain how their business will fit into that era).

²⁴ See U.S. CONST. art. I § 8, cl. 8; Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976).

²⁵ See Aaron Swardlow, *The Emerging Legal Battle Over Video Game Streaming Rights*, VENTURE BEAT (May 27, 2017, 6:00 AM), <https://venturebeat.com/2017/05/27/the-emerging-legal-battle-over-video-game-streaming-rights/>; Merrill & Smith, *supra* note 18, at 388–90; Clark, *supra* note 17.

²⁶ Clark, *supra* note 17.

²⁷ See U.S. CONST. art. I § 8, cl. 8.

²⁸ *Id.*; see Duncan Kennedy & Frank Michelman, *Are Property and Contract Efficient?*, 8 HOFSTRA L. REV. 712, 759 (1980).

problems surrounding copyright law from real property rights and normative perspective. Part IV will propose solutions to the current gap in copyright jurisprudence, considering the analytical framework offered in Part III. Part V will conclude that although there are no perfect solutions to copyright law, placing the rights to the creation primarily in the creator promotes economic and utilitarian efficiencies. Better normative signaling to video game streamers about the scope of their rights will give developers more confidence in their rights, allowing for the creation of more video games.

II. BACKGROUND

Copyright law is the primary intellectual property that protects video game rights. The Copyright Act of 1976 (“Copyright Act”) and the Digital Millennium Copyright Act (“DMCA”) codify modern copyright law.²⁹ This Comment focuses on the implications that live streaming video games have upon the former, but the DMCA will be discussed relationally to issues regarding the protection of creators’ rights. Modern copyright laws were drafted nearly forty-five years ago, and technological developments have rendered many aspects of copyright law ambiguous, which allows courts to be flexible in applying the standards to a fast-developing society.³⁰ However, the ambiguity that has developed creates problems applying the law for those using technology, unknown at the time the law was drafted, to display or use their work.

Copyright, as defined in 17 U.S.C. § 102, requires (1) an original work of authorship (2) fixed to a tangible medium of expression.³¹ Once an author has created an original work fixed to a tangible medium, copyright law grants them six unique exclusive rights in that work.³² The two rights relevant to this Comment are: (1) the right to prepare derivative works and (2) the right to perform the copyrighted work publicly.³³ Public performance is essential because it protects audiovisual works, including video games. Performing an audiovisual work is defined as “show[ing] its images in any sequence or . . . mak[ing] the sounds accompanying it audible.”³⁴ A public performance means “to perform . . . at a place open to the public or . . . to transmit . . . a performance . . . to the public, by means of any device”³⁵

²⁹ Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976) (codified as amended at 17 U.S.C. § 101); Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998) (codified as amended at 17 U.S.C. § 512).

³⁰ See, e.g., 4 NIMMER ON COPYRIGHT § 13.05 (quoting *Time, Inc. v. Bernard Geis Assocs.*, 293 F. Supp. 130 (S.D.N.Y. 1968) (fair use “is so flexible as virtually to defy definition”); Digital Millennium Copyright Act, 144 Cong. Rec. H. 7074, 7099 (Rep. Berman stating that the rapid increase in technology required congress to address a lack of protections to copyright holders in what became DMCA).

³¹ 17 U.S.C. § 102(a).

³² *Id.* § 106.

³³ *Id.* §§ 101, 106.

³⁴ *Id.* § 101; see *infra* Part II.A. (explaining video games as audiovisual works).

³⁵ 17 U.S.C. § 101.

A. Application of Copyright Law to Video Games

Copyright law protects video games as both literary works and audiovisual works.³⁶ The reason video games are protected as literary works is because video games are embodied in written code that, when executed, displays the game.³⁷ Similarly, the reason why video games are protected as audiovisuals is because they are projected and experienced primarily as audiovisuals by computers displaying the executed code.³⁸ Thus, when evaluating a copyright claim, courts will have to dissect video games into their literal (written code) and non-literal elements (characters, audio, artworks displayed).³⁹

For a video game to be copyrightable, the video game must independently have some hint of creativity and must not be an idea or system.⁴⁰ In terms of computer programs, the Second Circuit developed a three-step analysis for determining whether the computer program is essentially a system of expression.⁴¹ First, the court looks at the level of abstraction of a computer program.⁴² Next, the court “filters” the abstract elements to determine what level of protection is warranted.⁴³ Specifically, the court looks at whether the abstract element is based on efficiency, items taken from the public domain, or external factors, which are standard techniques based on which operating system the program will run.⁴⁴ Finally, the court analyzes whether the infringing program is substantially similar to the protected work.⁴⁵ This process is important because it determines the

³⁶ 17 U.S.C. § 102(a); *see also* Computer Assocs. Int’l v. Altai, 982 F.2d 693, 702 (2nd Cir. 1992) (explaining that computer programs were intended to be included as literary works); Red Baron-Franklin Park, Inc. v. Taito Corp., 883 F.2d 275, 278 (4th Cir. 1989) (explaining that, in accordance with other appeals courts, video games are categorized as copyrightable audiovisual works).

³⁷ *See* Coogan, *supra* note 22, at 386.

³⁸ *See* Red Baron-Franklin Park, Inc., 883 F.2d at 278-79; *see, e.g.*, Atari Games Corp. v. Nintendo of Am., Inc., 975 F.2d 832, 835 (Fed. Cir. 1992).

³⁹ *See* Clark H. Worthy, *Determining The Scope of Copyright Protection For A Computer Program’s Nonliteral Elements: Is It As Easy As 1*2*3*?**, 48 WASH. & LEE L. REV. 1079, 1087-88 (1991).

⁴⁰ 17 U.S.C. § 102(a)-(b); *see* Feist Publ’ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 355 (1991).

⁴¹ Computer Assocs. Int’l, 982 F.2d at 706-12.

⁴² *Id.* at 707 (explaining that low level of abstract elements in a program are more complex, whereas high-level abstraction of elements breaks down a program into trivial functions).

⁴³ *Id.*

⁴⁴ *Id.* at 707-709.

⁴⁵ *Id.* at 710. This comparison only includes things that are copyrightable, as determined through filtration. *Id.* at 714. Some critics of early video game copyright jurisprudence have argued that modern video games are closer to systems or procedures than actual copyrightable materials. *See, e.g.*, Bruce E. Boyden, *Games and Other Uncopyrightable Systems*, 18 GEO. MASON L. REV. 439, 441-42 (2011) (arguing that video games are mere systems because they rely on input from a user). They do this in part because user input makes the possibilities numerous. *Id.* at 457. Their reasoning is flawed because not only have video games been characterized as audiovisual works, but video games do have a finite number of sequential display outputs. Red Baron-Franklin Park, Inc. v. Taito Corp., 883 F.2d 275, 279 (explaining that video games exact output image sequence will vary, “but there will always be a *sequence* of images”). The finite number of sequences is true even in large scale “sandbox” games because the code and the operating system, on which it runs, has a limited ability to construct sequential images. Clarissa Littler, *Computers, Programs, and Wrestling With Infinity*, THE RECOMPILER, <https://recompilermag.com/issues/issue-1/computers-programs-and-wrestling-with-infinity/> (last visited May 25, 2021) (explaining that computation is a finite process); *see* Coogan, *supra* note 22, at 409 (determining that courts will

scope of protectability of works embedded in computer code, such as video games.⁴⁶

When determining whether a video game is fixed to a tangible medium of expression, courts have been flexible. For example, in *MDY Industries, LLC v. Blizzard Entertainment, Inc.*, the court held that the copying of a video game's code to a computer's random access memory ("RAM"), a form of temporary memory, was sufficient under copyright to constitute fixation.⁴⁷ Courts are also afforded even more flexibility when determining this with respect to video games.⁴⁸ Moreover, the dual (literary and audiovisual) nature of video games allows for the fixation of the video game to be in a literary form, which simultaneously protects the literary and audiovisual features of said game.⁴⁹ Copyright law's text supports the court's flexibility and helps illustrate, at least historically, that courts have been liberal in finding copyrightable elements of video games.⁵⁰ Thus, courts have traditionally regarded video game copyrights liberally when analyzing whether a work deserves protection under current copyright law.

One notable case of copyright infringement came from *Red Baron-Franklin Park, Inc. v. Taito Corporation* ("Red Baron").⁵¹ In Red Baron, the court found infringement when a store allowed a coin-operated arcade game (a predecessor to modern-day video games) to be played, visible to the rest of the store.⁵² The court emphasized that playing the game in a place open to the public constituted a "public performance" within the meaning of the Copyright Act.⁵³ Interestingly, Congress responded to this decision by creating an exemption for coin-operated video games.⁵⁴ Congress did so on a provisional one-year basis and failed to pass an extension on the exemption.⁵⁵ *Red Baron* is, therefore, instructive on how public performance

maintain that audiovisual output of a video game system is a "particular expression of the system"). However, when applying the Second Circuit's more difficult test to "sandbox" games, they would, at a minimum, be protected for their non-literal elements (such as picture and music played together), even if the possibilities are expansive. *See id.* at 408–09 (explaining that a sandbox game with expressive characters, an expressive surreal world, and a physics engine, when played would be a copyrightable expression, despite a physics engine being a system under the Second Circuit's test).

⁴⁶ *Computer Assocs. Int'l*, 982 F.2d at 712.

⁴⁷ *MDY Indus., LLC v. Blizzard Ent. Inc.*, 629 F.3d 928, 938 (9th Cir. 2010).

⁴⁸ *See* Bryan W., *Game Design Copyright & Patent Guide*, <https://www.gamedesigning.org/gaming/copyright/> (last visited May 25, 2021).

⁴⁹ *See* 1 NIMMER ON COPYRIGHT § 1.08 (2020) (stating a writing must have "some material form, capable of identification, and . . . a permanent endurance"); *see also* *Goldstein v. California*, 43 U.S. 546, 561–562 (1973) ("writings" for constitutional interpretation is any physical rendering of the intellectual labor).

⁵⁰ 17 U.S.C. § 101 (defining "fixed" as "sufficiently permanent...to permit it to be perceived, reproduced, or otherwise communicated for...more than a transitory duration").

⁵¹ *See* *Red Baron-Franklin Park, Inc. v. Taito Corp.*, 883 F.2d 275, 275 (4th Cir. 1989).

⁵² *Id.* at 278–79.

⁵³ *Id.*

⁵⁴ 17 U.S.C. § 109(e).

⁵⁵ *See generally id.*

of video games should be treated.⁵⁶

B. Fair Use Defense

The fair use doctrine is a defense in copyright law to otherwise infringing activity and includes four factors that the court weighs to determine whether infringement claims can be avoided.⁵⁷ First, the court will look to the character and purpose of the use, including whether it is of a commercial nature.⁵⁸ Second, the court will review the nature of the copyrighted work.⁵⁹ Third, the court will look at the substantiality of the portion used compared with the whole work.⁶⁰ Finally, the court will examine the effect of the use on the market of the copyrighted work.⁶¹

In terms of video games, the courts have not commented directly on the fair use defense as applied to situations similar to streaming. The most recent and analogous case consisted of a PC emulator of games, similar to those on the PlayStation, using Sony copyrighted screenshots in advertising his emulator.⁶² In *Sony Computer Entertainment America, Inc. v. Bleem, LLC*, the court conceded that although the infringement allowed the PC programmer to profit, it did not substantially use the material, did not take away the market for the copyrighted work, and was comparative in nature rather than strictly commercial.⁶³ Thus, the court held the fair defense applicable.⁶⁴

An issue with the fair use defense became apparent when the older video game cases did not involve the same substance and character of technology, leaving comparison difficult for modern video games. The characterization of video games as an audiovisual work publicly performed is more substantively infringing (than displaying screenshots of games) and is closer to a similar character of the original video game (is showing images in sequence).⁶⁵ The analysis of the nature of the copyrighted work led commentators to denote the variety of genres of video games as affecting a fair use defense to the streaming of video games.⁶⁶

For instance, many commentators have stated that multiplayer online games are so inherently transformative that they would either be original

⁵⁶ *Red Baron-Franklin Park, Inc.*, 883 F.2d at 278–79.

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² *Sony Computer Entertainment Am., Inc. v. Bleem, LLC*, 214 F.3d 1022, 1024–25 (9th Cir. 2000).

⁶³ *Id.* at 1027–28.

⁶⁴ *Id.* at 1030.

⁶⁵ Coogan, *supra* note 22, at 397–98.

⁶⁶ *Id.* at 397; see James Puddington, *Fair Play: Economic Justifications for Applying Fair Use to the Online Streaming of Video Games*, 21 B.U. J. SCI. & TECH. L. 413, 430 (2015).

works or sufficiently transformative to justify a fair use defense.⁶⁷ On the other hand, commentators have acknowledged that as applied to games that are more story-based, the fair use defense is hard to justify because even with commentary, the market for the video game may be usurped by the streaming of the game.⁶⁸ This area of copyright law, as applied to video games, has created much controversy in dealing with the issue of online streaming of such games.⁶⁹

Some commentators have emphasized that the filtration analysis is helpful when analyzing fair use.⁷⁰ Specifically, it allows the “thickness” of the work to be weighed against how substantially the defendant used the copyrightable elements.⁷¹ Although this process requires substantial fact-driven inquiry, it would make the fair use doctrine clearer for users and rights holders.

The uncertainty of any fair use defense further reduces the likelihood that new developers will innovate or litigate, for that matter. This uncertainty arises because the fair use defense is often subjective and amorphous when applied by courts, thus, leaving a developer not only uncertain as to whether his game is a mere system or sufficiently protected but also to how fair use may affect his ability to market his game. A developer may be too uncertain as to the ability to enforce his rights, such that the developer quits creating video games entirely.⁷²

C. End User License Agreements

Software and video game companies protect their copyrights through the use of limited licensing agreements.⁷³ These agreements usually take the form of an end user license agreement (“EULA”), where the person who wants to use the technology (video game) has to scroll or click through the terms of the license and agree in some form before gaining access to the technology (video game).⁷⁴ The use of EULAs is standard practice, and currently, many developers allow for some commercial use of their games via third-party streaming.⁷⁵ The permitted streaming of video games is primarily

⁶⁷ See Coogan, *supra* note 22, at 399.

⁶⁸ See *id.* at 391; Puddington, *supra* note 66, at 432.

⁶⁹ Puddington, *supra* note 66, at 415–16.

⁷⁰ Shyamkrishna Balganes, *The Normativity of Copying in Copyright Law*, 62 DUKE L.J. 203, 278 (2012).

⁷¹ *Id.* at 280.

⁷² See *supra* Part I.

⁷³ See, e.g., *Fortnite® End User License Agreement*, EPIC GAMES, <https://www.epicgames.com/fortnite/en-US/eula> (last visited May 25, 2021); *Blizzard End User License Agreement*, BLIZZARD, <https://www.blizzard.com/en-us/legal/fba4d00f-c7e4-4883-b8b9-1b4500a402ea/blizzard-end-user-license-agreement> (Oct. 9, 2020); see also Swerdlow, *supra* note 25.

⁷⁴ See *Fortnite® End User License Agreement*, *supra* note 73; see *Blizzard End User License Agreement*, *supra* note 73; see, e.g., *Nguyen v. Barnes & Nobel Inc.*, 763 F.3d 1171, 1175–76 (9th Cir. 2014) (walking through clickwrap and browserwrap end user license agreements).

⁷⁵ See *Fortnite® End User License Agreement*, *supra* note 73; see, e.g., Swerdlow, *supra* note 25.

due to the perception (and evidence) that publicly performing a video game is closer to an advertisement than actual infringement.⁷⁶ However, this is not always the case.⁷⁷ The uncertainty that currently looms in video game copyrights will likely lead to stricter EULAs to reduce the risk exposure of developers.

D. The Digital Millennium Copyright Act

The DMCA was created to address the growing internet use in 1998.⁷⁸ DMCA limits liability for online service providers.⁷⁹ It also allows for injunctive relief in certain circumstances, commonly referred to as “safe harbor” provisions.⁸⁰ This limitation on liability, as applicable to internet streaming, is controlled by 17 U.S.C. § 512(c)(1).⁸¹ That provision limits liability if the material residing on the network is directed by the user of the network.⁸² In other words, the streamer who uploads and casts a stream must be in control of the content, which is currently the case on streaming platforms.

This limitation on liability depends on whether the provider (i.e., Twitch) lacks knowledge that the material is infringing, is aware of facts or circumstances from which infringing activity is apparent, or upon it obtaining knowledge or awareness, expeditiously removes the material.⁸³ Additionally, the service provider must not receive a financial benefit attributable to the infringing activity, where they have control of the activity.⁸⁴ Finally, when notified of the infringement, the service provider must remove the infringing material.⁸⁵ To obtain expeditious removal of the material, notice of the infringement must be given to the service provider, and the copyrighted work must be identifiable.⁸⁶ This process is commonly referred to as a DMCA takedown, which requires notice to the provider.⁸⁷ Although this construction allows for the removal of multiple infringing works on a single website, the website is not required to search for infringements.⁸⁸

The DMCA “safe harbor” and takedown laws cause information-

⁷⁶ See Swerdlow, *supra* note 25.

⁷⁷ See Klepek, *supra* note 1 (where game developer did not profit off of game when the game was uploaded in its entirety. In effect this usurped the market for those who would have otherwise bought the game).

⁷⁸ See Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2860 (1998).

⁷⁹ See generally 17 U.S.C. § 512.

⁸⁰ *Id.* § 512 (a).

⁸¹ *Id.* § 512(c)(1).

⁸² *Id.*

⁸³ *Id.* § 512(c)(1)(A).

⁸⁴ *Id.* § 512(c)(1)(B).

⁸⁵ *Id.* § 512(c)(1)(C).

⁸⁶ *Id.* § 512(c)(1)(A)(iii).

⁸⁷ *Id.* § 512(j)(3).

⁸⁸ See *Id.* § 512(c)(3)(A)(iii) (2020); *Viacom Int'l, Inc. v. YouTube, Inc.*, 718 F. Supp. 2d 514, 525 (2010).

seeking costs that may be insurmountable to new developers. The cost of discovering infringements of millions of users across multiple platforms may be prohibitive of distributing a work that would be usurped by the public performance of the video game via streams. The plausible deniability service providers receive under the DMCA and the norm of infringement currently allowed by market holding developers both stymie enforcement through the DMCA before the market is displaced. Further, larger streamers are now bringing in enough revenue that they can effectively litigate against even larger developers.⁸⁹ These realities greatly affect the certainty of the creators' rights.

Currently, the informational cost is not necessarily going to be as extreme in every instance of a new developer or even a new game. However, there is at least anecdotal evidence that the usurping of a story-based game's market can occur before the infringing activity can be addressed.⁹⁰ The inability to police the infringing activity before its damage occurs escalates when the amount of user-generated content is in the millions per day.⁹¹ The difficulty in policing is compounded when the service provider needs to know that a user is a repeat offender before they can terminate the user's accounts with the service providers.⁹² Enough users may infringe daily that repeat offenders may not be discovered before their conduct eviscerates the market for the protected work.⁹³ Thus, DMCA is likely not adequate when dealing with the incredibly transitory nature of streams, which in the aggregate, can substantially distort the market of any sole copyright.⁹⁴

III. CONTEMPORARY COPYRIGHT LAW ANALYZED

For progress to occur, first, one must be able to plan for the future. Economic thinkers since the time of Adam Smith have argued intellectual property rights as in rem (real) rights because they can be vindicated against anyone in the world who prints a book or copies a machine during the term of a copyright or patent.⁹⁵ More recently, Thomas Merrill articulated that because "property rights create duties that attach to 'everyone else,' they provide a basis of security that permits people to develop resources and plan for the future."⁹⁶ Thus, economic thinkers have consistently held the viewpoint that copyrights and intellectual property rights generally are economically beneficial, and this viewpoint matches the view of copyright

⁸⁹ See Kim, *supra* note 11.

⁹⁰ See Klepek, *supra* note 1.

⁹¹ See Fruhlinger, *supra* note 9.

⁹² See 17 U.S.C. § 512(i)(1)(A).

⁹³ See Klepek, *supra* note 1.

⁹⁴ Kyle Tuckman, *The Digital Millennium Copyright Act: A Work in Progress in the Era of Live Streaming*, J. OF L. & THE ARTS, Feb. 25 2020, at 6.

⁹⁵ See SMITH, *supra* note 19; see generally Merrill & Smith, *supra* note 18, at 359.

⁹⁶ Merrill & Smith, *supra* note 18, at 359.

law as enacted by Congress.⁹⁷

A. What Incentivizes the Dissemination and Creation of Knowledge?

Rights that are state-protected would naturally produce the most efficient good for the greatest amount of people. This efficiency occurs in two ways. First, those who feel secure in their rights (and right to sell those rights) are more likely to share (for a profit) the property covered by copyright.⁹⁸ Moreover, one who can make money from the fruits of their labor is more likely to create and disseminate those fruits when the law ensures that the right to the labor belongs exclusively to the creator.⁹⁹ Second, by securing rights, allowances for risk are increased. There is a certain amount of legal exposure that any right will have. By minimizing these exposures in copyright holders, it allows them to safely and efficiently risk more (and produce better copyrightable material) by attempting to sell to more people or by attempting to innovate further.¹⁰⁰

Because copyright law is ultimately grounded in the Congress's power to promote the progress of science and useful arts, the Supreme Court has characterized the primary purpose of copyright as to secure the general benefits derived by the public from the labor of authors.¹⁰¹ For instance, the Court in the 1970s held that the dissemination of intellectual labor must be compelled by a fair return for the author's labor.¹⁰² The private benefit derived is the mechanism that compels owners to share the copyrighted works with the public.¹⁰³ To do this, Congress has exercised its constitutional power to legislate for the useful arts and sciences in the enactment of the Copyright Act.¹⁰⁴

However, some commentators believe the United States's system for innovation is not effective or efficient.¹⁰⁵ Joseph Stiglitz, a Nobel Laureate, has urged that intellectual property rights are unlike traditional (in rem) property rights.¹⁰⁶ Moreover, Stiglitz characterizes intellectual property as "knowledge" because it can be shared with one person while remaining available for another.¹⁰⁷ Economically speaking, knowledge is a public good

⁹⁷ SMITH, *supra* note 19, at 20; Merrill & Smith, *supra* note 18, at 369; *see generally* 17 U.S.C. § 106.

⁹⁸ *See* Merrill & Smith, *supra*, note 18.

⁹⁹ *See* U.S. CONST. art. I § 8, cl. 8; *see* Kennedy & Michelman, *supra* note 28, at 767–69.

¹⁰⁰ *See* U.S. CONST. art. I § 8, cl. 8; *see* Kennedy & Michelman, *supra* note 28, at 767–69.

¹⁰¹ 1 NIMMER ON COPYRIGHT § 1.03 (citing *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975)); *New York Times Co. v. Tasini*, 533 U.S. 483, 520 (2001).

¹⁰² 1 NIMMER ON COPYRIGHT § 1.03; *see* *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151 (1975).

¹⁰³ *See* *Eldred v. Ashcroft*, 537 U.S. 186, n. 18 (2003); 1 NIMMER ON COPYRIGHT § 1.03.

¹⁰⁴ U.S. CONST. art. I § 8, cl. 8; Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976).

¹⁰⁵ *See* Joseph E. Stiglitz, *Economic Foundations of Intellectual Property Rights*, 57 DUKE L. J. 1693, 1699–1700 (2008).

¹⁰⁶ *Id.*

¹⁰⁷ *Id.*

because its consumption is “non-rivalrous.”¹⁰⁸ In essence, Stiglitz argues that the dissemination of knowledge will always result in a net positive gain because knowledge can be consumed by many without taking away from anyone.¹⁰⁹ This argument is, in fact, correct because the dissemination of knowledge is a public good.

The Founding Fathers thought the same thing when they drafted the Progress Clause, and the Supreme Court has interpreted that clause in the same way.¹¹⁰ However, the purpose of the Progress Clause is twofold; the primary purpose is to disseminate knowledge as Stiglitz thrusts forward, and the second is to compel creation and discovery through the governmental grant of rights.¹¹¹ Thus, the argument Stiglitz makes about knowledge being a public good is consistent with most thinkers and the Founding Fathers.

However, Stiglitz presumes that motivation to create and disseminate works, at least in academia, is not to make money but to “influence ideas” and “shape the intellectual debate.”¹¹² Stiglitz’s presumption, or at least this Comment’s interpretation of Stiglitz’s presumption, focuses on the notoriety and esteem that comes with the popularization of an author’s creative work as a primary motivator for dissemination.¹¹³ As stated above, all intellectual property is a public good because it can be used by many without taking away from the good. The point where Stiglitz and this Comment diverge is what compels dissemination and, incidentally, creation of creative works.¹¹⁴ Stiglitz further argues that a grant of exclusive rights for intellectual property stymies innovation and distorts what innovations occur.¹¹⁵

Stiglitz concedes that funding is necessary to further knowledge but insists that government funding promotes better and more useful dissemination of knowledge than does the grant of exclusive rights in the United States.¹¹⁶ In his article, he offers alternatives to the current funding for the United States’ patent regime: a prize system and government-sponsored research.¹¹⁷ A prize system would be a government-funded incentive for doing a specific thing (in the article, he uses an example of curing malaria) and smaller incentives for subsequent improvements on the initial discovery

¹⁰⁸ *Id.* A “non-rivalrous” good is something that can be used without depleting the good. See Amanda Reid, *Copyright Policy as Catalyst and Barrier to Innovation and Free Expression*, 68 CATH. U. L. REV. 33, 37 (2019).

¹⁰⁹ Stiglitz, *supra* note 105, at 1700.

¹¹⁰ See *Harper & Row, Publrs. v. Nation Enters.*, 471 U.S. 539, 545–46 (1985) (citing *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984)).

¹¹¹ See Stiglitz, *supra* note 105.

¹¹² *Id.* at 1695.

¹¹³ See Stiglitz, *supra* note 105, at 1695–1696. Although Stiglitz’s article is primarily on patents, he uses what would be American copyright protections as an analogy. See *id.* This Comment similarly critiques patent alternatives compared to copyrights. See *supra* Part III.A.

¹¹⁴ See Stiglitz, *supra* note 105, at 1695.

¹¹⁵ *Id.* at 1700.

¹¹⁶ *Id.* at 1699–1700.

¹¹⁷ *Id.* at 1697.

(cheaper ways of creating the cure to malaria).¹¹⁸ This mechanism is compelling but ineffective in the field of copyright. Moreover, only allowing government-sponsored arts causes the freedom of expression to be restricted and would not allow for innovation in areas the government does not feel are worthwhile.¹¹⁹

Government-funded research would similarly be inapplicable. Moreover, government-funded research, as it currently exists in the United States, has encouraged the fabrication of knowledge rather than the discovery of knowledge.¹²⁰ Government funding follows many of the same flaws as a prize system would, especially in the realm of copyrights. Government-funded research would not promote the discovery of knowledge but would tailor the knowledge to whatever the government believed useful at the time. The flaw with the government choosing one type of research for copyright is that it would inherently exclude research for others.¹²¹

For instance, in the context of copyrights, criticisms of public television funding were discussed in the 1960s.¹²² If taxes are funding the television programming, then the public is paying for the programming on public television.¹²³ However, because the government, rather than people, chose what is useful at the time, the government became a paternalistic entity deciding what is good and bad to disseminate and discover with peoples' money, with little input from the people themselves.¹²⁴ A better regime indeed would be to allow folks to vote with their money for what they believed was useful and derive and create similar works off of the public's spending conscience rather than political conscience.¹²⁵ Thus, a structure where a government controls the means of discovery tilts toward politically motivated discoveries, which are not necessarily what the public wants.¹²⁶

In sum, Stiglitz's view of creation and dissemination of creative

¹¹⁸ *Id.* at 1719.

¹¹⁹ For example, with respect to copyrights, the government may promote the development of novels and movies, but not put prizes (or put lower incentive prizes) for things like music or video games. *See, e.g.,* Sara Stadler, *Incentive and Expectation in Copyright*, 58 HASTINGS L. J. 433, 453-54 (2007); Thomas Hemmes, *The Adaptation of Copyright Law to Video Games*, 131 U. PA. L. REV. 171, 174-75 (1982). This system would both distort and restrict the development of copyrights as a whole.

¹²⁰ *See, e.g.,* Ivan Oransky, *Duke University to Settle Case Alleging Researchers Used Fraudulent Data to Win Millions in Grants*, SCIENCE, (Nov. 19, 2018, 12:10 PM), <https://www.sciencemag.org/news/2018/11/duke-university-settle-case-alleging-researchers-used-fraudulent-data-win-millions> (discussing Duke University settling a case for falsifying data to get federal grant money).

¹²¹ *See* AYN RAND, *THE VOICE OF REASON ESSAYS IN OBJECTIVIST THOUGHT*, 239-46 (Leonard Peikoff ed., 1990).

¹²² *See id.*

¹²³ *Id.* at 240-41.

¹²⁴ *Id.*

¹²⁵ *See id.* at 242-43.

¹²⁶ However, the argument Stiglitz puts forward is much more forceful in the context of patents, where innovations can indeed save lives. *See* Stiglitz, *supra* note 105, at 1719. This Comment does not delve into this argument; contextually speaking, Stiglitz's point about patents remains forceful but ultimately fails to be adequately extrapolated into the realm of copyrights. *See supra* Part III.A.; Stiglitz, *supra* note 105, at 1719.

works is inapplicable to copyrights because there would be no way to finance the creation of the works without granting strong intellectual property rights.¹²⁷ Specifically, without the ability to market and sell works, there is no practical way to sustain the creation of creative works. Strong protections are needed for intellectual property to be marketed and sold because creative works are non-rivalrous.¹²⁸ Similarly, Stiglitz’s claim that “strong intellectual property rights” distort innovation is inapplicable to his alternatives because similar distortion occurs when the government sponsors the creation of work.¹²⁹ As such, the better mechanism to incentivize creation and dissemination is the current copyright regime.¹³⁰ This regime, where the free market decides what is useful and deserving of reward, is what the Founders believed would best serve the dissemination of knowledge—one where the creators hold their rights against all.¹³¹ Thus, to promote the creation and dissemination of useful creations, the protection granted under copyright law is necessary.

B. The True Nature of the Exclusive Rights of a Copyright Holder; Defenses to Infringement

The Copyright Act not only granted exclusive rights to the authors of the copyrights but simultaneously limited the exclusivity in things such as the fair use defense.¹³² The Copyright Act codified the common law equitable defense that developed under the previous statutes.¹³³ The fair use defense, as enacted, creates an asymmetrical right, which creates further uncertainty to rights holders.¹³⁴

Fair use requires a fact-driven inquiry before ultimately deciding whether infringement occurred.¹³⁵ Because the maximization of value in copyrights requires clear rights, the fact-driven inquiry about the scope of a copyright holder’s exclusive right increases the costs of preventing infringement (or recovering for infringing activity).¹³⁶ This fact-driven inquiry, coupled with the minimal number of fair use cases applicable to video game streaming, which could educate the true extent of legal exposure,

¹²⁷ See Stiglitz, *supra* note 105.

¹²⁸ Reid, *supra* note 108, at 37.

¹²⁹ See *supra* Part III.A.

¹³⁰ See U.S. CONST. art. I § 8, cl. 8; Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976).

¹³¹ See U.S. CONST. art. I § 8, cl. 8; Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (1976).

¹³² See 17 U.S.C. §§ 106–07 (defining the exclusive rights of copyright holders and limiting those rights for a fair use defense). The fair use defense creates asymmetrical rights, which in turn makes those rights more challenging to enforce. See Kennedy & Michelman, *supra* note 28, at 767–69 (showing that a right in something does not legally restrict the privilege in someone else, where affirmative defenses exist).

¹³³ See *Harper & Row, Publrs. v. Nation Enters.*, 471 U.S. 539, 560 (1985) (holding fair use is a mixed question of law and fact).

¹³⁴ See 17 U.S.C. §§ 106–107.

¹³⁵ The finding of fair use is part fact and part law. However, because of the litany of factors weighed, it is still a fact-driven inquiry.

¹³⁶ David Fagundes, *Crystals in the Public Domain*, 50 B.C. L. REV. 139, 142 (2009).

increases the legal exposure of developers—especially new developers.

Uncertainty could lead to two distinct problems, both of which decrease the incentive for creators in copyrighted works. First, the uncertainty of the legal exposure could cause new developers to restrict the licenses given for their game.¹³⁷ This consequence will be discussed later, but in essence, the restriction of a license decreases the potential utility gains that any fair uses would otherwise net.¹³⁸ Second, uncertainty may detract from those wanting to develop games.¹³⁹ In essence, uncertainty takes away from both the primary and secondary purposes of the Progress Clause discussed above.¹⁴⁰ Thus, the rights must be sufficiently defined so that both those interacting with the copyrighted material and those disseminating it act for the public good.

The asymmetry created via the Copyright Act accommodates the First Amendment concerns surrounding copyrights.¹⁴¹ However, the unique nature of video game streams makes this asymmetry even more uncertain as to the actual extent of legal exposure to which developers are risking themselves. This uncertainty is in part due to DMCA takedowns.¹⁴² Moreover, DMCA takedowns created an efficient way to avoid court for copyright holders and service providers.¹⁴³ The downside to these takedowns is that less litigation occurs because most disputes are settled outside of court.¹⁴⁴ The lack of litigation is especially troublesome in a common law system, such as the United States, where holders of rights can be educated to their true scope when defenses (which create the asymmetrical right) are judicially determined.

The issue regarding fair use is that most precedent is not analogous to video game streaming, even early video game cases.¹⁴⁵ Although analogies may be drawn in other subject matters, such as video streaming services, video games offer more of a spectrum of fair use considerations than traditional video streaming infringement. Specifically, video streaming is often the whole, a substantial part of, or almost none of the work.¹⁴⁶ Whereas video game streaming often involves commentary, user inputs, and other considerations that make fair use a more fact-intensive inquiry. Conceptually,

¹³⁷ See Kennedy & Michelman, *supra* note 28, at 767–68.

¹³⁸ *Id.* at 767–68.

¹³⁹ *Id.*

¹⁴⁰ *Id.*; see also Harper & Row, *Publrs. v. Nation Enters.*, 471 U.S. 539, 545–46 (1985).

¹⁴¹ See generally 17 U.S.C. §107.

¹⁴² See *supra* Part II.D.

¹⁴³ See *supra* Part II.C–D. Cf. Makena Kelly, *House Overwhelmingly Approves Contentious New Copyright Bill*, VERGE (Oct. 22, 2019, 7:02PM), <https://www.theverge.com/2019/10/22/20927545/copyright-bill-house-congress-hakeem-jeffries-case-act-dmca>.

¹⁴⁴ *How Courts Work*, ABA (Sept. 9, 2019), https://www.americanbar.org/groups/public_education/resources/law_related_education_network/how_courts_work/cases_settling/.

¹⁴⁵ See, e.g., *Sony Computer Entertainment Am., Inc. v. Bleem, LLC*, 214 F.3d 1022 (9th Cir. 2000).

¹⁴⁶ See *Disney Enters. v. VidAngel, Inc.*, 869 F.3d 848, 861 (9th Cir. 2017).

in a case where there are many user inputs originating from multiple users in real-time, the stream created would likely be transformative under the fair use defense.¹⁴⁷ Similarly, a story-based game streamed without commentary is more likely to usurp a market, and, therefore, fair use would be unavailable.¹⁴⁸ However, the four fair use factors, discussed above, create this dimensional scale that can be hard for experienced attorneys to predict, let alone those wishing to endeavor in developing video games. The inevitable conclusion is that until further litigation occurs, uncertainty will loom in those wishing to start developing a game, but fair use is comparable to this subject matter with finesse.

C. Normative Issues with the Exclusionary Right of Public Performance

Current developer norms have created a normative problem for new developers. Moreover, developers often permit (and encourage) public performance by streamers because they see mutual economic benefit.¹⁴⁹ This norm is contrary to the exclusive rights imbued by the Copyright Act to prevent public performance.

To demonstrate the normativity of property rights, this Comment draws from Thomas Merrill, who explored normativity in the context of real property rights.¹⁵⁰ Merrill discusses exclusionary norms concerning the customs of a group of farmers and ranchers in a county in California.¹⁵¹ The norm he uses is as follows: cattle owners would not face any consequences for the first time a cattle trespassed onto a farmer's land, so long as they assisted with any repairs and ensured it would not happen again.¹⁵² The norm then allowed subsequent trespasses to follow with more severe remedial measures up to and including self-help.¹⁵³ Merrill later characterized the general rule of exclusion (cattle, vehicles, people) as being exempt when the trespass is of a neighbors' cat, as acceptable within a given community.¹⁵⁴

For a comparable analysis of video games with the analysis Merrill used, a few concessions would need to happen. The community of "streamers" would have to be a community in a sense embodied by Merrill.¹⁵⁵ Looking at the community solely as streamers instead of those who play video games may narrow the community to those with sufficient knowledge to interact with streaming. However, because new streamers are entering into

¹⁴⁷ See 17 U.S.C. § 107; Coogan, *supra* note 22, at 399.

¹⁴⁸ See Coogan, *supra* note 22, at 399–400.

¹⁴⁹ See Clark, *supra* note 17.

¹⁵⁰ Merrill & Smith, *supra* note 18, at 358–59.

¹⁵¹ *Id.* at 388.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ *Id.* at 390.

¹⁵⁵ *Id.* Noting that the community was a collection of people sharing the same norm. The county in the cow example represented a single community in the example.

the community at an alarming rate, a change in signaling may be warranted to correct the influx of inexperienced streamers.¹⁵⁶ Nonetheless, a normative analysis is warranted because the streaming community, as a whole, is likely sufficiently knowledgeable to understand norms.

The current norm in video game streaming is that streaming of the game is allowable without consideration of fair use.¹⁵⁷ The degree of consideration of whether streaming may constitute fair use may vary from streamer to streamer, but the consensus is that because streaming acts as “free advertising,” no permission needs to be sought before streaming a game.¹⁵⁸ Thus, the norm is not to examine the scope of a game’s license or to seek a license to stream for profit but to presume fair use is applicable.¹⁵⁹

When a choice between two norms’ efficiency is debatable or mixed, as it could be with the right to publicly perform videos, there is an informational cost-advantage to selecting a norm that coincides with the general in rem exclusion (public performance).¹⁶⁰ The choice is whether to adopt the current norm of presumed right to publicly perform a video game through live streaming or to adopt the presumed in rem right as the norm, and that the live streaming of video games is infringing upon the exclusive right of the copyright owner.¹⁶¹ The latter norm has a lower informational cost because the copyright owner already holds the exclusive right.¹⁶² The lower cost is furthered by the limited licenses through which developers sell their games in the shape of EULAs, which preclude in some way publicly performing the game.¹⁶³ Thus, adopting in rem rights to public performance furthers the informational-cost advantage.

The current normative regime of video game streamers and developers also shields many service providers from DMCA takedown issues.¹⁶⁴ Due to the transitory nature of streaming, DMCA takedowns would be unfeasible.¹⁶⁵ DMCA safe harbor laws would require knowledge or circumstances that would put the service provider on notice of likely

¹⁵⁶ See Edge, *supra* note 7.

¹⁵⁷ See Klepek, *supra* note 1.

¹⁵⁸ See Clark, *supra* note 17; see generally Klepek, *supra* note 1.

¹⁵⁹ See Shigenori Matsui, *Does it Have to be Copyright Infringement?: Live Game Streaming and Copyright*, 24 TEX. INTELL. PROP. L.J. 215, 239 (2016); Clark, *supra* note 17. Ray Narvaez Jr., known as “BrownMan” on Twitch, believes that because his stream helps people buy the game it’s completely legal. *Id.* However, he believes that if a developer does not want their game streamed, it is their right. *Id.* This sort of mindset epitomizes the current problem with streaming: Streamers believe they are in the right until told not to stream.

¹⁶⁰ Merrill & Smith, *supra* note 18, at 391.

¹⁶¹ See 17 U.S.C. §§ 106–107; Clark, *supra* note 17.

¹⁶² See Merrill & Smith, *supra* note 18, at 390–91. This norm would be comparable to one not allowing a cow on their property as the norm in Merrill. *Id.* at 388.

¹⁶³ See Swerdlow, *supra* note 74; see, e.g., *Fortnite® End User License Agreement*, *supra* note 73; see *Blizzard End User License Agreement*, *supra* note 73.

¹⁶⁴ See *supra* Part II.

¹⁶⁵ Live streams take place in real-time, and DMCA takedowns require notice, and then the provider is required to remove the content expeditiously. See 17 U.S.C. § 512(c)(iii).

infringement.¹⁶⁶ Streamers may assume that they have permission or an implied license to stream when they have no permission because many developers do not enforce their rights.¹⁶⁷ This assumption leads to the norm in the streaming community of presuming they have a right to stream without determining whether fair use or a license exists. This current norm hampers takedown claims because knowledge of infringement will be nearly impossible to prove when the current norms indicate the opposite on the part of the streamer and incidentally on the service provider.¹⁶⁸

The only feasible way to get content taken down would be to scan through and look at the content of every user streaming.¹⁶⁹ This review would be followed by notifying the provider of infringement when it occurs.¹⁷⁰ This process would likely take a lot of money and time to effectively police, which happens to be things that new developers are unlikely to have.¹⁷¹ Additionally, the number of streamers and streaming services is increasing at a significant rate, thereby increasing potential costs to protect the right at a rate similar to the increase in streamers.¹⁷² In sum, the multitude of streamed video games combined with the number of users streaming, again combined with the number of streaming services developed, makes it infeasible to protect the copyright holders' interest. The lack of feasibility is especially true when the fair use defense is unclear as applied to different streamers, and the factual inquiry required of a fair use defense is also unclear.¹⁷³ Thus, as the current normative culture exists, the developers' rights are in limbo.

D. End User License Agreement Consequences, and Why Modifying Them Decrease the Usefulness of Video Games

EULAs define the scope of use of the copyrighted works.¹⁷⁴ EULAs are also the most efficient way to define the scope of the rights given because they must be interacted with before the license is used.¹⁷⁵ However, one way to minimize risk in the distribution of a copyrighted work, specifically video games, is to restrict the public performance right through EULAs.¹⁷⁶ The

¹⁶⁶ *Id.*

¹⁶⁷ See Clark, *supra* note 17; see, e.g., Klepek, *supra* note 1; see generally 17 U.S.C. § 512.

¹⁶⁸ See Clark, *supra* note 17; see also Klepek, *supra* note 1.

¹⁶⁹ 17 U.S.C. § 512 (requiring notice be given to a service provider for each instance of infringement).

¹⁷⁰ *Id.* (requiring notice be given to a service provider for each instance of infringement).

¹⁷¹ In 2019 alone, Twitch has had an average of 3.64 million streamers per month. *Twitch Statistics & Charts*, TWITCH TRACKER, <https://twitchtracker.com/statistics> (last visited Sept. 13, 2019). Thus, to effectively police the streaming activity, a developer would have to regularly check Twitch to determine whether the game is being streamed. *Id.*

¹⁷² See *id.* (In 2019, the number of average monthly streamers increased by 7% from 2018.).

¹⁷³ See Coogan, *supra* note 22, at 397–400.

¹⁷⁴ See *supra* Part II.

¹⁷⁵ See *supra* Part II. The efficiency comes from the known right being given up by the one who holds the right. See generally Merrill & Smith, *supra* note 18. This signaling helps keep the right in rem and grants notice of changes to that right through the nature of the EULAs and the use of games.

¹⁷⁶ See Steven J. Horowitz, *Copyright's Asymmetric Uncertainty*, 79 U. CHI. L.R. 331, 363 (2012). Another option posited by Horowitz is to overvalue the price of the license. See *id.*

restriction is not socially desirable because the licenses would stymie future innovations to the works and other transformative uses of the work.¹⁷⁷ However, EULAs serve an important function. Specifically, they tell users what the scope of their rights to use the works (games) is.¹⁷⁸ A current and continuing problem is the rate at which users actually read the licenses they purchase.¹⁷⁹ In a 2011 study with 2,500 participants, the estimate was that no more than eight percent of users read license agreements in full.¹⁸⁰ Thus, a further restriction of the right to perform is unlikely to impact the norm discussed above.¹⁸¹

IV. SO, THERE IS A GLITCH IN THE SYSTEM. HOW DO WE TROUBLESHOOT IT?

There have been many proposed changes to copyright laws to accommodate the dawn of rapidly changing technology. The changes range from creating a copyright exception to live streaming video games, adding compulsory licenses to the subject area of video game streaming, and expanding fair use analysis to DMCA takedowns as some examples.¹⁸² Commentators on the other end of the spectrum often urge for rules rather than factors for fair use analysis.¹⁸³ These proposed solutions will be explored. However, a more realistic two-part approach could lead to improvements both streamers and developers find amenable.

A. Pro-Streamer Solutions

Pro-streamer commentators believe that the risks streamers bear in the current regime are too great and that the current regime needs clarification to minimize these risks.¹⁸⁴ One solution proposed would be to adopt a compulsory license regime.¹⁸⁵ The advantages would be to come into closer compliance with Japanese and Chinese approaches to streaming.¹⁸⁶ In addition, the compulsory license regime would balance the rights of service providers, rights holders, and streamers.¹⁸⁷ The proposal does not require advanced permission for use and allows for cancellation by the rights

¹⁷⁷ *See id.*

¹⁷⁸ *See* Coogan, *supra* note 22, at 399.

¹⁷⁹ *See* Jeff Sauro, *Do Users Read License Agreements?*, MEASURINGU (Jan. 11, 2011) <https://measuringu.com/eula/>.

¹⁸⁰ *See id.*

¹⁸¹ *See supra* Part III.B.

¹⁸² *See* Yang Qiu, Article, *A Cure For Twitch: Compulsory License Promoting Video Game Live-Streaming*, 21 MARQ. INTELL. PROP. L. REV. 31, 50–55 (2017); *see also* Matsui, *supra* note 159 at 238; Puddington, *supra* note 66, at 422–37.

¹⁸³ *See generally* Balganes, *supra* note 70.

¹⁸⁴ *See* Qiu, *supra* note 182, at 50–55.

¹⁸⁵ *See id.* at 51.

¹⁸⁶ *See id.* at 50.

¹⁸⁷ *See id.*

holder.¹⁸⁸ Although finding unity internationally in streaming is admirable, the logistic problem of allowing an after-the-fact cancellation may end up overly burdening the service provider and streamer, thus, leading to inefficient dissemination rather than streamlined dissemination.¹⁸⁹

Another pro-streamer solution is to allow streaming to occur without consequences, so long as no one complains.¹⁹⁰ This proposal reinforces the normative problems discussed above, which leads to a decrease in creation.¹⁹¹ Yet another pro-streamer proposal would be for the service providers themselves to conduct the fair use analysis on a case-by-case basis.¹⁹² However, this proposal misses the point of who is in the best position to do the fair use analysis, the streamer. Additionally, the administration of the proposal is near impossible because service providers are unable to predict or analyze fair use during a live stream expeditiously.¹⁹³ Currently, under the DMCA, service providers must remove infringing content expeditiously when a takedown has been adequately noted.¹⁹⁴ Failure to take down the infringing material expeditiously opens the provider to liability because the safe harbor rules would no longer apply.¹⁹⁵ Streamers who believe their streams qualify for fair use can challenge the takedown and often get the stream put back up.¹⁹⁶ The proposal would require an entire rewriting of the DMCA to fulfill its suggested purpose. In sum, allowing the norm to control and putting the burden on the service provider misses the point; the burden for being legal in streaming is on the streamer themselves.

B. Pro-Rights Holder Proposals

Pro-rights holders (those who would support the developer in the video game scenario) ask for clearer rights so that the (justifiably) risk-averse will create and disseminate their works.¹⁹⁷ Moreover, fair use creates an asymmetric right in the developer.¹⁹⁸ Fair use is also subject to delineated factors and, thus, furthering uncertainty.¹⁹⁹ To facilitate clearer rules, two commentators suggested legislation that would delineate presumptive fair use (i.e., 10 seconds of sound recording or 100 words in a written work).²⁰⁰ The

¹⁸⁸ See *id.*

¹⁸⁹ See *id.*

¹⁹⁰ See Matsui, *supra* note 159, at 235–39.

¹⁹¹ See *id.*

¹⁹² See Puddington, *supra* note 67, at 422–37.

¹⁹³ See generally 17 U.S.C. § 512. In essence, the proposal takes away all of the benefits of the DMCA safe harbors. See *id.* The safe harbor laws allowed the development of streaming platforms in the first place by limiting the liability of service providers. *Id.* If they went away, the concept of streaming or on-demand user videos would likely cease to exist in the United States.

¹⁹⁴ See *id.*

¹⁹⁵ See *id.*

¹⁹⁶ See *id.*

¹⁹⁷ See Fagundes, *supra* note 136, at 151.

¹⁹⁸ See Kennedy & Michelman, *supra* note 28, at 767–69.

¹⁹⁹ See Fagundes, *supra* note 136, at 151.

²⁰⁰ See *id.* at 176.

legislation would make the easy cases easier but would still not resolve more complicated cases, such as live streaming games.²⁰¹ There is also the recently enacted Copyright Alternative in Small-Claims Enforcement Act (“CASE Act”), which attempts to streamline the process for recovering against individuals.²⁰² The CASE Act is not expressly directed toward video games but is targeted at small claims of internet infringement.²⁰³ Although the CASE Act may address some issues raised in this Comment, it is unlikely to change things dramatically because both parties to the infringement claim must consent to the jurisdiction of the Copyright Claims Board, a three judge tribunal.²⁰⁴

There are, of course, other proposals that seek to move copyright from a standard-based regime to a bright-line rule regime in other ways.²⁰⁵ However, the bright-line rules clearly demarcating the “property lines” create tension with First Amendment protections to free speech.²⁰⁶ A clearer rule may not solve the problem faced by video game streaming because the live streaming often contains comments of the product, entitling at least part of the stream to fair use protection.²⁰⁷ Thus, a clearer rule is unlikely to satisfy the needs of the gaming community or to rights holders and creators.

C. *The Simple Solution that Allows Comprehensive Change to Occur*

The solution to the problem comes from two angles. First, companies/developers must do a better job of notifying consumers/streamers of the limits on their right to stream. Since the norm of presumed permission to stream has come about, EULAs have gotten longer and more detailed, and no common-sense effort has been made by the developers to identify the scope of licenses clearly. Second, the Register of Copyrights should advise Congress on the current issue of video game streaming.²⁰⁸ The Register is empowered to advise Congress on the scope of the problem. Thus, this puts the problem at the public forefront.

The solution for copyright law comes from the lack of enforcement

²⁰¹ See Fagundes, *supra* note 136, at 176–77.

²⁰² See Terrica Carrington & Keith Kupferschmid, *CASE Act Signed Into Law: What This Means*, COPYRIGHT ALL., (Jan. 7, 2021) <https://copyrightalliance.org/case-act-signed-into-law/>; Kelly, *supra* note 143. This legislation, Copyright Alternative in Small-Claims Enforcement Act is intended to give content creators a more efficient system to receive damages for infringement. Kelly, *supra* note 143. “[Representative Hakeem] Jeffries, called the DMCA takedown system ‘inefficient, cumbersome,’ and even ‘pointless’ for content creators.” *Id.* This discussion helps shed light on the issue discussed in this Comment but does not highlight the specific problems of video games and streaming for infringement purposes. See *id.*

²⁰³ See Carrington & Kupferschmid, *supra* note 202.

²⁰⁴ *Id.* This is likely to address some issues faced by developers and streamers alike, but if one party refuses to consent, costly federal court litigation is the only option that remains. See *id.*

²⁰⁵ See, e.g., Fagundes, *supra* note 136, at 151.

²⁰⁶ See *Golan v. Holder*, 565 U.S. 302, 328 (2012) (quoting *Eldred v. Ashcroft*, 537 U.S. 186, 219 (2003)) (fair use and the idea expression dichotomy are “built-in First Amendment accommodations”).

²⁰⁷ See Clark, *supra* note 17.

²⁰⁸ 17 U.S.C. § 701(b)(1).

by stakeholders.²⁰⁹ Moreover, in order for a legal rule or norm to have an effect in most cases, official enforcement of the legal rule or norm must be forthcoming.²¹⁰ Industry stakeholders are likely deterred by the fallout of the music industry after the Napster resolution, such that enforcement by stakeholders is not forthcoming in any event.²¹¹ With this in mind, better signaling is the pragmatic solution to the deviation of social norms from legal norms.²¹² Moreover, in America, social norms are impacted by what people believe is the law.²¹³ Americans believe that doing what the law says is the right thing to do.²¹⁴ Thus, consistent, regular, and affirmative signaling by game companies when users interact with their products, and affirmative signaling by a governmental body that copyrights and fair use are a concern nationally will tell would-be infringers that streaming without considering fair use and the scope of their license is not the right thing to do.²¹⁵

On the developer end, frequent signaling of rights should happen when the game is loading or booting up. Moreover, a short plain statement on a loading screen will cheaply and effectively communicate the rights a would-be streamer has in the video game license. This signaling statement could be done with plain text saying, “before you stream your game, double-check the license agreement for what is allowed.” A statement like this will not solve every issue of would-be infringement, but it would decrease the likelihood of streamers, in the aggregate, usurping a games’ market.²¹⁶ This statement signals more effectively than a bare EULA because it focuses on a particular section of the EULA and reinforces the importance of the rights by reminding streamers of their duty before streaming.²¹⁷

The Register of Copyrights has a vital role to play as well. The Register of Copyrights heads the Copyright Office.²¹⁸ The Register is authorized, under the Copyright Act, to “[a]dvice Congress on national . . .

²⁰⁹ See Swerdlow, *supra* note 25.

²¹⁰ Amir N. Licht, *Social Norms and the Law: Why Peoples Obey the Law*, 4 REV. OF L. & ECON. 715, 718 (2008).

²¹¹ See Kyle Anderson, *Metallica v. Napster, Inc. 15 Years Later: Lars, Forgive Me*, ENTERTAINMENT (Apr. 12, 2015, 9:58 PM), <https://ew.com/article/2015/04/12/metallica-v-napster-inc-15-years-later-lars-forgive-me/> (“Metallica . . . spent years trying to walk back the case in an effort to reverse the narrative that they had turned on their own fans.”); *The Case for Napster, Some Fifteen Years Later: Hindsight and Regret in 2013’s Downloaded*, MAELSTROM (Jan. 30, 2018), <https://www.maellstrom.com/music-1/2018/1/30/the-case-for-napster-some-fifteen-years-later-hindsight-and-regret-in-2013s-downloaded> (artists who fought Napster isolated their fans, whereas artists who encouraged fans to use Napster benefited long term from fans who felt a strengthened mutual bond).

²¹² See Licht, *supra* note 210, at 719–20.

²¹³ See *id.* at 736.

²¹⁴ See *id.* at 737.

²¹⁵ See *id.* at 736–38.

²¹⁶ See *supra* Part III.B.

²¹⁷ See *supra* III.C–D. If all in the community see a cat on a neighbor’s property, all will assume that cats are exempt from the norm of trespassing on others’ property. If other community members do not want cats on their properties, they may post signs on fences reinforcing the legal norm to the community. This correction is a simple and easy way to correct a community norm that developed contrary to the legal norm.

²¹⁸ 17 U.S.C. § 701(a).

issues relating to copyright . . . and related matters.”²¹⁹ Acting under the statutory authority to advise Congress, the Register should advise Congress of the impending problems with online streaming of video games so that the issue is at the public forefront.²²⁰ Specifically, by advising Congress of the multibillion-dollar industry that has very little defined as to rights involving streaming, the Register will let Americans and stakeholders in the video game industry know that this issue needs to be addressed.²²¹ Further, the Register can minimize potential fallout by simply advising that stakeholders on the streaming end, at a minimum, take into account fair use when streaming.²²² A modernization of copyright law is likely in the future.²²³ However, simple signaling can reduce uncertainties would-be developers may have and can lead to the creation and dissemination of useful works in video games.

Having the Register only advise Congress of the gravity of the situation while not requesting sweeping change allows for the status quo to remain, in large part, where it has been while also reducing the uncertainty of other stakeholders.²²⁴ In the recent past, former Register Maria Pallante was an advocate for wide-sweeping reform in copyright to parallel the digital age.²²⁵ Pallante requested the House Subcommittee on Courts, Intellectual Property, and the Internet Committee on the Judiciary to be more forward-thinking and flexible when designing the next great copyright act.²²⁶ However, just three years later, Pallante was demoted by the Librarian of Congress and subsequently resigned in 2016.²²⁷ Realistically, this signals that a Register who advocates too much may be without a job once a new Librarian of Congress takes office.²²⁸ Thus, a less direct approach, where the Register only signals the gravity of the issue, is both realistic and practical for the current problem.²²⁹

The corrective signaling by game developers and the Register of Copyrights is not a permanent solution. The signaling is arguably mitigating, while the stakeholders in streaming and game development most likely work toward a non-legal solution. For that reason, the solution will be temporary. However, the solution is also by far more administrable than rewriting

²¹⁹ *Id.* at §701(b)(1).

²²⁰ *See id.*

²²¹ *See id.* at § 701(b)(1); *U.S. Video Game Sales Reach Record-Breaking \$43.4 Billion in 2018*, ENT. SOFTWARE ASS'N (Jan. 22, 2019), <https://www.theesa.com/press-releases/u-s-video-game-sales-reach-record-breaking-43-4-billion-in-2018/>.

²²² *See* 17 U.S.C. § 701(b)(1); *see supra* Part III.B.

²²³ *See* Kelly, *supra* note 143.

²²⁴ *See id.*

²²⁵ *See Innovation in America (Part I and II): Hearing Before the Subcomm. on Courts, Intellectual Property, and the Internet of the H. Comm. on the Judiciary*, 113th Cong. 56–57 (2013) (statement of Maria A. Pallante, Register of Copyrights, United States Copyright Office).

²²⁶ *See id.*

²²⁷ Kathryn Penick, *The Life Cycle of Copyright Law: A Push for Copyright Reform*, 21 TUL. J. TECH. & INTELL. PROP. 71, 79 (2019).

²²⁸ *Id.* at 80–82.

²²⁹ *See id.*

legislation and is fairer to right holders than blanket licenses or fair use always applying in streams.²³⁰ Thus, the solution this Comment proposes to fix copyright issues with streaming is superior to those highlighted above because, although the solution may be temporary, its application is administrable quickly and allows for non-governmental intervention to correct the issue.

V. CONCLUSION

Current copyright law does not afford developers of video games enough certainty to create new games, especially story-based games. The DMCA does not provide sufficient recourse to right holders when transitory streams, in the aggregate, may usurp the market for the games.²³¹ Video game developers, like the ones illustrated in the introduction, may have to wait for Congress to act or for a landmark judicial decision before they feel confident enough in the protection of their creations to develop again. Additionally, the likelihood of meaningful, comprehensive copyright legislation addressing video games is poor, and with the fallout that happened after the Napster case in music, developers are unlikely to litigate, thus leaving little room for meaningful change.²³² However, the two-part solution this Comment proposed will reduce uncertainty in developers by signaling to streamers, at a minimum, fair use needs to be considered before streaming. The solution is quick, administrable, and should encourage would-be developers to create.

The solution will address immediate problems, but for a long-term solution, either Congressional legislation needs to intervene, or industry stakeholders would need to come to a non-legal solution. In either case, this Comment's proposed solution bridges the gap with a low-cost, easily administrable solution so that a meaningful resolution can happen. Alternatively, if no resolution occurs, this Comment's solution will mitigate potential harm that could occur because of the uncertainty that exists in the video game industry.

In sum, there are many solutions to video game streaming and copyrights.²³³ This Comment proposes a quick and administrable solution to the problems with video game streaming and copyrights that can be supplemented by existing proposed legal solutions or by non-legal industry changes. For new developers to enter the market, uncertainty with respect to their rights must be minimized efficiently. Thus, this Comment's proposed solution addresses the immediate problem while leaving downstream solutions to Congress or legislatures.

²³⁰ See *supra* Part IV.A–B.

²³¹ See Kelly, *supra* note 143.

²³² See Anderson, *supra* note 211; Kelly, *supra* note 143.

²³³ See *supra* Part IV.