Protecting Fair Use From Algorithms, Internet Platforms, and the Copyright Office: A Critique of the § 512 Study

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INTRODUCTION

In 1994, the Supreme Court of the United States held that a musical group's parody of a well-known song could be fair use, which is a noninfringing use of copyrighted content.[1] In 2006, the Second Circuit found that an artist's use of copyrighted photographs in his own artwork constituted fair use.[2] In 2016, the Ninth Circuit found that a video of a child dancing to a short clip of a copyrighted Prince song could be fair use.[3] But in 2022, a creator who attempts to share her fair use of copyrighted material online may not have recourse to the judicial system to vindicate her use—in fact, her fair use may never even see the light of day.

Over the past two decades, the rise of smartphones, social media, and broadband connections has transformed the Internet and the ways in which the world uses it to consume

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[1] Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 579 (1994) ("Suffice it to say now that parody has an obvious claim to transformative value . . . . Like less ostensibly humorous forms of criticism, it can provide social benefit, by shedding light on an earlier work, and, in the process, creating a new one. We thus line up with the courts that have held that parody, like other comment or criticism, may claim fair use under § 107."); *see infra* text accompanying note 12.

[2] Blanch v. Koons, 467 F.3d 244, 259 (2d Cir. 2006).

[3] Lenz v. Universal Music Corp., 815 F.3d 1145, 1154 (9th Cir. 2016) (noting that whether Lenz's video constituted fair use was a question to be determined by jury at trial, but not making a dispositive ruling of fair use); *see also id.* at 1159 n.4 (Smith, J., concurring in part and dissenting in part) ("Had Universal properly considered the statutory elements of fair use, there is no doubt that it would have concluded that Lenz's use of *Let's Go Crazy* was fair.").

entertainment, news, and all types of artistic and political content.[4]   This transformation in technology has led to a corresponding rise in the democratization of expression and creation, as well as access to that creation.[5]   Online expression has migrated to platforms that host "user-generated" or "user-created" content, such as YouTube, Instagram, TikTok, and SoundCloud; the "openness" of these platforms has led to the popularity of user-created content that incorporates others' copyrighted material "as an act of communication and expression."[6]   The rise of these platforms, however, has concomitantly led to concerns about whether current law—the Digital Millennium Copyright Act of 1998 ("DMCA")—can still sufficiently address the enormous volume of copyrighted material online, much of which is not authorized use.[7]   Indeed, several recent pieces of draft legislation, including the Digital Copyright Act of 2021 ("DCA") and, more recently, the SMART Copyright Act of 2022, have suggested updates to the DMCA.[8]

The evolution of algorithms has gone hand-in-hand with these other changes to the digital landscape. While algorithms are often discussed in many contexts, one context in which they play an increasingly important role is in the policing of copyright infringement online.[9]   Ironically, then, an artist who attempts today to make a fair use of a copyrighted work and to share it

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[4] U.S. COPYRIGHT OFF., SECTION 512 OF TITLE 17: A REPORT OF THE REGISTER OF COPYRIGHTS 28–31 (2020) [hereinafter U.S. COPYRIGHT REP.].

[5] *Id.* at 75 (citations omitted) (arguing that the Internet " 'has fueled a virtuous cycle of expressive and creative works, and it has democratized access and reach at scale,' " and has "aided the creation of works by providing authors with a variety of new tools to produce creative content"); *see also* Pamela Samuelson, *Pushing Back on Stricter Copyright ISP Liability Rules,* 27 MICH. TECH. L. REV. 299, 340–42 (2021); Matthew Sag, *Internet Safe Harbors and the Transformation of Copyright Law*, 93 NOTRE DAME L. REV. 499, 518 (2017).

[6] Sag, *supra* note 5, at 518.

[7] U.S. COPYRIGHT REP.*, supra* note 4, at 10 ("As online activity and third party uses of creators' content have increased, so too has the pressure on the notice-and-takedown system's ability to serve the needs of all stakeholders.").

[8] Thom Tillis, Tillis Releases Landmark Discussion Draft To Reform the Digital Millennium   Copyright   Act,   PRESS   RELEASE   (Dec.   22,   2020), https://www.tillis.senate.gov/2020/12/tillis-releases-landmark-discussion-draft-to-reform-the-digital-millennium-copyright-act   [https://perma.cc/YBZ6-4JGF];   Thom Tillis, Tillis and Leahy Introduce Bipartisan Legislation to Combat Copyright Theft, Enhance Content Sharing, and Hold Tech Accountable, PRESS RELEASE (Mar. 18, 2022)   https://www.tillis.senate.gov/2022/3/tillis-and-leahy-introduce-bipartisan-legislation-to-combat-copyright-piracy-enhance-content-sharing-and-hold-tech-accountable.

[9] *See* discussion *infra* Section II.A.

with the world will face greater obstacles than she would have twenty years ago, despite the advances in technology since then: algorithms that can detect copyrighted material may prevent the work from being shared at all or remove the work from the platform after it is uploaded, and may even preclude the creator's access to the judicial system to litigate her claimed fair use.[10]

This Note argues that the U.S. Copyright Office's recent study discussing potential changes to the DMCA statute should have called for the protection of the fair use doctrine from the rise of algorithmic technology by: (1) advocating for the preservation of the current safe harbors and (2) rejecting both DMCA+ and notice-and-staydown systems as potential Standard Technical Measures. Part I of this Note provides background information about the doctrine of fair use and the DMCA in general. Part II then explores algorithms and their use within DMCA systems and distinguishes between the traditional DMCA framework and DMCA+ systems. Part III discusses the recent Copyright Office Study and note the areas in which it falls short. Finally, Part IV highlights the potential dangers of implementing stricter platform liability, DMCA+ systems, or notice-and-staydown systems and instead advocates for legislative and judicial solutions that preserve the fair use doctrine and users' freedoms of expression.

I. Fair Use and the Digital Millennium Copyright Act

A. *Fair Use in General*

Fair use is a doctrine that is rooted in the philosophical foundations of copyright law.   The "ultimate goal" of the U.S.'s utilitarian philosophy of "copyright is to expand public knowledge and understanding . . . by giving potential creators exclusive control over copying of their works, thus giving them a financial incentive to create informative, intellectually enriching works for public consumption."[11]   A copyrighted work, however, *may* be reproduced for a "fair use," which is not considered an

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[10] *See* discussion *infra* Section II.C.
[11] Authors Guild v. Google, Inc., 804 F.3d 202, 212 (2d Cir. 2015). The court emphasized that this goal is "clearly reflected in the Constitution's empowerment of Congress '*To promote the Progress of Science* . . . by securing for limited Times to Authors . . . the exclusive Right to their respective Writings.' " *Id.* (quoting U.S. CONST. art. I, § 8, cl. 8).

infringement[12] Fair use is a famously flexible doctrine that seeks to "protect[ ] th[ese] incentives of authors to create for the public good" while simultaneously attempting "to define the boundary limit of the original author's exclusive rights in order to best serve the overall objectives of the copyright law to expand public learning."[13] The Second Circuit has referred to fair use as "the most troublesome [issue] in the whole law of copyright."[14] Others have described it as "the jewel in the crown of American copyright law."[15] Only a few other countries enjoy such a broad doctrine.[16]

The doctrine is codified in 17 U.S.C. § 107, which lays out four factors to help courts determine whether a use of copyrighted material is a fair use:[17]

> (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 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.[18]

Courts have cautioned, however, that a fair use analysis should not include "conventional statutory interpretation" or be treated like a "checklist,"[19] and they have emphasized that fair use should not be evaluated "mechanistically."[20] Under this analysis, courts have found many different types of activity to be fair use, including song parodies,[21] artwork that incorporates

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[12] Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 433 (1984) (a person "who makes a fair use of the work is not an infringer of the copyright with respect to such use").

[13] *Authors Guild*, 804 F.3d at 213.

[14] Dellar v. Samuel Goldwyn, Inc., 104 F.2d 661, 662 (2d Cir. 1939) (per curiam).

[15] Niva Elkin-Koren, *Fair Use by Design*, 64 UCLA L. REV. 1082, 1084 (2017).

[16] *See* Dan L. Burk, *Algorithmic Fair Use,* 86 U. CHI. L. REV. 283, 286 n.14 (2019) (noting that Israel and the Philippines are two countries with provisions similar to fair use).

[17] 17 U.S.C. § 107. The doctrine evolved from Folsom v. Marsh, 9 F. Cas. 342, 348 (C.C.D. Mass. 1841) (No. 4901), a case involving a pirated version of a collection of George Washington's correspondence. *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 576 (1994).

[18] 17 U.S.C. § 107.

[19] Cambridge Univ. Press v. Patton, 769 F.3d 1232, 1284 (11th Cir. 2014) (Vinson, J., specially concurring). Judge Vinson proposed an appropriate analogy for a doctrine that often deals with artistic and creative works: "in analyzing fair use in a given case, the court should step back a little, just as you would at an art museum, and view the work and its use in its entirety." *Id.* at 1285.

[20] *Id.* at 1283 (majority opinion).

[21] *Campbell*, 510 U.S. at 579.

copyrighted material,[22] a song by Drake that sampled from another composition,[23] and Google's digitization of full-length books.[24]   Conversely, the Supreme Court has found that extensively quoting the "heart" of an unpublished manuscript in a magazine article was not fair use, even if the manuscript was particularly newsworthy.[25]

B.   *Digital Millennium Copyright Act of 1998*

A much newer body of law, the DMCA, added provisions to federal copyright law to address the rapidly growing role of the Internet in the distribution of copyrighted material.[26]   Of chief prominence, section 512(c) of DMCA creates a "safe harbor" that excuses platforms from liability for hosting infringing content, so long as they follow certain notice and removal procedures.[27]   The procedure that the DMCA currently outlines is known as the notice-and-takedown system: platforms avoid liability for copyright infringement if, upon receiving a notification from a copyright holder that the content the platform hosts is infringing, the platform "expeditiously" removes or disables access to that content.[28]

This notification is known as a takedown notice, which must include identification of both the copyrighted material and the allegedly infringing material, and "critically, a statement that the copyright holder believes in good faith the infringing material 'is not authorized by the copyright owner, its agent, or the law.' "[29]   The platform must also inform its allegedly infringing user that it has disabled or blocked access to their content.[30] That user can then send a "counter notification" to the platform, which must include a statement of "good faith belief that the material was removed or disabled as a result of mistake or

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[22] Cariou v. Prince, 714 F.3d 694, 698–99 (2d Cir. 2013); Blanch v. Koons, 467 F.3d 244, 259 (2d Cir. 2006).

[23] *See* Sam Claflin, Note, *How to Get Away with Copyright Infringement: Music Sampling as Fair Use*, 26 B.U. J. Sci. & Tech. L. 159, 171–72 (2020); Estate of Smith v. Cash Money Records, Inc., 253 F. Supp. 3d 737, 752 (S.D.N.Y. 2017), *aff'd sub nom*. Estate of Smith v. Graham, 799 F. App'x 36 (2d Cir. 2020).

[24] Authors Guild v. Google, Inc., 804 F.3d 202, 207 (2d Cir. 2015).

[25] Harper & Row Publishers, Inc. v. Nation Enters., 471 U.S. 539, 559–60, 565 (1985).

[26] Lenz v. Universal Music Corp., 815 F.3d 1145, 1150–51 (9th Cir. 2016).

[27] 17 U.S.C. § 512(c).

[28] *Id.* § 512(c)(1)(C).

[29] *Lenz*, 815 F.3d at 1151.

[30] 17 U.S.C. § 512(g)(1)–(2)(A).

misidentification."[31]   Once the platform receives the counter notification, the platform must inform the copyright holder and restore the content within ten to fourteen days—unless, that is, the platform receives notice that the copyright holder has filed suit against the user.[32]

In the seminal Ninth Circuit case *Lenz v. Universal Musical Group*, an employee of Universal came across a short video that Stephanie Lenz had uploaded to YouTube of her children dancing while the Prince song "Let's Go Crazy" played in the background.[33]   Since Universal held the song's copyright, the Universal employee manually sent YouTube a takedown notice, but, crucially, failed to explicitly consider fair use before doing so.[34]   One of the more controversial elements of *Lenz*'s holding was the way in which it interpreted the interaction between the copyright holder's requirement of a "good faith belief" that the use is not authorized, found in section 512(c)(3)(A)(v), and the "knowing misrepresentation" provision, found in section 512(f), which creates liability for "[a]ny person who knowingly materially misrepresents . . . that material or activity is infringing."[35]

The Ninth Circuit ruled on both Lenz's good faith claim under section 512(c) and her knowing misrepresentation claim under section 512(f).   Ultimately, the court held that copyright holders must consider fair use in subjective good faith before sending a takedown notice under section 512(c)(3)(A)(v), and that Universal would be liable under section 512(f) if it knowingly misrepresented in its takedown notice that it had determined in good faith that the allegedly infringing material did not constitute fair use.[36]   The court thus denied Universal's motion for summary judgment, concluding that "a jury must determine whether Universal's actions were sufficient to form a subjective good faith belief about the video's fair use or lack thereof"; if not, Universal would be liable, because its takedown notice would then have been a knowing misrepresentation.[37]

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[31] *Id.* § 512(g)(3)(C).

[32] *Id.* § 512(g)(2)(B)–(C).

[33] *Lenz*, 815 F.3d at 1149.

[34] *Id.*

[35] 17 U.S.C. § 512(c)(3)(A)(v), (f)(1).

[36] *Lenz*, 815 F.3d at 1155.

[37] *Id.* at 1154. *See also* Sag, *supra* note 5, at 531 ("In other words, before issuing a takedown notice, a rightsholder must at least form a view about whether the

Despite the robust tools that the DMCA notice-and-takedown system features, however, many copyright holders still do not feel that the system provides them with enough enforcement power.[38] Instead, these copyright holders advocate for a more restrictive notice-and-staydown system.[39] This more rigid system would implicate privacy and free speech concerns, since such a system, in ensuring that copyrighted materials stay off the platform, would automatically scan all content uploaded to a platform to detect and block any repeated uploads of copyrighted material.[40] In other words, the platform would have an obligation to continue to block all uploads of the copyrighted work after receiving a takedown notice—even though subsequent uploads could potentially be fair uses. This type of system would become necessary if the DMCA's safe harbors were altered or abolished to subject platforms to stricter liability, because platforms would then have to take proactive steps to avoid liability by monitoring all uploads for infringing content, basically employing an "upload filter."[41] This system is essentially mandated by the European Union's recent and controversial Article 17 of the Directive on Copyright in the Digital Single Market.[42] Because European copyright "exceptions" are generally much narrower than the U.S.'s fair use

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accused work is infringing, and that process includes forming a view as to whether the accused work is fair use.").

[38] Samuelson, *supra* note 5, at 302 (noting that "copyright industry groups" have argued for this change).

[39] *Id.* at 333; *see also* Elliot Harmon, *"Notice-and-Stay-Down" Is Really "Filter-Everything,"* ELEC. FRONTIER FOUND. (Jan. 21, 2016), https://www.eff.org/deeplinks/2016/01/notice-and-stay-down-really-filter-everything [https://perma.cc/4V9V-DQ99].

[40] *See* Harmon, *supra* note 39.

[41] Samuelson, *supra* note 5, at 329.

[42] *Id*. at 317–19.

doctrine,[43] much of the criticism of Article 17 involves its lack of flexibility for freedom of expression.[44]

Finally, one of the "threshold criteria" that a platform must meet to benefit from the safe harbors is to "accommodate 'standard technical measures.' "[45] The statute defines standard technical measures as the "technical measures that are used by copyright owners to identify or protect copyrighted works" that (1) "have been developed pursuant to a broad consensus of copyright owners and service providers," (2) "are available to any person on reasonable and nondiscriminatory terms," and (3) "do not impose substantial costs on service providers."[46] Currently, however, there is no consensus as to what those technical measures are, and whether algorithms—and what type— qualify.[47]

II. ALGORITHMS AND DMCA+ SYSTEMS

A. *Algorithms and Their Functions*

At its core, an algorithm is simply "a sequence of instructions telling a computer what to do."[48] Algorithms are used for

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[43] *See* Christophe Geiger & Elena Izyumenko, *Towards a European "Fair Use" Grounded in Freedom of Expression*, 35 AM. U. INT'L L. REV. 1, 3–4, 6–7 (2019). While the United States's theory of copyright is utilitarian in nature, and "not an inevitable, divine, or natural right that confers on authors . . . absolute ownership," often known as a moral rights theory of copyright, many European countries (such as France) do adhere to a moral rights theory. *See* Pierre N. Leval, Commentary, *Toward a Fair Use Standard,* 103 HARV. L. REV. 1105, 1107, 1128 (1990). This difference in copyright philosophy is just one reason why an Article 17-style notice-and-staydown system should be avoided in the United States, with its much more flexible approach to copyright than many European nations.

[44] *See* Geiger & Izyumenko, *supra* note 43, at 11 & n.45; *see also* Michael Bechtel, *Algorithmic Notification and Monetization: Using Youtube's Content ID System as a Model for European Union Copyright Reform*, 28 MICH. ST. U. COLL. L. INT'L L. REV. 237, 260–61 (2020).

[45] *See* Viacom Int'l, Inc. v. YouTube, Inc., 676 F.3d 19, 27 (2d Cir. 2012) (citation omitted).

[46] 17 U.S.C. § 512(i)(2); U.S. COPYRIGHT REP., *supra* note 4, at 176.

[47] U.S. COPYRIGHT OFFICE, *supra* note 4, at 176; *see* Letter from Thom Tillis & Patrick Leahy, U.S. Senators, to Reg. of Copyrights Shira Perlmutter, 1–2 (June 24, 2021), https://www.ipwatchdog.com/wp-content/uploads/2021/06/6.24.21-Ltr-to-USCO_Senators-Tllis-and-Leahy_re-STMs.pdf (addressing Register Perlmutter in their respective roles as Chairman and Ranking Member of the Senate Judiciary Committee, Subcommittee on Intellectual Property).

[48] Jacob Brogan, *What's the Deal with Algorithms?*, SLATE (Feb. 2, 2016, 10:29 AM), https://slate.com/technology/2016/02/whats-the-deal-with-algorithms.html [https://perma.cc/ZN3K-LSMV]. The article quotes the definition of algorithm from *The Master Algorithm* by Pedro Domingos. *Id.*

countless tasks: recommending content on social media platforms, serving targeted ads, automating stock trading, and even powering self-driving cars.[49] Most of these algorithms are examples of machine-learning technology, in which "systems . . . rewrite themselves as they work," based on data and parameters set by human programmers.[50]

Algorithms can serve important functions, such as blocking illegal content, and, therefore, have increasingly been employed by tech platforms over the past decade.[51] Algorithms are also commonly used to police copyright infringement online, such as in fingerprinting or content matching systems; these types of algorithms are employed to identify copyrighted material in user-uploaded content, using a database of reference files provided by the copyright holder.[52] But algorithms that are designed to detect copyrighted materials present many problems, including identification of different types of "false positives."[53] And one of the most significant flaws of these copyright algorithms is that they cannot determine whether a use of copyrighted material constitutes fair use.[54]

B. *Algorithms Cannot Determine Fair Use*

There are several crucial reasons why algorithms should not be relied upon to determine fair use questions. First, the statutory fair use factors, as set out in 17 U.S.C. § 107, are mostly qualitative, not quantitative, which makes them difficult

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[49] *Id. See also* Faiz Siddiqui, *What Self-Driving Cars Can't Recognize May Be a Matter of Life and Death*, WASH. POST (Nov. 11, 2019), https://www.washingtonpost.com/technology/2019/11/11/what-self-driving-cars-cant-recognize-may-be-matter-life-death.

[50] Brogan, *supra* note 48.

[51] *See* Burk, *supra* note 16, at 284. Some of the best-known algorithms used by tech platforms include Audible Magic, YouTube's ContentID, and Facebook's Rights Manager. *See* U.S. COPYRIGHT REP., *supra* note 4, at 42–46.

[52] For example, Audible Magic is an "automatic content recognition" fingerprinting algorithm used by many platforms, including Facebook, Instagram, Twitch, and SoundCloud, which boasts that "[t]he list of rightsholders who proactively register with Audible Magic consists of over 140,000 music labels and over 1000 video suppliers across the globe. . . . includ[ing] content from industry leaders." *See 7 Hard but Very Telling Questions for Your Automatic Content Recognition Vendor (ACR)*, AUDIBLE MAGIC (Sept. 22, 2020) [hereinafter AUDIBLE MAGIC], https://www.audiblemagic.com/2020/09/02/7-hard-but-very-telling-questions-for-your-automatic-content-recognition-vendor-acr [https://perma.cc/YHY9-RAZF].

[53] Sag, *supra* note 5, at 544–45.

[54] *See* discussion *infra* Section II.B.

to program.[55] One analysis concluded that "[a]pplying machine learning to fair use faces considerable hurdles," because programming a machine learning algorithm to detect fair use would require one to classify examples of fair use—and this would be challenging, because the "data" of fair use cases is "noisy," or "contradictory, vague, and unpredictable."[56] Moreover, while one could argue that some of the fair use factors could be automated, such as the amount of the original work used in the allegedly infringing work or differences in the purposes of the two works,[57] even such straightforward quantitative analysis would not be foolproof: in some instances, full reproduction of an entire work *is* considered fair use, as in photographic depictions of Barbie[58] or the digitization of entire books.[59]

Second, the fair use inquiry is also context-dependent, and algorithms, at least in their current state of technology, cannot understand context.[60] Unlike algorithms, "[h]umans can usually tell if a work is a parody or a critique; they can usually tell if an excerpt is being used by way of illustration or reference."[61] The question is whether an algorithm can "stop and think" about a work in context the way that a human being can; the answer, at least "for the foreseeable future," is no.[62]

Some scholars have attempted to circumvent these obstacles by arguing that algorithms could be used to at least "approximate" fair use or make "better," more efficient, fair use determinations than humans.[63] These fair use determinations, however, would be made based on non-statutory and extrajudicial values, or even drawn from user data, rather than

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[55] *See* 17 U.S.C. § 107; Stephen McJohn & Ian McJohn, *Fair Use and Machine Learning*, 12 NE. U. L. REV. 99, 114–17 (2020).

[56] McJohn & McJohn, *supra* note 55, at 160–61. The authors also noted that *Cambridge University Press v. Patton*'s admonition to courts to not apply the statutory fair use factors mechanically, "[r]ead for everything it's worth . . . would bar machine learning assessment of fair use, at least by judges." *Id.* at 152.

[57] Elkin-Koren, *supra* note 15, at 1096.

[58] *See, e.g.*, Mattel, Inc. v. Walking Mountain Prods., 353 F.3d 792, 804 (9th Cir. 2003).

[59] *See* U.S. COPYRIGHT REP., *supra* note 4, at 190 n.1004; *see also* Authors Guild v. Google, Inc., 804 F.3d 202, 207 (2d Cir. 2015) (noting that digitization of full copies of copyrighted books was fair use); McJohn & McJohn, *supra* note 55, at 114–15 (discussing additional cases in which full copies were held to be fair use).

[60] Samuelson, *supra* note 5, at 317–18.

[61] Sag, *supra* note 5, at 531.

[62] *Id.*

[63] *See* Peter K. Yu, *Artificial Intelligence, The Law-Machine Interface, and Fair Use Automation,* 72 ALA. L. REV. 187, 212 (2020).

the statutory fair use factors that Congress has set forth and that judges have interpreted.[64] It is also not at all evident that algorithms are more efficient or better decision-makers than human beings; one particularly illustrative example over the past several years has been the rise of self-driving automated vehicles, and along with them, accidents caused by the vehicles' algorithms inability to detect other vehicles, pedestrians, or obstacles.[65]

Another serious danger of relying on algorithms is the discriminatory effects they can have, either inadvertently or due to biases built into them by their programmers. Algorithms have been shown to discriminate on the basis of race, sex, and income level.[66] A recent study found that "algorithms can discriminate on the basis of a social category, intentionally and unintentionally, even when they are not explicitly fed social category data."[67] As one scholar noted, the legal argument that algorithms are more efficient and objective decision-makers than humans is "alarming" because "[t]he data [is] always cooked, before algorithmic processing and certainly during algorithmic processing," and thus "[t]he question is never whether the data [is] biased but rather how, by whom, and for what purposes."[68] These algorithms' lack of transparency is an additional concern: as one commentator noted, "[t]he use of privately developed algorithms by private corporations creates a system of 'black box governance' in which copyright adjudication is carried out by opaque entities with minimal transparency or accountability."[69]

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[64] For example, Yu proposes drawing upon user data (such as pauses, replays, and highlights) from platforms like Amazon and Netflix to determine what the most "significant" part of a work is; while this idea is innovative, the most highlighted or replayed part of a work does not necessarily correlate to the most significant or meaningful part. *See id.* at 218 & n.141.

[65] *See* Siddiqui, *supra* note 49 (noting that these accidents are sometimes fatal); *see also* Katrina Geddes, *Meet Your New Overlords: How Digital Platforms Develop and Sustain Technofeudalism*, 43 COLUM. J.L. & ARTS 455, 456 (2020).

[66] *See* Claire Cain Miller, *When Algorithms Discriminate*, N.Y. TIMES (July 9, 2015), https://www.nytimes.com/2015/07/10/upshot/when-algorithms-discriminate.html?searchResultPosition=1.

[67] Betsy Anne Williams et al., *How Algorithms Discriminate Based on Data They Lack: Challenges, Solutions, and Policy Implications*, 8 J. INFO. POL'Y 78, 88 (2018).

[68] Burk, *supra* note 16, at 295–96.

[69] Geddes, *supra* note 65, at 470 (quotation omitted).

C.   Differences Between DMCA+ Systems and the Traditional DMCA Framework

Despite the dangers inherent in the use of algorithms, some platforms have developed "DMCA+" systems that employ algorithms not only within the confines of the DMCA, but also outside the coverage of the statute and extra-statutorily. DMCA+ systems are "private agreements made in the shadow of . . . safe harbors."[70] The key differences between DMCA and DMCA+ frameworks are how, and at what points, DMCA+ systems use such algorithms to "engage," or not engage, with the DMCA and its procedures.[71]

Traditional DMCA takedowns can be manual, in which a copyright holder, as in *Lenz*, comes across allegedly infringing content on a platform and sends a takedown notice.[72] Platforms can also employ some form of algorithmic content recognition technology to "flag[ ]" a match for copyright holders who must then provide the platform with a "fingerprint" or "reference" file of the copyrighted material; copyright holders can also use algorithms themselves to search for and identify copyrighted material online, and can even use algorithms to send automated takedown notices to the platform.[73] Under these traditional systems, despite the use of an algorithm, "once a takedown notice has been issued, the consequences of a match are [still] determined by the DMCA."[74] The process that the rightsholder and the user must follow to resolve the dispute are outlined in the takedown process under section 512.[75]

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[70] Sag, *supra* note 5, at 500, 544; *see also The Difference Between Copyright Takedowns and Content ID Claims*, YOUTUBE, https://support.google.com/youtube/answer/7002106?hl=en&ref_topic=9282678 [https://perma.cc/C2H3-YAN9] (last visited June 5, 2022) ("Unlike [DMCA] takedowns, which are defined by law, Content ID is a YouTube system that is made possible by deals made between YouTube and content partners who have uploaded material they own to our database.").

[71] Sag, *supra* note 5, at 543–44 ("The salient difference between DMCA-plus systems—such as YouTube's Content ID system—and what came before is not the technology employed, but the legal architecture in which that technology is embedded.").

[72] Lenz v. Universal Music Corp., 815 F.3d 1145, 1149 (9th Cir. 2016).

[73] *See* Sag, *supra* note 5, at 543, 545; AUDIBLE MAGIC, *supra* note 52; U.S. COPYRIGHT REP., *supra* note 4, at 33, 155 (noting the fair use concerns implicated by these automated takedown notices); *see also* discussion *infra* Section II.C.2.

[74] *See* Sag, *supra* note 5, at 543.

[75] *See* discussion *supra* Section I.B.

Unlike in traditional DMCA takedowns, however, in DMCA+ systems, algorithms can be used at several different stages within a system that can easily "sidestep[ ]" the DMCA and its procedural safeguards for users.[76]   YouTube's Content ID is probably the best-known example of a DMCA+ system.   And while a few other platforms, such as Facebook, employ similar systems,[77] Content ID will serve as an illustrative example of how a DMCA+ system functions.[78]   Content ID detects copyrighted content uploaded to YouTube by users and presents rightsholders with three choices: (1) block the video, (2) allow the video to stay online while tracking its viewing data, or (3) monetize the video—allow it to stay online while sharing in the YouTube advertising revenue it generates.[79]

1.   Ex-Ante vs. Ex-Post Enforcement

A DMCA+ system can use an algorithm to block allegedly infringing material from ever being uploaded to the platform, without requiring the copyright holder to send a takedown notice;[80] this change shifts copyright enforcement from its current ex-post standard, meaning after the alleged infringement has taken place, to an ex-ante standard, "impos[ing] unwarranted restrictions on non-infringing materials and fair

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[76] Sag, *supra* note 5, at 544.

[77] Facebook's "Rights Manager" features a structure that is very similar to Content ID, including options such as blocking, monetizing, applying attribution, or sending a "copyright report" to Facebook. *See Copyright*, FACEBOOK, https://www.facebook.com/help/1020633957973118/?helpref=hc_fnav [https://perma.cc/W4LS-HYXV] (last visited June 5, 2022) (under "Rights Manager and Other Intellectual Property Tool" click the hyperlink "What tools does Facebook provide to help me protect my intellectual property in my videos?"). Facebook also uses Audible Magic, in addition to its own Rights Manager system. *Id.*

[78] The Study specifically identifies Facebook's Rights Manager and YouTube's Content ID as DMCA+ systems. U.S. COPYRIGHT REP., *supra* note 4, at 67 n.355, 153 n.819.

[79] *How Content ID Works*, YOUTUBE, https://support.google.com/youtube/answer/2797370?hl=en [https://perma.cc/GZM5-9SP4] (last visited June 5, 2022) (under "Common questions about Content ID" click the hyperlink "What options are available to copyright owners?"). The uploader may "sometimes" also have the opportunity to share in the revenue. *Id.*; *see also Using Content ID*, YOUTUBE, https://support.google.com/youtube/answer/3244015?hl=en [https://perma.cc/7XB8-P8UD] (last visited June 5, 2022).

[80] *What Is a Content ID Claim?*, YOUTUBE CREATOR ACAD., https://creatoracademy.youtube.com/page/lesson/respond-to-content-id-claims_what-is-a-content-id-claim_list [https://perma.cc/77RS-43TT] (last visited June 5, 2022) ("Most Content ID claims appear upon upload, but note that they can come at any time if you use any copyrighted material in your videos.").

uses of content."[81] It also shifts the burden of policing content onto the platform, which, with the copyright holder's authorization by providing the platform with the "reference copy" of their copyrighted material and setting their "preferred policy," can identify and automatically block the use, rather than the copyright holder identifying the use and manually sending a takedown notice.[82] Thus, while under the traditional DMCA framework, sending a counter notification permits a "user to litigate the issue of the lawfulness of her use," an algorithm that blocks that use from even being uploaded "never gets the chance" to be litigated.[83] This shift to ex-ante enforcement may have a "chilling effect" on the production of fair use content, especially because so few Content ID claims are actually disputed by users who may feel "disempowered" to litigate the fair use.[84]

2.   Avoidance of Fair Use Consideration and Liability for Misrepresentation

Under a DMCA+ system, the copyright holder does not need to consider whether the use is infringing or make a good-faith fair use determination under section 512(c)(3)(A)(v) for the content to be blocked—whether at the moment of upload or after the content has already been posted to the platform—because the rightsholder never has to actually send a takedown notice under the DMCA to block the content.[85] In not requiring a takedown notice, the DMCA+ system also allows the rightsholder to avoid a misrepresentation claim under section 512(f). Therefore, such systems may essentially cut the fair-use determination mandated by *Lenz* out of the equation completely,[86] especially because algorithms are incapable of determining fair use.[87]

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[81] Maayan Perel & Niva Elkin-Koren, *Accountability in Algorithmic Copyright Enforcement*, 19 STAN. TECH. L. REV. 473, 516 (2016); Elkin-Koren, *supra* note 15, at 1099.

[82] *See Using Content ID*, *supra* note 79.

[83] *The Digital Millennium Copyright Act at 22: What Is It, Why Was It Enacted, and Where Are we Now?*: *Hearing Before the S. Comm. on the Judiciary*, *Subcomm. on Intell. Prop.*, 106th Cong. 15 (2020) [hereinafter *Tushnet Statement*] (statement of Rebecca Tushnet, Professor, Harvard Law School), https://www.judiciary.senate.gov/imo/media/doc/Tushnet%20Testimony.pdf [https://perma.cc/93WY-NV85] (last visited June 5, 2022).

[84] Geddes, *supra* note 65, at 461, 471.

[85] *See What Is a Content ID Claim?*, *supra* note 80.

[86] *See* M. Jake Feaver, Note, *Correcting Computer Vision: The Case for Real Eyes After* Lenz, 68 HASTINGS L.J. 397, 411–12 (2017) ("How can someone consider fair use in advance of seeing the result of any Content ID match? Since the video is

Importantly, the original 2015 *Lenz* opinion was amended in 2016; in its amended opinion, the court deleted language from its original opinion "not[ing] . . . that the implementation of computer algorithms appears to be a valid and good faith middle ground for processing a plethora of content while still meeting the DMCA's requirements to somehow consider fair use."[88] The amended 2016 opinion also removed additional language that appeared in the original 2015 opinion, in which the court, citing an argument made in an amicus brief, had observed that

> consideration of fair use may be sufficient if copyright holders utilize computer programs that automatically identify for takedown notifications content where: "(1) the video track matches the video track of a copyrighted work submitted by a content owner; (2) the audio track matches the audio track of that same copyrighted work; and (3) nearly the entirety . . . is comprised of a single copyrighted work."[89]

The original opinion then suggested that rightsholders "could then employ individuals . . . to review the minimal remaining content a computer program does not cull."[90] This deleted language is relevant, of course, for the use of algorithms within DMCA+ systems to identify and block fair use content. It is also relevant, however, for takedown notices within the traditional DMCA framework sent by copyright holders using automated algorithms, because, per *Lenz*, such notices cannot be sent without the copyright holder making a good-faith fair use determination, and algorithms are not able to make this determination.[91]

The court's observation that human review would still be necessary in some cases speaks to the obvious shortcomings of algorithms in making such determinations. Moreover, the fact that "the use of full-length content can sometimes be fair use" further underscores algorithms' inability to detect fair use, even

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automatically blocked, tracked, or monetized, can the copyright holder ever satisfactorily discharge its burden?").

[87] *See* discussion *supra* Section II.B.

[88] Lenz v. Universal Music Corp., 801 F.3d 1126, 1135 (9th Cir. 2015), *amended by* 815 F.3d 1145 (9th Cir. 2016).

[89] *Id.* (quoting Brief for the Org. for Transformative Works, Public Knowledge & Int'l Documentary Ass'n as Amici Curiae Supporting Appellee, at 29–30 n.8).

[90] *Id.* at 1135–36.

[91] *See* U.S. COPYRIGHT REP., *supra* note 4, at 33, 151; *see also* discussion *supra* Sections I.B, II.B.

when they are able to match identical content.[92] Regardless, the court's deletion of this language from its original opinion leaves a "critical question in the wake of *Lenz*" that is broader than the intricacies of section 512(c)(3)(A)(v) and section 512(f): whether copyright holders can use algorithms to determine fair use in the same way they use them to flag potential infringement.[93]

3.   Burdensome or Non-Existent Appeal Processes

Additionally, the appeal processes that DMCA+ systems incorporate can be burdensome and can prevent users from accessing their right to dispute an infringement accusation under the DMCA.[94] For example, users who receive a Content ID claim must first file a dispute with the copyright holder, and, if the copyright holder rejects that dispute, the user can file an appeal.[95] The copyright holder has thirty days to respond at each stage.[96]   The copyright holder can file a traditional DMCA takedown notice at either the dispute or appeal stage, and after this takedown notice is filed, the user can file a counternotice.[97] But, theoretically, a user could be forced to endure sixty days of this two-level extra-statutory process before she is able to finally access the procedures of the DMCA, which she can only do once the copyright holder decides to file a takedown notice.[98]   The language on the Content ID website illustrates this system's separation from the statute: "If you believe that your video falls under fair use, you can defend your position through the Content ID dispute process. . . . *Sometimes,* you *may* need to carry that dispute through the appeal and DMCA counter notification process."[99]

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[92] U.S. COPYRIGHT REP., *supra* note 4, at 190 n.1004 (citing Matthew Schruers, Comput. & Commc'n Indus., Comments at the U.S. Copyright Office Section 512 Public Roundtable, Session 5: Technical Strategies and Solutions (May 3, 2016), *in* Transcript of the U.S. Copyright Office Section 512 Public Roundtable, at 84:4–7, copyright.gov/policy/section512/public-roundtable/transcript_05-03-2016.pdf).

[93] Sag, *supra* note 5, at 531; *see also* Geddes, *supra* note 65, at 467.

[94] *See* Geddes, *supra* note 65, at 464.

[95] *Dispute   a   Content   ID   Claim,*   YOUTUBE, https://support.google.com/youtube/answer/2797454   [https://perma.cc/EJ47-M87P] (last visited June 5, 2022).

[96] *Id.*

[97] *Id.*

[98] *Id.*

[99] *Frequently Asked Questions About Fair Use*, YOUTUBE (emphasis added), https://support.google.com/youtube/answer/6396261?hl=en   [https://perma.cc/BPT5-5QMU] (last visited June 5, 2022) (under "Common fair use questions" click the hyperlink "How does Content ID work with fair use?"). YouTube also seems to

Although Content ID's appeals process can be burdensome, it is noteworthy that this process exists in the first place: for example, Audible Magic, another major player in the algorithm technology industry, "does not incorporate complaint and redress mechanisms at all."[100]   It is also important—and alarming—to note that YouTube contracts with certain "Content ID partners [to] allow them to override DMCA counternotifications" as well as the Content ID appeals process.[101]   YouTube explains, without any further elaboration, that these contracts "require[ ] [Youtube] to remove specific videos from the site," "block specific videos in certain territories, or prevent specific videos from being reinstated after a [DMCA] counter notification," which "may mean the Content ID appeals and [DMCA] counter notification processes won't be available."[102]

III. The Copyright Office Study

Against these significant evolutions in technology over the past two decades, the U.S. Copyright Office released a study in May of 2020 entitled "Section 512 of Title 17: A Report of the Register of Copyrights" (the "Study").[103]   Congress held twenty copyright review hearings over two years,[104] and from these hearings emerged the Study, a 198-page document that attempts to "look[ ] at the past, evaluate[ ] the present, and identif[y] important issues, themes, and consideration for next steps."[105] The aim of the Study was to evaluate potential problems with, and updates to, the DMCA in light of the "[c]hanges in technology and business models used to create and disseminate

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discourage the creation of fair use material in the first place when it adds: "The easiest way to deal with Content ID claims is to avoid them in the first place. Don't use copyrighted material unless it's essential to your video." *Id.*

[100] Annemarie Bridy, *The Price of Closing the "Value Gap": How the Music Industry Hacked EU Copyright Reform*, 22 Vand. J. Ent. & Tech. L. 323, 356 (2020).

[101] *Tushnet Statement*, *supra* note 83, at 16.

[102] *Videos Removed or Blocked Due to YouTube's Contractual Obligations*, YouTube,   https://support.google.com/youtube/answer/3045545 [https://perma.cc/LRL8-36BV] (last visited June 5, 2022); *see* Geddes, *supra* note 65, at 470.

[103] U.S. Copyright Rep., *supra* note 4.

[104] *Id.* at Acknowledgements. These stakeholders included Viacom, Verizon, and Amazon; film, music, and publishing industry groups; and individual artists and authors. *See id.* at Appendix B.

[105] *Id.* at Acknowledgements. The Study is 198 pages without the appendices, and the appendices brings the full document to 250 pages. *Id.*

copyrighted materials . . . that could not have been imagined in 1998 when the Digital Millennium Copyright Act was passed."[106]

One of the main questions the Study sought to address was whether the safe harbors should be altered to create stricter liability for platforms.[107] Unsurprisingly, many rightsholders advocate for stricter liability, arguing that it will better protect their copyrighted material from infringement; platforms seeking to avoid liability and users who create fair use content, oppose stricter liability.[108] The Study discusses this stricter liability debate at length and says that the current configuration of the safe harbors has "increase[d] the burden on rightsholders seeking to enforce their rights online," and that the "cumulative effect" has altered the balance struck by Congress when it passed the DMCA in 1998.[109] The Study concludes that "[t]he Copyright Office therefore would support a Congressional effort to clarify select provisions of section 512 in order to restore its original balance."[110] These "select provisions" include the various knowledge requirements under different sections of section 512— including the knowing misrepresentation standard under section 512(f), and the *Lenz* court's interpretation of it—as well as the categories of platforms that are eligible for safe harbor protection, which the Study recommends narrowing.[111]

And yet, while the Study focused on these and other potential changes to the DMCA, fair use is barely mentioned. The Study also fails to adequately address the dangers to fair use posed by some of the technological and legislative changes that the Study contemplates, including use of algorithms, DMCA+ systems, and notice-and-staydown systems.

A. *Dismissive Toward Fair Use and Lenz*

Overall, the Study gives short shrift to complex concerns about fair use.[112] In light of the importance of fair use, it is startling to observe that the Study, which is over 100,000 words long, mentions the phrase "fair use" only forty-three times.[113] Its

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[106] *Id.*

[107] *Id.* at 1–2.

[108] *Id.* at 77. *See* Samuelson, *supra* note 5, at 308, 310.

[109] U.S. COPYRIGHT REP., *supra* note 4, at 136.

[110] *Id.*

[111] *Id.* at 2–7, 136.

[112] *See generally id.*

[113] Samuelson also notes that the Study is "quite dismissive" in its "treatment of fair uses." Samuelson, *supra* note 5, at 334.

longest continuous discussion of fair use spans two pages out of nearly two hundred.[114]

Downplaying the importance of the good-faith consideration of fair use required of rightsholders, the Study, in its recommendations to Congress, also suggests that the Ninth Circuit decided *Lenz* wrongly.[115]   Interestingly, while this recommendation is listed at the very start of the Study, the Study does not actually elaborate on "imputing the good faith requirement" in the later substantive section of the Study that discusses *Lenz*.[116]   The Study does, however, cite to the United States's amicus curiae brief for the *Lenz* case, which articulates the argument mentioned in the Study's recommendation.   The amicus brief argues that the *Lenz* court's "analysis . . . contains a significant legal error" in its holding because if "respondents failed to consider the fair-use factors before sending their takedown notice, respondents can be held liable for damages under Section 512(f) on that basis alone, *whether or not* the video actually constituted fair use of the copyrighted work."[117]   The brief also contends that if Lenz's video "did not actually constitute fair use, respondents' statement that the video was infringing was not a 'misrepresent[ation],' *whether or not respondents conducted any fair-use inquiry before sending their takedown notice.*"[118]

As the *Lenz* court found, if Universal did not consider fair use before sending the takedown notice, then it would in effect be misrepresenting its good-faith belief that the work was infringing. Without considering fair use, Universal simply *could not have* formed that good-faith belief. Indeed, fair use is one of the most common justifications for the use of copyrighted material. The brief—and the Study—reverse that logic, however, arguing that an ultimate finding by a court that the work was actually infringing would *absolve* the copyright holder from failing to consider fair use.[119]

This argument, rejected by the *Lenz* court but advocated for by the Copyright Office, would have serious implications if it

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[114] U.S. COPYRIGHT REP., *supra* note 4, at 150–52.

[115] *Id.* at 5.

[116] *Id.* at 5, 150–52.

[117] Brief for the United States as Amicus Curiae at 20–21, Lenz v. Universal Music Corp., 2017 WL 1756949 (2017) (No. 16-217).

[118] *Id.* at 21 (emphasis added).

[119] *Id.* at 17–21.

were applied in future cases with similar fact patterns to *Lenz* but when copyright holders instead use algorithms to send takedown notices. If algorithms—which are neither ruled in nor ruled out by the amended *Lenz* opinion[120]—cannot adequately consider or determine fair use,[121] then (1) algorithmic takedown notices *cannot* form a "good faith belief" that the material was infringing; and (2) the rightsholders using those algorithms to send automated notices would then be liable under section 512(f) for knowingly misrepresenting the infringing quality of the content. In effect, these algorithmic takedown notices would be equivalent to the Universal employee who did not consider fair use before sending the manual takedown notice.

Therefore, the *Lenz* holding is a further motivation for some platforms' migration to DMCA+ systems, in which content can be blocked without having to deal with the good-faith belief under section 512(c) or liability under section 512(f).[122] However, after summarizing the debate over the role of algorithms,[123] and noting that the *Lenz* opinion "did not speak directly to automated aspects of monitoring for infringements and sending notices,"[124] the Study disapprovingly concludes that *Lenz*'s "result [is] placing potential liability on rightsholders who fail to undertake a fair use inquiry before sending a takedown notes [sic], *without regard* to whether or not the material is actually infringing."[125] But applying this recommendation would essentially excuse rightsholders from considering fair use and would likely result in the unchecked suppression of fair use content on these platforms, thus undermining one of the foundational doctrines and philosophies of U.S. copyright law.[126]

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[120] *See* discussion *supra* Section II.C.2.

[121] *See* discussion *supra* Section II.C.

[122] *See* discussion *supra* Section II.C.; *see also* U.S. COPYRIGHT REP., *supra* note 4, at 151.

[123] *See* U.S. COPYRIGHT REP., *supra* note 4, at 151–52.

[124] *Id.* at 152. Surprisingly, the Study does not mention that the original *Lenz* opinion was amended to remove the discussion of automation—even though it (incorrectly) cites to the original 2015 opinion in its recommendation. *Id.* at 5 n.11, 150–52.

[125] *Id.* at 5 (emphasis added).

[126] *See* discussion *supra* Section I.A.

B.   *Failure To Acknowledge the Dangers of DMCA+ Systems to Fair Use and Due Process*

The Study also fails to fully acknowledge the dangers that DMCA+ systems pose to both fair use and users' access to statutory procedures.[127] The Study's language describing these various technologies is not precise, and it is somewhat unclear when the Study is actually referring to DMCA+ systems. For example, the Study specifically mentions "fingerprinting" technology as an approach that might become a "feasible option" for all platforms to employ—and while systems that use fingerprinting to identify copyrighted content are not necessarily DMCA+ systems,[128] the Study then goes on to describe fingerprinting as a Content ID-style DMCA+ system.[129]

When the Study does clearly discuss DMCA+ systems, such as Content ID, it fails to highlight the danger to fair use that these systems pose. Although the Study does briefly note a few panelists' concerns about Content ID being unable to "properly take fair use considerations into account" or "sweep[ing] up" fair use content, the Study phrases this merely as a potential "concern" or "argu[ment]," and does not extensively discuss the system's potentially detrimental impact on fair use or even state its agreement with this view.[130] But, in a post-Study letter to Congress, the Copyright Office did briefly note that "[i]ncreased access to [DMCA+ systems] is not likely to be a silver bullet, however. Even the most advanced filtering systems result in a non-negligible number of false positives and cannot identify whether content is protected by fair use."[131] It is interesting to note that the Study itself never makes such a direct declaration that algorithms cannot identify fair use as stated in the post-Study letter; it simply notes the opinion of "some" stakeholders

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[127] U.S. COPYRIGHT REP., *supra* note 4, at 44, 189.

[128] *Id.* at 177–78 (the Study includes "[a]udio fingerprinting systems" in this category, then, two sentences later, essentially describes Content ID, which is a more complex DMCA+ system than a simple audio fingerprinting algorithm).

[129] *Id.*

[130] *Id.* at 44, 189.

[131] *See* Letter from Marcia Strong, Acting Register of Copyrights & Dir., U.S. Copyright Off., to Sen. Thom Tillis & Sen. Patrick Leahy 9 (June 29, 2020), https://www.copyright.gov/laws/hearings/response-to-may-29-2020-letter.pdf [https://perma.cc/3BKS-9CDU].

who testified to that effect, and often contradicts that testimony with other stakeholders' opposing views.[132]

Similarly, the Study fails to note the dangers to due process and statutory remedies that DMCA+ systems pose. When discussing "Extra-Section 512 Processes and Requirements," the Study notes that "many participants in the notice-and-takedown system have adapted their practices to accommodate its increasing usage since the DMCA's enactment," clarifying in a footnote that it is referring to "the use of automated identification services by rightsholders and DMCA+ content management systems, like Google's Content ID or Facebooks [sic] Rights Manager, by [platforms]."[133] The Study then only focuses on two problems that DMCA+ systems cause: "(i) the adoption of additional notification requirements" by some platforms for copyright holders to use DMCA+ systems, for example, submitting additional documentation or information about the alleged infringement, and "(ii) the increasing reliance on web-based submission forms with friction deliberately built into the process."[134] The Study, however, ignores problems that *users* face under these systems, such as the way in which Content ID potentially removes the user from the DMCA with its appeals process.[135] Intriguingly, the Study even questions whether these additional requirements for rightsholders under DMCA+ systems invalidate the safe harbors, but it does not address the additional burdens a user has to go through to appeal such a dispute, or whether those burdens invalidate the protection of the safe harbors.[136]

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[132] U.S. COPYRIGHT REP., *supra* note 4, at 44 ("[U]ser advocacy groups expresse [sic] concern that the system . . . 'cannot properly take fair use considerations into account.'" (quotation omitted)); *id.* at 151–52 ("rejoin[ing]" Verizon's "assert[ion]" that it is "impossible" for an algorithm to determine fair use with other stakeholder testimony that contradicts it); *id.* at 189 (noting the view of "[m]any opponents" of notice-and-staydown systems that "technology cannot determine" what "constitutes fair use," and that "[s]ome users and online content creators . . . maintain" that Content ID "sweeps up content they believe makes fair use").

[133] *Id.* at 152–53, 153 n.819.

[134] *Id.* at 153–54.

[135] *See* discussion *supra* Section II.C.

[136] U.S. COPYRIGHT REP., *supra* note 4, at 155. This assumes, of course, that the DMCA+ system in question actually has an appeals process available to the user. *See* discussion *supra* Section III.B.

C. Failure To Reject DMCA+ and Notice-and-Staydown Systems as Standard Technical Measures

In light of the dangers these systems pose to fair use and due process, it is all the more alarming that the Study seems to favorably mention DMCA+ systems as an option for potential Standard Technical Measures.[137] In noting that "not a single technology has been designated a 'standard technical measure' under section 512(i)," the Study observes that "some individual [platforms] have deployed DMCA+ systems," then—without criticizing this extra-statutory approach—the Study explains that "DMCA+ systems allow rightsholders to identify and potentially remove infringing content *without going through the notice-and-takedown process.* Examples include YouTube's Content ID and Facebook's Rights Manager, both of which are monetization systems."[138] The Study also refers to fingerprinting technology as an option that may become "feasible" in the future, but a close examination of the Study's discussion of fingerprinting technology reveals that it really means a DMCA+-type system.[139]

Moreover, the Study does not completely reject the idea of a notice-and-staydown regime. The Study notes that a staydown system was the "proposal that has attracted the most attention both from participants in the Study and from outside commentators,"[140] and that many copyright holders of all sizes endorsed such a system to help them police infringement of their work online.[141] The Study then summarizes the many negative consequences that could follow from the adoption of a staydown system, including "the impact . . . on free expression and speech interests," the view of "[m]any opponents . . . that technology cannot determine whether use of rightsholders' material included in uploaded content . . . constitutes fair use," and the possibility that "a staydown requirement would turn [platforms] into 'gatekeepers' of online speech," which many users and creators feel is a role that DMCA+ systems (and specifically Content ID)

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[137] U.S. COPYRIGHT REP., *supra* note 4, at 67, 178.

[138] *Id.* at 67 & n.355 (emphasis added).

[139] *Id.* at 178; *see supra* notes 128–129 and accompanying text. The Copyright Office's post-Study letter to Congress, however, does frame DMCA+ systems in a more negative light. *See* Letter from Marcia Strong, *supra* note 131.

[140] U.S. COPYRIGHT REP., *supra* note 4, at 186.

[141] *Id.* at 187.

already play.[142] After noting all these negative consequences, however, the Study fails to take a stance against adoption of such a system. The furthest the Study goes is to conclude that a notice-and-staydown regime "should be adopted, if at all, only after significant additional study, including of the non-copyright implications they would raise" and after observation of the effects of the E.U.'s implementation of Article 17.[143]

Moreover, in a June 2020 letter to Congress answering several follow-up questions about the Study—one of which was simply, "[W]hat does the Copyright Office think of 'notice and staydown'?"[144] The Copyright Office again answered that "[i]t may . . . be prudent to wait and see whether the EU ultimately coalesces around one or two models [of implementing a notice-and-staydown system], and then evaluate the relative success or failure of those models against the current notice-and-takedown system in the United States."[145] The letter then went on to enumerate many of the concerns that a notice-and-staydown system would entail, before once again concluding that "[t]he Copyright Office lacks information with respect to many of these questions," and that the question "may benefit from further analysis both within and outside of government."[146]

IV. RECOMMENDATIONS TO PROTECT FAIR USE

The Copyright Office's Study should have explicitly called for the protection of the doctrine of fair use from the rise of algorithmic technology by advocating for the preservation of the current safe harbors and rejecting both DMCA+ and notice-and-staydown systems as potential Standard Technical Measures. In light of the Copyright Office's failure to do so, it is important that Congress be aware of these concerns when considering any legislative changes to section 512, including its evaluation of the proposed SMART Copyright Act of 2022. Similarly, courts should

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[142] *Id.* at 189.

[143] *Id.* at 193.

[144] Letter from Sen. Thom Tillis & Sen. Patrick Leahy, to Marcia Strong, Acting Register of Copyrights & Dir., U.S. Copyright Off. 2 (May 29, 2020), https://www.copyright.gov/laws/hearings/response-to-may-29-2020-letter.pdf [https://perma.cc/3BKS-9CDU].

[145] Letter from Marcia Strong, *supra* note 131, at 18. The fact that Congress posed this question after reading the Study may indicate that they were seeking a more direct recommendation on this type of system than the Study provided.

[146] *Id.* at 18–19.

keep these dangers in mind when considering any future DMCA litigation involving fair use and the use of algorithms.

A.   *No Changes to Safe Harbors*

The Study should have recommended that Congress preserve the safe harbors without making liability for platforms stricter, due to the importance of the fair use doctrine and the insufficiency of current algorithmic technology to detect or determine it.[147]   Such an approach would have ensured the neutrality of these platforms without giving them a weighted role in disputes between rightsholders and would-be fair use content creators.

Considering the voluminous amount of potentially infringing content online, which no one could have fully foreseen when the DMCA was passed in 1998, many argue that liability for platforms should be stricter because the platforms are in the best position to police the content, and because they are responsible for its wide proliferation.[148]   But stricter platform liability is not the answer.   Implementing stricter liability for platforms would encourage the platforms to rely on non-transparent algorithms to make underinclusive determinations of what constitutes fair use, outside the scope of the doctrine's statutory and judicial contours.[149]

Moreover, stricter liability would likely necessitate some type of notice-and-staydown system.   One only has to look at the internal contradictions found in the E.U.'s Article 17 to come to this conclusion: although Article 17 articulates a "no-general-monitoring" obligation, it also requires platforms to use "high industry standards" and "best efforts" to make sure that copyrighted works remain "unavailab[le]" on the platform, which seems to indicate that these platforms must essentially employ a notice-and-staydown system.[150]   Therefore, stricter platform liability would implicate a host of concerns—not the least of which is the suppression of fair use material—and, as some in the E.U. have pointed out, such a notice-and-staydown system may even violate the European Charter of Fundamental Rights,

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[147] *See* discussion *supra* Part II.

[148] Samuelson, *supra* note 5, at 308–10.

[149] *See* discussion *supra* Section I.B.

[150] Samuelson, *supra* note 5, at 319 ("These technologies cannot be effective without being general, because by design they scan every file uploaded onto the service's site.").

given its dire implications for the fundamental right of freedom of expression.[151]

B.   *No DMCA+ Systems or Notice-and-Staydown for Standard Technical Measures*

The Study also should have rejected both DMCA+ systems and notice-and-staydown systems as potential Standard Technical Measures ("STMs"). This is a key issue, and a timely one, as technical measures have become a major focus of several recent DMCA revision efforts: virtual stakeholder meetings were held by Congress in September 2020 to "lay the groundwork for sustained engagement on STMs";[152] the proposed Digital Copyright Act of 2021 advocated, among other things, for the establishment of STMs and for a notice-and-staydown system for certain types of works;[153] and the SMART Copyright Act of 2022 calls for the creation of an entirely separate category of "designated technical measures" that would specifically "identify, protect, or manage copyrighted works," and which would be selected via a rulemaking process led by the Copyright Office.[154] Under this proposed law, "covered" platforms would be required to use "commercially reasonable efforts" to "accomodate and not interfere with" these technical measures, which could include "filtering" and other types of algorithmic technologies, or else face "actual or statutory damages."[155] In light of its dismissive view of fair use, discussed *supra*, giving the Copyright Office the authority to define these technical measures would pose a serious risk to this important doctrine.[156]   The potential for this

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[151] *Id.* at 326–30; s*ee also* Geddes, *supra* note 65, at 471.

[152] *See Standard Technical Measures Discussion Event*, U.S. COPYRIGHT OFF., https://www.copyright.gov/events/stm-discussion [https://perma.cc/HK86-ZT9E] (last visited June 5, 2022).

[153] *See* Press Release, Thom Tillis, *supra* note 8 ("Significant revisions include: . . . establishing technical measures . . . and replacing the notice-and-takedown system in existing law with a notice-and-staydown system . . . .").

[154] *See* SMART Copyright Act of 2022, S.3880, 117th Cong. (2022) https://www.congress.gov/bill/117th-congress/senate-bill/3880/text.

[155] *Id.*; THE TILLIS-LEAHY SMART COPYRIGHT ACT OF 2022, STRENGTHENING MEASURES TO ADVANCE RIGHTS TECHNOLOGIES: MYTHS V. FACTS https://www.tillis.senate.gov/services/files/BBDBFA87-17CA-4D15-AA0F-9B54BFEEA31D (last visited June 17, 2022); THE SMART COPYRIGHT ACT OF 2022: A BILL TO REDUCE ONLINE THEFT AND ENHANCE CONTENT SHARING FOR ALL, https://www.tillis.senate.gov/services/files/465759C0-DBFA-4348-9565-CBA4FE6FB45F (last visited June 17, 2022).

[156] *See* discussion *supra* Section III; *see also* Nicholas Garcia, *Not So Smart: The SMART Copyright Act's Dangerous Approach to Online Copyright Protection*, PUB.

legislation, or similar bills, to become law is all the more reason to emphasize the dangers that DMCA+ and notice-and-staydown systems, in particular, pose to fair use.

1.   DMCA+ Systems

DMCA+ systems should be rejected as STMs for their negative impact on both fair use and users' due process expectations under the DMCA statute. First, DMCA+ systems can be deployed in such a way that blocks the majority of fair use content, even at the point of upload.[157] Second, DMCA+ systems that employ an appeals process, such as Content ID, can burden a user with delays and additional steps before they can even access the statutory framework—and that is, of course, if the DMCA+ system even incorporates an appeals process.[158] And again, while some argue that DMCA+ systems are a pragmatic solution to the issues with the DMCA that keep all stakeholders happy, the concern is DMCA+ systems are based in private, non-transparent values, rather than those Congress has set out in the DMCA or those that safeguard users' procedural and substantive rights under the DMCA.[159]

Of course, platforms are private and governed by their own terms and conditions; no user has a "right" to upload content to a platform.[160] But the reality is that tech platforms have so democratized creative, political, and personal output that these tech platforms are the default delivery systems for expression today[161]—especially for young people, who consume virtually all media via these platforms, including everything from political content to artistic works to cultural criticism.[162] In many cases, these types of media depend on the fair use of copyrighted works.[163] And the rise of these platforms' use of algorithms—especially DMCA+ systems—endangers access to and creation of

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KNOWLEDGE (Apr. 28, 2022), https://publicknowledge.org/not-so-smart-the-smart-copyright-acts-dangerous-approach-to-online-copyright-protection [https://perma.cc/XMF6-SL9N].

[157] *See* discussion *supra* Section II.C.

[158] *See* Bridy, *supra* note 100, at 356.

[159] Sag, *supra* note 5, at 506 ("These systems are a pragmatic response to the incredible scale of online infringement, but they also have the potential to fundamentally rewrite the balance of copyright law.").

[160] *Tushnet Statement*, *supra* note 8383, at 18.

[161] *See* Kate Klonick, *The New Governors: The People, Rules, and Processes Governing Online Speech*, 131 HARV. L. REV. 1598, 1603–04, 1653 (2018).

[162] Geddes, *supra* note 65, at 463.

[163] *See id.* at 456–57.

these fair uses.[164]   Using algorithms to enforce these private policies endangers and suppresses fair use, and deprives the users, who have driven these platforms' growth and success,[165] of their statutory and procedural expectations.

2.   Notice-and-Staydown Systems

Notice-and-staydown systems should also be rejected as STMs for the devastating blow they would deal to fair use content and the creative, collaborative, and democratic community that currently exists on these platforms.[166] There are significant privacy and free speech concerns with these systems.[167]   For example, to enforce a notice-and-staydown system, platforms would have to scan all uploaded content to detect any copyrighted material.[168] And equally important, in filtering out all repeated uploads of a copyrighted work, the system would likely block the majority of fair use content.[169] While the Study ultimately concludes that the United States should adopt a "wait-and-see" approach to how the E.U. implements such a system, this type of system is uniquely unsuited to the United States, with its strong doctrine of fair use.[170] Any potential modernization of the DMCA, including the SMART Copyright Act, should therefore reject the use of notice-and-staydown systems.

CONCLUSION

As proponents of change to the DMCA and its safe harbors, such as musician Don Henley, put it, "The DMCA has shown its age—it is a relic of a MySpace era in a TikTok world."[171] That much is true—the Internet and the ways we interact with it have evolved beyond recognition since 1998. Undoubtedly there is more infringement online today than there was twenty years ago,

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[164] *See* discussion *supra* Section II.C; *see also* Geddes, *supra* note 65, at 463.

[165] Samuelson, *supra* note 5, at 334–37.

[166] *Id.* at 337–41.

[167] *Id.* at 322, 341–42; *see also* Harmon, *supra* note 39.

[168] *See* discussion *supra* Section I.B.

[169] *See* Bechtel, *supra* note 44, at 260–61.

[170] *See* discussion *supra* Section I.A.

[171] *Oral Statement of Don Henley Before the Committee on the Judiciary, U.S. Senate Subcomm. on Intell. Prop. on Section 512 of the Digital Millennium Copyright Act*,   116th   Cong.   (2020)   (statement   of   musician   Don   Henley), https://www.judiciary.senate.gov/imo/media/doc/Henley%20Testimony.pdf [https://perma.cc/93NB-AV6U] (last visited June 5, 2022).

and the rise of algorithms has transformed the way the DMCA envisioned access to this material and litigation of copyright enforcement. But there are positive and negative aspects to this technological evolution: the growth of the democratized Internet and user-generated content platforms has resulted in more creation, more speech, and more expression, which often makes fair use of copyrighted materials, just as artists and commentators have done, legally under U.S. law, since the nineteenth century. Therefore, we should look to solutions from Congress and the courts that preserve this essential and important doctrine, rather than allowing privately-ordered algorithms developed by tech platforms to suppress it.