

ALGORITHMIC NOTIFICATION AND MONETIZATION: USING YOUTUBE'S CONTENT ID SYSTEM AS A MODEL FOR EUROPEAN UNION COPYRIGHT REFORM

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Digital streaming has emerged as a primary format for communication of creative works in the last two decades. The user-uploaded content site is now one of the most prominent platforms for streaming creative works. Because of safe harbor laws that limit liability for infringement of copyrighted works, these user-uploaded content sites have little incentive to fairly pay content creators for the use of works uploaded by the sites' users. This perceived value gap created by unfair payment has led copyright owners to call for copyright reform that would provide an opportunity for fairer compensation and create more liability for the user-uploaded content platforms. This note will address the value gap and unfair remuneration caused by safe harbor laws that allow user-uploaded content sites to avoid liability for infringement of copyright owner's works. This note will also address the need for copyright reform in light of the European Commission's Digital Single Market Strategy and analyzes the European Union's most recent attempts at reformation. Finally, this note will suggest a possible solution for reform modeled after YouTube's Content ID system that would close the value gap and provide fair remuneration for content creators while not conflicting with the fundamental right to freedom of expression.

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I. INTRODUCTION

With the musical, literary, and video repertoires of the world available at a moment's notice in the modern digital streaming era of the Internet, it is difficult not to ponder whether content creators feel blessed to live in a time when their music, books, and movies can be distributed to the billions of people of the world with relative ease. These ponderings quickly dissolve after coming across an article with the captivating title: *Why Musicians Are So Angry at the World's Most Popular Music Streaming Service*.¹

YouTube, accounting for twenty-five percent of all worldwide music streaming, has been accused by copyright owners of taking advantage of “safe harbor” provisions in copyright laws, which allow them to avoid liability for copyright-infringing works uploaded by their users.² These safe harbor provisions have led to a “value gap,” which has resulted in copyright owners not being fairly compensated for the streaming of their works on the site.³ A prominent group of content creators implored the European Commission⁴ to reform copyright laws to address the value gap and unfair remuneration.⁵ The European Commission acknowledged the need for copyright reform that would address the value gap and remuneration in its communications regarding the Digital Single Market

1. Todd C. Frankel, *Why Musicians Are So Angry at the World's Most Popular Music Streaming Service*, WASH. POST (July 14, 2017), https://www.washingtonpost.com/business/economy/why-musicians-are-so-angry-at-the-worlds-most-popular-music-streaming-service/2017/07/14/bf1a6db0-67ee-11e7-8eb5-cbccc2e7bfbf_story.html.

2. *Id.* For an explanation of the safe harbor provisions in copyright laws, see discussion *infra* Section III.A.

3. See Frankel, *supra* note 1.

4. The European Commission is the branch of the European Union government that plans, prepares, and proposes new European Union laws. *What the European Commission Does in Law*, EUR. COMMISSION, https://ec.europa.eu/info/about-european-commission/what-european-commission-does/law_en (last visited Oct. 15, 2019). “The Commission submits a legislative proposal to the European Parliament and the Council of the European Union, who must agree on the text for it to become EU law.” *Id.*

5. INT’L FED’N OF THE PHONOGRAPHIC INDUS. (IFPI), GLOBAL MUSIC REPORT 2017, 24, 26 (2017).

Strategy for Europe.⁶ After many communications, the European Commission proposed a new directive to reform copyright in the Digital Single Market.⁷ This proposal for copyright reform incited debate over user-uploaded content (UUC) sites' ability to avoid liability for infringing works appearing on their sites under safe harbor laws.⁸

II. BACKGROUND

Over the last fifteen years, digital streaming, most notably the streaming of video and audio works on Internet platforms such as Netflix and Spotify, has transformed the market for communication of creative works.⁹ The music industry has acknowledged that the significant increase in digital streaming has been a primary factor for the growth of the industry over the last decade.¹⁰ In fact, digital streaming is now the dominant distribution format for the music industry.¹¹ While there is a variety of digital streaming services, UUC sites have become an increasingly common platform for digital streaming.¹²

6. *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Online Platforms and the Digital Single Market Opportunities and Challenges for Europe*, at 8, COM (2016) 288 final (May 25, 2016); see generally *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Digital Single Market Strategy for Europe*, COM (2015) 192 final (June 5, 2015) [hereinafter *DSMS Communication*].

7. William New, *Concern Grows over Spread of EU Copyright Filtering Rules*, INFOJUSTICE (June 18, 2019), <http://infojustice.org/archives/41212>; see generally Directive 2019/790, of the European Parliament and of the Council of 17 April 2019 on Copyright and Related Rights in the Digital Single Market and Amending Directives 96/9/EC and 2001/29/EC, 2019 O.J. (L130) 92 [hereinafter 2019 Copyright Directive].

8. IFPI, *supra* note 5, at 26.

9. See DELOITTE, *DIGITAL MEDIA: RISE OF ON-DEMAND CONTENT 5-6* (2015), <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-rise-of-on-demand-content.pdf>.

10. IFPI, *supra* note 5, at 7.

11. *Id.* at 16.

12. See Joseph Dimont, Note, *Royalty Inequity: Why Music Streaming Services Should Switch to a Per-Subscriber Model*, 69 HASTINGS L.J. 675, 676–77 (2018).

UUC sites allow users to upload material that other users will then download or stream.¹³ These sites emerged in 2004 concurrently with the development of Web 2.0.¹⁴ Websites within Web 2.0 have the capability of being a platform for users to upload copyrighted content, in contrast to Web 1.0, where the websites themselves primarily provided content.¹⁵ One of the largest UUC sites, YouTube, is said to be “the largest music streaming site in the world,” having over a billion users.¹⁶ While artists are optimistic concerning the role of streaming in the growth of their industry,¹⁷ they have been critical of UUC sites that hide behind online liability laws and exploit the artists’ content.¹⁸

The UUC sites are allegedly taking advantage of these liability laws, known as “safe harbor” laws, discussed in more detail later, and exploiting copyright owners’ content by allowing streaming of copyrighted works for a profit without providing fair remuneration to those investing in and creating those works.¹⁹ This exploitation has led to what is now known as the “value gap.”²⁰ The value gap is defined as “the mismatch between the value that user upload services extract from music

13. See STAN J. LIEBOWITZ, INT’L CONFEDERATION OF SOC’YS OF AUTHORS & COMPOSERS (CISAC), ECONOMIC ANALYSIS OF SAFE HARBOR PROVISIONS 2 (2018), <https://www.cisac.org/Media/Studies-and-Reports/Publications/Transfer-of-Value-Study/Dr.-Stan-Liebowitz-Economic-Analysis-of-Safe-Harbor-Provisions>.

14. Martin B. Robins, *A Good Idea at the Time: Recent Digital Millennium Copyright Act § 512(c) Safe Harbor Jurisprudence – Analysis and Critique of Current Applications and Implications*, 15 TUL. J. TECH. & INTEL. PROP. 1, 4 (2012) (explaining that when “technology evolved to allow easy submission and posting to Web sites of user-generated content from computers” and other devices, Web 2.0 applications, in particular user-generated content sites, were developed as “users gain[ed] the ability to upload, edit, and collaborate in information dissemination,” in contrast with Web 1.0).

15. See Leron Solomon, Note, *Fair Users or Content Abusers? The Automatic Flagging of Non-Infringing Videos by Content ID on YouTube*, 44 HOFSTRA L. REV. 237, 238 n.10, 250–51 (2015).

16. LIEBOWITZ, *supra* note 13, at 2.

17. See IFPI, *supra* note 10, at 7.

18. *Id.* at 26.

19. *Id.* at 25–26.

20. *Id.* at 25. But see Giancarlo F. Frosio, *Reforming Intermediary Liability in the Platform Economy: A European Digital Single Market Strategy*, 112 NW. U.L. REV. ONLINE 18, 28 (2017) (stating that the “value gap” is fabricated and that “in reality, the digital platform economy has created value for content providers, not a value gap that needs to be closed”).

and the revenue returned to creators and investors.²¹ An example of the value gap can be seen by looking at the relative percentages paid to copyright owners by YouTube, a UUC site, and Spotify, a permission-based subscription streaming service.²² Spotify pays seventy percent of its revenues to copyright owners, while YouTube pays only fifty-five percent.²³

The revenue-earned to revenue-paid percentage disparity is not the only reason that copyright owners feel they are compensated unfairly for the streaming of their works on UUC sites: the actual dollar amounts per stream paid to copyright owners by many UUC sites are significantly lower than that of other streaming services.²⁴ For example, Spotify pays copyright owners approximately \$7.50 for every one thousand streams,²⁵ whereas YouTube pays only approximately \$1.50 for the same number of streams.²⁶ The lower amount paid by YouTube is a result of the combination of two factors: (1) the amount of revenue earned per stream, and (2) the percentage of that revenue paid to the copyright owners.²⁷ YouTube may generate less revenue than subscription-based services partly because they currently do not maximize profits from advertisement revenue, as they allow “skippable” ads.²⁸ These skippable ads do not require advertisers to pay if a user chooses to skip the advertisement, resulting in less advertising revenue earned by YouTube.

21. Poppy Reid, *The EU's New Copyright Law Could Change the Entire Music Industry*, INDUSTRY OBSERVER, (Sept. 13, 2018), <https://theindustryobserver.thebrag.com/the-eu-parliaments-digital-copyright-directive/>. The value gap is not limited to music, however, as many different content creators have spoken out against the value gap, including photographers, composers, lyricists, cartoonists, and film directors. Helen Smith et al., *Value Gap is Crucial for the Music Sector*, GUARDIAN (July 24, 2016, 2:43 PM), <https://www.theguardian.com/business/2016/jul/24/valu-gap-music-sector-youtube>.

22. See LIEBOWITZ, *supra* note 13, at 20.

23. *Id.* at 30.

24. *See id.* at 29.

25. *Id.* at 29.

26. *Id.*

27. *Id.* at 30.

28. *See id.* at 28.

²⁹ This, in turn, leads to even less monetizing revenue for the copyright owners.³⁰

UUC sites are able to stream copyrighted works for profit because of the safe harbor online liability laws currently in place that limit their liability for infringement.³¹ In the European Union (EU), these online liability laws are found in the E-Commerce Directive—a directive primarily focused on legal aspects of electronic commerce—which was enacted in 2000,³² prior to the debut of Web 2.0 applications in 2004.³³ Similar laws limiting online liability in the United States are found in the Digital Millennium Copyright Act of 1998 (DMCA), also predating the emergence of Web 2.0 and the prevalence of UUC sites.³⁴ At the time these laws that limit liability were enacted, legislators had not foreseen the possibility of UUC sites that would enable users to upload extraordinarily large amounts of copyrighted works and allow other users to stream those works.³⁵ The EU last notably updated its copyright laws in 2001 when it enacted the Information Society Copyright Directive (2001 Copyright Directive).³⁶ The 2001 Copyright Directive, the last significant update of EU copyright law, predates the development of Web 2.0 and UUC sites.³⁷ Because these laws limiting liability have

29. *Id.*

30. *Id.* at 30. Additionally, another comparison shows that an ad-supported Spotify (as opposed to the subscription-based platform) pays \$2.11 per thousand streams as compared to that comparison's determination of ad-supported YouTube's \$1.20 per thousand streams. *Id.* at 31.

31. *Id.* at 2. These liability-limiting laws, resulting in the safe harbor regime, are discussed in *infra* Section III.A.

32. Directive 2000/31/EC, of the European Parliament and of the Council of 8 June 2000 on Certain Legal Aspects of Information Society Services, in Particular Electronic Commerce, in the Internal Market (Directive on Electronic Commerce), art. 14, 2000 O.J. (L 178) 1, 13 [hereinafter E-Commerce Directive].

33. Robins, *supra* note 14, at 4.

34. See Digital Millennium Copyright Act § 202(a), 17 U.S.C. § 512.

35. LIEBOWITZ, *supra* note 13, at 7.

36. See *generally* Directive 2001/29/EC, of the European Parliament and of the Council of 22 May 2001 on the Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society, 2001 O.J. (L 167) 10 [hereinafter 2001 Copyright Directive].

37. They have, however, enacted other Directives concerning various aspects of copyright, but none of them have been truly significant regarding updating liability in light of Web 2.0. See *generally* Directive 2006/115/EC, of the European Parliament and of the Council of 12 December 2006 on Rental Right and Lending Right and on Certain

allowed a staggering number of infringing uploads of copyrighted content on UUC sites and led to the existence of the value gap,³⁸ the EU's copyright laws are overdue for much-needed reform. The European Commission proposed such a copyright reform in furtherance of its Digital Single Market Strategy.³⁹

A. The Digital Single Market Strategy

The Digital Single Market Strategy (DSMS) attempts to connect the twenty-eight separate national markets of the EU into a single market.⁴⁰ The Communication from the Commission regarding the DSMS (DSMS Communication) for Europe states that the “Digital Single Market is one in which the free movement of goods, persons, services and capital is ensured and where individuals and businesses can seamlessly access and exercise online activities under conditions of fair competition, . . . irrespective of their nationality or place of residence.”⁴¹ The Commission lists three notable “pillars” on which the strategy is built, which are “[b]etter access for consumers and businesses to online goods and services across Europe,” “[c]reating the right conditions for digital networks and services to flourish,” and “[m]aximising the growth potential of [the] European Digital Economy.”⁴² The Commission states that the DSMS will provide better online access and new opportunities for businesses and entrepreneurs across Europe and that “action is . . . required to break down barriers to cross-border online activity including

Rights Related to Copyright in the Field of Intellectual Property, 2006 O.J. (L 376) 28 (“Rental Directive”); Directive 2009/24/EC, of the European Parliament and of the Council of 23 April 2009 on the Legal Protection of Computer Programs, 2009 O.J. (L 111) 16 (“Computer Programs Directive”); Directive 2012/28/EU, of the European Parliament and of the Council of 25 October 2012 on Certain Permitted Uses of Orphan Works, 2012 O.J. (L 299) 5 (“Orphan Works Directive”); Directive 2014/26/EU, of the European Parliament and of the Council of 26 February 2014 on Collective Management of Copyright and Related Rights and Multi-Territorial Licensing of Rights in Musical Works for Online Use in the Internal Market, 2014 O.J. (L 84) 72 (“Collective Management Directive”).

38. LIEBOWITZ, *supra* note 13, at 35.

39. See Giancarlo Frosio, *To Filter, or Not to Filter? That Is the Question in EU Copyright Reform*, 36 CARDOZO ARTS & ENT. L.J. 331, 335–36 (2018).

40. *Id.* at 334.

41. *DSMS Communication*, *supra* note 6, at 3.

42. *Id.* at 3–4.

differences in . . . copyright law between Member States.”⁴³ The Commission further addresses the need to consider measures that would safeguard fair remuneration of content creators “in order to encourage the future generation of content.”⁴⁴

The first step in bringing copyright law into conformity with the goals of the DSMS would be to propose a new EU copyright directive. The process of EU law reform begins when the European Commission proposes new EU legislation either by its own initiative or by invitation from the European Council, the Council of the European Union, the European Parliament, or by citizens, via a European Citizens’ Initiative.⁴⁵ EU treaties set out objectives and rules for EU institutions, and secondary laws, including regulations and directives, come from the objectives and principles set forth in those treaties.⁴⁶ Directives and regulations are different in one major respect. A directive sets forth a particular result and requires EU member countries to implement measures that will incorporate (transpose) those results into each respective country’s national laws to satisfy the objectives of that directive.⁴⁷ Each EU member country is free to determine on their own the best way to incorporate a directive’s particular desired result into its national laws.⁴⁸ A regulation, on the other hand, applies uniformly and automatically to all EU member countries without the need for transposition into national laws.⁴⁹

B. Directive Proposals, Their Reception, and an Opportunity for Effective Copyright Reform in the Modern Internet Era

The European Commission, in furtherance with the DSMS, drafted the *Proposal for a Directive of the European Parliament and of the*

43. *Id.* at 4.

44. *Id.* at 7.

45. *Planning and Proposing Law*, EUR. COMMISSION, https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law_en (last visited Nov. 8, 2019).

46. *Types of EU Law*, EUR. COMMISSION, https://ec.europa.eu/info/law/law-making-process/types-cu-law_en (last visited Nov. 8, 2019).

47. *Id.*

48. *Id.*

49. *Id.*

Council on Copyright in the Digital Single Market (2016 Proposal),⁵⁰ which included provisions that attempt to give copyright owners increased protection against possible infringement.⁵¹ The European Parliament approved this proposal on September 12, 2018, and the European Parliament and the Council of the European Union then had several meetings for compromise negotiations regarding revisions of specific articles of the proposed directive.⁵² As a result of these negotiations, a revision of the Proposal was introduced on February 13, 2019,⁵³ and the new Directive (2019 Copyright Directive) was approved by the European Parliament in April 2019.⁵⁴

The new Directive attempts to provide measures to aid in the fair compensation of content creators for content shared through UUC sites.⁵⁵ The 2016 Proposal first approved by the European Parliament contained a provision that would have held online platforms liable in the event of copyright infringements occurring on UUC sites.⁵⁶ To avoid liability, those online platforms would have been required to implement filters to block copyrighted content in an effort to prevent the availability of copyright-infringing works uploaded by users.⁵⁷ The final version of the Directive has removed any explicit mention of filtering technologies, but

50. *Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market*, COM (2016) 593 final (Sept. 14, 2016) [hereinafter 2016 Proposal].

51. Ryan Brown, *European Union Copyright Laws Change*, GUILFORDIAN (Sept. 21, 2018) <https://www.guilfordian.com/worldnation/2018/09/21/european-union-copyright-laws-change/>.

52. Julia Reda, *EU Copyright Reform/Expansion*, JULIA REDA (Feb. 21, 2019), <https://juliareda.eu/eu-copyright-reform/#timetable> (click “Show past events” hyperlink under “Timetable”).

53. Julia Reda, *The Text of Article 13 and the EU Copyright Directive Has Just Been Finalised*, JULIA REDA (Feb. 13, 2019), <https://juliareda.eu/2019/02/eu-copyright-final-text/>.

54. New, *supra* note 7.

55. See 2019 Copyright Directive, *supra* note 7, recital (73), arts.16–17; see also *infra* Section III.B.

56. Már Másson Maack, *The EU’s Disastrous Copyright Reform, Explained by Its Lovers and Haters*, NEXT WEB (June 19, 2018), <https://thenextweb.com/eu/2018/06/19/the-eus-disastrous-copyright-reform-explained/>.

57. *Id.*

the use of filters would likely be inevitable in order for UUC sites to comply with the requirements, as discussed later.⁵⁸

Throughout its history of revisions and proposal versions, the Directive has seen a plethora of both support and opposition by copyright owners, UUC sites, and proponents of freedom of expression.⁵⁹ Many large UUC sites and proponents of fair use and freedom of expression objected to the upload filter requirement found in the 2016 Proposal, which would have required UUC sites to install filters to prevent users from uploading works that contained copyrighted material.⁶⁰ They claimed that such a requirement would result in copyrighted works being unnecessarily censored as containing infringing material, even when the use of the copyrighted material may otherwise be permitted as a parody or criticism, or when the use is merely incidental.⁶¹

In contrast, many copyright holders and content creators agree with the increased liability for UUC sites and upload filter requirement set forth in Article 13 of the 2016 Proposal.⁶² Many artists have spoken in

58. See *infra* Section III.C.

59. See Foo Yun Chee, *EU Parliament Committee Votes for Tougher EU Copyright Rules to Rein in Tech Giants*, REUTERS (June 20, 2018, 7:28 AM), <https://uk.reuters.com/article/us-eu-copyright/eu-parliament-committee-votes-for-tougher-eu-copyright-rules-to-rein-in-tech-giants-idUKKBN1JG1FE>; *Controversial Copyright Law Rejected by EU Parliament*, BBC NEWS (July 5, 2018), <https://www.bbc.com/news/technology-44712475>.

60. Foo Yun Chee, *supra* note 59; Timothy Vollmer, *With the European Parliament Vote on the Copyright Directive, the Internet Lost – For Now*, CREATIVE COMMONS (Sept. 12, 2018), <https://creativecommons.org/2018/09/12/with-the-european-parliament-vote-on-the-copyright-directive-the-internet-lost-for-now/>.

61. See Vollmer, *supra* note 60; Julia Reda, *When Filters Fail: These Cases Show We Can't Trust Algorithms to Clean Up the Internet*, JULIA REDA (Sept. 28, 2009), <https://juliareda.eu/2017/09/when-filters-fail/>.

62. See BBC, *supra* note 59; Scott Roxborough, *Paul McCartney, James Blunt Back New European Copyright Law*, HOLLYWOOD REP. (July 4, 2018, 4:36 AM), <https://www.hollywoodreporter.com/news/paul-mccartney-james-blunt-back-new-european-copyright-law-1124974>; Lars Brandle, *David Guetta and All Three Major Labels are Among Industry Giants Pushing for Copyright Reform*, INDUSTRY OBSERVER (June 29, 2018), <https://www.theindustryobserver.com.au/david-guetta-and-all-three-major-labels-are-among-industry-giants-pushing-for-copyright-reform/>; Martin Banks, *Publishers Back Controversial EU Copyright Proposals*, PARLIAMENT MAG. (June 11, 2018), <https://www.theparliamentmagazine.eu/articles/news/publishers-back-controversial-eu-copyright-proposals>.

favor of the more stringent requirements for UUC sites, claiming that implementing the measures required by the 2016 Proposal would help “secure [their] creative community into the next decade.”⁶³ Many musicians have argued that UUC sites were making large profits from the musicians’ works, while the musicians were not being fairly paid for their content.⁶⁴

In particular, Paul McCartney, former Beatles member, expressed his support for the 2016 Proposal, imploring the European Parliament to “address the value gap and help assure a sustainable future for the music ecosystem and its creators, fans and digital music services alike.”⁶⁵ In addition to Paul McCartney, many other musicians, songwriters, publishers, and other content creators worldwide have felt their works have been unfairly exploited by UUC sites and have expressed their support for the proposals and the use of upload filters.⁶⁶ They include James Blunt, Plácido Domingo,⁶⁷ David Guetta, Ennio Morricone,⁶⁸ Annie Lennox,⁶⁹ the European Magazine Media Association, the European Newspaper Publishers’ Association, New Media Europe, the European Publishers’ Council,⁷⁰ Nightlife Music, and Australia’s Independent Record Labels Association, among others.⁷¹ However, as new versions of the 2016 Proposal were discussed during the Parliament and Council’s negotiations,⁷² many previously in favor of the 2016 Proposal rescinded their support and called for significant revisions of the provisions in question.⁷³ However, though they no longer agreed with

63. Brandle, *supra* note 62; see also Roxborough, *supra* note 62

64. See Mark Savage, *Stars Fail to Convince Politicians*, BBC NEWS (July 5, 2018), <https://www.bbc.com/news/technology-44712475>.

65. Roxborough, *supra* note 62.

66. See Brandle, *supra* note 62; Banks, *supra* note 62. *But cf.* Cory Doctorow, *Now EVERYBODY Hates the New EU Copyright Directive*, ELECTRONIC FRONTIER FOUND. (Jan. 18, 2019), <https://www.eff.org/deeplinks/2019/01/now-everybody-hates-new-eu-copyright-directive>.

67. Roxborough, *supra* note 62

68. Brandle, *supra* note 62.

69. Savage, *supra* note 64.

70. Banks, *supra* note 62.

71. Reid, *supra* note 21.

72. Reda, *supra* note 52.

73. See Doctorow, *supra* note 66; Letter from European Coordination of Independent Producers (CEPI), et al., (Jan. 17, 2019), https://www.ifpi.org/downloads/17_Jan_2019_European_Creatives_and_Rightsholders_

the original 2016 Proposal, the content creators retained their desire to resolve the wage gap and fair remuneration issues regarding UUC sites.⁷⁴

The 2016 Proposal has been widely criticized by proponents of freedom of expression on the Internet.⁷⁵ One of the major concerns presented by opponents of the 2016 Proposal is that the existing filtering technology is not advanced enough to accurately detect copyright infringement and would subject legitimate speech to censorship.⁷⁶ The controversy and debate surrounding the current attempts to reform copyright laws have allowed an opportunity to consider the different interests and arguments and explore possibilities of copyright reform that may better protect the interests of copyright owners, UUC sites, and those opposed to preemptive censorship.

C. Copyright Protection Justifications

In considering possible copyright reforms, it is important to understand the justifications for copyright protection. The most commonly recognized justification comes from an incentive (or utilitarian) theory for copyright protection.⁷⁷ The main thrust of this theory is that copyright protection allows a copyright owner to exclude others from reproducing their works at minimal cost to the infringer and selling for a profit.⁷⁸ Without copyright protection, an infringer would be able to sell a work at a significantly lower price than what the original creator would because the original creator would need to recover the investment in creating the work while the infringer would only need to recover the cost of making the copy.⁷⁹ A lack of copyright protections

Caution_that_New_Draft_of_Article_13_Requires_Urgent_Changes_in_Key_Areas.pdf [hereinafter CEPI Letter].

74. See CEPI Letter, *supra* note 73.

75. Julia Alexander, 'Internet Is Under Threat': What You Need to Know About the EU's Copyright Directive, POLYGON (Sept. 11, 2018, 10:43 AM), <https://www.polygon.com/2018/9/11/17843664/copyright-directive-european-union-parliament-explained-internet-article-13-youtube-fair-use/comment/488598145> ("If [the Proposal] stands out to you, you're concerned, you're worried – good, you should be.").

76. See Maack, *supra* note 56.

77. See JULIE E. COHEN ET AL., COPYRIGHT IN A GLOBAL INFORMATION ECONOMY 6–7 (4th ed. 2015).

78. See *id.*

79. See *id.* at 6.

would create market competition that would drive the price of the work down to the point where the original creator would be unlikely to recover their investment.⁸⁰ With less possibility to recover investments, artists and other content creators would have a reduced incentive to invest significant amounts of time and other resources into the production of their creative works.⁸¹ Over time, this could disincentivize content creators from producing new works, or at the very least, would reduce the quality of new creative works.⁸²

A further justification for copyright protection comes from the nexus between artistic works and culture and the effect that both have on society.⁸³ Copyright protection itself plays a role in shaping modern culture by incentivizing creators to produce creative works that both reflect and influence the culture.⁸⁴ The DSMS Communication recognizes the importance of copyright protection for the cultural industry in the EU.⁸⁵ Further, creative works such as music and movies can be vitally important to world culture and can also help bridge gaps between different cultures.⁸⁶ If the economic incentives provided by copyright protections disappeared and, as a result, artists were no longer creating new music, movies, books, or other works of art that were

80. *See id.*

81. *See* ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY 247 (2011); *but see* Julie E. Cohen, *Copyright as Property in the Post-Industrial Economy: A Research Agenda*, 2011 WIS. L. REV. 141, 143 (2011) (“Everything we know about creativity and creative processes suggests that copyright plays very little role in motivating creative work.”).

82. MERGES, *supra* note 81, at 246.

83. *See generally* Peter Bazalgette, *We Have to Recognise the Huge Value of Arts and Culture to Society*, GUARDIAN (Apr. 26, 2014, 7:03 PM), <https://www.theguardian.com/culture/2014/apr/27/value-of-arts-and-culture-to-society-peter-bazalgette> (explaining that art enhances our lives, entertains and helps define personal and national identities).

84. *See* Cohen, *supra* note 81, at 145–46 (“Copyright, then, is a catalyst for, rather than an ingredient in, cultural change: It accelerates society’s progress along a single, inevitable, merit-based trajectory.”); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 YALE L.J. 283, 350–51 (1996).

85. DSMS Communication, *supra* note 6, at 6.

86. *See* Souad Mekhennet, *Bridging Cultural Gaps with Music*, N.Y. TIMES (Oct. 25, 2011), <https://www.nytimes.com/2011/10/26/world/asia/26iht-letter26.html>; Vikas Shah, *The Role of Film in Society*, THOUGHT ECON. (June 19, 2011), <https://thoughteconomics.com/the-role-of-film-in-society/>.

relevant to the twenty-first century, then the ability to bridge the gaps between cultures by means of the arts would begin to diminish.

While there are many justifications for copyright protection, this protection must be limited so as not to completely bar people from using other content creators' works as the basis for the creation of new works. Nearly all works build on previously created works to an extent.⁸⁷ In fact, some creators have largely built entire careers by transforming existing works and publishing their remixed creations on UUC sites.⁸⁸ Entire genres of works are based on the ability to create transformative works, including commentary videos, memes, reaction videos, and fan fiction, among others.⁸⁹ Over-protective copyright laws would almost certainly hinder the production and creation of many different types of later works, effectively limiting the livelihood of many contributing to the modern Internet-era culture and possibly stifling the creation of new genres in the future.⁹⁰ Therefore, the economic incentives furthered through copyright protection of original works must be balanced against the ability of creators to make and share such transformative works on the Internet. In light of this balance, current EU copyright law has provided for a limited allowance of the use of copyrighted material for the purposes of criticism, review, parody, caricature, or pastiche.⁹¹

III. THE SAFE HARBOR REGIME, THE EUROPEAN UNION'S COPYRIGHT REFORM, AND THE DANGER OF UPLOAD FILTERS

At the forefront of the debate surrounding EU copyright reform are copyright owners seeking legislation that would address the value gap and provide an opportunity for fair remuneration for the communication of their works on UUC sites.⁹² A reform of EU copyright laws is necessary to ensure that UUC sites may no longer hide behind safe

87. COHEN ET AL., *supra* note 77, at 8; MERGES, *supra* note 81, at 245.

88. Alexander, *supra* note 75.

89. *Id.*; Julia Reda, *What the EU Parliament May Add to Copyright Reform Plans*, JULIA REDA, <https://juliareda.eu/eu-copyright-reform/parliament-additions/> (last visited Oct. 22, 2019).

90. See Alexander, *supra* note 75.

91. See 2001 Copyright Directive, *supra* note 36, arts. 5(3)(d), (k).

92. IFPI, *supra* note 5, at 26; see also *supra* Part II (discussing the value gap).

harbor laws while exploiting the works of content creators for their own profits.

A. Notice and Takedown and the Safe Harbor Regime

The E-Commerce Directive limits the liability of UUC sites for infringing content that users of the sites upload on two conditions: “(a) the provider does not have actual knowledge of illegal activity or information . . . or (b) the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disable access to the information.”⁹³ This provision has created a notice and takedown mechanism, which allows an exemption from liability for UUC sites that expeditiously remove infringing materials after notice by a copyright holder.⁹⁴ The exemption has created a safe harbor regime because the UUC sites will not be liable for infringing material uploaded by users of the sites as long as the UUC site has no actual knowledge of the infringing material.⁹⁵ Upon notice by a copyright holder of infringing material, however, the UUC site would be required to remove that material or otherwise risk losing its safe harbor protection against liability.⁹⁶ The safe harbor exemption has been criticized by musicians, songwriters, and recording artists, claiming that the UUC sites, which monetize the artists’ works, are taking advantage of the exemption and exploiting the use of their works.⁹⁷

The notice and takedown regime is not without its flaws, and some have lamented its ineffectiveness in actually protecting against infringement.⁹⁸ Typically, after a takedown notice has been issued, the infringing material will reappear on the same UUC site within hours of

93. E-Commerce Directive, *supra* note 32, arts. 14(1)(a)–(b). A “provider” here is one that provides a service “that consists of the storage of information provided by a recipient of the service,” which would include UUC sites. *Id.* art. 14.

94. *Id.* art. 14(1)(b).

95. *Id.* art. 14(1)(a).

96. *See id.* art. 14(1)(b); Miquel Peguera, *The DMCA Safe Harbors and Their European Counterparts: A Comparative Analysis of Some Common Problems*, 32 COLUM. J.L. & ARTS 481, 488 (2009).

97. *See* IFPI, *supra* note 5, at 26.

98. *See* Stephen Carlisle, *DMCA “Takedown” Notices: Why “Takedown” Should Become “Take Down and Stay Down” and Why It’s Good for Everyone*, NOVA SOUTHEASTERN U. (July 23, 2014), <http://copyright.nova.edu/dmca-takedown-notices/>.

its removal.⁹⁹ As a result, content creators have to issue thousands of takedown notices in an ultimately futile attempt to have infringing content removed from the UUC sites.¹⁰⁰ Practically speaking, the notice and takedown system would really only be effective if the number of copyright infringements remained low.¹⁰¹ While the safe harbor exemption may not have unduly burdened rightholders when it was first implemented, the rise of Web 2.0 has led to the unprecedented millions of uploads of copyrighted content, rendering notice and takedown impracticable and the safe harbor exemption unreasonable.¹⁰² In light of the flaws in the notice and takedown system and the exemptions from liability under these safe harbor laws, copyright reform is needed to address the value gap issue and protect the content creators' works from infringement and revenue loss.

Scholars have posited several varying solutions that could help minimize unfair remuneration while still protecting freedom of expression. These solutions include encouraging artists to negotiate remuneration with Internet media platforms,¹⁰³ reforming EU copyright laws to require platforms to take out extended collective licenses,¹⁰⁴ and revising notice and takedown provisions into takedown and stay down provisions.¹⁰⁵ However, these solutions are not without their own critiques,¹⁰⁶ and some may even still lead to a general monitoring obligation that would require upload filters.¹⁰⁷ Additionally, because

99. *Id.*

100. *Id.*

101. LIEBOWITZ, *supra* note 13, at 9.

102. *See id.* at 7; Carlisle, *supra* note 98.

103. *See* Savage, *supra* note 64.

104. Julia Reda, *Article 13 Is A Mess: Now Even Big Rightholders Disavow It*, JULIA REDA (Dec. 3, 2018), <https://juliareda.eu/2018/12/article-13-mess/>.

105. Carlisle, *supra* note 98.

106. *See e.g.*, Jonathan Band & Brandon Butler, *Some Cautionary Tales About Collective Licensing*, 21 MICH. ST. INT'L L. REV. 687, 698 (2013) (critiquing extended collective licensing regimes in Nordic countries); Zach Blumenfeld, Note, *Selling the Artist, Not the Art: Using Personal Brand Concepts to Reform Copyright Law for the Social Media Age*, 42 COLUM. J.L. & ARTS 241, 274 (2019) (noting that artists would not be likely to want to join a large collecting society with compulsory licenses).

107. *See* Elliot Harmon, "Notice-and-Stay-Down" Is Really "Filter-Everything," ELECTRONIC FRONTIER FOUND. (Jan. 21, 2016), <https://www.eff.org/deeplinks/2016/01/notice-and-stay-down-really-filter-everything>; *see*

there is currently no liability for the UUC sites under the safe harbor laws,¹⁰⁸ large UUC sites would be in no hurry to simply renegotiate remuneration with content creators absent some kind of legislation. As part of their recent copyright reform efforts in furtherance of the DSMS, the European Commission proposed legislation that included measures intended to safeguard fair remuneration and to close the value gap.¹⁰⁹

B. The European Union's Proposals for Copyright Reform

In its attempt to reform copyright laws, the European Commission initially drafted the proposed directive with provisions that would require the use of upload filters, or “content recognition technologies,” for UUC sites that would recognize and prevent the availability of certain infringing works from appearing on the site.¹¹⁰ After a series of negotiations between the EU Parliament, the EU Council, and the European Commission, a new version of the proposed directive was finalized, which then passed a final vote by the European Parliament in April of 2019.¹¹¹ This new version removed the language that requires the use of content recognition technologies that was found in earlier versions of the proposal.¹¹² The 2016 Proposal stated that “[i]nformation society service providers . . . shall . . . take measures . . . to prevent the availability on their services of works or other subject-matter identified by rightholders through the cooperation with the service providers.”¹¹³ This version explicitly mentioned “the use of effective content recognition technologies” as an example of such a measure.¹¹⁴ This specific language referencing content recognition technologies is missing from the final version of the Directive.¹¹⁵

Article 17 of the 2019 Copyright Directive instead imposes on UUC sites a requirement of obtaining authorization from rightholders

also Frosio, *supra* note 39, at 355 (noting that it is currently unknown how to implement stay-down procedures “without establishing a general monitoring obligation”).

108. E-Commerce Directive, *supra* note 32, art. 14.

109. See Frosio, *supra* note 39, at 354–55, 357–58.

110. See 2016 Proposal, *supra* note 50, art. 13(1).

111. New, *supra* note 7.

112. See generally 2019 Copyright Directive, *supra* note 7.

113. 2016 Proposal, *supra* note 50, art. 13(1).

114. *Id.*

115. See 2019 Copyright Directive, *supra* note 7, art. 17.

“cover[ing] acts carried out by users of the services.”¹¹⁶ The 2019 Copyright Directive also creates a carveout of the safe harbor exemption of the E-Commerce Directive for UUC sites by providing that “[w]hen an online content-sharing service provider performs an act of communication to the public or an act of making available to the public . . . the limitation of liability established in Article 14(1) of Directive 2000/31/EC shall not apply to the situations covered by this Article.”¹¹⁷ An “act of communication” within the 2019 Copyright Directive includes when UUC sites make available to the public subject-matter uploaded by users of the sites.¹¹⁸ This removes the safe harbor exemption for UUC sites and renders them liable in the absence of authorization from rightholders.¹¹⁹

The Article mentions licensing agreements as a potential method of obtaining the requisite authorization before conducting an act of communication.¹²⁰ For large UUC sites where users upload material, this would require the UUC sites to preemptively obtain a license for everything that a user may possibly upload.¹²¹ Some have suggested that it would be impossible for a UUC site to obtain such authorization because this would effectively require a license for all copyrighted content that exists worldwide.¹²²

However, the 2019 Copyright Directive does attempt to limit the liability of the UUC sites by providing that, if they have not obtained authorization, they may not be liable if they can demonstrate that they have:

- (a) made best efforts to obtain an authorisation, and
- (b) made, in accordance with high industry standards of professional diligence, best efforts to ensure the unavailability of specific works and

116. *Id.* arts. 17(1)–(2). Article 17 of the Directive is the revised version of the 2016 Proposal’s Article 13. *See* New, *supra* note 7.

117. 2019 Copyright Directive, *supra* note 7, art. 17(3).

118. *Id.* recital (64).

119. *See id.* arts. 17(1)–(3).

120. *Id.* art. 17(1).

121. Reda, *supra* note 53.

122. *Id.* (“Commercial sites and apps where users can post material must make ‘best efforts’ to preemptively buy licences for anything that users may possibly upload – that is: all copyrighted content in the world. An impossible feat.”).

other subject matter for which the rightholders have provided the service providers with the relevant and necessary information; and in any event

(c) acted expeditiously, upon receiving a sufficiently substantiated notice from the rightholders, to disable access to, or to remove from their websites, the notified works or other subject matter, and made best efforts to prevent their future uploads in accordance with point (b).¹²³

The “best efforts” requirement in these liability limitations is incredibly ambiguous, and the Directive is largely silent as to the means or method by which these “best efforts” obligations can be fulfilled.¹²⁴ To be sure that they are complying with the obligation to make “best efforts to ensure the unavailability of specific works” for which they cannot obtain a license,¹²⁵ UUC sites will have very little choice but to simply employ content recognition technology to prevent the availability of any potentially unauthorized work from appearing on their platform.¹²⁶ This would effectively result in the UUC sites utilizing upload filters to block or remove the potentially infringing content because the UUC sites would want to stay on the safe side, ultimately removing all possibility of any infringing content in an effort to avoid direct liability.¹²⁷ This overcompensation of using an upload filter to block any potentially infringing content would lead to censorship of many legitimate uses of speech, such as parody or critique, thus conflicting with the EU’s right to freedom of expression.¹²⁸

However, even assuming that it would be possible for UUC sites to demonstrate that they have made “best efforts” to obtain authorization, Article 17 still implicitly imposes a general monitoring obligation, which would likely result in the use of upload filters.¹²⁹ A UUC site, after

123. 2019 Copyright Directive, *supra* note 7, art. 17(4).

124. *See generally* Press Release, European Comm’n, Questions and Answers – European Parliament’s Vote in Favour of Modernised Rules Fit for Digital Age (Mar. 26, 2019), https://ec.europa.eu/commission/presscorner/detail/en/MEMO_19_1849.

125. 2019 Copyright Directive, *supra* note 7, art. 17(4)(b).

126. New, *supra* note 7; Reda, *supra* note 53.

127. *See* Reda, *supra* note 53; Cory Doctorow, *German Data Privacy Commissioner Warns at New Copyright Directive Will Increase the Tech Oligopoly, Make EU Companies Dependent on US Filter Vendors, and Subject Europeans to Surveillance by US Companies*, BOING BOING (Mar. 1, 2019, 6:18 AM), <https://boingboing.net/2019/03/01/informationsfreiheit.html>.

128. Reda, *supra* note 53; *see also infra* notes 137–142 and accompanying text.

129. *See* New, *supra* note 7.

attempting to obtain an authorization from a rightholder and failing to accomplish that task, would still be subject to a notice and takedown requirement for any works for which rightholders have given sufficiently substantiated notice.¹³⁰ The 2019 Copyright Directive further provides that after notice from a rightholder, the UUC site must make “best efforts” to prevent future uploads of that work.¹³¹ In spite of a requirement of only “best efforts,” the obligation to prevent future uploads of a work would almost inevitably lead to a general monitoring obligation requiring the use of upload filters, as other methods would be impractical or even impossible.¹³² This inevitable monitoring obligation is in direct conflict with another provision in Article 17, which states that the “application of this Article shall not lead to any general monitoring obligation.”¹³³ Should the 2019 Copyright Directive become law as written, the EU Commission would do well to introduce criteria on how to comply with the “best efforts” obligation to prevent future uploads of infringing material (similar to a “stay down” mechanism) without imposing such a general monitoring obligation.¹³⁴

C. A Closer Look at Upload Filters and YouTube’s Content ID

Though the 2019 Copyright Directive does not explicitly require the use of upload filters, the use of filters would still be inevitable either to limit liability due to an impossibility of obtaining licenses for copyrighted works or to prevent future uploads of infringing works after notice has been given by a rightholder.¹³⁵ A filtering requirement, whether explicit or implicit, presents several issues that must be weighed against the benefits that such a requirement would advance. In particular, the technologies of current upload filters and their algorithms are not

130. 2019 Copyright Directive, *supra* note 7, art. 17(4).

131. *Id.*

132. *See New, supra* note 7; Reda, *supra* note 53.

133. 2019 Copyright Directive, *supra* note 7, art. 17(8).

134. *See Frosio, supra* note 39, at 355 (noting that the E-Commerce Directive also lacks any criteria on how to avoid a general monitoring obligation under a “stay down” mechanism).

135. *See supra* Section III.B.

sophisticated enough to be able to distinguish between an unlawful use of copyrighted material and a lawful use.¹³⁶

Lawful uses under the 2001 Copyright Directive are created by many different exceptions and limitations on the reproduction and communications rights.¹³⁷ Among these exceptions are “quotations for purposes such as criticism or review”¹³⁸ and “use for the purpose of caricature, parody or pastiche.”¹³⁹ These exceptions are also explicitly allowed for in the 2019 Copyright Directive, as the Directive states that users of UUC sites will be “able to rely on any of the following existing exceptions or limitations when uploading and making available content generated by users on online content-sharing services: (a) quotation, criticism, review; (b) use for the purpose of caricature, parody or pastiche.”¹⁴⁰ Quoting a work for criticism or review, whether it be in the form of a literary text, audio recording, visual work, or video recording, necessarily requires that a portion of copyrighted work be communicated as a part of the new work, which reviews or criticizes the original work.¹⁴¹ Similarly, a parody necessitates borrowing elements from another previously existing work, as the viewer must be able to recognize the previous work for the parody to have the intended effect.¹⁴²

Because transformative works use elements of copyrighted material, upload filters would likely flag these types of transformative works¹⁴³ as

136. See Alexander, *supra* note 75; Brown, *supra* note 51; ‘Disastrous’ Copyright Bill Vote Approved, BBC NEWS (June 20, 2018), <https://www.bbc.com/news/technology-44546620>.

137. See 2001 Copyright Directive, *supra* note 36, art. 5.

138. *Id.* art. 5(3)(d).

139. *Id.* art. 5(3)(k).

140. 2019 Copyright Directive, *supra* note 7, art. 17(7).

141. See Hayleigh Boshier, *Quotation, Criticism & Review*, COPYRIGHTUSER.ORG, <https://www.copyrightuser.org/understand/exceptions/quotation/> (last visited Feb. 28, 2019).

142. Case C-201/13, Deckmyn v. Vandersteen, EU:C:2014:458, Opinion of May 22, 2014, ¶ 50.

143. Criticism, caricature, parody, or pastiche are considered types of transformative uses. See Eric Östlund, Transforming European Copyright: Introducing an Exception for Creative Transformative Works into EU Law 21 (Autumn 2013) (unpublished master thesis, Uppsala Universitet [Uppsala University]), <http://www.diva-portal.org/smash/get/diva2:688462/FULLTEXT01.pdf>. However, it should be noted that there are other types of transformative uses that are not currently allowed under current EU law. *Id.*

being infringing and prevent users from uploading a work that should be a lawful use under the provisions in the 2019 Copyright Directive.¹⁴⁴ Current available filtering systems do not have algorithms that would be able to ascertain the difference between a lawful transformative work and an infringing work.¹⁴⁵ This can be shown by examining filtering algorithms that UUC sites currently utilize in an effort to prevent the availability of infringing works uploaded by users of the sites.¹⁴⁶

Perhaps the most prominent and well-developed of these algorithms is Content ID, the automated filtering system developed by Google and currently used for YouTube.¹⁴⁷ The Content ID system scans user-uploaded videos against a database comprised of files of works submitted by copyright owners who meet specified criteria.¹⁴⁸ The system detects a match and sends a notice to the copyright holder, who has several options for actions to take from there.¹⁴⁹ The system will flag even a partial match of an uploaded video with copyrighted content.¹⁵⁰ While the content-recognition technologies have been continuously improved over the past eleven years, they remain imperfect in detecting infringement because of their inability to identify when the use of a copyrighted work would be allowed under an exception,¹⁵¹ such as parody, criticism, or review.¹⁵² This automatic flagging of permitted uses of copyrighted material, in turn, would lead to a number of false positives,¹⁵³ where a non-infringing video has been flagged as infringing.¹⁵⁴

144. See Alexander, *supra* note 75.

145. *Id.*

146. See LIEBOWITZ, *supra* note 13, at 15–16.

147. Alexander, *supra* note 75.

148. *How Content ID Works*, YOUTUBE HELP, <https://support.google.com/youtube/answer/2797370?hl=en> (last visited Mar. 1, 2019); *Qualifying for Content ID*, YOUTUBE HELP, <https://support.google.com/youtube/answer/1311402> (last visited Mar. 1, 2019).

149. Solomon, *supra* note 15, at 256.

150. *Id.* at 257.

151. Maack, *supra* note 56.

152. Solomon, *supra* note 15, at 241.

153. Brown, *supra* note 51.

154. Toni Lester & Dessislava Pachamano, *The Dilemma of False Positives: Making Content ID Algorithms More Conducive to Fostering Innovative Fair Use in Music Creation*, 24 UCLA ENT. L. REV. 51, 65 (2017).

The inevitability of false positives would present a problem in implementing legislation that would require, explicitly or implicitly, the use of upload filters for UUC sites to avoid liability for their users' uploaded content. Because the upload filters would not be able to recognize that the use of a copyrighted work in a transformative work constituted a parody or quotation for the purpose of criticism,¹⁵⁵ the algorithms would likely block that content, and many legitimate uses of copyrighted content would be censored.¹⁵⁶ Such censorship would run a great risk of conflict with the right to freedom of expression.¹⁵⁷

D. Balancing of Interests: Copyright Owner's Interests vs. Freedom of Expression

One of the driving factors for the copyright reform is to provide for the fair remuneration for artists and eliminate the value gap.¹⁵⁸ While a laudable goal, fair remuneration must be balanced against the fundamental right of freedom of expression.¹⁵⁹ The Charter of Fundamental Rights of the European Union, which establishes a number of fundamental rights for citizens of EU Member States, recognizes freedom of expression as a fundamental right.¹⁶⁰ The Charter further provides that the "right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers."¹⁶¹

Respect for freedom of expression cannot be guaranteed by the use of upload filters, which preemptively block all potentially infringing content.¹⁶² Because a lawful transformative work, such as a parody,

155. 2019 Copyright Directive, *supra* note 7, art. 17(7).

156. See e.g., Frosio, *supra* note 39, at 357; Maack, *supra* note 56. See generally Reda, *supra* note 61.

157. See Maack, *supra* note 56.

158. #AxelVoss on #Copyright Reform: 'We Want to Protect the Rights of Creatives,' EU REP. (Sept. 20, 2018), <https://www.eureporter.co/frontpage/2018/09/20/axelvoss-on-copyright-reform-we-want-to-protect-the-rights-of-creatives/>.

159. Charter of Fundamental Rights of the European Union art. 11, 2012 O.J. (C 326) 391, 398.

160. *Id.*

161. *Id.*

162. See Frosio, *supra* note 39, at 357.

makes use of copyrighted content, an upload filter would block the lawful work from ever appearing on the UUC site.¹⁶³ Parodies have been recognized by the European Court of Justice as “a form of artistic expression and a manifestation of freedom of expression.”¹⁶⁴ The lawful uses of copyrighted content that would be censored by the current content recognition technologies (false positives) would therefore negatively impact freedom of expression.¹⁶⁵

Additionally, the implementation of preemptive upload filters would be inconsistent with the E-Commerce Directive, which states that “the removal or disabling of access has to be undertaken in the observance of the principle of freedom of expression.”¹⁶⁶ Both the 2019 Copyright Directive’s requirements that UUC sites make “best efforts to prevent . . . future uploads”¹⁶⁷ and the UUC sites’ desire to avoid direct liability would likely lead to the use of preemptive upload filters.¹⁶⁸ The inadequacy of the current content recognition technologies would lead to the censorship of non-infringing works in conflict with both the right of freedom of expression and the E-Commerce directive. The fact that a particular group of copyright owners feels unfairly compensated for the use of their works on UUC sites should not lead to the implementation of upload filters that would stifle freedom of expression, even if inadvertently.

IV. LIMITING INTERMEDIARY LIABILITY WITH AN ALGORITHMIC NOTIFICATION AND MONETIZATION SYSTEM

In the absence of any requirement leading to the use of preemptive upload filters, how are content creators to ensure the unavailability of infringing uses of their works on UUC sites? If one of the driving forces of the copyright reform is to provide fair remuneration for content creators, would upload filters, which block all potential infringing material, truly achieve that goal? Can the current content recognition

163. See Solomon, *supra* note 15, at 257.

164. Case C-201/13, *Deckmyn v. Vandersteen*, EU:C:2014:458, Opinion of May 22, 2014, ¶ 70 (emphases omitted).

165. Frosio, *supra* note 39, at 357.

166. E-Commerce Directive, *supra* note 32, recital (46).

167. 2019 Copyright Directive, *supra* note 7, art. 17(4)(c).

168. See *supra* Section III.C.

technologies be used in a way that both protects the rights of copyright owners and allows for the freedom of expression of those using copyrighted works in lawful ways?

For many content creators, the mere removal of their copyrighted works from UUC sites is not necessarily the ultimate goal.¹⁶⁹ The goal, rather, is fair compensation for the communication of their works by closing the value gap.¹⁷⁰ As evidence that removal is not the copyright owner's goal, under YouTube's current system, when given the opportunity either to remove works that have been flagged by the algorithm or to earn advertising revenue by keeping them on the site, most content creators will choose to allow the content to remain.¹⁷¹ Despite the fact that YouTube retains forty-five percent of the advertisement revenue on a flagged video,¹⁷² the monetization option remains popular because it allows a copyright holder to benefit from another users' uploading of the copyright holder's content.¹⁷³

If content creators are willing to allow an infringing uploaded work to remain on a UUC site in exchange for advertisement revenue monetization,¹⁷⁴ then perhaps a filtering system like the system YouTube uses with Content ID could be implemented among all UUC sites to create an algorithmic notification system with an option for monetization. YouTube's current system uses Content ID to scan new uploads to the site against a database of copyrighted content.¹⁷⁵ Once a full or partial match has been found, the copyright owner is notified of the matching content and is given several options.¹⁷⁶ The copyright owner can choose to have the video blocked from being viewed or share

169. See Alexander, *supra* note 75.

170. See IFPI, *supra* note 5, at 26.

171. Alexander, *supra* note 75; *A Guide to YouTube Removals*, ELECTRONIC FRONTIER FOUND., <https://www EFF.org/issues/intellectual-property/guide-to-youtube-removals> (last visited Mar. 1, 2019).

172. Paul Tassi, *The Injustice of the YouTube Content ID Crackdown Reveals Google's Dark Side*, FORBES (Dec. 19, 2013, 10:00 AM), <https://www.forbes.com/sites/insertcoin/2013/12/19/the-injustice-of-the-youtube-content-id-crackdown-reveals-googles-dark-side/#564fe5f266c8>.

173. Solomon, *supra* note 15, at 256.

174. Alexander, *supra* note 75.

175. *How Content ID Works*, *supra* note 148.

176. Solomon, *supra* note 15, at 256; see also *How Content ID Works*, *supra* note 148.

in the monetization of advertisement revenue generated from the infringing video and track the viewership statistics of the video.¹⁷⁷

The system is similar to a notice-and-takedown mechanism except that here, the original notification comes from the UUC sites to the copyright owner, rather than from the copyright owner to the site.¹⁷⁸ After the copyright holder has decided whether to block or monetize the allegedly infringing video, the uploader may then dispute the copyright holder's claim if they believe that the claim is incorrect.¹⁷⁹ After the uploader disputes the claim, the copyright owner must respond within thirty days and either release the claim, uphold the claim, submit a takedown request, or simply let the claim expire.¹⁸⁰ If the uploader's dispute is rejected by the copyright owner, the uploader can again appeal the rejected dispute, after which the copyright owner must again respond within thirty days with either a release of the claim or a takedown request, or they may again simply let the claim expire.¹⁸¹

Enacting legislation in the EU implementing a system modeled in this way could be very beneficial to copyright holders, new content creators, and the UUC sites. First, it would limit the liability of the UUC sites for infringing content uploaded by users by rendering the UUC sites liable for failing to notify the copyright holder of a potentially infringing upload, rather than by requiring that infringing material never be found on the UUC site.¹⁸² This requirement of notification would not unduly burden a UUC site for a number of reasons. While the content recognition technologies currently available would be inadequate to accurately detect only unlawful uses of copyrighted works,¹⁸³ the currently available technologies are adequately capable of detecting

177. *How Content ID Works*, *supra* note 148.

178. *See id.*

179. *Dispute a Content ID Claim*, YOUTUBE HELP, <https://support.google.com/youtube/answer/2797454> (last visited Mar. 1, 2019).

180. *Id.* (click "File a dispute" and "What happens after you dispute" hyperlinks).

181. *Id.* (click "If your dispute is rejected, file an appeal" and "What happens after you appeal" hyperlinks).

182. As is the case in the Directive, requiring "best efforts to ensure the unavailability of specific works and other subject matter for which the rightholders have provided the service providers with the relevant and necessary information" and requiring "best efforts to prevent their future uploads in accordance with point (b)." 2019 Copyright Directive, *supra* note 7, arts. 17(4)(b)–(c).

183. Solomon, *supra* note 15, at 257.

potentially infringing content by finding full or partial matches to copyrighted material.¹⁸⁴ By only requiring notification of potential infringements, the UUC sites would be able to utilize the currently available, albeit imperfect, content recognition technologies without expending significant resources in the future development of a more perfect system.

Second, copyright owners would receive several benefits from legislation implementing such a system. Copyright owners would receive notification of potentially infringing material without having to spend excessive resources locating infringing uploaded material and issuing formal takedown notices.¹⁸⁵ Copyright owners would also benefit from such a system because upon notice from a UUC site of potentially infringing material, copyright owners would be provided an option to earn revenue from monetization of the infringing upload rather than only having the option to issue a takedown request.¹⁸⁶ Having the option to monetize infringing works uploaded to UUC sites that derive value from those works could help to close the value gap.

Finally, users of these UUC sites who created works that incorporate copyrighted material but are non-infringing under one of the exceptions, such as quotation, criticism, review, or parody,¹⁸⁷ would not have their freedom of expression negatively impacted due to unnecessary censorship as a result of upload filters.¹⁸⁸ This type of system would allow users an opportunity to dispute a copyright owner's claim if the uploader believes that the use of the copyrighted work is allowed under one of the exceptions.¹⁸⁹ A disputed claim would then allow the copyright owner an opportunity to more closely look at that particular

184. See *id.* at 256. This would also require a reliable, comprehensive database of copyrighted content for the filtering technologies to compare against, possibly in the form of national or EU-wide copyright registry. See *infra* Section V.B.

185. Carlisle, *supra* note 98.

186. Blocking the video would still be an option for the copyright owner, should they choose that over a monetization option. *How Content ID Works*, *supra* note 148 (click "What options are available to copyright owners?" hyperlink). However, as noted before, within YouTube's current system, most copyright owners choose monetization. Alexander, *supra* note 75.

187. 2001 Copyright Directive, *supra* note 36, arts. 5(3)(d), (k); 2019 Copyright Directive, *supra* note 7, art. 17(7).

188. Frosio, *supra* note 39, at 357.

189. *Dispute a Content ID Claim*, *supra* note 179.

instance of potential infringement and determine whether they believe the uploader's dispute is valid under one of the exceptions.¹⁹⁰ If the copyright owner upholds the claim, the uploader would have yet another opportunity to appeal to the copyright owner before the copyright owner files a formal takedown notice.¹⁹¹ These several opportunities to dispute a claim would help protect a UUC site's users' freedom of expression by allowing them an opportunity to claim one of the allowable uses of copyrighted material rather than the work being preemptively censored by an upload filter.

Allowing for the narrowly defined lawful uses under this type of algorithmic notification would be much simpler to implement in the EU because the EU currently does not recognize a broad fair use doctrine.¹⁹² The relative lack of flexibility in determining whether a use falls under an exception under EU law,¹⁹³ as compared to the fair use doctrine of the United States, for example,¹⁹⁴ would make effective implementation of this system much more feasible.

190. See *id.* (click "File a dispute" and "What happens after you dispute" hyperlinks).

191. *Id.* (click "If your dispute is rejected, file an appeal" and "What happens after you appeal" hyperlinks).

192. Alex Dobie, The EU Copyright Directive Is About to Make the Internet Worse for Almost Everyone, ANDROID CENT. (Jan. 20, 2019), <https://www.androidcentral.com/eu-copyright-directive-about-make-internet-worse-almost-everyone>. Fair use allows for "copying of copyrighted material done for a limited and 'transformative' purpose," such as quoting from a book when writing a review. Richard Stim, *What Is Fair Use?*, STAN. COPYRIGHT & FAIR USE, <https://fairuse.stanford.edu/overview/fair-use/what-is-fair-use/> (last visited Oct. 6, 2019). The definition of "transformative" is ambiguous, and "[t]here are no hard-and-fast rules, only general guidelines and varied court decisions." *Id.*

193. See Östlund, *supra* note 143, at 21 (discussing Article 5 of 2001 Copyright Directive). Article 17 of 2019 Copyright Directive does not amend Article 5 in a meaningful way for the purpose of our discussion. See *supra* notes 137–42 and accompanying text.

194. See 17 U.S.C. § 107 (2012).

V. OTHER RELEVANT CONSIDERATIONS FOR OPTIMAL EFFECTIVENESS OF AN ALGORITHMIC NOTIFICATION SYSTEM

A. Education of Users Concerning Their Rights

The algorithmic notification system alone would not necessarily adequately achieve all of the goals; there are several other things that must happen in order for implementation to be effective. The first is that users of UUC sites must be more educated as to their rights to make the algorithmic notification system effective. Many users of YouTube currently are unaware of the rights they have under copyright law when creating and uploading works to the site.¹⁹⁵ A large number of current YouTube users will not dispute claims made by copyright owners under the Content ID system because they lack knowledge about fair use and other legitimate uses of copyrighted material or, alternatively, they fear a lawsuit from a copyright holder.¹⁹⁶

YouTube's help page currently includes some information for users on fair use and public domain and implores users to "[m]ake sure you understand how fair use and the public domain work before you choose to dispute for either of those reasons."¹⁹⁷ In the requirements for a proposed algorithmic notification system, there should be a provision requiring UUC sites not only to make users aware of their relevant rights under the 2001 Copyright Directive prior to allowing the user to upload content,¹⁹⁸ but also make them aware that the user would not be subject to a lawsuit after an initial claim, as the copyright holder would have

195. Solomon, *supra* note 15, at 256. As further evidence of the lack of knowledge of uploaders, a fair number of users make affirmative representations in the description of their uploads such as "no infringement intended" or "all rights go to the author" in a mistaken attempt to avoid a copyright claim. *What Is Fair Use: Fair Use Myths*, YOUTUBE, <https://www.youtube.com/yt/about/copyright/fair-use/#yt-copyright-myths> (last visited Mar. 2, 2019).

196. Solomon, *supra* note 15, at 256. Additionally, even if the use of content recognition technology was found to be an impossible burden to some UUC sites, a requirement could be made that, at the very least, those sites should filter and notify copyright holders for those uploads, which make textual affirmative representations in an effort to help reduce the number of infringing uploads. *What Is Fair Use: Fair Use Myths*, *supra* note 195.

197. *Dispute a Content ID Claim*, *supra* note 179 (click "File a dispute" hyperlink).

198. See 2001 Copyright Directive, *supra* note 36, art. 5.

another opportunity to reject the user's claim without resorting to legal action.¹⁹⁹

B. Creating a Database of Copyrighted Material

Implementation of an algorithmic notification system would require a database of copyrighted materials for the content recognition technologies to compare new uploads against. YouTube's Content ID currently has its own database of copyrighted works that content owners have submitted.²⁰⁰ In contrast to YouTube's current database, which does not allow all content creators to have access to the technology, this database must allow any content creator who wished to receive benefits of the algorithmic notification and monetization to submit digital copies of their works to the database.²⁰¹ This could be done by creating a copyright registry for content and requiring content creators to register their works to be eligible for monetization under the algorithmic system.²⁰² A registration system for all EU member countries could be implemented similar to the Madrid International Trademark System to allow uniformity of the database among all EU member countries and among all UUC sites.²⁰³

199. This provision would be similar to YouTube's current system of claims and appeals. See *Dispute a Content ID Claim*, *supra* note 179 (click "File a dispute" hyperlink). Such a provision has been suggested by a law student as an addition to the DMCA in the United States. See Solomon, *supra* note 15, at 262–63 ("A service provider will be required to have a page on its website describing the fair use doctrine in layman's terms. All users shall be redirected to this page both when they upload a video, and when they receive a notification about a video they previously uploaded being flagged for infringement.").

200. *How Content ID Works*, *supra* note 148.

201. See Blumenfeld, *supra* note 106, at 262.

202. A discussion of the extensive mechanics of implementing such a copyright registry exceeds the scope of this article, but it would include consideration of the consequences of failing to register, the process of examining registrations, the process of preventing and punishing fraudulent registrations, and the uniform implementation of the registry among all EU member countries.

203. See generally *Madrid – The International Trademark System*, WORLD INTELL. PROP. ORG., <https://www.wipo.int/madrid/en/> (last visited Mar. 2, 2019).

C. Resolving the Disparity in Bargaining Power

Another necessary change needed for effective implementation of the proposed algorithmic notification system would be a resolution of the unequal bargaining power between large intermediary UUC sites and copyright owners.²⁰⁴ As previously discussed, the value gap exists due to the disparity between the value derived from copyrighted content by the UUC sites and the revenue paid to those copyright owners.²⁰⁵ Because of the safe harbor provisions limiting liability, UUC sites currently have little incentive to pay copyright owners for permission to allow streaming of copyrighted works by the site's users.²⁰⁶ Because the UUC site can stream material and generate revenue without the permission of the copyright owners, those copyright owners generally accept the UUC site's offers to pay them something rather than nothing, even though the amount paid is considerably lower than if the copyright owners could effectively control the availability of their works.²⁰⁷ The copyright owners lack this kind of control because of the ineffectiveness of the notice and takedown regime in handling the massive numbers of infringements on UUC sites.²⁰⁸ The safe harbor exemption for UUC sites reduces their willingness to pay copyright owners for permission because the works will be available on the UUC sites regardless.²⁰⁹ Therefore, suggesting that copyright owners should simply renegotiate deals with the UUC sites to achieve fairer remuneration²¹⁰ is ineffective because UUC sites will have little incentive to do so in the absence of legislation requiring renegotiation.²¹¹

Because this proposed algorithmic notification system leaves intact the notice and takedown mechanism and the safe harbor regime,²¹²

204. See LIEBOWITZ, *supra* note 13, at 21.

205. See *supra* Part II.

206. LIEBOWITZ, *supra* note 13, at 20.

207. *Id.* at 20–21.

208. *Id.* at 23.

209. *Id.* at 21.

210. See Savage, *supra* note 64.

211. See LIEBOWITZ, *supra* note 13, at 3.

212. Rather than replacing the notice and takedown mechanism, the algorithmic notification system rather adds a preliminary layer requiring UUC sites to implement notification systems with content recognition technologies to continue to avoid direct liability for infringing material uploaded to the site. See *supra* Section III.D.

another provision must be introduced to help ensure fairer remuneration for copyright owners. The 2019 Copyright Directive includes a provision stating that “where authors and performers license or transfer their exclusive rights for the exploitation of their works or other subject matter, they are entitled to receive appropriate and proportionate remuneration.”²¹³ The 2019 Copyright Directive states that in determining what “appropriate and proportionate” remuneration would be, Member States may consider market practices.²¹⁴ In this case, market practices would likely include an evaluation of what other permission-based streaming platforms pay to copyright owners and could be determined based on either the dollar amount per stream paid or a percentage of the UUC sites’ revenues paid to copyright owners.²¹⁵ A similar provision should be included in the reform with criteria to aid in determining what a fair value would be, such as matching the average revenue percentage paid per-stream from permission-based and subscription-based streaming services.²¹⁶

VI. CONCLUSION

As it stands now, the 2019 Copyright Directive for EU copyright reform presents many issues regarding the feasibilities of (1) complying with the requirements for obtaining authorization for works uploaded to the site by users, (2) ensuring the unavailability of specific works, and (3) the prevention of future uploads of infringing works.²¹⁷ The first of these three requirements would be impractical for most, if not all, UUC sites, and even “best efforts” to comply would likely fall short of the requirement.²¹⁸ The latter two of these requirements would effectively result in UUC sites resorting to imperfect upload filters, which would result in the unnecessary block and censorship of potentially lawful uses of copyrighted works, such as criticisms or parodies, directly conflicting with the fundamental right of freedom of expression.²¹⁹

213. 2019 Copyright Directive, *supra* note 7, art. 18(1).

214. *Id.* recital (73).

215. See LIEBOWITZ, *supra* note 13, at 29, 30.

216. See *id.* at 29–31.

217. See *supra* Section III.B.

218. See *supra* Section III.B.

219. See *supra* Sections III.C–D.

However, because the value gap and unfair remuneration of copyright owners remains an issue, a reform of EU copyright laws is essential to ensure that UUC sites may not continue to hide behind safe harbor laws while exploiting the works of content creators for their own profits.²²⁰ An algorithmic notification and monetization system is a possible solution to implement throughout the EU that would help close the value gap and provide artists with an opportunity to monetize on infringing uploads rather than expending resources issuing countless takedown notices.²²¹

This system would require UUC sites to utilize content recognition technologies that are currently readily available, such as Content ID, to scan new uploads for potentially infringing material found in a database made from an international copyright registry for the EU.²²² After finding a match, the UUC would then be required to notify the copyright holder, who would have the option to monetize on the advertisement revenue that the uploaded infringing work generates for the UUC site.²²³ The user who uploaded the work would then have an opportunity to dispute that copyright owner's claim if the user believes that the work falls under one of the exceptions of the 2001 Copyright Directive, such as criticism or parody.²²⁴ Both the copyright owner and the alleged infringer would each have another opportunity to dispute the claims before the copyright owner would resort to a formal take-down notice.²²⁵

An algorithmic notification and monetization system would allow for a parody or critique to remain on the UUC sites until both the copyright owner and the user had an opportunity to claim copyright protection and would not be preemptively blocked from appearing on the site, thus providing a safeguard against stifling freedom of expression.²²⁶ Additionally, the system would include a provision requiring UUC sites to pay a proportionally appropriate amount reflecting the amount that permission-based streaming sites pay to copyright owners.²²⁷ This system would provide a fair balance between the right of freedom of expression

220. *See supra* Part III.

221. *See supra* Part IV.

222. *See supra* Section V.B.

223. *See supra* Part IV.

224. *See supra* Part IV.

225. *See supra* Part IV.

226. *See supra* Part IV.

227. *See supra* Section V.C.

and the need for copyright owners to be paid fairly for their works, allowing incentives to produce quality content for the enjoyment of the European Union.