

Before the
**U.S. COPYRIGHT OFFICE
LIBRARY OF CONGRESS**

**In the Matter of Section 1201 Exemptions to
Prohibition Against Circumvention of Technological
Measures Protecting Copyrighted Works**

Docket No. 2014-07

Reply Comment of

- **Peter Decherney, Professor of Cinema Studies and English, University of Pennsylvania,**
- **Michael X. Delli Carpini, Professor and Dean, Annenberg School for Communication, University of Pennsylvania,**
- **College Art Association,**
- **International Communication Association,**
- **Library Copyright Alliance, and**
- **Society for Cinema and Media Studies.**

**Requested Class of Work for Exemption – Proposed Class 3 (Audiovisual Works—
Educational Uses—Massive Open Online Courses)**

Audiovisual works embodied in physical media (such as DVDs and Blu-Ray Discs) or obtained online (such as through online distribution services and streaming media) that are lawfully made and acquired and that are protected by various technological protection measures, where the circumvention is accomplished by students and faculty participating in Massive Open Online Courses (MOOCs) for the purpose of criticism or comment.

Table of Contents

I. Commenter Information	1
II. Overview	2
III. Technological Protection Measures and Methods of Circumvention	3
IV. Asserted Noninfringing Uses	4
A. MOOCs Involve the Kinds of Uses Favored Under Both § 107 and § 110(2)	5
B. Opponents of Proposed Class Misunderstand the Definition and Administration of MOOCs	8
V. Asserted Adverse Effects	10
A. Opponents Claim MOOCs have Thrived Without Exemption, but Overlook the Striking Paucity of MOOCs that Study Audiovisual Works	10
B. Production Can Make or Break a MOOC	11
C. Limited Time Available in MOOC Format Amplifies Need for Exemption	12
D. Opponents Overstate our Burden in this Proceeding	12
E. Opponents Attempt to Short-Circuit this Proceeding and Minimize the Value of Access to High Quality Video by Misrepresenting <i>Corley</i> and <i>Elcom</i>	13
F. Alternatives to Circumvention are Insufficient	14
1. Screen Capture Degrades Quality and Results in an Experience Divorced from the Director’s or Creator’s Original Intent	14
2. Streaming Is a Flawed Alternative to Circumvention	17
VI. Statutory Factors	19
Conclusion	21

I. Commenter Information

This written reply comment is submitted on behalf of Peter Decherney, Professor of Cinema Studies and English at the University of Pennsylvania, Michael X. Delli Carpini, Professor and Dean of the Annenberg School for Communication at the University of Pennsylvania, the College Art Association (CAA), the International Communication Association (ICA), the Library Copyright Alliance (LCA), and the Society for Cinema and Media Studies (SCMS). Parties interested in contacting the submitter should contact Sarah O'Connor and Mark Patrick at (202) 274-4148 or by email at so6921a@student.american.edu or mp9853a@student.american.edu.

The joint petitioners [hereinafter referred to as “Joint Academics”] filing this written reply comment represent over 300,000 artists, art historians, curators, critics, collectors, educators, librarians, publishers, professors, scholars, professional university staff, and professionals in the visual arts, all interested in improving the quality of higher education in the United States. The College Art Association (CAA) is a professional association that promotes excellence in scholarship and teaching in the history and criticism of the visual arts and in creativity and technical skill in the teaching and practices of art. The International Communication Association (ICA) is an academic association dedicated to the study, teaching, and application of human and mediated communication. The Library Copyright Alliance (LCA) consists of three major library associations—the American Library Association, the Association of Research Libraries, and the Association of College and Research Libraries—with a unified goal of fostering global access and fair use of information for creativity, research, and education. The Society for Cinema and Media Studies (SCMS) is an organization dedicated to the study of the moving image. The ICA and SCMS were petitioners in the corresponding 2012 request for

exemption,¹ and their involvement in this Comment is a testament to the growing importance and prevalence of massive open online courses (“MOOCs”).²

II. Overview

MOOCs represent one of the most promising recent innovations in education, bringing elements of university education to many different groups including underserved and underprivileged populations. MOOCs have grown significantly since the last iteration of this proceeding. In 2012, Coursera, now the largest provider of MOOCs, had registered more than 1.7 million students.³ Coursera enrollment has now surpassed 12.6 million people.⁴ The adverse effects experienced by the faculty and students who have, or would have, participated in MOOCs must be multiplied across the tens of millions of participants who will enroll in MOOCs in the next three years.

Past exemptions have covered significant numbers of users with no adverse effects to the opponents of Proposed Class 3. Nevertheless, they argue that “[t]he sheer numbers and the very nature of MOOCs as ‘massive’ counsel against adoption of this exemption.”⁵ Twenty-one million college and university students were potentially covered by the previous exemption in 2015.⁶ Many more students are covered under the current exemption for traditional education than would be covered under the proposed class, and opponents acknowledge the continuing need for the exemption granted for traditional college and university courses in the previous

¹ 2011 Comment of Peter Decherney, et al.

² See *infra* Part IV.B (discussing the definition of “massive open online courses”).

³ Laura Pappano, *The Year of the MOOC*, N.Y. TIMES (Nov. 2, 2012), <http://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html?pagewanted=all>.

⁴ COURSERA, <https://www.coursera.org> (last visited Apr. 24, 2015).

⁵ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 2.

⁶ Comment of Joint Creators and Copyright Owners on Proposed Class 1 at 4.

rulemaking.⁷ Other exemptions (noncommercial filmmaking and cell phone unlocking, for example) have been equally far-reaching in their potential applicability, with no known harm to the rights holders involved.

The opponents of the proposed exemption rely on an artificially narrow view of fair use and caselaw that is irrelevant in the current proceeding. Opponents also contend that the idea that students demand high quality content is overstated and not supported by case law. In fact, high quality media is an essential part of MOOCs' success, as they are delivered in rich multimedia formats. Screen capture technology—one of the alternatives to circumvention suggested by the opponents of the proposed class—cannot create clips that retain the full richness of the creator's intended experience of the work. Similarly, other alternatives suggested by the opponents, including streaming, and creating clips with cell phone cameras or digital cameras, are inadequate for a variety of reasons. Finally, the proposed class of works and its uses qualify for an exemption under the factors enumerated in § 1201(a)(1)(C).

III. Technological Protection Measures and Methods of Circumvention

According to the opponents, technological protection measures (TPMs) “have increased the availability of works and have allowed for a vast proliferation of platforms on which consumers can enjoy authorized access to an increasing variety of content,” and specifically enabled “creators of motion pictures to expand their streaming and downloading options and to

⁷ See Comment of DVD Copy Control Association [hereinafter DVD CCA] on Proposed Class 1 at 2 (“DVD CCA does not object to issuance of a new three-year exemption under the same terms and conditions as were contained in the 2012 exemption applicable to this class”); Comment of Joint Creators and Copyright Owners on Proposed Class 1 at 2 (“Joint Creators and Copyright Owners would not oppose a renewal of the educational exemptions for universities and colleges granted in the last proceeding”); *see also id.* at 5 n. 7 (stating that “Joint Creators and Copyright Owners do not oppose renewal of the current exemptions for screen capture technologies”).

experiment with a broad range of business models to increase access to their works.”⁸ The Joint Academics are glad to see that exemptions for education have had no detrimental effect on the various business models that the Digital Millennium Copyright Act was supposed to enable.⁹

Opponents claim that Joint Academics failed to explain how circumvention is accomplished.¹⁰ As previously stated, the most common method of circumvention for educational use is through software programs that disable the various TPMs referenced above.¹¹ These programs are readily available online and able to rewrite the desired portion of a protected work with the exact same frame rate, preserving content and maintaining the same resolution. Additionally, these programs do not require decryption of the entire work—faculty and students can decrypt only the portion of the work needed for the asserted educational purpose. The techniques used may differ widely based on the experience and sophistication of the student or faculty member attempting to use the copyrighted work for any of the fair uses described below.

IV. Asserted Noninfringing Uses

The opponents exaggerate the consequences of the TEACH Act and its relation to fair use.¹² There is no requirement that a use be protected by both § 107 and § 110(2) to be lawful.

⁸ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 4.

⁹ See *infra* Section VI (addressing the statutory factors, including the effect of circumvention of TPMs on the market for or value of copyrighted works).

¹⁰ Comment of DVD Copy Control Association (DVD CCA) and Advanced Access Content System Licensing Administrator LLC (AACSLA) [hereinafter DVD CCA & AACSLA] on Proposed Class 3 at 4 (“The proponents did not state how they would accomplish circumvention.”).

¹¹ Comment of Peter Decherney et al. on Proposed Class 3 at 4 (“MOOCs and traditional courses involve the same technological protection measures and methods of circumvention, and our Comment on Proposed Class 1 describes them in greater detail.” Comment of Peter Decherney et al. on Proposed Class 1, Part III).

¹² See Comment of DVD CCA & AACSLA on Proposed Class 3 at 3 (“DVD CCA and AACSLA oppose the grant of any exemption for MOOCs [because] the uses proposed by proponents

Instead, the two exceptions run in parallel to one another and show congressional policy favoring exactly the types of uses covered in this proposed class. Moreover, the opponents fundamentally misunderstand and misrepresent the definition and administration of MOOCs and their relation to higher education institutions. The uses enabled by this exemption would be lawful.

A. MOOCs Involve the Kinds of Uses Favored Under Both § 107 and § 110(2)

Section 110(2) of the TEACH Act was an effort to address the growth of distance education, and it applies to education outside the traditional face-to-face classroom and settings in which students receive materials through digital transmissions.¹³ However, the TEACH Act has not lived up to its promise. Groups who provide expert support to educators trying to use the provision, like the American Library Association, have attempted to explain its complexities, but warn:

Because of the numerous conditions, and the limitations on permitted activities, many uses of copyrighted works that may be desirable or essential for distance education may simply be barred under the terms of the TEACH Act. Educators should seek to implement the TEACH Act, but they should also be prepared for exploring alternatives when the new law does not yield a satisfactory result.¹⁴

Opponents of the proposed class suggest that the lawfulness of MOOCs may be dependent upon their compliance with the complexities of the TEACH Act,¹⁵ but the educational community has known for years that fair use picks up where the TEACH Act leaves off.¹⁶

Indeed, the fair use argument in support of the uses at issue here, which is strong on its

do infringe copyright by failing to comply with the TEACH Act and any exemption would be an unwarranted evasion of the TEACH Act requirements;).

¹³ 17 U.S.C. § 110(2) (2005).

¹⁴ Kenneth D. Crews, *New Copyright Law for Distance Education: The Meaning and Importance of the TEACH Act*, AMERICAN LIBRARY ASSOCIATION (Sept. 30, 2002), *available at* <http://www.ala.org/advocacy/copyright/teachact/distanceeducation>.

¹⁵ Comment of DVD CCA & AACS LA on Proposed Class 3 at 5.

¹⁶ Christine Fruin, *Struggles and Solutions for Streaming Video in the Online Classroom*, AMERICAN JOURNAL OF DISTANCE EDUCATION (Nov. 29, 2012), *available at* <http://www.tandfonline.com/doi/abs/10.1080/08923647.2012.728078>.

own, is further buttressed by the TEACH Act and § 110(1). These provisions show an overarching policy favoring use of media in education, including distance education. Educational uses are already primed for favorable treatment under § 107, with specific mention in the preamble (“purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research”) as well as the first statutory factor.¹⁷ These favorable aspects of the law are not conclusive, of course, and opponents attack a straw man by arguing that “not all educational uses are fair uses *per se*.”¹⁸ Joint Academics never suggested they were. Rather, we argued then, as now, that educational uses are more likely to be fair than other uses. Not only does the law expressly favor educational uses, but perhaps more importantly, these uses are transformative relative to the original purposes of the vast majority of audiovisual works, which were not created or marketed as educational tools.

The opponents contend that in addition to providing educational content, MOOCs function as marketing tools for universities, generate significant income for the for-profit MOOC providers, are used as a form of entertainment, and that these are all factors that negate their qualification as fair use.¹⁹ However, for-profit or commercial activity does not preclude a finding of fair use. Rather, as the Supreme Court said in *Campbell*, “nearly all of the illustrative uses listed in the preamble paragraph of § 107, including news reporting, comment, criticism, teaching, scholarship, and research, . . . are generally conducted for profit in this country.”²⁰ As noted in the 1976 report of the House of Representatives Judiciary Committee on the 1976 Copyright Act:

¹⁷ 17 U.S.C. § 107 (2010).

¹⁸ Comment of DVD CCA & AACS LA on Proposed Class 3 at 6-8.

¹⁹ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 4-5.

²⁰ *Campbell v. Acuff-Rose*, 510 U.S. 569, 584 (1994).

The Committee has amended the first of the criteria to be considered—“the purpose and character of the use”—to state explicitly that this factor includes a consideration of “whether such use is of a commercial nature or is for non-profit educational purposes.” This amendment is not intended to be interpreted as any sort of not-for-profit limitation on educational uses of copyrighted works.²¹

Thus, the opponent’s assertion that MOOCs are not fair because they may generate income is in direct opposition to Supreme Court jurisprudence and the legislative history of § 107.

Jurisprudence has also developed in a manner that places greater emphasis on transformative use.²² Transformative uses “lie at the heart of the fair use doctrine’s guarantee of breathing space within the confines of copyright.”²³ The opponents contend that MOOCs can be entertaining, thus undermining the idea that they serve a different function than the work they seek to use.²⁴ This is not how courts apply the concept of transformativeness; a use can be as entertaining as the work it borrows from and still be fair.²⁵ The question is whether “the quoted matter is used as raw material, transformed in the creation of new information, new aesthetics, new insights and understandings—this is the very type of activity that the fair use doctrine intends to protect for the enrichment of society.”²⁶ Educators both employ and elicit analysis, commentary, and criticism in their lectures. When faculty and students use audiovisual works for educational purposes, the use falls squarely within Judge Leval’s description of a transformative use, and when unencumbered, these uses result in the societal enrichment fair use was intended to protect. Additionally, because transformative uses do not affect the market for

²¹ H.R. Rep. No. 94-1476, 94th Cong., 2d Sess. (Sept. 3, 1976).

²² See generally, Neil Weinstock Netanel, *Making Sense of Fair Use*, 15 LEWIS & CLARK L. REV. 715 (2011) (examining the development of the fair use doctrine and the rise to prominence of the transformative use paradigm).

²³ *Campbell*, 510 U.S. at 579.

²⁴ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 4.

²⁵ In some cases the transformative work is arguably *more* entertaining. See, e.g., *Brownmark Films, LLC v. Comedy Partners*, 682 F.3d 687 (7th Cir. 2012).

²⁶ Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1111 (1990).

the original work by acting as a substitute, there is no question of market harm under the fourth statutory factor.²⁷

Finally, the format of a MOOC lecture makes the proposed uses especially likely to be fair. MOOCs employ video lectures that are broken up into a series of short clips, usually lasting ten minutes or less. Due to the brevity of the lectures, any embedded media will be carefully tailored to take only what is necessary to serve the pedagogical goals of the professor. The uses sought by Joint Academics under the proposed class will easily qualify as fair, noninfringing uses.

B. Opponents of Proposed Class Misunderstand the Definition and Administration of MOOCs

Opponents of the proposed class lament that the Joint Academics have refused to allow for any distinction or limitation along any of the lines suggested in the Notice of Proposed Rulemaking.²⁸ To be clear, the Joint Academics are not opposed to limitations and distinctions per se, but instead were concerned that the distinctions suggested in the Notice of Proposed Rulemaking are not the most useful ones.

Although much is made in the popular press of their “massive,” “open” character, it is their nature as “courses” that makes MOOCs ripe for an exemption in this proceeding. MOOCs fuse traditional lectures with multimedia presentations, self-quizzes, and a variety of other pedagogical techniques that lead students through a critical exploration of a subject. As digital

²⁷ See *Author’s Guild, Inc. v. HathiTrust*, 755 F.3d 87, 99 (2d Cir. 2014) (“[A]ny economic ‘harm’ caused by transformative uses does not count because such uses, by definition, do not serve as substitutes for the original work”).

²⁸ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 5 (“[Joint Academics] refuse to allow for any distinction or limitation along any of the lines suggested in the NPRM, such as whether the content is open or free or requires course materials to be licensed; whether the provider is a non-profit or for-profit entity; or whether the courses require registration and/or identity verification.”).

environments that personalize learning, MOOCs have the potential to serve as “educational positioning systems” that precisely navigate students through their curriculum along individual “pathways and routes to maximize student success.”²⁹

Opponents of this proposed class claim that a MOOC cannot be distinguished from any other online video that purports to be educational.³⁰ However, this ignores the high educational standards of MOOCs, their origins in higher education, and the pedagogical scaffolding that makes a MOOC more than just a set of videos. The vast majority of MOOCs are modeled from existing college and university courses and are taught by college and university professors. The leading MOOC providers are either partnered with or owned by colleges and universities. In addition to video lectures, a typical MOOC course consists of a variety of interactive and non-interactive assessment and learning exercises. Quite simply, a web video on its own is not a course.³¹

The opponents’ description of access to MOOCs is unnecessarily alarmist. Opponents of the proposed class warn that, unlike traditional universities, MOOCs are open to the Internet at large.³² While enrollment in a MOOC is not limited to those who attend ivy-draped institutions, each platform providing MOOCs follows a set of registration and enrollment procedures that distinguish students from non-students. Participants must register and sign in to access course content and participate in course exercises. Students enrolled in MOOCs therefore do constitute

²⁹ Linda Baer and John Campbell, *From Metrics to Analytics, Reporting to Action: Analytics’ Role in Changing the Learning Environment*, in *GAME CHANGERS: EDUCATION AND INFORMATION TECHNOLOGIES* 63 (Diana G. Oblinger ed., 2012).

³⁰ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 6.

³¹ See *Course*, *NEW OXFORD AMERICAN DICTIONARY* (3d ed.) (defining “course” as “a series of lectures or lessons in a particular subject, typically leading to a qualification”).

³² Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 5.

a “‘narrow and focused’ class,”³³ which is clearly defined by the enrollment process for each course, and is no more numerous or unfocused than the class of users who qualify for existing exemptions for education, remix, and cell phone unlocking, for example.

V. Asserted Adverse Effects

Students and faculty engage in fundamentally the same kinds of activities, whether they are in a MOOC or in a traditional college or university classroom. The proposed exemption encompasses uses that are the online equivalent of core traditional educational uses: incorporation of excerpts in faculty lectures and student projects. Opponents of the proposed class overstate the burden of proof necessary for an exemption, and ignore essential and compelling facts driving the need for an exemption. The DMCA has led to chilling effects on course offerings, and in certain instances has completely blocked them. The adverse effects on the production of MOOCs are substantial and merit an exemption

A. Opponents Claim MOOCs have Thrived Without Exemption, but Overlook the Striking Paucity of MOOCs that Study Audiovisual Works

Of the tens of thousands of courses offered across the three largest MOOC platforms, at most four are film and media studies courses. Coursera lists four courses that could be generously described as being primarily about film (one is about images generally). EdX and Udacity list none. Searches for “film,” “movie,” “cinema,” and even “media” yield listings for book clubs and programming language courses. Ben Wiggins, Director of Digital Learning Initiatives at the University of Pennsylvania, gave an example of how § 1201’s ban on circumvention tends to preempt the creation of MOOCs centered on the analysis of films:

I’m working with Simon Richter (the chair of the German department at Penn) on a closed, credit course and while we were touring the studio he expressed interest in doing a MOOC on the so-called Lola films. He specifically asked if we could

³³ *Id.* at 5 (quoting 2012 Recommendation of the Registrar of Copyrights at 9).

do scene-analyses and cut in clips from the myriad Lola pictures of the last 60 years. I had to let him know that, unfortunately, the University was not prepared to take that risk.³⁴

Section 1201's ban on circumvention is warping the growth of online education, and erasing from academic history the most powerful medium of the Twentieth Century: the moving image. Online learners have unlimited access to rich courses about computer coding languages and trigonometry, but virtually nothing about the language of cinema or the visions of its leading auteurs. It is particularly tragic that the Motion Picture Association of America is opposed to a provision that would give the history and artistry of the movies parity with "How to Use Javascript" and "Intro to iOS App Development."

B. Production Can Make or Break a MOOC

An article by James G. Mazoue explains that:

Contrary to what some may think, designing the best learning environments does not entail their being taught by the best professors or affiliated with elite universities. Instead of simply using scholarly reputation and institutional prestige as quality standards, we should judge MOOCs by how well they enable the conditions that optimize learning for each student.³⁵

Opponents contend that low attention span and course completion issues are endemic to the nature of MOOCs, and are not relevant to this proceeding.³⁶ However, the opponents ignore that this is a substantial adverse effect that occurs when professors cannot design a lesson plan with tailored content. Commenting on the issue of tailored course content and its relation to retention, a liaison at Coursera told us, "[I]t's just better to embed content in the course itself to minimize distractions It will likely vary across different types of external pages—for

³⁴ Email from Ben Wiggins, Director of Digital Learning Initiatives at the University of Pennsylvania, (Apr. 11, 2015).

³⁵ James G. Mazoue, *The MOOC Model: Challenging Traditional Education*, EDUCAUSE (Jan. 28, 2013), available at <http://www.educause.edu/ero/article/mooc-model-challenging-traditional-education>.

³⁶ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 7.

example, the Rice Python professors linking to an external programming assignment probably has very high retention, whereas directing people to a YouTube video would likely be more distracting.”³⁷

C. Limited Time Available in MOOC Format Amplifies Need for Exemption

The typical MOOC lecture is broken up into short clips of ten minutes or less to ensure they do not outlast limited attention spans. Due to this time constraint, it is nearly impossible to include more than the bare minimum necessary to demonstrate a point or draw out analysis. Linking out to external content undermines this feature of a MOOC and wastes valuable time. Pausing for students to navigate to external content breaks the flow of a lecture, which is as important in a MOOC as in the physical classroom. In a 2014 blog post on the Blackboard Blog, a Grand Valley State administrator wrote: “The benefit of embedding video into a course is that it enables the students to stay within the context of the course and within the sequence of instruction, rather than linking out away from course content.”³⁸

D. Opponents Overstate our Burden in this Proceeding

Under § 1201(a)(1)(C), “the prohibition against circumvention applies unless and until the Librarian determines that ‘persons who are users of a copyrighted work are, or are likely to be in the succeeding 3-year period, adversely affected by the prohibition . . . in their ability to make noninfringing uses under this title of a particular class of copyrighted works.’”³⁹ The standard does not require that circumvention be “necessary” or “essential to the pedagogical

³⁷ Email from Ben Wiggins, Director of Digital Learning Initiatives at the University of Pennsylvania, (Apr. 11, 2015).

³⁸ Eric Kunnen, *The Power of Video*, BLACKBOARD BLOG (Sept. 17, 2014), *available at* <http://blog.blackboard.com/the-power-of-video/>.

³⁹ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 79 Fed. Reg. 55,687, 55,689 (Sept. 17, 2014) (quoting 17 U.S.C. 1201(a)(1)(C)).

purpose.” While the adverse effects should not be de minimis, they need not be catastrophic. Proponents have met our statutory burden.

E. Opponents Attempt to Short-Circuit this Proceeding and Minimize the Value of Access to High Quality Video by Misrepresenting *Corley* and *Elcom*

Opponents misrepresent relevant case law in an attempt to undermine the Joint Academic’s argument in both Proposed Class 1 and Proposed Class 3 that the ability to access high quality audiovisual works is paramount for high quality instruction.⁴⁰ Opponents of the proposed class cite to *Universal City Studios, Inc. v. Corley*⁴¹ and its holding that “[f]air use has never been held to be a guarantee of access to copyrighted material in order to copy it by the fair user’s preferred technique or in the format of the original.”⁴² Similarly, opponents cite to *U.S. v. Elcom Ltd.*⁴³ and that court’s observation that “no authority . . . guarantees a fair user the right to the most technologically convenient way to engage in fair use.”⁴⁴ However, these cases are irrelevant to the current proceeding. In both cases, the court sought to determine whether the fair use provision and the First Amendment could be used on their own to bypass or even nullify the anti-circumvention provisions of § 1201. This proceeding is “the ‘fail-safe’ mechanism in section 1201(a)(1)” employed every three years precisely because the statute is not subject to direct challenge on fair use (or First Amendment) grounds.⁴⁵ Granting an exemption where, but for § 1201, lawful uses would be “optimum” and “convenient” is therefore perfectly consistent with this line of cases.

⁴⁰ Comment of Peter Decherney et al. on Proposed Class 3 at Part IV.B.3.

⁴¹ 273 F.3d 429 (2d Cir. 2001)

⁴² Comment of DVD CCA & AACS LA on Proposed Class 3 at 9 (quoting *Corley*, 273 F.3d at 459).

⁴³ 203 F. Supp. 2d 1111 (N.D. Cal. 2002).

⁴⁴ *Id.* at 1131.

⁴⁵ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 79 Fed. Reg. 55,687, 55,688 (Sept. 17, 2014).

F. Alternatives to Circumvention are Insufficient

1. Screen Capture Degrades Quality and Results in an Experience Divorced from the Director's or Creator's Original Intent

First, although the Joint Academics did not request an exemption to permit use of screen capture, we would not oppose such an exemption, suitably modified to encompass the same uses contemplated in this proposed class.⁴⁶ Since the opponents of the proposed class and others have never conceded that screen capture is not circumvention, an exemption would give additional comfort to educators who use it. That said, while screen capture is sometimes useful, it is hardly sufficient for the full array of uses of media in MOOCs.⁴⁷

Opponents of the proposed class argue that screen capture is a viable alternative to circumvention with respect to Blu-ray discs and DVDs.⁴⁸ In reality, screen capture degrades the quality of the work in important ways and requires vast amounts of time and data. Additionally, MOOCs will be viewed on a variety of different devices and optimizing the content for delivery will help ensure the most adequate parity in representation. This is especially true when it comes to the sound reproduced in the screen-captured version of an audiovisual work. Opponents assume that anyone enrolled in or producing a MOOC will have access to the most technologically advanced screen capture tools available, which is not the case.

While screen capture software is available at a wide range of price points, only more expensive products possess functionality adequate for use in education. Some screen capture

⁴⁶ See Comment of Joint Creators and Copyright Owners on Proposed Class 1 at 5 n. 7 (“While there is no request in this proceeding for a screen capture exemption, the Joint Creators and Copyright Owners do not oppose renewal of the current exemptions for screen capture technologies (but would oppose any expansion of those exemptions).”).

⁴⁷ See generally Statement of Prof. Tisha Turk, Comments of Electronic Frontier Foundation and Organization for Transformative Work on Proposed Class 7 at Appx. 101 (describing the deficiencies of screen capture software as a viable alternative to circumvention in the case of noncommercial remix videos).

⁴⁸ Comment of DVD CCA & AACS LA on Proposed Class 3 at 11-14.

software creates degraded clips due to the loss or compression of data. The issues are only amplified when capturing video on Blu-ray discs, as there are a greater number of pixels, and thus, a greater potential for the loss of data. The technical issues causing this loss in video quality are due to a combination of the reduced framerate and ineffective deinterlacing, among others.⁴⁹ Screen capture software is not designed to capture motion pictures, and, as such, is typically ill-equipped to preserve a motion picture's aspect ratio. This results in captured video with a non-standard frame size, making it more difficult to edit and manipulate the content to display it in line with or alongside other works. Screen capture may use deinterlacing (the process that separates merged frames that can result from making video files that will display on a standard television set) when capturing video. This leads to lost frames and a lower quality file. When professors are attempting to show a particular scene or scale up an image for analysis, this lower quality file is insufficient compared to the file you would get with circumvention.

The use of screen capture technology also typically results in files with dramatically inferior sound quality. When performing a screen capture, the resulting excerpt or file will be downsampled to stereo—a means of reproducing sound that creates an illusion of directionality and audible perspective by channeling sound to the left or right. The surround sound intended by the director or original creator is lost. Surround sound provides an immersive experience by projecting sound from 360 degrees in relation to the listener. Thus, screen capture software cripples the soundtrack of the work, severely damage to fidelity to the creator's intent.

Degraded sound and image quality lead to a viewing experience different from the one the director or creator of the work originally intended. In the courses he teaches at Bucknell

⁴⁹ See Statement of Prof. Tisha Turk, *supra* note 47 (outlining the numerous other problematic technical issues faced when using screen capture technology).

University, Professor Faden routinely “scales up” stills from films to show details that demonstrate composition and technique. However, DVD almost always “falls apart” at some point due to the more limited number of pixels. Although these kinds of still images from high definition formats can be created and scaled up using screen capture software, Dr. Faden says they are often inferior versions.

In addition to the output limitations, screen capture software seriously burdens compliance with Americans with Disabilities Act⁵⁰ accessibility requirements. For example, when using screen capture software you can choose to have burned in captions or none at all; you cannot encode or capture with selectable audio tracks, but only one at a time. Audio tracks, director commentary, and alternate scenes are all examples of things that would have to be captured specifically instead of stored in a single, universally accessible file. These considerations are in addition to the internal standards by which libraries attempt to provide the best possible quality and the broadest possible access.

Finally, screen capture is an inadequate alternative to circumvention because it is not intuitive to use as a mode of copying high-quality excerpts from professional media formats. Screen capture software is designed for recording videos of activity on a computer screen, such as tutorials about software use.⁵¹ Its features and default settings are optimized for that purpose. Faculty and students may be deterred by the difficulty of hacking the settings of screen capture software as an alternative to circumvention.⁵²

⁵⁰ 42 U.S.C. §§ 12181-89 (1990).

⁵¹ *See, e.g.*, Meet Students’ Individual Learning Needs, <https://www.techsmith.com/education-tutorial-student-practice.html> (last visited April 30, 2015) (a use case described by the makers of Camtasia).

⁵² For example, a recent entry on the tech support forums for Camtasia suggests that Windows users have to navigate deep into the system settings of the Windows XP operating system to

2. Streaming Is a Flawed Alternative to Circumvention

Opponents of the proposed class state, “[W]hen considering the availability for use of copyrighted works, § 1201(a)(1)(C)(i), it is important to recognize that more works than ever are more readily available than ever, in particular through streaming and downloadable online content.”⁵³ While streaming, and proprietary programming across various platforms, has become a major competitor for traditional sources of audiovisual materials, it does not serve as a satisfactory alternative to DVD and Blu-ray discs for educational use. Streaming audiovisual works is not an alternative to circumvention because of restricted access to the works due to Terms of Use or End User License Agreements, potential Internet connectivity issues, the lack of consistent availability of the works sought for educational purposes, the lost classroom time due to cueing up online streams, image cropping, and the practical issues faced when embedding clips.

The Terms of Use or End User License Agreements that often accompany streamed media may deter faculty and students hoping to use online streaming services as an alternative to circumvention. Netflix and similar commercial streaming sites require users to accept a set of “terms and conditions” that may waive any fair use rights the user would otherwise have. For example, by agreeing to the “Netflix Terms of Use,” users “agree not to archive, download (other than through caching necessary for personal use), reproduce, distribute, modify, display, perform, publish, license, create derivative works from, offer for sale, or use (except as explicitly

enable DVD capture. *Camtasia (Windows): Capturing DVD Playback with Camtasia Studio/Recorder is Blank*, <https://support.techsmith.com/hc/en-us/articles/203728418-Camtasia-Windows-Capturing-DVD-playback-with-Camtasia-Studio-Recorder-is-blank> (last visited April 30, 2015).

⁵³ Comment of Joint Creators and Copyright Owners on Proposed Class 3 at 9.

authorized in these Terms of Use)[streamed works].”⁵⁴ The Terms of Use make no mention of teaching or fair use.

Streaming services often have carefully curated libraries, but their libraries are not curated for academic use. Instead, online video libraries are typically assembled for entertainment purposes. Professor Faden at Bucknell University cannot locate online over 90 percent of the films he uses in his classes on film and media studies.⁵⁵ Value in an audiovisual work is not strictly based on entertainment value, and media libraries curated with profits or popularity in mind will rarely meet the educational needs of the faculty or students looking for a particular work. Additionally, the lack of continuity regarding what content is provided through streaming services in any given month makes streaming an unreliable alternative to circumvention. CNET.com publishes a monthly list of titles that will be added to and taken away from the Netflix library.⁵⁶ According to the most recent listing, “May will see a lot movies going offline at Netflix,”⁵⁷ including the classic science fiction film “*Fantastic Voyage*.” At this rate of change, professors cannot rely on the availability of a work from one month to the next, let alone from semester to semester or year to year.

Professor Faden described some of the challenges students have encountered and that he has noticed in relying on streaming in support of education:

⁵⁴ Netflix Terms of Use, NETFLIX, <https://www.netflix.com/termsfuse> (last accessed Apr. 20, 2015).

⁵⁵ Phone call with Professor Eric Faden, Associate Professor of English at Bucknell University (Apr. 16, 2015).

⁵⁶ Iyaz Akhtar & Caitlin Petrakovitz, *What's coming and going on Netflix for April 2015*, CNET (Mar. 18, 2015, 7:00 AM), <http://www.cnet.com/news/netpicks-whats-coming-and-going-on-netflix-for-april-2015/>.

⁵⁷ Iyaz Akhtar, *What's coming and going on Netflix for May 2015*, CNET (Apr. 22, 2015, 7:00 AM), <http://www.cnet.com/news/netpicks-whats-coming-and-going-on-netflix-for-may-2015/> (noting specifically that his high school biology teacher had screened *Fantastic Voyage*).

I've had instances where a student began a project about a certain film only to discover that the film disappeared from streaming access in the middle of their research (I assign video essays that ask them to appropriate stills and video from films as evidence to support their project's arguments). In addition, streaming assumes a level playing field in terms of Internet access. For lower income and/or rural students, Internet access sufficient for ubiquitous streaming at high quality is anything but guaranteed.⁵⁸

The opponents contend that embedding streaming clips into presentations provides a simple alternative to circumvention. However, most streaming services, especially the free services, have advertisements that a viewer cannot bypass. Websites like YouTube contain ads that can pop up before, and even during, the presentation of a clip. Such an interruption can disrupt the message and waste valuable time, especially given the fact that MOOC lectures are designed to be limited and concise. Additionally, as discussed above, the ability to clip and embed content directly into a MOOC lecture is essential to the format and administration of MOOCs.

VI. Statutory Factors

The four statutory factors are designed to ensure that the Librarian balances the interests of rightsholders in using TPMs to facilitate their business models against the needs of the public, especially the needs of educators and their students, to make lawful uses without being adversely affected. Years of experience now show that these interests can co-exist quite peacefully: the motion picture industry has grown and thrived while the exemption for educational uses of motion pictures has steadily grown to allow more and more lawful activity.

The first statutory factor is “the availability for use of copyrighted works.”⁵⁹ The opponents point to inadequate alternatives like streaming services to establish that availability for

⁵⁸ Email message from Professor Eric Faden, Associate Professor of English at Bucknell University (Apr. 30, 2015) (on file with authors).

⁵⁹ 17 U.S.C. § 1201(a)(1)(C)(i).

use is not an issue. This comment and request for exemption is not premised upon a general lack of availability of works, but rather on the unavailability of works stored on certain TPM encumbered formats for specific educational uses.

The second factor, in fact, is of much more relative importance to this specific class, considering the access the availability for use of works for nonprofit archival, preservation, and educational purposes. The Joint Academics have demonstrated clear Congressional policy favoring the educational use of audiovisual materials through provisions like §§107 and 110 of the Copyright Act. However, due to the lack of an exemption for MOOCs, institutions have been completely dissuaded from using audiovisual works in support of MOOCs.

The opponents argue that, under the fourth statutory factor considering market harm, any exemption broader than past narrowly tailored exemptions to circumvent CSS technology would harm the DVD and Blu-ray disc markets. Joint Academics have shown that the market for these formats has existed in peaceful coexistences with exemptions. The proposed uses discussed in this exemption are educational in nature and would otherwise be considered fair use. Constraints on time help ensure that lecturers and professors developing MOOCs will not use more of an audiovisual work than is necessary. The content being used in MOOCs is limited, and the accompanying message is transformative in nature.

Conclusion

The uses identified in Proposed Class 3 are a logical extension of the current college and university exemption. The Joint Academics have demonstrated that the kinds of activities involved in Proposed Class 3 are not only lawful, but that they are the kinds of uses Congress favors. The market for works sought has existed alongside exemptions for years and this exemption would merely expand the way in which these works could be used. The opponents rely on an artificially narrow view of fair use and caselaw that is irrelevant in the current proceeding. Additionally, the Joint Academics have demonstrated that the current lack of an exemption has had a substantial adverse effect on the development of MOOCs, specifically those that would deal thematically with audiovisual materials.

For the abovementioned reasons, the Copyright Office should recommend the Librarian of Congress promulgate an exemption that covers audiovisual works for use in MOOCs.

Submitted By:
Sarah O'Connor and Mark Patrick
Student Attorneys
Glushko-Samuels Intellectual Property Law Clinic
Washington College of Law, American University
4801 Massachusetts Ave, NW
Washington, DC 20016