



Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201

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ITEM A. COMMENTER INFORMATION

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On behalf of

Software Preservation Network (SPN)

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The Software Preservation Network coordinates software preservation efforts to ensure long term access to software. It connects and engages the legal, public policy, social science, natural science, information & communication technology, and cultural heritage preservation communities that create and use software. SPN consists of archivists, librarians, scholars, technologists, and legal experts committed to establishing and retaining access to software which would become inaccessible without careful and conscientious stewardship.

Library Copyright Alliance (LCA)

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The Library Copyright Alliance consists of two major library associations (the American Library Association and the Association of Research Libraries) and was established in order to safeguard the interests of librarians and archivists in the realm of copyright law. These two associations collectively represent over 300,000 information professionals and thousands of libraries of all kinds throughout the United States and Canada.

ITEM B. PROPOSED CLASS ADDRESSED

Class 14(b) – Video Games – Preservation

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Privacy Act Advisory Statement: Required by the Privacy Act of 1974 (P.L. 93-579)

The authority for requesting this information is 17 U.S.C. §§ 1201(a)(1) and 705. Furnishing the requested information is voluntary. The principal use of the requested information is publication on the Copyright Office website and use by Copyright Office staff for purposes of the rulemaking proceeding conducted under 17 U.S.C. § 1201(a)(1). NOTE: No other advisory statement will be given in connection with this submission. Please keep this statement and refer to it if we communicate with you regarding this submission.

A proposed expansion of the video game preservation exemption (37 C.F.R. § 201.40(b)(17)) to eliminate the requirement that the program not be distributed or made available outside of the physical premises of an eligible institution.

Proposed Exemption:

Video games in the form of computer programs embodied in physical or downloaded formats that have been lawfully acquired as complete games, that do not require access to an external computer server for gameplay, and that are no longer reasonably available in the commercial marketplace, solely for the purpose of preservation of the game in a playable form by an eligible library, archives, or museum, where such activities are carried out without any purpose of direct or indirect commercial advantage.

Any electronic distribution, display, or performance made outside of the physical premises of an eligible library, archives, or museum of works preserved under this paragraph may be made only for a limited time and after the eligible institution acts to ensure that users seeking off-premises access to works are doing so primarily for the purposes of private study, scholarship, teaching, or research by: 1) specifically determining that the user’s interest is private study, scholarship, teaching, or research, 2) instituting access restrictions appropriate to the nature of the use and the material, and 3) notifying users that they are receiving access to copyrighted material subject to adherence with applicable laws.

ITEM C. OVERVIEW

Video games are a cultural juggernaut. They are widely studied, both for their own sake and as cultural products that represent (or sometimes buck) broader social trends. However, the vast majority of historic video games—more than 87% according to a recent study—are effectively inaccessible in their original form because copies are no longer sold by their publishers.¹ Though second-hand copies of some games can be purchased from third-party sellers on websites like eBay, the academic utility of such a purchase is contingent on ownership of a working version of the corresponding hardware, which is often hard to find. Even when video games are reissued, they tend to be sold through digital storefronts which themselves tend to shrink or disappear with the release of new consoles.² The paucity of commercial options for access, combined with the general scarcity of video game collections among cultural institutions, has put scholars who teach and study video games in a precarious position.

Consider *Duck Hunt*, the wildly popular game released for the Nintendo Entertainment System (NES) in 1984 and reissued to the Wii U Virtual Console in 2014.³ Nintendo ended support for

¹ Phil Salvador, *Survey of the Video Game Reissue Market in the United States*, VIDEO GAME HISTORY FOUNDATION 2 (July 2023), available at <https://doi.org/10.5281/zenodo.8161056> [hereinafter *Game Availability Study*].

² Moreover, games acquired through this digital distribution model cannot be transferred. Thus, when a storefront closes, any titles that were solely released there become difficult to access legally, except by people who have already purchased them. The closure of a digital storefront leads not only to the loss of any games that happened to be reissued but also limits access to all the unique digital-only titles that shipped there.

³ *Duck Hunt*, WIKIPEDIA, https://en.wikipedia.org/w/index.php?title=Duck_Hunt&oldid=1184699935. Like all NES games published by Nintendo in this time period, copies of *Duck Hunt* would include a key designed to work with the 10NES lockout chip system, arguably a “technological protection measure” for purposes of Section 1201.

the Wii U eShop on March 27, 2023.⁴ Now, any scholar interested in studying *Duck Hunt* who does not already own the reissue from the Wii U eShop and cannot not afford to buy the game, NES, NES Zapper, and a CRT TV necessary to play the original⁵ would be left with only one legal choice: to locate and travel to an institution that owns it. Based on a search in the library database WorldCat, there is only one such institution: the University of Michigan.⁶ The game lives in Michigan's Computer and Video Game Archive, a space that requires all visitors to make a reservation and mandates "prior approval" for anyone not directly affiliated with the university.⁷ These access restrictions are a way to ensure that use of the materials is consistent with the university's reason for investing scarce resources in preserving and providing access to the collection: to support scholarship, teaching, and learning. Restrictions of this kind are easily replicated for off-premises access to video game collections.

Duck Hunt is an important piece of video game history that, due to the constraints imposed by Section 1201, is readily available only to scholars at a single university. What about the undergraduates studying toward a Bachelor of Science in Games at the University of Utah,⁸ a Bachelor of Fine Arts in Game Development and Interaction Design at the University of Southern California,⁹ or a Bachelor of Science in Computational Media with a concentration in Games at Georgia Tech?¹⁰ Under the current exemption, even if these students only needed to play *Duck Hunt* for thirty minutes to use it as a supporting citation for a research paper, or capture a screen shot as evidence of an important point in a critical essay about the game, they would have to travel all the way to Ann Arbor.

It does not have to be this way. Copyright law has long recognized the immense public benefit of resource sharing and academic fair use in the context of books, television, and film.¹¹ It is time to level the playing field for video games. Section 1201 stands in the way of vital scholarship, research, and teaching relevant to one of the most influential art forms of the twenty-first century.

⁴ *Nintendo Support: Wii U & Nintendo 3DS eShop Discontinuation Q&A*, NINTENDO SUPPORT, https://en-americas-support.nintendo.com/app/answers/detail/a_id/57847/~/wii-u-%26-nintendo-3ds-eshop-discontinuation-q%26a [<https://perma.cc/Z24F-C4UY>].

⁵ *Duck Hunt*, WIKIPEDIA, https://en.wikipedia.org/w/index.php?title=Duck_Hunt&oldid=1184699935.

⁶ *Duck Hunt*, WORLDCAT, <https://search.worldcat.org/title/23024834> [<https://perma.cc/WP7Y-R9UL>].

⁷ *Locations and Hours: Computer and Video Game Archive*, UNIVERSITY OF MICHIGAN LIBRARY, <https://www.lib.umich.edu/locations-and-hours/computer-and-video-game-archive> [<https://perma.cc/Y2NE-4WUB>].

⁸ *Bachelor of Science in Games: Program Details*, THE UNIVERSITY OF UTAH, <https://games.utah.edu/prospective-students/bs-in-games/> [<https://perma.cc/P823-NPRR>].

⁹ *Interactive Media and Games Division*, UNIVERSITY OF SOUTHERN CALIFORNIA DEPARTMENT OF CINEMATIC ARTS, [https://cinema.usc.edu/interactive/index.cfm#:~:text=Bachelor%20of%20Fine%20Arts%20\(Game%20Development%20and%20Interactive%20Design\),comprehensive%20specialization%20in%20a%20profession](https://cinema.usc.edu/interactive/index.cfm#:~:text=Bachelor%20of%20Fine%20Arts%20(Game%20Development%20and%20Interactive%20Design),comprehensive%20specialization%20in%20a%20profession) [<https://perma.cc/G5FF-2JUK>].

¹⁰ *Catalog: Bachelor of Science in Computational Media*, GEORGIA TECH, <https://catalog.gatech.edu/programs/computational-media-bs/#concentrationtext> [<https://perma.cc/457S-9GJP>].

¹¹ *See generally* 17 U.S.C. § 107; 17 U.S.C. § 108.

As proponents have outlined in previous filings, video game scholarship is a growing interdisciplinary field that faces impediments unlike those of any other discipline.¹² In 2018, the Copyright Office and the Library of Congress recognized the importance of preserving video games, granting Section 1201 exemptions for the circumvention of technological protection measures (TPMs) required by archival preservation and research activities.¹³ Last cycle, in 2021, this trend continued, with the unification of eligibility requirements across the software and video game classes, modifying, but not removing the requirement that preserved games only be made available on the premises of the cultural institution that owns them.¹⁴ Though this progress is important, the value of preserved games lies not in the mere storage of resources but rather in providing access to these collections for researchers, scholars, and educators.

This comment proposes modification of the current exemption for video game preservation and research access to permit authorized users to access preserved video games remotely. In response to concerns raised in the last cycle, proponents suggest access restrictions to ensure that remote use would be permitted only for the approved purposes: education, research, or scholarship, without any purpose of direct or indirect commercial advantage. Cultural institutions—archives, museums, libraries, universities—would implement access restrictions to safeguard against off-premises access for recreational use, making good-faith efforts to ensure that users accessing works in their video game collections are doing so for non-infringing purposes under the Copyright Act. These restrictions will occur at several points following an individual’s request for remote access: beginning with initial identity verification and vetting of user requests, followed by standard copyright notices accompanying the materials, and potentially also including technological controls, such as download protection, and time-bounded access or scheduled appointments. As we demonstrate throughout this comment, most cultural institutions already make use of similar policies to govern access to their physical collections. They are well-equipped to extend these practices to off-premises use.

To aid the Copyright Office’s understanding of the merits of the proposed modification, this comment focuses on the legal bases and market realities that support modifying the exemption as well as the mechanisms by which access would be restricted. This comment will identify the adverse effects of barring remote access to preserved video games, discuss how the uses proposed under the exemption are fair use, and explain how the statutory factors support an expanded exemption.

¹² See Software Preservation Network and Library Copyright Alliance, *Long Comment Regarding A Proposed Exemption Under 17 U.S.C. § 1201 (2020)*, available at https://www.copyright.gov/1201/2021/comments/Class%2014a%20and%2014b_InitialComments_Software%20Preservation%20Network%20and%20Library%20Copyright%20Alliance.pdf [hereinafter *2021 Initial Comment*]; Software Preservation Network and Library Copyright Alliance, *Reply Comment Regarding A Proposed Exemption Under 17 U.S.C. § 1201 (2021)*, available at https://www.copyright.gov/1201/2021/comments/reply/Class%2014b_Reply_Software%20Preservation%20Network%20and%20Library%20Copyright%20Alliance.pdf [hereinafter *2021 Reply Comment*].

¹³ Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 83 Fed. Reg. 54010, 54023-25 (Oct. 26, 2018).

¹⁴ U.S. COPYRIGHT OFFICE, SECTION 1201 RULEMAKING: EIGHTH TRIENNIAL PROCEEDING TO DETERMINE EXEMPTIONS TO THE PROHIBITION ON CIRCUMVENTION, RECOMMENDATION OF THE REGISTER OF COPYRIGHTS 13 (2021) [hereinafter *2021 RECOMMENDATION*]; Exemption to Prohibition on Circumvention of Copyright Protection Systems for Access Control Technologies, 86 Fed. Reg. 59627, 59635-36 (Oct. 28, 2021).

ITEM D. TECHNOLOGICAL PROTECTION MEASURE(S) AND METHOD(S) OF CIRCUMVENTION

As mentioned above, vintage games require vintage hardware. This is one of the biggest barriers to video game scholarship, but it is also one of the easiest to surmount. As detailed in our 2021 comment, emulation offers a way to simulate the computing environment of older systems without needing the physical systems themselves.¹⁵ For detailed descriptions of the technological protection measures that inhibit preservation of and remote access to software and video games, please refer to Item D of proponents' 2018 filing for Class 9.¹⁶

ITEM E. ASSERTED ADVERSE EFFECTS ON NON-INFRINGEMENT USES

1. Section 1201 Restrictions Have Adverse Effects on Video Game Preservation and Scholarship.

Regulatory barriers inhibiting off-premises access to preserved video games impede video game scholarship and limit the development of the technical infrastructure that would support such scholarship. As Andrew Borman, Digital Games Curator at the Strong National Museum of Play, noted, “[w]e can’t even begin to know” the impact of remote access on video game scholarship, “because we don’t have the legal ability to do it regardless, so we’re not expending resources to even have that conversation... [b]ut we would begin to have that conversation should that be an exemption that we gain.”¹⁷ Borman said that many items held at the Strong are one-of-a-kind, saying “they’re really only able to access it here and that’s a really unique piece of history.”¹⁸ There are similar one-of-a-kind items in the traditional special collections space of rare books and manuscripts; however, the core difference is that libraries are able to make those materials digitally accessible to people who cannot travel.

John Overholt, curator of the Donald and Mary Hyde Collection and Early Books and Manuscripts housed in Houghton Library at Harvard University, noted that digitization of his collection is largely “demand-driven,” with a preference toward prioritizing the digitization of materials that are “going to be the most useful to the general research community...”¹⁹ If Overholt were a video game curator, he would not be at liberty to use his professional discretion in this way.

This inconsistency in the copyright regime is acutely felt at an institution like The Strong that houses both games and many written materials associated with them. Borman explained that game design documentation, images, and other static materials are often made available off-premises via scans, but source code and playable games are only accessible on site.²⁰ Lifting the premises restriction would move closer to parity of access across collections material.

¹⁵ See *2021 Initial Comment* at 7.

¹⁶ Software Preservation Network and Library Copyright Alliance, *Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201 5-6* (2017).

¹⁷ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

¹⁸ *Id.*

¹⁹ Interview with John Overholt, Harvard University (Sep. 26, 2023).

²⁰ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

Overholt noted that the items he digitizes “tend[] to be manuscript material or material that is in some way very scarce or unique.”²¹ These categories are an apt point of comparison for the out-of-market games covered by this exemption. Because the games covered by this exemption are commercially obsolete and, thus, often very rare, they are often held by only a few collecting institutions. While film and English professors regularly assign materials spanning back decades or centuries, game scholars are loath to imagine research projects or craft syllabi that feature vintage games because of the difficulties associated with access.²² Researchers at institutions without extensive game libraries cannot rely on an interlibrary loan system to carry out their research projects, as they might with other materials. Instead, they must either contend with the time and cost burdens of travelling to an institution that owns the game they seek or reshape—sometimes even abandon—their research projects.

Furthermore, institutional game collections are unevenly distributed, with a few schools that are home to robust programs housing the majority of games nationwide. When asked about institutions with robust collections similar to The Strong, Andrew Borman named only six.²³ Preservationists at Yale University, for instance, believe that they have only one video game, which came to them amid the papers of a novelist.²⁴ Yale Software Preservation Analyst Ethan Gates noted that if a Yale affiliate approached them about accessing a vintage game that is no longer commercially available, he would say “maybe you should go talk to the Strong [Museum of Play]”.²⁵ Under the current state of the law, that person would then have to travel from New Haven, Connecticut to Rochester, New York—either by driving over five hours or taking multiple flights—in order to visit the title in-person. Such requests are not merely hypothetical: Claire Fox, Digital Preservation Librarian at Yale, noted that just this semester her team received a video game inquiry that they would have been unable to satisfy if the patron had not been able to come to campus.²⁶

The technological advancements in and deepening cultural impact of video games in the past four decades parallel the changes in the movie industry that led to the passage of the National Film Preservation Act and the creation of the National Film Preservation Board in 1988.²⁷ Like film, video games have matured from a pop culture medium largely ignored by the academy to one recognized as worthy of academic preservation and study. Granting an exemption for remote access would be a boon for video game academics and would enable institutions to devote more resources to figuring out how to preserve this important part of our cultural heritage.

a. Adverse Effects of On-Site Limitation for Preservationists and Librarians

While special collections librarians like Overholt can make judgment calls about digitization to provide access to remote patrons, curators of digital collections, like Borman, Gates, and Fox,

²¹ Interview with John Overholt, Harvard University (Sep. 26, 2023).

²² Interview with Dr. Bo Ruberg, UC Irvine (Mar. 8, 2021).

²³ E-mail from Andrew Borman to Jaime Gordon (Nov. 20, 2023).

²⁴ Interview with Claire Fox, Yale University (Oct. 13, 2023).

²⁵ *Id.*

²⁶ *Id.*

²⁷ See Eric J. Schwartz, *The National Film Preservation Act of 1988: A Copyright Case Study in the Legislative Process*, 36 J. COPYRIGHT SOC’Y USA 138, 158 (1989) (a result of the Act will be to “encourage and educate the public to appreciate certain films as “art,” and one can hope that this broadens the public’s appreciation for film, something of value to both copyright owners and users.”

cannot. The barriers posed by Section 1201 directly affect their ability to do their job. Beyond being unable able to provide for their patrons, cultural institutions with video game collections also cannot effectively collaborate with each other. Borman noted a recent internal discussion at The Strong regarding another institution seeking “a formal loan of a digital copy of one of [the Strong Museum’s] physical games”.²⁸ A physical loan was out of the question, due to the material’s fragility and the Strong’s curators were unsure about the legal status of a digital loan; thus, they ultimately decided to deny the request.²⁹ Henry Lowood, Harold C. Hohbach Curator for History of Science & Technology Collections and the Curator for Film & Media Collections in the Stanford University Libraries, echoed the sentiment, saying “...with some of the new technologies like Emulation as a Service, there is an institution-to-institution option... but we’re just not sure about what’s permitted with that.”³⁰

Having to do everything on-premises is also constraining in terms of physical space and staff bandwidth. Wendy Hagenmaier, Software Preservation Program Manager at Yale, described the challenge of supporting researchers in-person in her time at Georgia Tech’s retroTECH video game facility.³¹ In addition to some courses being too large to fit into the room, she said “[t]he staff capacity would never scale to cover that many in-person visits, so, hence, the interest in [emulation].”³² While the in-person model might be sustainable for hosting individual researchers, it does not work for large groups.

From a preservation perspective, providing patrons with digital access to a game is often preferable in order to maintain delicate, legacy hardware, like floppy disks.³³ Given that on-site research access to such materials is often facilitated through emulation anyway, insofar as it is sufficiently limited, a premises restriction is arbitrary. In these scenarios, like many others, maintaining the restriction only serves to limit scholarly access to preserved resources.

Allowing limited, reasonable off-premises access to faculty, students, and other researchers for the purposes of their scholarship would remove a meaningful burden from librarians and preservationists and is easily achievable with existing technology.

b. Adverse Effects of On-Site Limitation for Researchers and Educators

As game publishers and developers direct their resources toward newly released consoles and titles, they tend to neglect distribution of older games. Though this does not pose a problem for recreational gamers who are often interested in the newest games and technology, it makes things difficult for scholars who study video games – whether from a technical or narrative standpoint.³⁴ Dr. Bo Ruberg, a professor of Film & Media Studies at UC Irvine, noted that professors of video game courses “cannot assume that [their] students have the money, resources, and computing power to play the things you want them to play” and, thus, “[s]o many

²⁸ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

²⁹ *Id.*

³⁰ Interview with Henry Lowood, Stanford University (Oct. 2, 2023).

³¹ *RetroTech: What is RetroTech?*, GEORGIA TECH LIBRARY, <https://library.gatech.edu/retrotech>, [<https://perma.cc/C9AG-KR97>].

³² Interview with Wendy Hagenmaier, Yale University (Oct. 13, 2023).

³³ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

³⁴ This phenomenon is discussed at length in proponents’ 2021 initial and reply comments, *2021 Initial Comment* at 11-14; *2021 Reply Comment* at 15-18.

decisions we make as games studies teachers are based on availability.”³⁵ Under the current state of Section 1201, video game academics are forced to organize their syllabi and research projects around what they are able to access, rather than deciding what they would like to study and *then* requesting access to it. Ruberg said that an exemption enabling remote access—particularly through emulation, thereby removing the need for original hardware—“would open up a whole new realm of games teaching”.³⁶ In this regard, video game scholarship will only blossom into the fullness of its potential when and if this exemption is passed.

As shown in the Video Game History Foundation’s recent Game Availability Study, access to historical games will contract as more video game systems become neglected. For instance, among games made for the PlayStation 2, a console that came out in 2000, only 12% are currently in release.³⁷ For the GameBoy family, a group of consoles released between 1989 and 2001, this number drops to 5.87%.³⁸ Games released prior to 1985—a historically important period, marking the genesis of game development as a whole—have an availability rate of just 2.59%.³⁹

While the game industry may reissue titles from time to time based on consumer demand, reissues are not typically useful to scholars and teachers.⁴⁰ First, reissues are seldom sold in durable formats appropriate for long-term preservation and research access.⁴¹ Instead, developers license reissues through ephemeral digital storefronts that eventually shutter as game technology advances. At that point, reissues disappear from the market, and they typically cannot be donated, sold, or otherwise transferred by consumer licensees. Even the “legacy digital storefronts” that *do* remain available after their corresponding consoles were released often show “such a degradation in service quality that they [become] effectively unusable”.⁴²

Secondly, as discussed in further detail below, reissues are not useful for scholars because they often alter the original game—for instance, using updated technology to improve outdated graphics. These changes may bolster the title’s recreational value but might obscure academically relevant aspects of the original version, effectively rewriting history. As one video game journalist explained, “[a] remake is just an interpretation—it should not replace the original.”⁴³ Reissues have an important place in the consumer marketplace, but they are a poor substitute for preservation and access to original versions.

2. Limited Off-Premises Access by Scholars and Researchers is Fair Use.

The activities covered by this proposed modification are non-infringing, as required by 17 U.S.C. § 1201(a)(1)(C). Specifically, the creation of temporary copies on the user’s computer and the

³⁵ Interview with Dr. Bo Ruberg, UC Irvine (Mar. 8, 2021).

³⁶ *Id.*

³⁷ *Game Availability Study* at 2.

³⁸ *Id.*

³⁹ *Id.* at 32.

⁴⁰ Additional examples of the lack of suitability of reissues were discussed in proponents’ 2021 reply comments. *2021 Reply Comment* at 19-21.

⁴¹ *See supra* note 2.

⁴² *Game Availability Study* at 30.

⁴³ Will Bedingfield, *Video Game Remakes Are in a Golden Age. That Could Be a Bad Thing*, WIRED (June 22, 2023), <https://www.wired.com/story/golden-age-of-video-game-remakes/> [<https://perma.cc/F49F-8S57>].

display and performance of preserved works in a user’s browser as part of emulation for preservation, teaching, and research, as well as the copying and distribution of preserved software to facilitate teaching and research by remote users using their own hardware, are protected by the fair use doctrine.⁴⁴

Originally developed as a judicial doctrine, Congress provided statutory guidance for finding fair use according to the following factors:

- i. the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
- ii. the nature of the copyrighted work;
- iii. the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
- iv. the effect of the use upon the potential market for or value of the copyrighted work.⁴⁵

Although the factors weigh heavily in judicial decision-making, the list is not exhaustive, and no one factor is decisive.⁴⁶ Rather, each factor is to be considered and weighed together, “in light of the purposes of copyright.”⁴⁷ The law recognizes that copyright is “not an inevitable, divine, or natural right that confers on authors the absolute ownership of their creations. It is designed rather to stimulate activity and progress in the arts for the intellectual enrichment of the public.”⁴⁸ Furthermore, copyright “encourages others to build freely upon the ideas and information conveyed by a work.”⁴⁹

Off-premises use of preserved video games for the purposes of scholarship and research would enable scholarship and pedagogy that builds upon these works by studying their technical and narrative aspects, not only contributing to the field of video game studies, but also to broader academic discourse in fields like English, History, and Computer Science. The social benefit of such a model is akin to the benefit gained by the longstanding practice of institutions sharing books with students across the country via interlibrary loan and digitizing archival materials to democratize access to special collections.

a. Purpose and Character of the Use

Like other disciplines, the field of video game studies analyzes media as a cultural artifact; thus, an exemption allowing remote access to preserved video games fits within the framework of fair

⁴⁴ In some cases, as discussed in previous comments from SPN and LCA, the described uses may also be protected by 17 U.S.C. §§ 108 and 118, or the works might be in the public domain and therefore a use cannot be infringing. See Software Preservation Network and Library Copyright Alliance, *Long Comment Regarding a Proposed Exemption Under 17 U.S.C. § 1201* 13-18 (2017). We focus on fair use here, however, as it is the most relevant legal basis for non-infringing use pertaining to the proposed expansion of the exemption.

⁴⁵ 17 U.S.C. § 107.

⁴⁶ See *Castle Rock Entm’t, Inc. v. Carol Publ’g Grp., Inc.*, 150 F.3d 132, 145 (2d Cir. 1998); see also H.R. Rep. No. 94-1476, at 65 (1976).

⁴⁷ *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 578 (1994).

⁴⁸ Pierre N. Leval, *Toward a Fair Use Standard*, 103 HARV. L. REV. 1105, 1107 (1990).

⁴⁹ *Feist Publ’ns, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 350 (1991).

use. Uses that “benefit[] the broader public interest” are more likely to be fair,⁵⁰ as are non-profit or non-commercial uses.⁵¹ The 2021 Register’s Recommendation recognized that “[w]ith respect to preservation, research, and teaching uses, the first factor weighs in favor of fair use.”⁵² Moreover, it noted that “regardless of whether the uses are considered transformative, they advance purposes that are generally favored under the first factor.”⁵³ In addition to this established presumption in favor of video game preservation, developments in case law since 2021 bolster the argument that the off-premises use covered by this exemption would have a transformative character.

In *Apple v. Corellium*, the Eleventh Circuit held that software which enabled research use of Apple’s copyrighted iOS operating system was fair use.⁵⁴ The court’s reasoning rested in part on the fact that security research constituted a transformative purpose.⁵⁵ Like the research product offered by Corellium, the emulation services in development at libraries and archives not only have features that reissues of vintage games would lack—such as the ability to view the source code—they also lack features that an actual vintage game would have—namely, the original physical hardware.⁵⁶ Using emulation, institutions could display metadata, design documents, and source code alongside the emulated gameplay, allowing researchers to peek under the hood of the title they are studying, as a literary scholar might look back at early drafts of a published work. In the case of console games, the experience of viewing a game in a browser is vastly different from playing it with original controls; the emulated experience is simultaneously useful to a scholar and sub-par for a recreational user. In both of these ways, emulated off-premises access is not “geared towards the same consumer-oriented function” as recreational play, but rather “giv[es] researchers the ability to examine and understand” the underlying work.⁵⁷ Emulated use avoids the sticky buttons and drifting joysticks that recreational retro gamers love in favor of historical and technological details that are only pertinent to serious scholars. Off-premises access “offers new features, serves new purposes, and furthers the progression of” the field.⁵⁸

Recreational use of video games in research collections is unlikely not only because preserved games are suboptimal for leisure play but also because access restrictions will place meaningful limits on off-premises use. These restrictions will govern who can access games off-premises, when, and how, ensuring that remote users will have a bona fide academic purpose. No restriction is perfect, but “potential unintended use or a secondary use for an alleged infringing product” does not preclude a finding of fair use.⁵⁹ The Eleventh Circuit explained in *Corellium* that “transformativeness does not require unanimity of purpose—or that the new work be

⁵⁰ *American Geophysical Union v. Texaco Inc.*, 60 F.3d 913, 922 (2d Cir. 1994). See also *Blanch v. Koons*, 467 F.3d 244, 253 (2d Cir. 2006).

⁵¹ See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 451 (1984).

⁵² 2021 RECOMMENDATION at 270. See also *Sundeman v. Seajay Soc’y, Inc.*, 142 F.3d 194, 202 (4th Cir. 1998) (finding copying of entire work to aid scholar’s commentary and criticism of it to be transformative).

⁵³ 2021 RECOMMENDATION at 271.

⁵⁴ *Apple Inc. v. Corellium, Inc.*, No. 21-12835, 2023 WL 3295671 (11th Cir. May 8, 2023).

⁵⁵ *Id.*

⁵⁶ *Id.* at *2.

⁵⁷ *Id.* at *3 (internal quotations and citations omitted).

⁵⁸ *Id.* at *7.

⁵⁹ *Apple Inc. v. Corellium, LLC*, 510 F. Supp. 3d 1269, 1288 (S.D. Fla. 2020), *affirmed in part and vacated in part*, *Apple Inc. v. Corellium, Inc.*, No. 21-12835, 2023 WL 3295671 (11th Cir. May 8, 2023).

entirely distinct—because works rarely have one purpose. In assessing whether a work is transformative, the question has always been whether a [transformative use] may reasonably be perceived.”⁶⁰ As outlined above, providing emulated off-premises access to preserved video games transforms them from a fun pastime into objects of serious intellectual study.

In *Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith*, a photographer sued the Foundation for licensing an artwork based on her photograph to a commercial publication.⁶¹ The Court held that the use was not adequately transformative to support a finding in Warhol’s favor under the first fair use factor, but reiterated the transformativeness of uses that “serv[e] a manifestly different purpose from the [work] itself.”⁶² Scholarly use of preserved video games is categorically distinct from recreational play.

The ruling in *Warhol* underscores another element of the fair use doctrine emphasized by the Supreme Court in its earlier decision in *Campbell*: uses for purposes listed in the Section 107 preamble—teaching (including multiple copies for classroom use), scholarship, or research—are the kinds most likely to be found fair.⁶³ The Second Circuit agreed in its 2021 ruling in *Marano v. Metropolitan Museum of Art*.⁶⁴ Affirming the decision of the district court, the Second Circuit ruled that the display of a photo in a museum without a license was fair use on several grounds. In addition to noting that the exhibition transformed the photo by foregrounding a different aspect of the image than the photographer had and adding additional context, the court emphasized that the Met is a nonprofit cultural institution and that its use of the photograph served the educational purposes for which the Met was founded.⁶⁵ These factors are also present in the circumstances covered by our proposed exemption. Scholarly use of video games is educational, noncommercial, and foregrounds different elements of gameplay than recreational use—aiming, for instance, to analyze narrative intricacies or level design mechanics rather than to get a high score.⁶⁶

b. Nature of Copyrighted Work

The second factor is not dispositive, or even particularly influential, in most fair use analyses. This factor’s alleged preference for creative as distinct from factual works “is not much help in [] separating the fair use sheep from the infringing goats” in cases where a transformative purpose will necessarily involve the use of creative works.⁶⁷ Where the use is transformative, the nature of the work is part of the comparison between a work’s original purpose and the user’s new

⁶⁰ *Corellium*, 2023 WL 3295671 at *8.

⁶¹ *Andy Warhol Found. for the Visual Arts, Inc. v. Goldsmith*, 143 S. Ct. 1258 (2023).

⁶² *Warhol*, 143 S. Ct. at 1274 (quotations and internal citations omitted).

⁶³ *Id.* (“Although the examples given are ‘illustrative and not limitative’, they reflect the sorts of copying that courts and Congress most commonly ha[ve] found to be fair uses’....”) (quoting *Campbell*).

⁶⁴ 844 F. App’x 436 (2d Cir. 2021) (summary order).

⁶⁵ *Id.* at 438 (“Yet the Met was founded for the purpose of establishing and maintaining in [New York City] a museum and library of art and it remains a nonprofit that collects, studies, conserves, and presents significant works of art.”) (citations and internal quotations omitted).

⁶⁶ *See id.*

⁶⁷ *Campbell*, 510 U.S. at 586.

purpose, and thus the second factor will favor fair use in cases where, as here, the user’s purpose is different, non-superseding, and transformative.⁶⁸

c. Amount and Substantiality of Portion Used

The third factor “asks whether ‘the amount and substantiality of the portion used in relation to the copyrighted work as a whole,’ ... are reasonable in relation to the purpose of the copying.”⁶⁹ A wide variety of cases have found that copying an entire work is reasonable in relation to a legitimate fair use purpose.⁷⁰ The Register’s Recommendation from 2021 acknowledged this, noting “this factor does not necessarily weigh against fair use, as it may be necessary to copy an entire work to provide researchers with access to the work for educational or research purposes.”⁷¹

As the Second Circuit explained in *Authors Guild v. Google*, the third fair use factor should focus on the amount and substantiality of what is made available to the user rather than the amount that may be stored for preservation and other technological purposes.⁷² Cultural institutions grant individual researchers access to individual games for limited times on a case-by-case basis. Like Corellium’s use of iOS, use of the *entirety* of any video game is “tethered” to the transformative purpose that necessitates access to *any* of it.⁷³ Just as “[s]ecurity research requires the use of the entire work because flaws may be found anywhere in the code,”⁷⁴ supporting video game research will require memory institutions to collect and preserve entire games because scholarly interest may necessitate access to elements found anywhere in the game.⁷⁵ The differences in outcome that result from distinct choices in games, for example, are academically significant for both narrative and technical studies of video games; thus, cultural institutions must make games “broadly available so that researchers can target the portions... relevant to their work.”⁷⁶

d. The Effect of Use on the Market for the Work

⁶⁸ *Authors Guild v. Google, Inc.*, 804 F.3d 202, 220 (2d Cir. 2015).

⁶⁹ *Campbell*, 510 U.S. at 586.

⁷⁰ See, e.g., *Sundeman v. Seajay Society, Inc.*, 142 F. 3d 194, 205-6 (4th Cir. 1998); *Bill Graham Archives v. Dorling Kindersley Ltd.*, 448 F.3d 605, 613 (2d Cir. 2006); *A.V. ex rel. Vanderhye v. iParadigms, LLC*, 562 F.3d 630, 642 (4th Cir. 2009); *Swatch Grp. Mgmt. Servs. Ltd. v. Bloomberg L.P.*, 756 F.3d 73, 90 (2d Cir. 2014); *Am. Inst. of Physics v. Schwegman, Lundberg & Woessner, P.A.*, No. CIV. 12-528 RHK/JJK, 2013 WL 4666330 at *16 (D. Minn. Aug. 30, 2013); *White v. West Pub. Corp.*, 29 F. Supp. 3d 396, 399 (S.D.N.Y. 2014).

⁷¹ 2021 RECOMMENDATION at 274.

⁷² *Authors Guild v. Google*, 804 F.3d at 221-22 (“While Google *makes* an unauthorized digital copy of the entire book, it does not reveal that digital copy to the public. The copy is made to enable the search functions to reveal limited, important information about the books.”).

⁷³ See *Corellium* at *10.

⁷⁴ *Id.*

⁷⁵ See, e.g., Nicoletta Tancred et al., *Player Choices, Game Endings and the Design of Moral Dilemmas in Games* in CHI PLAY '18 Extended Abstracts: Proceedings of the 2018 Annual Symposium on Computer-Human Interaction in Play, ASSOCIATION FOR COMPUTING MACHINERY, 627 (2018), available at <https://dl.acm.org/doi/abs/10.1145/3270316.3271525>.

⁷⁶ *Corellium* at *11.

The 2021 Register’s Recommendation noted that “including minimum security measures could address some of opponents’ concerns regarding potential market harms.”⁷⁷ The access restrictions incorporated into the proposed rule and described throughout this comment are responsive to this suggestion.⁷⁸ We refer the Copyright Office to proponents’ 2021 comment for a detailed description of the Emulation as a Service infrastructure (EaaS), one tool that could be used to provide off-premises access to preserved games.⁷⁹ More generally, vetting and individual approval of uses, of the type already deployed in special collections settings, would prevent the development of “publicly-accessible online arcade[s]” or public access for entertainment purposes.⁸⁰ Review by staff, and bandwidth at cultural institutions, serve as natural constraints on the prevalence of remote access. As Andrew Borman has explained, staff bandwidth requires The Strong Museum to refuse or pare down some ambitious user requests even on-premises.⁸¹

Scholarly use is also unlikely to harm the market for the original works because the works are out-of-commerce and unlikely to be re-released. The Video Game History Foundation’s Game Availability Study indicates that the vast majority of games are never re-released, and that reissues are generally limited to a handful of well-known, popular games.⁸² This market will not be affected by limited academic access to works that are no longer commercially viable, a category that comprises the vast majority of historic video games.

Market harm is even more speculative because of the transformative nature of the use by scholars. Because transformative use has a distinct purpose from ordinary market uses, “market substitution is at least less certain.”⁸³ *Corellium* explained that “the Copyright Act doesn’t give creators... a monopoly over transformative inventions that enable research into their product.”⁸⁴ The relevant market here is that for each game and its derivatives when used as they were originally intended, rather than for transformative purposes like those at issue here.

Even if there was evidence of market harm, as Justice Breyer explained in his opinion in *Google v. Oracle*, the fourth factor involves balancing the private loss associated with a fair use, if any, against the public benefit gained from it, asking “Are those benefits, for example, related to copyright’s concern for the creative production of new expression? Are they comparatively important, or unimportant, when compared with dollar amounts likely lost (taking into account as well the nature of the source of the loss)?”⁸⁵ In this case, the answer is clear. The use by

⁷⁷ 2021 RECOMMENDATION at 275-6.

⁷⁸ For example, representatives from the Entertainment Software Association explained that authentication of users would reduce their concerns about market harm. 1201 Hearing Tr. at 672:21–673:03 (Apr. 19, 2021) (“I think if the proposal [involved] authenticated students that are doing a project on a particular game, that’s a different proposition...”).

⁷⁹ 2021 Initial Comment at 7-9.

⁸⁰ These were concerns raised by opponents in the previous exemption cycle. See 2021 RECOMMENDATION at 272 fn. 1517.

⁸¹ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023). (“Realistically, there is a limited amount of staff time, so some of [our vetting], especially for people who haven’t done research is to say ‘no, you can’t access the entire Atari collection.’”).

⁸² *Game Availability Study* at 2, 27, 32-33.

⁸³ *Campbell*, 510 U.S. at 591. Of course, the use at issue in *Campbell* was itself commercial, and the Court was considering whether that commerciality necessarily implied a threat of substitution. The scholarly, non-commercial use at issue here would be even less likely to serve as a substitute for ordinary consumer purchases.

⁸⁴ *Corellium* at *13.

⁸⁵ *Google LLC v. Oracle Am., Inc.*, 141 S. Ct. 1183, 1206 (2021).

scholars is centered on copyrighted works that have reached the end of their commercial life and become obsolete, and the restrictions are targeted to eliminate the possibility of commercial substitution. The “nature of the source of the loss” to game developers and publishers is not only negligible, but also speculative, whereas the potential for public benefit to educators, scholars, and preservationists is concrete and substantial.⁸⁶ Video game scholarship and pedagogy would benefit enormously from easier access to their subject matter. The goals of copyright law are well served by enabling scholarship and teaching with no effect on the rightsholders’ incentive to create and publish new works.

The off-premises access that would be enabled by this proposed exemption, though suitable for individuals with a scholarly interest in games, would not satisfy a recreational user. Such users likely “would not opt to acquire the copy in preference to the original”⁸⁷ because, in being transformed to provide maximum utility to researchers, a game accessed remotely through emulation loses many features that make it appealing from a recreational standpoint.

Indeed, allowing archival access could have positive impacts on the market for future copyrighted works. Stanford’s Lowood explained that “[o]pening up research access through cultural institutions is going to have very little impact on any commercial projects that [game developers] have; however, the role that these collections and this research could have in keeping franchises alive is something those companies could exploit...” A college student who has thirty minutes of emulated access to a Nintendo 64 title for a class project might then purchase the latest installation in the series to enjoy on their Nintendo Switch in their free time. Critical focus on an out-of-commerce game could generate enough public interest to support a commercial reissue, as happened with *Deus Ex Machina*.⁸⁸ The potential for positive financial effects accruing to the copyright holder can also weigh in favor of the use being fair.⁸⁹

With the safeguards suggested, this exemption more than balances any private loss to video game publishers and developers with the public benefits to scholars and the public at large. For that reason, the fourth factor favors fair use, and the use is thus non-infringing.

3. The Statutory Factors Support Granting Remote Access to Preserved Video Games.

Section 1201(a)(1) directs the Register of Copyrights and the Librarian of Congress to examine four factors in evaluating a proposed exemption: (1) the availability for use of copyrighted

⁸⁶ *Id.*

⁸⁷ *Authors Guild v. Google, Inc.*, 804 F.3d 202, 223 (2d Cir. 2015).

⁸⁸ *Deus Ex Machina* was an early independent art game from 1984 that received little attention at the time. It was subsequently featured in works like *REPLAY: THE HISTORY OF VIDEO GAMES* and *1001 VIDEO GAMES YOU MUST PLAY BEFORE YOU DIE*, and the documentary *From Bedrooms to Billions*. The attention led the rightsholders to republish the game for its thirtieth anniversary, and they directly referenced these works on its store page. *See Deus Ex Machina, Game of the Year, 30th Anniversary Collector’s Edition*, STEAM [https://store.steampowered.com/app/508910/Deus Ex Machina Game of the Year 30th Anniversary Collectors Edition/](https://store.steampowered.com/app/508910/Deus_Ex_Machina_Game_of_the_Year_30th_Anniversary_Collectors_Edition/) [<https://perma.cc/AKJ8-MBSX>]. *Deus Ex Machina* was subsequently discussed in Lana Polensky’s *Towards an Art History of Video Games*, demonstrating the potential virtuous cycle between critical engagement, games, and scholarship. Lana Polensky, *Towards an Art History of Video Games*, RHIZOME (Aug. 2016), <https://rhizome.org/editorial/2016/aug/03/an-art-history-for-videogames/> [<https://perma.cc/PT5L-XZHA>].

⁸⁹ *Oracle Am.*, 141 S. Ct. at 1207 (explaining in favor of fair use on the fourth factor that “...the jury also heard evidence that Sun foresaw a benefit from the broader use of the Java programming language in a new platform like Android, as it would further expand the network of Java-trained programmers”).

works; (2) the availability for use of works for nonprofit archival, preservation, and educational purposes; (3) the impact that the prohibition on the circumvention of technological measures applied to copyrighted works has on criticism, comment, news reporting, teaching, scholarship, or research; and (4) the effect of circumvention of technological measures on the market for or value of copyrighted works.⁹⁰ We address each in turn.

a. Availability for Use of the Copyrighted Works Generally

The first statutory factor directs the Register to consider “the availability for use of copyrighted works.”⁹¹ By definition, all of the games covered by this exemption are no longer available on the first-party commercial market.⁹² As the Game Availability Study shows, this category includes the vast majority of historic video games. The availability of video games released between 1985 and 2010 in the commercial marketplace is roughly equivalent to the survival rate of silent films from eight decades prior.⁹³

As discussed above, reissues do not fill the gap. “Collectively, the game industry has recommercialized less than one-fifth of all historical games, leaving nearly 90 percent of their historical output unavailable from the rightsholders.”⁹⁴ Even with increased interest in retro games, “[n]ew availability for select titles does not mean progress toward broader access for the entire medium.”⁹⁵ Major developers like Nintendo and Sega may port flagship classic titles to their latest consoles; however, these releases are not a robust market of their own and, thus, a reliable substitute for access to preserved games. Reissues are often shipped to digital storefronts, which as explained above, are vulnerable to the whims of the developer. *Super Mario 3D All-Stars*, a combined release of three vintage Mario titles, is a perfect example of this, having been added to the Nintendo Switch eShop as a “limited time” item, then removed.⁹⁶

Secondary marketplaces do not provide significant additional help. First, they can be unreliable.⁹⁷ And even if games are available through third party sellers, prices can be significantly inflated, and they may be unplayable without getting expensive and difficult to find vintage hardware.⁹⁸ Take again *Super Mario 3D All-Stars*—the few physical copies of this re-release that are still available on the secondary market are priced at a significant markup.⁹⁹

Furthermore, as highlighted by the Game Availability Study and cited above regarding availability, smaller studios often lack the resources to reissue games and even major developers

⁹⁰ 17 U.S.C. § 1201(a)(1)(C).

⁹¹ 17 U.S.C. § 1201(a)(1)(C)(i).

⁹² 37 C.F.R. § 201.40(b)(17) (2021).

⁹³ *Game Availability Study* at 2.

⁹⁴ *Id.* at 34.

⁹⁵ *Id.* at 6.

⁹⁶ *Super Mario 3D All-Stars leaves Nintendo eShop on March 31st*, NINTENDO (Mar. 17, 2023), <https://www.nintendo.com/us/whatsnew/super-mario-3d-all-stars-leaves-nintendo-eshop-on-march-31st/>, [<https://perma.cc/J9RP-UN4Y>].

⁹⁷ *Id.* at 12-13.

⁹⁸ *Id.* at 13.

⁹⁹ The current price for a hard copy of *Super Mario 3D All-Stars* is over \$100 as of 11/25/23. *Super Mario 3D All-Stars for Nintendo Switch*, AMAZON (accessed on Dec. 6, 2023) [<https://perma.cc/T82W-SD4L>]. See also *Game Availability Study* at 12-13.

tend not to reissue anything except the most popular games.¹⁰⁰ By way of example, even though Nintendo has shown “active interest in continuing to reissue Game Boy family titles,” only 5.87% of Game Boy titles are currently in release.¹⁰¹

Given these facts, an off-premises exemption will increase the availability of the relevant copyrighted works, while minimizing any market harm that might prevent the additional creation of games.

b. Availability for Use of the Copyrighted Works for Archival, Preservation, and Educational Purposes

The second statutory factor directs the Register to consider “the availability for use of works for nonprofit archival, preservation, and educational purposes.”¹⁰² As the Register found with regards to the broader software preservation exemption, exemptions that allow for preservation and access expand the availability of copyrighted work for archival, preservation, and educational uses. This statutory factor favors the proposed exemption.¹⁰³ Under the current status quo, researchers wishing to study video games must either find and visit an institution that owns them or scavenge through the secondary market and spend their own money—not only on the software, but also the hardware necessary to play it. As discussed in testimony in the 2021 cycle, barriers posed by the current law push scholars into studying works that are easier to access, rather than those they are truly interested in studying.¹⁰⁴ In this regard, Section 1201 directly prevents the field of game studies from providing a full and faithful record of the medium’s development and cultural importance.

Video game scholars seeking to access media released in 2002, even titles that were incredibly commercially and critically successful, face significant challenges. Take, for instance, *Metroid Prime*—a Nintendo action-adventure shooter game originally released for the GameCube in 2002¹⁰⁵ that is well-regarded and academically salient for several reasons, including, but not limited to its female protagonist.¹⁰⁶ Copies of the original game are held at a few universities and libraries across the country, such as the Strong Museum of Play, University of Southern California, and the University of Michigan;¹⁰⁷ however, under the current exemption, these institutions can only provide access to researchers who have the resources to travel to them. Scholars in other parts of the country are left in the lurch.

c. Impact on Criticism, Teaching, and Scholarship

As explained above, academic work about video games is indelibly shaped by the difficulties of accessing retro games. The impact of this issue is pervasive. Professors often cannot assign

¹⁰⁰ *Id.* at 7-12.

¹⁰¹ *Id.* at 28.

¹⁰² 17 U.S.C. § 1201(a)(1)(C)(ii).

¹⁰³ 2021 RECOMMENDATION at 277.

¹⁰⁴ 2021 *Reply Comment* at 17.

¹⁰⁵ *Metroid Prime*, WIKIPEDIA, https://en.wikipedia.org/w/index.php?title=Metroid_Prime&oldid=1184223911.

¹⁰⁶ Sara M. Grimes, “You Shoot Like a Girl!” *The Female Protagonist in Action-Adventure Video Games*, in DIGRA ’03 – PROCEEDINGS OF THE 2003 DIGRA INTERNAL CONFERENCE: LEVEL UP, DIGRA (2003), <http://www.digra.org/wp-content/uploads/digital-library/05150.01496.pdf> [<https://perma.cc/LE5N-WLUE>].

¹⁰⁷ *Metroid Prime*, WORLDCAT, <https://search.worldcat.org/title/51774673> [<https://perma.cc/WL9C-JRWK>].

games that they find historically or technologically significant because they are unsure whether their students would be able to access those works. As Dr. Ruberg said, “if there was something centralized and accessible, it would open up the world to whole new ways of teaching, whole new genres of games, whole new game histories....”¹⁰⁸

Likewise, researchers—whether graduate students or independent scholars—who cannot afford to travel across the country to visit archives like the Strong often structure their projects around what they can access, rather than what they find academically important. Because video game scholarship, in this regard, “is a matter of money, resources, and travel”¹⁰⁹, the Strong has taken it upon themselves to sponsor academics who otherwise would not have the funds necessary to complete their projects, offering a few \$750 per week fellowships.¹¹⁰ Opportunities like this could be incredibly helpful for a serious researcher working on a long-term project—e.g. a PhD student writing a dissertation; however, they do not make things easier for students in game studies courses who only need to play any given game for a brief amount of time for purposes of a class discussion or assignment.

Furthermore, even full-time scholars are limited by the geographic ultimatum of the current exemption because it makes them to cram all of their research into the period in which they are physically visiting the materials, forcing them to anticipate everything they might potentially be interested in over the course of their project during the few days or weeks that they are able to play the game. These limits are unnecessary given that many of the games in question are already preserved under the current exemption and the technology exists to provide remote access to them.

d. Effect of Circumvention on the Market for Copyrighted Works

The arguments above have fully encapsulated the ways in which this exemption is necessary. To respond to concerns expressed in previous cycles, cultural institutions can engage in user vetting, provide copyright notices, and use access restrictions, making a good faith effort to ensure that access to these materials aligns with the bounds of academic fair use. Vetting could include institutional verification by way of a requirement that users fill out a research request detailing the scope of their project, a process already widely used by museums with video game collections. Copyright notices could be full-screen pop-ups, clickwrap, physical forms, or a verbal attestation. Example access restrictions could include time-bounded access and technological controls.

Vetting is already common practice within both special collections and video game collections. Borman notes that, for its current on-premises access, the Strong hosts “people that are working on books, dissertations, papers” in addition to students, professors, and the like.¹¹¹ This is in line with the current model of access in traditional special collections. As Harvard’s Overholt noted of his rare books and manuscripts, “[t]he principle I try to keep in mind is not *how is this person qualified or credentialed to use this collection*, but rather *what is their project or their research*

¹⁰⁸ Interview with Dr. Bo Ruberg, UC Irvine (Mar. 8, 2021).

¹⁰⁹ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

¹¹⁰ *Research Fellowships*, THE STRONG NATIONAL MUSEUM OF PLAY, <https://www.museumofplay.org/collections/research-fellowships/> [<https://perma.cc/JDY8-U5K4>].

¹¹¹ *Id.*

interest in the collection.”¹¹² The same should be true for off-premises access to preserved video games as long as institutions with video game collections work to ensure that the researchers who take advantage of this exemption are doing so for scholarly purposes. Emulated games would not be plastered on the homepage of cultural institutions' websites; instead, they would exist within catalogued archives with other special collections resources,¹¹³ requiring a user to know what they are looking for and, more importantly, to *request* access after finding it. The attention-to-detail and academic literacy necessary to see this process through to the end will go a long way toward filtering out nefarious users.

Such controls are well within the expertise of practitioners in the field and also helpful to them from an administrability standpoint. As Ethan Gates of Yale noted, their current model involves “coordination between Reference and Preservation Services” in order to find the intersection of what the patron needs and what is possible.¹¹⁴ This can be true from both a technical and legal standpoint. His colleague, Claire Fox, added “...something we’re looking into more at Yale [is] how much can we ask researchers to be specific about what they’re looking for, so we can provide them with time-sensitive access, or a reasonable... amount of materials.”¹¹⁵ Likewise, Borman mentioned current copyright policy documents in place at The Strong: “When [users] come, they sign our Materials Use Policy, which specifically states that we don’t have the copyright to these [games]—that we’re able to do these things under museum fair use, so if [they] want to republish anything... it’s up to the researcher to go out and get clearance for that...”¹¹⁶

Moreover, even setting aside the question of reissues, the access restrictions put in place by institutions to ensure scholarly use will be sufficient to deter any users with infringing intentions, thereby guarding against market harm. As The Strong Museum’s Andrew Borman explained, “We’re not giving you a copy of it to add to your collection.... I see it being similar to a research request....” He noted that the museum would likely ask researchers to identify a specific amount of time for which they need access to the game and that any requests too wide in scope would probably be rejected. Borman continued: “[unlimited access] may be unrealistic just from a resources point of view as well... something that staff could not deal with.”¹¹⁷ Stanford’s Lowood agreed, saying “[a]ny access we give to people is going to be for personal research use,” rather than uploading it to the web for all to see because “[w]e’re pretty conservative about that sort of thing....”¹¹⁸ Cultural institutions have their own interest in making sure that the restrictions are effective: making games freely available for unlimited amounts of time would undermine their own value proposition and the esteem of their collections. Borman explicitly stated “[w]e don’t want to make copyright infringement easy. That benefits nobody. Selfishly, as a museum, that doesn’t benefit us. It doesn’t protect our donors....”¹¹⁹

¹¹² Interview with John Overholt, Harvard University (Sep. 26, 2023).

¹¹³ See, e.g., *How To: Use Harvard Library’s Special Collections and Archives*, HARVARD UNIVERSITY, <https://library.harvard.edu/how-to/use-harvard-librarys-special-collections-and-archives> [<https://perma.cc/PE82-33N8>].

¹¹⁴ Interview with Ethan Gates, Yale University (Oct. 13, 2023).

¹¹⁵ Interview with Claire Fox, Yale University (Oct. 13, 2023).

¹¹⁶ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

¹¹⁷ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

¹¹⁸ Interview with Henry Lowood, Stanford University (Oct. 2, 2023).

¹¹⁹ Interview with Andrew Borman, Strong Museum of Play (Sep. 27, 2023).

If institutions agree to vet users, impose some access restrictions, and include a copyright notice, the uses are unlikely to create market harm. Librarians take their jobs seriously and work to ensure that users have bonafide scholarly interest. They are already engaged in these controls for on-premises use; for instance, Borman noted that the Strong not only has a request form for researchers, but also scans their IDs to verify their identity. As to the currently digitized collection at Stanford, Henry Lowood said “[a]ccess is governed by our understanding of the rights situation and our attempts to contact the rightsholders.”¹²⁰ This would not change with an expanded exemption. This exemption would be expressly for academic use, which is a transformative purpose, in addition to providing a measure of technological transformation through emulation.

Further targeting will come to fruition upon passage of the exemption. As Ethan Gates explained, “[t]here’s a real chicken and egg with policy and technical question[s]. We’re wary to pursue the technical capabilities [of] our own platform...,” as the “policy gap makes administrators and practitioners nervous...”.¹²¹ In the absence of explicit language allowing off-premises access, librarians and preservationists are hesitant to spend time and resources developing emulation technology and policy. However, if an exemption *is* granted, practitioners would have the security necessary to begin “coming up with the really fine-grained controls and restrictions that we know we would need in order to reassure everyone.”¹²²

Market availability for older games is the exception, rather than the rule. Given the weakness of the reissue market, the financial impact that this exemption would have on the games industry is speculative at best. As described in the fourth fair use factor above, increased academic access to preserved games might even augment the market for retro games.¹²³ While video game developers continue to focus on the creation and marketing of new titles, “the commercial industry and cultural institutions must work together to fix the future of game preservation.”¹²⁴ This exemption not only does not cause *harm* to video game developers: it could also *help* them in the long run. The fourth statutory factor favors the exemption.

4. The Proposed Exemption Allows for Scholarly Access to Preserved Video Games Without Causing Market Harm.

Video game studies is a vibrant, interdisciplinary field that considers how a groundbreaking interactive artform affects and reflects cultural and technological change in society. The field’s growth has been limited by the lack of a legal means to remotely access its objects of study, relegated to studying what is available rather than what is important. It will continue to be

¹²⁰ Interview with Henry Lowood, Stanford University (Oct. 2, 2023).

¹²¹ Interview with Ethan Gates, Yale University (Oct. 13, 2023).

¹²² *Id.*

¹²³ As an additional example, critical attention to *Elevator Action II*, including discussion in liner notes to a soundtrack about the lack of availability of the game, likely played a part in its re-release. See Jeremy Parish, *Daily Classic: Elevator Action II, An Arcade Oddity Too Beautiful for This Miserable World*, USGAMER (Feb. 29, 2014) <https://web.archive.org/web/20150411134516/http://www.usgamer.net/articles/daily-classic-elevator-action-ii-an-arcade-adventure-too-beautiful-for-this-miserable-world>; Jeremy Parish, *ZUNTATA Arcade Classics Volume 1* (“Once you’ve enjoyed the pleasure of these compositions in this thoughtfully curated anthology, you really owe it to yourself to experience Zuntata’s music in its original context. Of course, Taito (or their current owners, Square Enix) haven’t made particularly that easy...”).

¹²⁴ *Game Availability Study* at 34.

limited without a more precise exemption. Off-premises access to preserved video games for academic use is a transformative fair use that benefits the public by facilitating scholarship about one of the most influential art forms of the twentieth and twenty-first century.

The proposed exemption is sufficient to ensure that use is limited to the purposes of research, scholarship, and teaching by imposing reasonable limitations on access utilizing procedures that cultural institutions have long used to protect other rare materials. These barriers to entry, combined with the technical and cultural differences between emulated games and physical copies, will make it such that anyone who wants to access games for recreational purposes will likely do so by other means. The lack of a reissue market not only shows that financial harm to the video game industry is unlikely, but also proves that this exemption is crucial because there is *no legal way for most scholars to access vintage games without it*.¹²⁵ The existing exemption has allowed for increased preservation, but preservation that only allows access for a miniscule number of in-person scholars does not serve the purposes of the Copyright Act. Fortunately, the Copyright Office and the Library of Congress have the opportunity to remedy that.

¹²⁵ As explained above, due to technical and aesthetic differences between them, reissues are not an ideal substitute for preserved games due; however, when available, they are better than nothing. Proponents invoke the dearth of the reissue market here to reiterate that, academic desirability notwithstanding, the vast majority of games are *not* rereleased beyond their original consoles. The scarcity of reissues combined with the premises restrictions on preserved games creates a landscape in which, for most titles, scholars have access neither to the original game nor a subpar substitute.