Docket No. PTO-C-2022-0035
Internet Archive’s Public Comments in Response to the
Study on NFTs and Related Intellectual Property Law Issues

These comments are provided on behalf of the Internet Archive, a 501(c)(3) non-profit library. Like other libraries, we work to expand access to knowledge by collecting, archiving, and providing public access to a variety of physical and digital collections. The Internet Archive is based in San Francisco, California, but most of our patrons visit our collections online at archive.org.¹

In 2015, Internet Archive’s founder and Digital Librarian Brewster Kahle gave a presentation at the Ford Foundation called “A Call for a Distributed Web.”² The following summer, the first Decentralized Web (“DWeb”) Summit took place at the Internet Archive’s San Francisco headquarters. At the summit, early web pioneers like Mitchell Baker, Vint Cerf, and Tim Berners-Lee met alongside newer DWeb pioneers like Juan Benet (inventor of IPFS and founder and CEO of Protocol Labs) and Primavera De Filippi (legal scholar and author of the book *Blockchain and the Law*).³ Internet Archive has been in active engagement with the DWeb community ever since, including convening and stewarding the development of the DWeb Principles,⁴ sponsoring the DWeb Camp,⁵ and a variety of other projects and events, such as a May 2021 DWeb webinar entitled: *NFTs: Hope or Hype of Art.*⁶

While the DWeb movement is not about NFTs per se, they do have shared roots in decentralized technologies.⁷ As outlined in Brewster Kahle’s 2015 talk, decentralization can be harnessed to provide many important benefits across a variety of domains: e.g., long term preservation, redundancy, privacy, provenance, and compensation structures. The Internet was originally architected to be decentralized, but over time the world wide web has evolved over the past generation towards being increasingly more centralized. We see potential value in NFTs when it comes to the long term preservation of digital artifacts and implementing provenance for the decentralized web. As a nonprofit library that has for many years now been deeply engaged in the DWeb community, and has long been engaged in copyright policy, we are writing to provide hopefully useful context on this emerging technology.

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¹ Archive.org is one of the world’s most visited websites. See, e.g., https://moz.com/top500.
³ https://2016.decentralizedweb.net/
⁴ https://getdweb.net/principles/
⁵ https://dwebcamp.org/
⁶ http://blog.archive.org/2021/05/11/dweb-meetup-may-2021-nfts-hope-or-hype-of-art/
⁷ For example, the dictionary definition of NFTs provided in the Offices’ joint study centers around blockchain—which is defined by the same dictionary in terms of “a large decentralized, publicly accessible network.” https://www.merriam-webster.com/dictionary/blockchain
Background: Further Defining NFTs

This study uses the following dictionary definition of an NFT: “a unique digital identifier that cannot be copied, substituted, or subdivided, that is recorded in a blockchain, and that is used to certify authenticity and ownership.” This definition is not entirely accurate, and as such, we believe that elaborating on what NFTs are will help frame our responses to specific questions below.

NFTs are a species of smart contracts—a general purpose technology that can be used to make certain types of transactions happen easily. NFTs are defined in certain technical standards; most notably, ERC-721\(^8\) and ERC-1155.\(^9\) These standards specify certain parameters for terms that must be included, e.g., identifying an owner and an asset, and certain behaviors that must be enabled, e.g., the ability to transfer, to be recognized as an NFT. NFT standards are non-proprietary in nature. This is part of what makes them useful. Anyone can make or use them, and any platform can and often will recognize a standards-compliant NFT. This feature of NFTs—what we might call, in a narrow sense, interoperability—is part of what gives the owners of NFTs a real sense of owning a digital asset. A given NFT can move freely among platforms and digital spaces, and can be freely exchanged by gift, trade, or sale.

NFTs can relate to works that qualify for copyright protection, such as works of visual art, but that is not necessary or inherent to what makes something an NFT. Because digital art and media appear to be the current most popular use cases for NFTs, a great deal of confusion has arisen among those who make, sell, and buy them regarding the relationship of NFTs to traditional copyright issues, hence the need for this study. We believe that the relationship between copyright and NFTs must be understood subject to two important qualifications.

First, NFTs do not necessarily have anything to do with copyrightable works. NFTs can relate to works that are subject to copyright, but they can also relate to things that have nothing to do with copyright at all. For example, an NFT could relate to ownership of real estate or a physical object, or it could provide authentication to access a particular event or venue—real or virtual.

Second, NFTs do not necessarily have anything to do with copying. NFT standards are generally agnostic as to how the referenced or underlying intangible assets (such as an image of a work of art) are handled. Minting platforms that employ these standards may choose to require the user to upload a copy of a work (thereby potentially implicating reproduction rights); however, they also may allow simple references to existing works hosted on traditional web servers or on decentralized storage systems such as IPFS (and, in either case, generally not resulting in a new reproduction of the work). Likewise, display or trading platforms may choose to honor or present referenced files in any of these ways, and may choose to make or not make their own incidental copy. Of course, it is also possible to mint an NFT without the use of any platform at all, which would allow all of these freedoms and more, by writing one’s own standard-complaint contract. In any event, the important point for

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our purposes here is that there is nothing inherent in the structure or concept of an NFT that requires copying the underlying asset.

Nevertheless, it is obvious that the relationship between NFTs and copyright is not broadly understood. This has, at times, given rise to disputes that run the gamut from ordinary misunderstandings to outright fraud. Given these circumstances, more public education regarding the relationship of NFTs to copyright does appear to be useful and necessary.

**Question 2: Copyright-related Opportunities and Challenges Relating to NFTs**

As with any new general purpose technology, people can use NFTs for good or ill. We see both significant opportunities and challenges for both production of and access to knowledge and culture.

1. **NFTs and Digital Ownership of Library Collections**

While much has been written about the various putative shortcomings of NFT ownership vis-a-vis traditional forms of ownership of copyright or of physical objects in which copyrighted works appear, the nonproprietary and interoperable nature of NFTs often gives NFT owners a greater sense of ownership over digital objects than what has otherwise been on offer in the digital marketplace to date. As such, NFTs offer new possibilities for how libraries and archives could build and manage their digital collections.

For the entirety of history until just a few years ago, the way libraries and archives built their collections was by acquiring physical materials that they then owned. Recently, this ownership relationship has been challenged as producers of knowledge and cultural materials have placed new legal and technological restrictions on the digital works that libraries pay for, primarily through licensing arrangements that allow mere access to digital works, rather than outright ownership. While this may have resulted in increased profit for some market participants, it has created a variety of problems for libraries and other users of copyrighted works. As against these developments, NFTs and other decentralized technologies show that many users desire a different kind of ownership over the creative works they pay for, are willing to work towards their preservation, and are open to doing so in new and innovative ways.

In today’s digital marketplace, many publishers are trying to change the paradigm of ownership whereby purchasers can rent access to digital resources, but cannot fully own them. For libraries, this can harm their ability to perform core public interest functions like preservation and lending. Under these circumstances, some have sought to ensure that libraries do not lose their traditional rights and public-interest role in the digital environment; i.e., to ensure digital ownership rights for libraries. This would include the rights to (1) collect

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copies of digital works by purchasing them at fair value; (2) preserve unchanged and, if necessary, update or repair those digital copies, so as to make them accessible in new formats for the specific needs of new generations of patrons; (3) lend the works embodied in those copies at the one-to-one lending capacity permitted by physical media; (4) cooperate and share their resources—especially for digital collections—so as to allow equitable access to patrons in remote and less well-funded districts.\(^\text{12}\)

It is just a matter of time before the publishing industry begins leveraging NFTs in the context of ebooks, and we do not yet know what impact this will have on libraries and readers. NFTs could work in a way that allows libraries to truly own their digital collections. For authors and publishers willing to do so, selling an NFT of a particular book to a library could allow the library to own a “particular copy”\(^\text{13}\) of that book, which could then be used pursuant to default rules of copyright rather than license terms. The fact that transfer of ownership of an NFT does not inherently require making a copy of the underlying asset means opportunities for digital resale marketplaces that do not run into the kinds of technical issues that arose in Capitol Records, LLC v. ReDigi Inc.\(^\text{14}\)—that is to say, NFTs present an opportunity for “digital first sale.” We are not currently aware of any library that has acquired NFT books, but the possibilities for digital collection development are of interest.

Alternatively, NFTs could be used to exclude libraries from access to exclusive digital content, and further erode traditional library functions like preservation and access. At least one textbook publisher appears to be exploring the possibility of using NFTs to increase prices and take a cut of resales of digital textbooks.\(^\text{15}\) These kinds of practices could be beneficial—if, for example, students could indeed be permitted to resell digital textbooks, which is currently forbidden by license terms. Of course, if prices are set too high, or libraries are excluded from offering access to these materials, the result would be harmful and exclusionary, and could negatively impact the poorest and most vulnerable students that libraries exist to serve.

This is an evolving space, and the impact of these experiments is by no means clear. We encourage the Copyright Office and regulators to consider the potential impacts on libraries and library users of any proposed regulations in this area.

2. **Creator Compensation and Access to Culture and Knowledge**

NFTs also provide opportunities for creators to obtain additional income streams through the sale of NFTs that do not interfere with—or rather, are agnostic to—traditional mechanisms for commercial exploitation of a work that compensate copyright intermediaries. For example, an artist can sell the NFT related to a piece of art, make plenty of money, and not have to worry about other folks making copies of that work ever again. The need for copyright policing


\(^{13}\) 17 U.S. Code § 109

\(^{14}\) 910 F.3d 649 (2d Cir. 2018)

\(^{15}\) https://coingecko.com/news/textbook-publisher-wants-to-use-nfts-to-skim-the-used-textbook-market,
could go away completely in such cases.\textsuperscript{16} Indeed, some artists are explicitly releasing their works under open licenses or even into the public domain using CC0\textsuperscript{17} to be clear that they do not have any interest in making money from enforcement of exclusive rights. These creators want their work to be widely shared, used and remixed—indeed, allowing a work to be copied and altered is a core tenet of Meme Culture. And they also want to make a living making art. NFTs have the potential to enable a world where both of these things can happen which, on the whole, is a net gain for the commons and access to knowledge and culture.\textsuperscript{18}

The Nouns Project is a good example of how creators are making money to fund the creation of more art by releasing it under CC0.\textsuperscript{19} Nouns is a generative NFT project on the Ethereum blockchain. At its core, Nouns is a protocol for proliferating Nouns. Nouns are 32x32 pixel characters based on people, places, and things. One Noun is generated every day, it is auctioned off, and the funds go into the Nouns treasury. Ownership of a Noun gives you a vote as to how the treasury is allocated. The creators use CC0 because re-use improves the value of the whole project: “In the same way that academic citations make the original paper more important, citation of Nouns in whatever form they come in—at least, this is our thesis—will make the originals more important and more valuable.”\textsuperscript{20}

One of the most prominent examples of an individual artist using the CC0 model is XCopy.\textsuperscript{21} This anonymous artist has made many millions of dollars,\textsuperscript{22} despite the underlying digital images being released into the public domain using CC0.\textsuperscript{23} If any example flies in the face of the oft-repeated maxim that “you can’t compete with free,” it’s this one. Anyone, anywhere can not only access Xcopy’s images, and they can also—completely legally—mint their own NFT of that artwork and make money from it. Nevertheless, collectors understand the difference, and are willing to pay substantially higher prices for authentic Xcopy NFTs, which can be easily and instantly verified just by examining the metadata of the NFT itself.

The core goal of copyright is to promote the creation of new culture and knowledge, which all ends up in the public domain for everyone to enjoy and build upon eventually. Xcopy and other artists using CC0 wish for their contribution to the public domain to happen now rather

\textsuperscript{16} It is worth noting that some NFT communities very much believe that copyright interests should be policed, and have been building self-help tools to make policing in this space easier. See, e.g., https://www.deviantart.com/team/journal/DeviantArt-Protect-Helping-Safeguard-Your-Art-884278903
\textsuperscript{17} https://creativecommons.org/share-your-work/public-domain/cc0/
\textsuperscript{18} For a deeper dive into one NFT collector’s view on CC0 and NFTs: https://twitter.com/punk6529/status/1611999180117118978?t=7DLV-N95roAQYaLFeqgDmQ&sz=19 (explaining that when you buy a CC0 NFT “You are not only paying money to have a piece of art for yourselves. You are also contributing (economically) so that art is contributed to the global cultural commons *now*, not 100 or 150 years from now. You have made the world a bit richer, not just yourself.”
\textsuperscript{19} https://www.nOUNDation.wtf/intro/nouns-cc0
\textsuperscript{20} https://decrypt.co/86795/how-ethereum-nft-project-nouns-is-building-open-source-ip
\textsuperscript{21} https://xcopy.art/
\textsuperscript{22} https://nftevening.com/superrare-a-guide-for-nft-collectors-and-artists/ (“Believe it or not, XCOPY has sold 222 works for an average of $228,418, generating $50,708,843 in total sales. Incredibly, that’s not including secondary sales either. The highest sale by XCOPY is a whopping $7,088,229.”)
\textsuperscript{23} https://twitter.com/XCOPYART/status/1554112748816109569?s=20&t=rDn0c1Yjfq0a-q628haFvA
than later. Whatever Xcopy’s reasons for choosing this way of releasing his art into the world, it is a legitimate choice that the copyright system should respect and empower.

While there certainly remains a wide diversity of viewpoints in the DWeb community about the NFTs, creating a world where artists get paid and the public can still have access seems like a net positive for the copyright system and for the commons. As such, we encourage the Copyright Office and regulators to consider the ways in which NFTs could improve both access to culture and knowledge while supporting compensation structures for creators.

**Question 8: Adequacy of Current Copyright Law**

As against the backdrop of the challenges and opportunities above, it is worth considering what role copyright can and should play. Because NFTs have been used as a mechanism to reference and generate revenue related to creative works, many creators, users, and indeed, many in the traditional copyright industries, have had their interest piqued. But copyright is not and never has been the exclusive domain for rules and regulation related to compensation in creative industries. Copyright has, instead, developed to respond to specific issues related to the creation of copies of certain kinds of works. As NFTs do not require the creation of any new copies of creative works, the copyright questions that have arisen in relation to NFTs have often taken the character of a new gloss on an old and preexisting copyright issue: appropriation art, for example.\(^24\) While these are interesting and difficult questions in their own right, many are being addressed by existing law through ordinary legal processes. Through this lens, there is nothing inherent in NFTs that cries out for new or different copyright rules.

Being clear on this point—that nothing about NFTs changes the basic rules of copyright—is a potentially important role for the Copyright Office to play in this evolving space. It is important for everyone engaging in the NFT space, from creators to collectors, to know that when copyright is indeed implicated, copyright remedies are still available for creators, fair use and other exceptions and limitations still apply for users, and the DMCA still applies to intermediaries.

As should be clear from the above, our view is that we should not rush to expand or alter copyright law in response to a technical development that is in many ways copy-agnostic. That is certainly the case if the traditional legal mechanisms for resolving related copyright problems are functioning as expected, which appears to be true. For example, if someone mints an NFT of an artist’s work without permission and a reproduction is made, then the artist can bring a claim of copyright infringement. If no copy is made, but there is a marketplace harm, there is recourse to other existing laws such as unfair competition, fraud, and the like. And intermediaries may well have liability if they are creating copies and fail to

\(^24\) See, e.g., https://www.vice.com/en/article/pkpby/nft-collector-sells-peoples-fursonas-for-dollar100k-in-right-click-mindset-war. In this case, an NFT artist copied the avatars of a large number of members of a particular community he sought to criticize and provoke. While this kind of use of art causes friction, it has long been the purview of fair use to resolve disputes of this nature.
comply with the DMCA; DMCA takedowns do appear to be functioning to remove unauthorized NFTs from marketplaces.\textsuperscript{25}

In short, at this juncture we see a need for additional observation, study, analysis, and public education. To the extent copyright issues are implicated, we see a positive role for the Copyright Office in these tasks—beginning with this study itself. Thus, we thank the Office for the open call for participation, and look forward to further opportunities to help.

Respectfully submitted,

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\textsuperscript{25} See e.g., https://nftevening.com/non-fungible-olive-gardens-nft-delisted-on-opensea/