# OPEN LICENSING, HIDDEN COSTS: SURVEY EXPERIMENT INSIGHTS ON CREATIVE COMMONS AND COPYRIGHT INFRINGEMENT

*Thomas H. Rousse*[*]

Word Count: 21,215 (main text) 28,002 (total)

*Since its inception, Creative Commons has introduced new ways for creators to grant licenses to the public without cost or the need for negotiation by breaking up rights provided by copyright and making a subset of those rights (as well as several rights and obligation beyond the scope of copyright itself) available to anyone willing to abide by the conditions of the license. Its widespread adoption has democratized open*

---

[*] J.D./Ph.D., Northwestern Pritzker School of Law, Northwestern University School of Communication, Media, Technology and Society Program. M.Sc., Media, Technology and Games Analysis, IT University of Copenhagen, 2013. B.A. Hons., American Studies, Northwestern University, 2010. Thanks to Peter DiCola, Aaron Shaw, Matthew Kugler, Casey Fiesler, Laura Pedraza-Fariña, Aymar Jean Christian, the J.D./Ph.D. Seminar at Northwestern Pritzker School of Law, Benjamin Mako Hill, the Community Data Science Collective, faculty at the University of Oregon School of Journalism and Communication, and Shari Seidman Diamond for feedback and commentary.

*licensing for creators beyond the software context these licenses originated within. Although the success of Creative Commons as a community is plain, relatively little information is available about its perception with the general public. Aggressive litigation by Creative Commons licensors has put the organization is a peculiar position: publicly clarifying that they would prefer licensors not enforce their rights when licenses are breached.*

*This stance raises questions about whether members of the public believe Creative Commons licensors are less likely to enforce their copyright. This Article presents insights from a novel, nationally representative survey experiment of over 1,200 participants applied to theoretical debates and prior cases dealing with the licenses. The survey evaluates the public's recognition of Creative Commons before dividing participants into three groups: a control group with a standard copyright notice, a treatment with an abbreviated Creative Commons license marking, and a treatment with a short primer on Creative Commons and a full text license caption. These three groups are presented with seven short scenarios presenting re-use in different contexts and asked about the likelihood of legal action, their estimate of the legal consequences under the current law, and their evaluation of what the consequence should be.*

*Survey results suggest about 7% of the U.S. adult population accurately recognizes the Creative Commons logo and about 25% have some knowledge of the organization. Using full-text license terms and a short primer on Creative Commons increased respondent estimates of the severity of legal consequences under current law as well as their estimate of preferred legal consequences for infringement. In sum, results suggest licensors who want the terms of their license respected should prioritize the use of full-text license descriptions that provide more information about the license terms and provide any opportunities available for potential licensees to understand Creative Commons.*

HIDDEN COSTS OF OPEN LICENSING?

A SURVEY EXPERIMENT ON CREATIVE COMMONS AND COPYRIGHT INFRINGEMENT

## INTRODUCTION

As a rallying cry for advocates of a more permissive creative culture, Creative Commons has been an astounding success.[1] In its third decade, however, the cultural milieu and legal landscape that motivated its creation have fundamentally changed. Two defining features of the mid-aughts, mass litigation by content companies and a vigorous subculture

---

[1] Niva Elkin–Koren, *What Contracts Cannot Do: The Limits of Private Ordering in Facilitating a Creative Commons*, 74 FORDHAM L. REV. 375, 377 (2005) (discussing the ideological flexibility of Creative Commons as a benefit for building a "social movement" but a hindrance to effective advancement of its original ideological motivations); *see State of the Commons*, CREATIVECOMMONS.ORG, https://stateof.creativecommons.org/ (last accessed Mar. 12, 2024).

of intellectual property piracy, have given way to a new equilibrium. Users are largely insulated from intellectual property infringement between each other by platform terms of service that are far more permissive than Creative Commons—so long as the material stays within the platform where it can generate advertising revenue and targeting data, of course. Meanwhile, the proliferation of dominant social media platforms worth billions has displaced the lionized "digital homesteader" of the early Web responsible for making choices about their own content and navigating the treacherous terrain of copyright infringement. The content industries, for their part, have been driven by market forces (and the need to combat a great deal of piracy) from the redoubts of near-monopsonic pricing for physical media to a brave new era of paid streaming that eschews consumer ownership for licensing of huge libraries of content through relatively low-cost monthly subscription fees. Fears of copyright infringement lack the salience they once held for certain members of a generation of dorm-dwelling pirates of software, music, film, games and other media that were kept up at night in a clammy sweat by the specter of a cease-and-desist letter and threats of lawsuits from the Recording Industry Association of America or the owner of pricey software they might not otherwise be able to afford.

This Article focuses on the effect of Creative Commons beyond its idealized implied user-base of sophisticated copyright activists to gauge Creative Commons' progress with and acceptance by two other key audiences: the American legal system and the American public. To aid this process, this empirical investigation and legal analysis considers the perspective of three groups with complementary and often conflicting rights and interests: creators and owners of copyrighted works, re-users of those works, and the public-at-large. A clear-eyed evaluation of Creative Commons requires a summation of costs as well as benefits. With Creative Commons licensing, creators and owners often trade the opportunity to receive some or all of the monetary compensation they might receive for the reproduction of their works in whole or in part in order to grant others a subset of the monopoly rights granted by copyright.[2]

Re-users, particularly those who do not identify with the mission of Creative Commons or even understand the problems it is trying to solve,

---

[2] Mira T. Sundara Rajan, *Creative Commons: America's Moral Rights*, 21 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 905, 966 (2011) ("[T]he author trades his or her right of economic remuneration, guaranteed by U.S. copyright law, for the recognition of his or her moral rights under the terms of the Creative Commons license.").

also take significant risks when using Creative-Commons–licensed work: because the licensing system is built on copyright, misunderstanding the license and failing to meet its conditions exposes would-be licensees to the potential for significant liability in the form of statutory damages.[3]

Finally, because Creative Commons has established widespread use and publicity granting it a significant first-mover advantage,[4] the public's future policy choices are shaped by the path-dependency of early policy decisions made by the architects of Creative Commons. If Creative Commons serves as a kind of safety valve for the political pressure caused by public dissatisfaction with an over-restrictive copyright regime, it may limit more expansive efforts to rebalance public rights and private monopolies.[5] Alternatively, Creative Commons may not be able to

---

[3] *See, e.g.*, Part II.B.3 (describing liability exposure for many re-users stemming from failure to provide proper attribution of images taken from Wikipedia).

[4] *See* Jennifer Wooley, Innovation Policy in Emerging Domains of Activity: First-mover Advantage or Curse? Atlanta Conference on Science and Innovation Policy (Oct. 2–3, 2009) (applying first-mover advantage in the context of innovation policy) https://ieeexplore.ieee.org/document/5367843.

[5] *Cf.* Miaoran Li, *The Pirate Party and the Pirate Bay: How the Pirate Bay Influences Sweden and International Copyright Relations*, 21 PACE INT'L L. REV. 281 (2009)

achieve its objectives without greater understanding of copyright by the public such that the costs of accidental infringement outweigh the benefits of more permissive sharing.

Empirically, this Article investigates the American public's recognition of Creative Commons as a brand and legal apparatus, and the difference in infringement deterrence between traditional copyright and Creative Commons. Previous commentators have identified fears that Creative Commons licenses may not be enforced as an obstacle to their widespread adoption.[6] More recently, however, the organization that has created the licenses has expressed its discomfort over the licenses' enforcement and now incorporates a 30-day grace period,

---

(cataloging the political impact of a social movement based around civil disobedience to copyright rather than extension and modification of copyright); Christopher S. Brown, *Copyleft, the Disguised Copyright: Why Legislative Copyright Reform is Superior to Copyleft Licenses*, 78 UMKC L. REV. 749 (2010).

[6] *See* Ashley West, *Little Victories: Promoting Artistic Progress Through the Enforcement of Creative Commons Attribution and Share-Alike Licenses*, 36 FLA. ST. U. L. 903, 903 (2009) ("While Creative Commons licensing has experienced a meteoric rise in popularity during its short life, its utility to further the goals of copyright law may be hindered if fear of infringement without enforcement repels artists from using these licenses in the first place.").

introduced in the 4.0 version of the licenses, to come back into compliance with license terms.[7]

Ignorance of Creative Commons licensing and mis-use of licensed work can also expose members of the public to liability: while in past decades copyright infringement only concerned those with access to restricted and expensive means of cultural production such as the printing press, recording studio, or radio station, barriers to publication have fallen dramatically with the advent of personal computing and the Internet.[8] As access to technology that makes copying and publication easier increases, so too does the public's chance of exposure to the risk of liability for copyright infringement. Although the rate of enforcement for copyright infringement overall is low, the stakes for those subject to lawsuits, or even the uncertainty and stress of how to respond to

---

[7] *Statement of Enforcement Principles*, CREATIVECOMMONS.ORG https://creativecommons.org/license-enforcement/enforcement-principles/.

[8] Jessica Litman, *Copyright Noncompliance (Or Why We Can't "Just Say Yes" to Licensing)*, 29 N.Y.U. J. INT'L L. & POL. 237, 237 (1996) ("The threat and promise of networked digital technology is that every individual with access to a computer will be able to perform the 21st century equivalent of printing, reprinting, publishing, and vending.").

threatening cease-and-desist letters, can be very high. Furthermore, Creative Commons might be cynically adopted by actors who do not share its ethos of openness and sharing as a "copytrap" to subject unwitting members of the public to the draconian copyright enforcement measures often at odds with the purpose of Creative Commons and the activism of its supporters.[9]

## I. LEVERING COPYRIGHT INFRINGEMENT PENALTIES FOR OPEN LICENSING ENFORCEMENT

Unfortunately for members of the public tasked with negotiating its hazards, "[c]opyright law is horribly complicated."[10] Yet, copyright plays a prominent role in American society and popular culture, particularly for a (mostly) civil statute. Although marking is no longer required for works created after March 1, 1989,[11] the "c in a circle" copyright symbol (©) is ubiquitous. Generations grew up on stern warnings by the FBI

---

[9] *See* Part II.C.3, *infra*.

[10] Litman, *Copyright Noncompliance*, *supra* note 8 at 241.

[11] UNITED STATES COPYRIGHT OFFICE, *Copyright Notice*, CIRCULAR 3 (Mar. 2022) https://www.copyright.gov/circs/circ03.pdf.

against piracy of copyrighted materials on VHS tapes,[12] and digital piracy surged to the forefront of public consciousness near the turn of the millennium due to the controversy generated by peer-to-peer filesharing of music and the recording industry's pursuit of a mass-litigation strategy in response.[13] Today's coming-of-age copyright experience may well be the "copyright strike" against either one's own uploaded content or the disappearance of a favorite streamer or mutual connection due to alleged copyright violations, often powered by sophisticated algorithmic enforcement.

Copyright's influence on the economy is also pervasive. The entire entertainment industries spanning media from books to film, the knowledge economy, and all software fundamentally rely on copyright protection to protect the value of work that is often expensive to produce but relatively easy to copy. In 2005, one estimate of the value of industries reliant on copyright in the United States came in at 11% of

---

[12] Eriq Gardner, *FBI Anti-Piracy Warnings: A Graphical History*, HOLLYWOOD REPORTER (May 9, 2012) https://www.hollywoodreporter.com/thr-esq/fbi-anti-piracy-warnings-over-time-pictures-322495.

[13] ELECTRONIC FRONTIER FOUNDATION, *RIAA v. The People: Five Years Later*, EFF.ORG (2008) https://www.eff.org/wp/riaa-v-people-five-years-later.

overall gross domestic product.[14] Before the pandemic, the U.S. Copyright Office processed over half a million registrations per year, and after a decline of roughly one-third in 2020, registrations have steadily rebounded.[15] Attribution of advertising revenue generated from shared and streaming media on social media platforms also heavily depends on copyright, aided by statutory requirements for content hosts to respond to takedown requests.[16]

The goal of U.S. copyright law is traditionally understood to be a fundamentally utilitarian bargain, balancing the public cost of a limited monopoly for authors against a greater incentive to create "Science and useful Arts" for the commonweal.[17] The low cost of copying expression

---

[14] PETER BALDWIN, THE COPYRIGHT WARS: THREE CENTURIES OF TRANS-ATLANTIC BATTLE, 275 (2014) (citing STEPHEN E. SIWEK, COPYRIGHT INDUSTRIES IN THE U.S. ECONOMY: THE 2006 REPORT, http://www.iipa.com/pdf/2006_siwek_full.pdf).

[15] UNITED STATES COPYRIGHT OFFICE, FISCAL 2022 ANNUAL REPORT 25 (2022) https://www.copyright.gov/reports/annual/2022/ar2022.pdf.

[16] *See* 17 U.S.C. § 512 (describing the Digital Millennium Copyright Act's notice and takedown procedures).

[17] *See, e.g.*, Fox Film Corp. v. Doyal, 286 U.S. 123, 126 (1932) ("The sole interest of the United States and the primary object in conferring the monopoly lie in the general

after it has been created could lead to an under-provision of original ideas if widespread copying diminishes the ability of creators to profit from their creative output. By granting a monopoly to creators over their creative work, copyright law attempts to align the rewards of creation with the creator while limiting the ability of non-creative copiers to free-ride on the creative labors of others. Insofar as copyright is a utilitarian bargain, an empirical accounting of its cost and benefits is essential to its evaluation.

Beginning in 1790 with a fourteen-year monopoly that could be extended fourteen additional years, copyright terms have now stretched from publication to 95 years (for pseudonymous, anonymous, or collective

---

benefits derived by the public from the labors of authors."); Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 359 (1967) ("If a new idea is freely appropriable by all, if there exist communal rights to new ideas, incentives for developing such ideas will be lacking. . . . If we extend some degree of private rights to the originators, these ideas will come forth at a more rapid pace."); Avishalom Tor & Dotan Oliar, *Incentives to Create Under a Lifetime-Plus-Years Copyright Duration: Lessons from a Behavioral Economic Analysis for* Eldred v. Ashcroft, 36 LOY. L.A. L. REV. 437 (2002) (calling "incentives to create" the "fundamental goal of copyright law").

works) or life plus 70 years (for individual authors).[18] The gradual expansion of copyright terms reduced the amount of material available in the public domain, and directly inspired Creative Commons' efforts to lower barriers for the licensing of creative work.[19]

Modern copyright requires few formalities. While creators once needed to provide a notice of copyright on every copy of a work produced, the United States' entry into the international Berne Convention governing intellectual property rights removed the requirement for that formality (as well as most others) in 1989.[20] As a result, every work is granted copyright as a matter of law at the moment of fixation. One essential formality remains, however: a copyright-holder must register their work with the Copyright Office for a nominal fee in order to have standing to bring a claim of copyright infringement to federal court and

---

[18] *See* 17 U.S.C. § 302 (setting duration of copyright). The limited, constitutional origin of American intellectual property differs from the continental European history that conceived of creators' rights as natural and moral rights. *See, e.g.*, BALDWIN, *supra* note 14, *The Battle between Anglo-American Copyright and European Authors' Rights*, ch. 1.

[19] *See* Part I.B, *infra.*

[20] BALDWIN, *supra* note 14 at 277.

to be eligible for remedies for infringement such as statutory damages.[21] Unlike patent and trademark registrations, receiving a copyright registration is relatively straightforward, certain, swift, and often viable without aid of counsel. This accessibility and affordability align with Creative Commons' goals.

Copyright registrations and the associated record of the work alone do not define the scope of protection, however. Some elements are excluded: Copyright protects fixed expression but not the underlying idea—specific designs for statuettes of dancing figures can infringe, but not original iterations on the idea of the figures, for example.[22] Protection also extends beyond the registered work: Copyright protects both exact copying and works derived from a copyrighted work, such as adaptations to another medium, translation into other languages, or extensions of, or sequels to, existing work.[23]

---

[21] 17 U.S.C. §§ 411–12.

[22] *See* Mazer v. Stein, 347 U.S. 201, 217 (1954) ("Unlike a patent, a copyright gives no exclusive right to the art disclosed; protection is given only to the expression of the idea—not the idea itself.").

[23] UNITED STATES COPYRIGHT OFFICE, *Copyright in Derivative Works and Compilations*, CIRCULAR 14 (rev. 2013).

Core to Creative Commons is repurposing the potential punishments associated with infringement to enforce the terms of a permissive open license. Copyright infringement can be thought of as a strict liability tort.[24] In a strict liability regime, accidental, unknowing or otherwise negligent violations do not exempt the infringer from liability; proof of violation is sufficient for punishment. Penalties for copyright infringement can be steep—infringers can have their business or expression halted through injunction or their infringing works destroyed, and find themselves liable for monetary damages, either based on the owner's actual damages and the infringer's profit, or statutory damages

---

[24] *See, e.g.*, Boehm v. Zimprich, 68 F. Supp. 3d 969, 977 (2014) ("Copyright infringement is a strict liability offense: a defendant is liable for infringement regardless of whether he intended to infringe.") Note, however, that copyright also may include criminal penalties. Others have argued that the existence of defenses such as fair use render copyright in practical terms a fault-liability regime. *See* Steven Hetcher, *The Immorality of Strict Liability in Copyright*, 17 INT. PROP. L. REV. 1 (2013). For the history of the early development of strict liability in American copyright law, see Alan Latman & William S. Tager, *Liability of Innocent Infringers of Copyrights*, STUDIES PREPARED FOR THE SUBCOMMITTEE ON PATENTS, TRADEMARKS AND COPYRIGHTS OF THE COMMITTEE ON THE JUDICIARY, 86 Cong. 2d. 135–58 (1958) https://www.copyright.gov/history/studies/study25.pdf.

ranging from $750–30,000 per infringed registered work and up to $150,000 where infringement is willful, as well as the copyright owner's attorney's fees.[25]

Willful infringement can also give rise to criminal penalties if the infringement is for private gain, totals over $1,000, or is a "leak" of work before its publication.[26] Particularly egregious repeat infringers are eligible for up to ten years of imprisonment, among other penalties.[27] Actual sentences tend to be less extreme, however. From 2017–21, federal judges sentenced 272 offenders for copyright and trademark infringement.[28] During that time the average sentence decreased from 15 months to 10 months.[29] Although the total number of copyright

---

[25] 17 U.S.C. §§ 502–505.

[26] 17 U.S.C. §§ 506(a)(1)(A)–(C).

[27] 18 U.S.C. § 2319(d)(4). For a critical evaluation of these criminal penalties, see Geraldine Szott Moohr, *Defining Overcriminalization Through Cost-Benefit Analysis: The Example of Criminal Copyright Laws*, 54 AM. U. L. REV. 783 (2005).

[28] UNITED STATES SENTENCING COMMISSION, QUICK FACTS: COPYRIGHT AND TRADEMARK OFFENSES 1 (2021) https://www.ussc.gov/sites/default/files/pdf/research-and-publications/quick-facts/Copyright_FY21.pdf.

[29] *Id.* at 2.

infringements are difficult to assess, chances of criminal prosecution for it are no doubt vanishingly small.

While copyright liability is strict, there are several exceptions and defenses that limit its application. Consistent with its advocacy of open culture, Creative Commons licenses specifically disclaim restricting these defenses and exceptions. Likely the most expansive of these is the affirmative defense of "fair use," a doctrine developed through case law and later codified by Congress in 1976.[30] As a four-part balancing test, the application of fair use can be unpredictable and is a source of considerable uncertainty that discourages utilization of fair use.[31] Critical legal theory emphasizes that these areas of indeterminacy and uncertainty provide opportunities for hierarchies of social class and

---

[30] 17 U.S.C. § 107 (listing four fair use factors).

[31] Michael W. Carroll, *Fixing Fair Use*, 85 N.C. L. REV. 1087, 1106 (2007) ("[I]t is reasonable to imagine that users will hesitate to rely on fair use unless the risk of enforcement appears low. Moreover, because the penalties for erroneously relying on fair use can be quite severe, . . . we should expect that primarily well-resourced users would be willing to assert fair use rights in litigation.").

ownership to influence the law's application in their favor.[32] One of the advantages of the Creative Commons licenses is their relative clarity: while fair use can be highly uncertain and its application variable between media and jurisdictions, licenses promise more certainty.

Another exception, the first sale doctrine,[33] indirectly led to the widespread adoption of licensing as the primary mechanism for distribution of software. Distribution is one of the rights granted by copyright,[34] but the first-sale doctrine holds that right of distribution travels with a physical copy of the work after it has been initially sold, thus allowing resale.[35] Digital reproducibility presented challenges for developers. To avoid losing control of how their sold software could be used under the doctrine of first sale, many companies began to license digital work instead of offering it for sale.[36] The practice of licensing of

---

[32] HANNIBAL TRAVIS, COPYRIGHT CLASS STRUGGLE: CREATIVE ECONOMIES IN A SOCIAL MEDIA AGE, 15, n. 76 (2018); Wythe Holt, *Tilt*, 52 GEO. W. L. REV. 280 (1984).

[33] 17 U.S.C. § 109(d).

[34] 17 U.S.C. § 106(3).

[35] *See* Bobbs-Merrill Co. v. Straus, 210 U.S. 339 (1908); 17 U.S.C. §109(a).

[36] *See* 17 U.S.C. § 109(d) (restricting subsequent rights of licensees and others who do not have ownership of a copy of the copyrighted work).

software copyrights, and innovations made by the free software community, provided the inspiration for the Creative Commons framework.

### *A. Non-Exclusive Licensing: Adaptation of Copyright Licensing to Enforce Terms of Use*

The core strategy of Creative Commons—using a licensing agreement to narrow and modify the broad grants of the underlying monopoly granted by the intellectual property policy of Congress—builds on innovative open licensing for software.[37] The basic premise of a license is simple. The licensor, by virtue of its ownership of the licensed good supported by state-granted monopoly rights, sets the terms of use which the licensee in a consumer setting is obliged to accept or reject without negotiation via an adhesion contract, often designated as an End User License Agreement (EULA). In the case of goods protected by a registered

---

[37] JAMES BOYLE, THE PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND, 182 (2008) ("[Creative Commons] tried to do for culture what the General Public License had done for software.").

copyright, that ownership is backed by statutory damages, provisions for attorney's fees, and even imprisonment.[38] Commercial firms specify the uses (and limitations on use) granted to the user in exchange for payment. Early non-commercial developers, often developing their policies in academic contexts that traffic in non-monetary reward structures such as attribution,[39] kept control over conditional terms of the licensing framework without demanding payment. These non-commercial developers defined the scope of rights granted to the user, maintained attribution or redistribution rights, and disclaimed certain liabilities as a condition for use.

A team of lawyers, activists, and technologists, including Hal Abelson, James Boyle, and Eric Eldred, led in part by Harvard Law professor Lawrence Lessig, created Creative Commons in 2002.[40] Professor Lessig was frustrated with what he saw as the regulatory capture of the copyright system by the content industries and the

---

[38] *See* notes 24–29, *supra.*

[39] *See* Catherine L. Fisk, *Credit Where It's Due: The Law and Norms of Attribution*, 95 GEO. L.J 49, 81–85 (2006) (describing attribution norms in academic writing with an emphasis on science and medicine).

[40] BOYLE, *supra* note 37 at 180.

increasing ability of technology to control media.[41] Lessig and others wanted to empower creators to adopt a "some rights reserved" copyright policy between the extremes of often conservative and permission-centered corporate control backed with steep penalties and the anarchy of a contemporaneous internet rife with file-sharing.[42]

Shortly after the project's genesis, Lessig argued before the Supreme Court in *Eldred v. Ashcroft*—a pivotal case concerning whether copyright could be extended in light of the commitment to the public domain required by the Constitution—and lost.[43] Motivated in part by failures to persuade Congress to take up a legislative solution and unfavorable

---

[41] *See* Lawrence Lessig, *The Creative Commons*, 55 FLA. L. REV 763, 764–65 (2003) (discussing the extension of copyright terms from 1968 onwards); *id.* at 766, 767–68 (discussing control of code through copyright and "technological inversion" of copyright values); Lawrence Lessig, *The Creative Commons*, 65 MONTANA L. REV. 1, 11 (2004) ("Enter an organization that I have helped start called the Creative Commons.").

[42] Lawrence Lessig, *The Creative Commons*, 65 MONTANA L. REV. 1, 11 (2004).

[43] *See Eldred v. Ashcroft*, 537 U.S. 186 (2003) (holding copyright extension legislation constitutional based in part on the long history of copyright extensions passed by Congress); Lawrence Lessig, *How I Lost the Big One*, LEGAL AFFAIRS, (Mar. 2004) (describing Lessig's regret for not focusing on the potential harm of extending copyright terms and thereby failing to persuade the Court's more liberal Justices).

judicial decisions exemplified by the *Eldred* decision, Creative Commons created "a second-best solution created by private agreement because the best solution could not be obtained through public law."[44] In crafting that solution, Creative Commons drew on the model of the GPL,[45] using the very same grants of monopoly rights essential to copyright that are at odds with their ideological goals of permitting creative reuse of cultural material. Creative Commons built a system for a more flexible and more permissive copyright alternative centered on non-exclusive licensing at no cost to the licensee.[46]

While many plans to extend or reform copyright never make it past the pages of a law review, Creative Commons has been remarkably

---

[44] BOYLE, *supra* note 37 at 183.

[45] Lawrence Lessig, *CC in Review: Lawrence Lessig on Supporting the Commons*, CREATIVECOMMONS.ORG, (Oct. 6, 2005) https://creativecommons.org/2005/10/06/ccinreviewlawrencelessigonsupportingthecommons/ ("We stole the basic idea from the Free Software Foundation—give away free copyright licenses. […] The idea (again, stolen from the FSF) was to produce copyright licenses that artists, authors, educators, and researchers could use to announce to the world the freedoms that they want their creative work to carry.").

[46] *See* Sundara Rajan, *supra* note 2 at 930.

successful and widely adopted. In the first four months after release, more than 400,000 pages linked to Creative Commons licenses.[47] In 2015, Creative Commons had 85 global affiliates, and the organization has since undertaken a global network strategy to allow more volunteers and activists to get involved.[48] As of 2017, more than 1.4 billion works had been licensed under Creative Commons,[49] spanning images, textbooks, novels, comics, government records, videogames, card games, music, news coverage, and websites.[50] By 2022, researchers at UC Berkeley's Data Science Discovery Project conservatively estimated more than 2.5 billion licensed works.[51] It is more difficult to quantify or even estimate

---

[47] BOYLE,*supra* note 37 at 183.

[48] Claudio Ruiz, *Creative Commons' Global Network: How We're Growing,* CREATIVECOMMONS.ORG, (Feb. 23, 2018), https://creativecommons.org/2018/02/23/global-network/.

[49] CreativeCommons.org, *State of the Commons 2017.* https://stateof.creativecommons.org/ (last visited Mar. 13, 2024).

[50] *See, e.g.*, *List of major Creative Commons licensed works*, WIKIPEDIA.ORG, https://en.wikipedia.org/wiki/List_of_major_Creative_Commons_licensed_works (last visited Mar. 13, 2024).

[51] Creative Commons.org, *State of the Commons 2022.* https://creativecommons.org/state-of-the-commons-2022/#cc-licenses-and-legal-tools (last visited Mar. 13, 2024).

the creation of derivative works from Creative-Commons–licensed material, infringement or lawsuits averted, and value to users, but by virtue of its proliferation alone, the value created by Creative Commons is substantial.

How was the project implemented? Each Creative Commons license theoretically operates at three levels.[52] The first level is the "deed,"[53] an attempt to summarize the legal language of the license itself into a "human-readable"[54] format suitable for a general audience. The second level is the license itself, also known as the "legal code"—this is the operative contract language that establishes legal responsibilities between the parties.[55] The third and final level is a system of metadata

---

[52] *About CC Licenses,* CREATIVECOMMONS.ORG, https://creativecommons.org/share-your-work/cclicenses/ (last visited Jan. 7, 2023).

[53] *See, e.g.*, *CC BY 4.0 Deed*, https://creativecommons.org/licenses/by/4.0/deed.en (last visited Jan. 7, 2023).

[54] The implication by distinction in these three levels that those who read licenses are not human is surely unintended.

[55] *Legal Code Defined*, CREATIVECOMMONS.ORG, https://creativecommons.org/legal-code-defined/ (last visited Jan. 7, 2023).

that is "machine-readable," or legible to computer processing.[56] Data is unavailable for how many Creative Commons licenses include the "machine-readable" level. Because only the second level of the system has legal effect, and the license does not require the provision of a deed or metadata to be effective, levels one and three are effectively optional additions that make the underlying license easier to understand for a general population and easier to process by computer systems, respectively.

1. Understanding the Licenses

As generations of first year law students have learned, property can be understood not as an indivisible object imbued with inseparable rights but as a "bundle of rights" the owner has against the interests of others.[57] Each stick in this bundle represents a right, such as the right to exclude,

---

[56] *See CC REL*, WIKI.CREATIVECOMMONS.ORG, https://wiki.creativecommons.org/wiki/CC_REL (last visited Mar. 13, 2024).

[57] *See* J.E. Penner, *The "Bundle of Rights" Picture of Property*, 43 UCLA L. REV. 711, 711 (1996) (citing and discussing influential work by Wesley Hohfeld and A.M. Honoré using the "bundle of sticks" metaphor).

the right to sell, the right to sublicense, and so on.[58] Creative Commons' essential contribution is providing a system for creators to dole out whatever copyright sticks—and only that specific bundle of sticks—they choose to the general public.[59] In effect, Creative Commons allows creators to give some of the rights bundled by default by copyright policy back to the public, so long as the public is willing to abide by the creator's terms. Creators can still contract privately with others for different terms, but the Creative Commons non-exclusive licenses are an open invitation for others to use work as specified. Interaction with and approval from the licensor is not required, reducing the transaction costs associated with receiving permission for use ranging from legal fees to determining the identity of the rights-holder. This is a key feature: For

---

[58] 17 U.S.C. § 106 (1)–(6).

[59] The structure of copyright law determines what bundled rights are available to an extent. Limitations on the monopoly granted by copyright still apply, regardless of the license selected, by standard terms preserving rights such as fair use.

many uses, the monetary expense, expertise, and time needed make more traditional approaches to licensing cost-prohibitive.[60]

To continue the metaphor, what "sticks" does Creative Commons allow creators to parcel out? The most common is a right beyond the standard rights granted by copyright: attribution. Since the release of the 2.0 revision in 2004, all Creative Commons licenses require attribution to the copyright holder, represented by the *BY* code in the short naming convention.[61] Early statistics on license use demonstrated that 97–98% of all licenses included an attribution requirement; cutting the option for the *BY* variant cut the total available licenses from eleven to six.[62] Versions 3.0 and 4.0 of the licenses make clear that the use of licensed

---

[60] *See* Richard A. Posner, *Transaction Costs and Antitrust Concerns in the Licensing of Intellectual Property*, 4 JOHN MARSHALL REV. INTELL. PROP. L. 325, 326 (2004) ("The costs of identifying and negotiating with the owner of a copyright are not great in absolute terms, but they are great relative to the value of most copyrighted works[.]").

[61] glenn [Glenn Otis Brown], "Announcing (and explaining) our new 2.0 licenses," CreativeCommons.org (May 25, 2004) https://creativecommons.org/2004/05/25/announcingandexplainingournew20licenses/ (last visited Mar. 13, 2024).

[62] *Id.*

material should not imply endorsement, and all versions allow licensors to request removal of attribution for re-uses of the work.[63] Attribution is not a requirement of the U.S. copyright system, but it is a core component of a moral rights framework, leading Mira Sundara Rajan to analyze the license system as "America's moral rights."[64] Requiring attribution as a minimum is a common feature of non-exclusive licensing; identifying the copyright holder makes it clear who is granting the license (and thereby purporting to own the licensed material) among other benefits.

---

[63] *License Versions*, CREATIVE COMMONS WIKI https://wiki.creativecommons.org/wiki/License_Versions#Detailed_attribution_comparison_chart (last visited Mar. 13, 2024).

[64] *See generally* Sundara Rajan, *supra* note 2 at 926–930 (tying Creative Commons elements like no derivatives, choice of attribution, and license reciprocity to authorship). N.B. that while moral rights in European implementations are typically exclusive to the author, often regardless of who actually owns the work, the Creative Commons licensor may simply be the copyright holder, not the author. *See* Colleen Creamer Fielkow, *Clashing Rights under United States Copyright Law: Harmonizing an Employer's Economic Right with the Artist-Employee's Moral Rights in a Work Made for Hire*, 7 DEPAUL-LCA J. ART & ENT. L. 218 (1997) (discussing moral rights in the context of work made for hire, where the copyright goes to someone other than the creator).

The second bundle of rights offered by Creative Commons licensing centers on adaptation and derivative work. United States copyright law protects not only the copyrighted work, but also variations, modifications, and transformations of that work.[65] Creative Commons licenses allow derivative work by default—the base attribution license (CC BY) includes a grant of derivative work, for example. With derivatives allowed by default, the licensing system specifies work that does not allow any derivatives (No Derivatives or ND), and work that allows derivatives on the condition that those derivatives reciprocate the same ability to create derivative work (Share-Alike or SA). The reciprocity provision is similar to the copyleft strategy employed by Richard Stallman and the Free Software Foundation's GPL.[66]

---

[65] UNITED STATES COPYRIGHT OFFICE, *Copyright in Derivative Works and Compilations*, CIRCULAR 14 (rev. 2020) https://www.copyright.gov/circs/circ14.pdf.

[66] *See* STALLMAN, *supra* note **Error! Bookmark not defined.**, at 127 ("To copyleft a program, we first state that it is copyrighted; then we add distribution terms, which are a legal instrument that gives everyone the rights to use, modify, and redistribute the programs' code, *or any program derived from it*, but only if the distribution terms are unchanged. Thus, the code and the freedoms become legally inseparable."). *See also*

The third bundle of rights offered by Creative Commons licensing is commercial use. Like derivative work, commercial use is allowed by default—the base attribution license (CC BY) allows commercial reuse, for example. The line between commercial and non-commercial use has been a subject of confusion and debate for some time.[67] Licenses can also be offered only for non-commercial re-use, designated by the *NC* short-form naming code. Some creators may choose to license their works by individual contract for commercial use, while allowing their work to be openly licensed for non-commercial use with a Creative Commons NC license.

Drawing from the cord of sticks provided by copyright law along with its own inclusions, Creative Commons has offered these different bundles

---

ROSEN, *supra* note **Error! Bookmark not defined.** at 103–140 (discussing reciprocity and the GPL).

[67] *See* Jane Park, *Findings from the Discovery Phase of CC Usability*, CREATIVECOMMONS.ORG BLOG, (Sept. 25, 2018). https://creativecommons.org/2018/09/25/findings-from-the-discovery-phase-of-cc-usability/.

of rights in six licenses since the 2.0 revision:[68] Attribution (CC BY), Attribution–Share-Alike (CC BY–SA), Attribution–No Derivatives (CC BY–ND), Attribution–Non-Commercial (CC BY–NC), Attribution–Non-Commercial–Share-Alike (CC BY–NC–SA), and Attribution–Non-Commercial–Share-Alike–No Derivatives (CC BY–NC–SA–ND).

One disadvantage of the naming convention chosen by Creative Commons is that its usefulness depends on the re-user's familiarity with the essential tenets of the licensing scheme. Some of the variants require more base knowledge of what the licensing project is about than those that provide explicit information on what is or is not permitted in their title. For example, the naming scheme specifies that attribution must be provided for every license, but without prior knowledge of Creative

---

[68] Glenn, *supra* note 61. Several other licenses are offered or have been offered under the aegis of Creative Commons. The organization sponsors a public domain mark, for works with no known copyright protection because that protection has expired. It also offers a CC0 license that provides an avenue for creators to dedicate their still-copyrighted work to the public domain. Creative Commons previously offered a fourteen-year copyright with a fourteen-year extension called "The Founder's Copyright." *See* ANDREW M. ST. LAURENT, UNDERSTANDING OPEN SOURCE AND FREE SOFTWARE LICENSING, 98 (2004). It is unclear if any work was licensed under this scheme.

Commons, the fact that commercial use and derivatives are allowed for variants that do not feature the prohibition in the title might may be nonobvious. The consequences of misunderstanding the licensing of significant rights, such as irrevocably giving up commercial rights to works that might otherwise be sold by choosing a license without the NC provision, can be significant.

How do creators, users, and re-users find Creative-Commons–licensed work? Some portion of future licensors no doubt discover Creative Commons through the branding, attribution, and hyperlinked information provided by other Creative-Commons–licensed work. Creative Commons also provides a training certificate program for educators and librarians, who then go on to teach students and patrons about licensing.[69] For images and videos, Creative Commons provides a search engine, formerly called CCSearch, that indexes more than 330 million images and allows users to sort and filter results by the licensing terms and the "bundles of sticks" doled out by the licensors.[70] Major

---

[69] *Creative Commons Certificate for Educators and Librarians,* CREATIVECOMMONS.ORG, https://certificates.creativecommons.org/cccertedu/ (accessed Mar. 13, 2024).

[70] SEARCH.CREATIVECOMMONS.ORG, https://search.creativecommons.org/ (last viewed Jan. 7, 2023).

content sharing platforms, such as Alphabet, Inc.'s video-sharing site YouTube and photo-sharing site Flickr, have integrated "license choosers" to simplify the process of applying Creative Commons.[71]

2. Sparse and Discouraged License Enforcement through Litigation

How are breaches of the Creative Commons licenses enforced? Creative Commons itself does not own the licensed works nor does it enforce licenses for those who adopt its framework. Each license deed states "Creative Commons is not a law firm and does not provide legal services."[72] Instead, licensors are left to their own devices on the matter of enforcement. Prompted by a spate of litigation by a single party, discussed in more detail below,[73] Creative Commons released a series of documents on December 8, 2021, explaining enforcement options available to licensors and the organization's own stance on enforcement.

---

[71] *See* Carmit Soliman, *Remixing Sharing: Sharing Platforms as a Tool for Advancement of UGC Sharing*, 22 ALB. L.J. SCI. & TECH. 279, 293–297 (2012).

[72] *See CC BY 4.0 Deed*, CREATIVECOMMONS.ORG, https://creativecommons.org/licenses/by/4.0/ (last visited Jan. 7, 2023).

[73] *Infra* Part III.B.3.

After a licensor has carefully investigated the purported infringement, Creative Commons recommends communicating with the suspected infringer if it could be a good-faith error, sending a takedown notice like those provided through the Digital Millennium Copyright Act in the U.S., sending a legal demand letter asserting the licensor's rights as well as possible remedies, and finally, consulting an attorney to take legal action.[74]

Notably, however, the advice never mentions the word "registration." Copyright registration is hardly discussed by Creative Commons on its website at all and no mention of a registration appears on any of the license deeds or the license itself. This is a key omission if Creative Commons is intended to be a useful legal instrument for lay people because a copyright owner in the U.S. does not have standing to sue in federal court, the only available venue due to federal pre-emption,[75] without a valid copyright registration.[76] While registration is relatively simple and low-cost compared to the requirements of some other forms of

---

[74] *What to Do if Your CC-Licensed Work is Misused*, CREATIVECOMMONS.ORG, https://creativecommons.org/misuse-of-works/ (last visited Jan. 7, 2024).

[75] 17 U.S.C. § 301 (establishing preemption of state law).

[76] 17 U.S.C. § 411(a).

intellectual property, registration only permits the award of statutory damages and the recovery of attorney's fees for infringement that takes place *after* registration or within a three-month grace period after registration that can be further limited to one month from gaining actual knowledge if the copyright holder learns of the infringement.[77] That tight one month turnaround after notice of infringement also increases the risk of following Creative Commons' advised course of action and the possible delays entailed in pursuing informal contact and a demand letter prior to seeking an attorney to bring suit.

Creative Commons' advice is very incomplete on the impact of a lack of registration, stating in part in their policy document on enforcement that "the use of the work that was out of compliance with the license was a copyright infringement. As the copyright holder, you are still entitled to damages for that infringement, if you choose to seek them."[78] But in fact, for Creative Commons' licenses based on U.S. copyright, the "you" in question is only entitled to damages (and costs) with a valid

---

[77] 17 U.S.C. § 412.

[78] *What to Do if Your CC-Licensed Work is Misused*, CREATIVECOMMONS.ORG, https://creativecommons.org/misuse-of-works/ (last visited Jan. 7, 2024).

registration for infringement that happened after registration or within the grace period window. To the extent that Creative Commons is leading licensors to believe that releasing their work under a Creative Commons license is sufficient to secure legal protection, it is doing a disservice to creators.

How many licensors who need overviews of the basics of enforcement or who need the "human-readable" deed to make sense of the licenses will be savvy enough to know their chosen license is practically unenforceable without a registration? This is especially perilous for licensors who have heard the true but misleading precept that "[c]opyright protection in the United States exists automatically from the moment the original work of authorship is fixed"[79] without realizing that protection is more legal fiction than fact without further action necessary to secure those rights. No data exists on the percentage of Creative Commons licenses that are actually backed by a valid registration and are therefore enforceable if the licensor chooses to pursue legal action for infringement.

---

[79] U.S. COPYRIGHT OFFICE, *Copyright Basics*, 1 CIRCULAR 1, https://www.copyright.gov/circs/circ01.pdf (rev. Sep. 2021).

In response to a wave of litigation prompted by the perceived misuse of Creative-Commons–licensed images contrary to the organization's goals, Creative Commons adopted three enforcement principles:

[1.] "The primary goal of license enforcement should be getting reusers to comply with the license.

[2.] Legal action should be taken sparingly.

[3.] Enforcement may involve monetary compensation, but should not be a business model."[80]

Version 4.0 of the licenses, released in 2013, also added a thirty-day grace period that allows infringers to correct an error and have their license automatically reinstated once they learn their use was infringing.[81] This thirty-day grace period might be subject to abuse by infringers who only need a work for a short period of time, such as a commercial website celebrating a musicians' upcoming appearance or birthday with work licensed under a Non-Commercial license, and can simply remove the infringing item if challenged.

---

[80] *Statement of Enforcement Principles*, CREATIVECOMMONS.ORG, (last visited Jan. 7, 2024).

[81] *Id.*

Enforcement demonstrates how tensions between using copyright as the legal foundation for the license and attempting to expand the public's usage of copyrighted materials can bubble to the surface.

## II. Empirical Analysis of the American Public's Perception and Evaluation of Creative Commons

This study aims to uncover how users and potential users of Creative Commons licenses, whether as creators/owners or re-users, interpret the Creative Commons licenses and change their behavior in response. The core of the project is a unique survey approximating a nationally representative population gauging differences in perception of Creative Commons and traditional copyright among the general public by randomly assigning respondents to answer questions about factorial vignettes on (mostly infringing) uses of copyrighted material with a control condition of a standard copyright registration notice and two treatment conditions of a Creative-Commons–licensed work in a between-subjects design. For most vignettes, Treatment A shows the "license abbreviation" marking system used by Creative Commons, while Treatment B shows the "full license name" marking system used by Creative Commons and asks respondents to review a summary of

Creative Commons licenses prior to answering questions about the vignettes. A shorter survey, administered to all respondents prior to the vignettes, evaluates the American public's recognition rates and knowledge of Creative Commons.

Asking respondents to answer questions about survey vignettes that differ on a stimulus condition (in this case, copyright status) allows causal tests of respondent decision-making and judgment in a quick and relatively low-cost manner.[82] Legal scholars have used survey experiments to study a broad range of underlying moral, legal, and political judgments by general audiences relevant to related areas of law—survey populations, analysis, and question design vary widely.[83]

---

[82] *See, e.g.,* Cheryl S. Alexander & Henry Jay Becker, *The Use of Vignettes in Survey Research*, 42 PUBLIC OPINION QUARTERLY 93 (1978).

[83] *See e.g.*, Janice Nadler & Shari Seidman Diamond, *Eminent Domain and the Psychology of Property Rights: Proposed Used, Subjective Attachment, and Taker Identity*, 5 J. EMPIRICAL LEGAL STUDIES 713, 725 (2008) (testing 568 participants recruited from volunteers for web-based research on underlying public sentiment, with logistic regression model analysis, that led to the marked popular backlash against the eminent domain case *Kelo v. City of New London*, 125 S. Ct. 2655 (2005)); Austin Sarat & Neil Vidmar, *Public Opinion, the Death Penalty, and the Eighth Amendment: Testing*

Survey questions about Creative Commons recognition, as well as familiarity and knowledge of copyright, also provide descriptive information about public knowledge of the licensing program.

---

*the Marshall Hypothesis*, 1976 WISC. L. REV. 171, 182 (1976) (evaluating attitudes and underlying moral judgments about the death penalty based on experimental manipulation of utilitarian and humanitarian information through interviews of 200 subjects); Stephen R. Galoob & Su Li, *Are Legal Ethics Ethical? A Survey Experiment*, 26 GEO. J. LEGAL ETHICS 481 (2013) (testing the interplay between legal ethics and lay moral judgment through experimental survey vignettes on a panel of 122 Berkeley students); Conor Clarke & Edward Fox, *Perceptions of Taxing and Spending: A Survey Experiment*, 124 YALE L.J. 1252 (2014) (testing public opinion of tax credits versus direct cash payments across a variety of policy fields using Google Consumer Surveys with 198 to 899 responses to 18 individual questions on a binary scale and finding "the public views tax expenditures as less costly than equivalent direct outlays."); Shiri Krebs, *Experimental Data on the Impact of Legal Labels on Wartime Event Beliefs*, 11 HARV. NAT'L SEC. J. 106 (2020) (testing a representative sample of 2,000 Jewish–Israeli citizens and demonstrating that using legal labels such as "war crimes" significantly decreases respondents' "willingness to believe information about Palestinian casualties and fails to stimulate feelings of empathy towards the victims.").

To increase the evidentiary value of this survey through transparency and a commitment to objective inquiry,[84] I pre-registered the plan for analysis, survey instrument, data collection, and a draft of this methods section as an open pre-registration using the Open Science Foundation's OSF Registries project prior to data collection.[85] Pre-registration helps combat publication bias, wherein null or unexpected results tend to go unreported,[86] as well as *p*-hacking—the subjective manipulation of analysis techniques to produce statistically significant findings while

---

[84] *See, e.g.*, Office of Evaluation Sciences, *Preregistration as a Tool for Strengthening Federal Evaluation*, GOVERNMENT SERVICES AGENCY (last accessed Mar. 14, 2024) https://oes.gsa.gov/assets/files/preregistration-as-a-tool-in-federal-evaluation.pdf ; Brian A. Nosek, Charles R. Ebersole, Alexander C. DeHaven, & David T. Mellor, *The Preregistration Revolution*, 115 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 2600 (2017) https://doi.org/10.1073/pnas.1708274114.

[85] OPEN SCIENCE FOUNDATION, OSFREGISTRIES, https://osf.io/registries (last visited Mar. 22, 2024).

[86] *See* Ridha Joober, Norbert Schmitz, Lawrence Annable & Patricia Boksa. *Publication Bias: What Are the Challenges and Can They Be Overcome?*, 37 J. PSYCHIATRY & NEUROSCI. 149 (2012) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3341407/.

failing to report on unfavorable results.[87] All analysis not included in this pre-registration should be considered exploratory and is noted as such in the text below.

### *A. Prior Empirical Survey Work on Copyright*

Empirical support for the utilitarian justification for current copyright law is notoriously thin. Prior to joining the Supreme Court, Stephen Breyer wrote a seminal article analyzing empirical evidence supporting copyright in 1970, arguing that the elimination of copyright protection would likely lead to lower prices, wider distribution, and the reduction of transaction costs.[88] While few, prior surveys of the public's behavior have informed the design of this Study.

Gregory N. Mandel has surveyed the public's understanding of the motivations behind copyright law and discovered that the majority of the

---

[87] *See* Andrew Gelman & Eric Loken, *The Statistical Crisis in Science*, 102 AMERICAN SCIENTIST 460 (2014) http://www.stat.columbia.edu/~gelman/research/published/ForkingPaths.pdf.

[88] Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281 (1970).

public thought intellectual property, including copyright, mostly served to prevent plagiarism rather than as an incentive for creativity.[89] Similarly, W. Michael Schuster conducted a survey to determine whether the voting public understands the "constitutional goals" of copyright and found that slightly less than 8% of respondents identified utilitarian incentives as the purpose of copyright.[90]

In a separate study, Mandel presented survey respondents with an infringement scenario where the creator of a song should be entitled to a copyright and a second party should be responsible for infringement.[91] From that scenario, 59% of respondents correctly (that is, in line with current statutes) identified that the creator should be entitled to damages.[92]

---

[89] Gregory N. Mandel, *What is IP For? Experiments in Lay and Expert Perceptions*, 90 ST. JOHN'S LAW REV. 659, 660 (2016).

[90] W. Michael Schuster, *Public Choice Theory, the Constitution, and Public Understanding of Copyright*, 51 U.C.D. L. REV. 2247, 2284 (2018).

[91] Gregory N. Mandel, *The Public Perception of Intellectual Property*, 66 FLA. L. REV. 261, 280 (2014).

[92] *Id.* at 280.

Surveys about copyright knowledge often rely on self-reports rather than probing respondents on specific knowledge about copyright. For example, one study evaluated respondent's copyright knowledge by asking "How familiar are you with copyright laws?" and then providing a four-point Likert-style scale from "Very Familiar" to "Not at all familiar."[93] One survey on the public's knowledge of clauses in copyright terms of service by Fiesler, Lampe, & Bruckman[94] offered several disheartening findings based on self-reports: regarding the 10% who self-reported reading the terms of service, their accuracy was not significantly better than their peers nor did reporting past copyright training affect accuracy.[95]

---

[93] Kay Hogan Smith et al.*, Copyright Knowledge of Faculty at Two Academic Health Science Campuses: Results of a Survey*, 32 SERIALS REV. 59 (2006) (featuring, in addition to the self-report, several short vignettes on use of copyrighted materials in an academic setting later in the questionnaire.)

[94] Casey Fiesler, Cliff Lampe, & Amy S. Bruckman. *Reality and Perception of Copyright Terms of Service for Online Content Creation*. Presented at CSCW, Feb. 27–Mar.2, San Francisco, CA (2016) https://dl.acm.org/doi/pdf/10.1145/2818048.2819931.

[95] *Id.* at 1457.

Fiesler, Feuston & Bruckman conducted a different sort of survey: a sample of discussions about copyright across eight web forums dealing with the re-use of creative material, culminating in grounded analysis of 339 posts after whittling down from a dataset of several million.[96] They found that the majority of conversations about copyright revolved around five types of problems: avoiding trouble, dealing with consequences, fear of infringement, dealing with infringement, and incomplete information.[97] Furthermore, lay advice tended to be both uninformed and very conservative, neglecting discussions of fair use and frequently advancing a permission-based viewpoint.[98] Users are far more likely to face sanctions from administrative functions of large social media platforms, such as YouTube, than the legal system, and as a result community knowledge tends to focus on the enforcement mechanisms and punishment standards meted out by sometimes automated

---

[96] Casey Fiesler, Jessica L. Feuston, & Amy Bruckman. *Understanding Copyright Law in Online Creative Communities*, 119. Presented at CSCW, Mar. 14–18, Vancouver, BC (2015).

[97] *Id.* at 120.

[98] *Id.* at 121.

copyright-compliance mechanisms.[99] Users are perhaps even more likely to face sanctions from their peers who are interested in enforcing norms of attribution and a taboo on plagiarism for derivative work created by other users, even if that work is based on prominent works of mass culture, and—perhaps wisely—they fear infringement of their own work by peers and are sometimes reluctant to share their work with a community brought together by a shared love of possible infringement.[100]

In a survey-based experiment, Ben Depoorter and Sven Vanneste investigated the effect of large-scale litigation by media content organizations and entertainment industry trade groups against copyright infringers who participated in file sharing networks.[101] Depoorter and Vanneste randomly divided a subject pool of Dutch undergraduates into four groups who received four different scenarios: high likelihood of punishment/high penalty, high likelihood of punishment/low penalty, low likelihood of punishment/high penalty, and

---

[99] *Id.* at 122.

[100] *Id.* at 123.

[101] Ben Depoorter & Sven Vanneste, *Norms and Enforcement*, 84 ORE. L. REV. 1127 (2005).

low likelihood of punishment/low penalty.[102] Depoorter and Vanneste looked at the differences between those who had previously engaged in file-sharing and those who did not: file-sharers did not believe others would cease downloading regardless of the severity of the punishment, and those who had not used file-sharing services believed that *more* people would engage in file-sharing when the punishment was more severe.[103] These survey results suggest the relationship between enforcement and deterrence is not as straightforward as many assume.

### *B. Study Design*

#### 1. Relevant Study Population

This study assumes that the potential population of American Creative Commons users is functionally equivalent to the U.S. population as a whole. As others have noted, the potential to commit copyright infringement, or to have created a work that is easily available

---

[102] *Id.* at 1145.

[103] *Id.* at 1146–48.

for infringement, is far less rarefied than it was before the advent of widely available digital technology connected to the Internet.[104] Furthermore, given that the only prerequisite for copyright is fixity of expression,[105] virtually every U.S. citizen will create a copyrighted work during their lifetime and thus could potentially license their work with a Creative Commons license. Creative Commons itself has been designed with a populist streak and at least intends to have a low barrier of entry—despite its complex underpinnings, it aims to be "a public movement that addresses the public at large."[106]

The adult U.S. population is also a salient subject for research on these issues because it is roughly equivalent to the population used to select American jurors, a process that, like survey population recruitment, also faces issues with non-random selection that may bias

---

[104] *See, e.g.*, Wu, *supra* note **Error! Bookmark not defined.**. *See also* Litman, *Copyright Noncompliance*, *supra* note 8.

[105] As discussed previously, *see* Part I.C.3, this bar is something of a legal fiction insofar as a copyright without a registration cannot be enforced.

[106] Elkin–Koren, *supra* note 1 at 387 (2005).

justice along demographic lines.[107] Furthermore, the proliferation and thorough saturation of copyrighted work in U.S. society means that the general U.S. population is also a population of potential infringers, and their knowledge and beliefs about copyright and associated penalties likely guide their own behavior.

2. Platform and Survey Instrument

a. Recruitment Platform

---

[107] Ashish S. Joshi & Christina T. Kline, *Lack of Jury Diversity: A National Problem with Individual Consequences*, AMERICAN BAR ASSOCIATION, (Sept. 15, 2015) (discussing under-representation of racial minorities and the economic factors that influence likelihood of answering a jury summons). https://www.americanbar.org/groups/litigation/committees/diversity-inclusion/articles/2015/lack-of-jury-diversity-national-problem-individual-consequences/ (last visited May 3, 2021). Note that this equivalence matches jurors roughly at the point of jury selection; after a (rare) trial on copyright infringement, jurors are likely to be much more sophisticated about copyright law than the average population as plaintiff and defendant explain how the law favors their respective positions.

Using quotas on age, gender, race, and ethnicity to approximate the U.S. population as a whole, I recruited over 1,300 survey respondents using CloudResearch's Connect platform.[108] On Connect, potential respondents choose assignments based on short descriptions of the task, a time estimate, and the pay rate for completion. Connect integrates with several survey platforms, including Qualtrics; screens participants using proprietary technological controls and attention checks; allows

---

[108] Rachel Hartman, Aaron J. Moss, Shalom N. Jaffe, Cheskie Rosenzweig, Jonathan Robinson, & Leib Litman. *Introducing Connect by CloudResearch: Advancing Online Participant Recruitment in the Digital Age*, PSYARXIV PREPRINTS (Sep. 15, 2023), osf.io/preprints/psyarxiv/ksgyr. Shortly before data collection, experienced researchers began circulating a pre-print not yet subject to peer review comparing nine online survey recruitment panels and found that Connect produced the highest data quality and that quotas approximating national demographics improved representativeness to the third best of the evaluated samples.[108] M. N. Stagnaro, J. N. Druckman, A. J. Berinsky, A. A. Arechar, R. Willer, & D. G. Rand. *Representativeness Versus Attentiveness: A Comparison Across Nine Online Survey Samples.* PSYARXIV PREPRINTS (accessed Mar. 8, 2024) https://doi.org/10.31234/osf.io/h9j2d (surveying over 13,000 participants across nine populations and recommending that researchers should move away from raw MTurk samples).

recruitment quotas; and provides a reputation system for both participants and recruiters.

b. Survey Instrument

The survey itself was administered using the survey platform Qualtrics, subscription-based software for collecting survey results for academic projects, market research, and other tasks. Connect participants are provided with a link to the Qualtrics survey after signing up for the assignment; that URL contains tracking information collected by the survey and used to link survey responses with Connect respondents; and, upon successful completion of the survey, Qualtrics provides a code to enter on Connect to ensure that participants receive compensation for completion and payment. The questions associated with each vignette were only available after five seconds to encourage respondent attention to the vignette. Similarly, the Creative Commons education primer displayed for 20 seconds before the option to proceed appeared.

c. Compensation, Survey Cost

Target respondent pay was set to $9 per hour, $1.75 more than the federal minimum wage.[109] Connect assignments automatically display an hourly rate based on payment and estimated time of completion. Evidence suggests more ethical compensation also results in higher quality data. Pilot surveys suggested good-faith respondents routinely finished in less than twenty minutes and as a result respondent pay was set to $3 for successfully completing the survey. Median completion time for the survey was 13:58 with an average duration of 16:50. Out of 1,200 responses, 1,017 (84.75%) completed the survey in 20 minutes or less. The average rating for "Compensation" from survey respondents through Connect's platform was 4.9 stars out of five with 703 users providing ratings.

d. Sample Composition

---

[109] While many offered rates at the beginning of MTurk were extremely low compared to prevailing U.S. wages, Amazon more recently suggested a pay rate of $6 per hour and many academic researchers now exceed that rate. *See* Hartman et al., *supra* note 108 at 60.

One disadvantage of using Connect and other online panel recruitment options as a source of respondents compared to traditional survey administration companies that use techniques like random phone number dialing is that Connect data is not inherently nationally representative because participation is opt-in rather than random. As such, online respondents are a convenience sample.[110] This panel achieves partial national representativeness across gender, ethnicity, race, and age through quotas that limit the availability of the survey to respondents as the relevant tranches are filled. Statistical analysis verified that random assignment ensured equivalence between the three groups.

### *C. Creative Commons Recognition Study*

As a threshold matter, both the adoption of Creative Commons and compliance with its terms are limited by public recognition and awareness of the licenses. While there has been frank acknowledgment

---

[110] Paul J. Lavrakas, *Convenience Sampling*, ENCYC. OF SURVEY RES. METHODS (2008) https://dx.doi.org/10.4135/9781412963947.n105.

of the complexity of copyright law in legal scholarship, even some critics of Creative Commons have taken the public's understanding of the licensing scheme (and its popularity) for granted. For example, in an early criticism, Severine Dusollier took issue with the ideological underpinnings and legal mechanisms of Creative Commons, but seems to have assumed that Creative Commons' icons "due to the successes of the Creative Commons project and its iconography" would allow licensors and licensees to "immediately recognize the type of license governing the work."[111] Creative Commons is built on the tacit assumption that would-be licensees and licensors will recognize the affordances offered by the license and dedicate the discernment necessary to appropriately use or select those licenses.

To establish a baseline of national exposure to and awareness of Creative Commons, survey respondents were presented with four logos in random order and asked whether they know the brand associated with

---

[111] Dusollier, *supra* note 205 at 276. *See also, id.* at 281 ("The significant public success of Creative Commons and the presence of the logos conveying the extent of the authorization have made those licenses very recognizable and usable by authors and users; this also helps reduce the cost of licensing.").

the logo. All respondents received the same questions for this block and there were no experimental manipulations or differing conditions.

The logos presented are the McDonald's "Golden Arches" (selected due to its widespread recognition to judge the response to a maximal stimuli), a minimalist line logo of a lightbulb wearing a shirt and tie created for this survey and not associated with any brand (included to detect synthetic responses and to gauge an expected minimal response), the Firefox browser logo (selected as a comparable non-profit organization with a similar focus on offering alternatives to proprietary ownership systems), and the Creative Commons "CC" logo, the logo of interest. While the logos themselves provide valuable information, simply showing logos beyond the logo of interest likely reduces the likelihood that savvy, bad faith respondents would falsely indicate recognition to strategically increase their opportunities for compensation opportunities, either to avoid being "screened out" of the current survey experiment or earn a qualification to be included in a survey panel for future research. Pilot-testing the logo experiment with free-text identification requests as a secondary verification check revealed several instances of dishonest strategic behavior leading to changes in design and instruction in the survey.

For each logo that respondents indicated they recognized by answering "Yes," a text-entry question is displayed asking the respondents to identify the brand they associate with the logo to ensure that they associate the logo with the correct brand and to identify false positives.

Some respondents may recognize the name of the organization/licensing scheme without recognizing the logo. In addition, the logo often appears together or alongside the brand name "Creative Commons." To evaluate respondent recognition of the plain text "Creative Commons" mark, at the end of the logo testing block, respondents were asked to respond to a grid of brands similar to Hargittai & Hsieh's succinct Internet skills survey measure.[112] Following similar reasoning to the presentation of multiple logos, Creative Commons and three other brand names were integrated into the pre-existing scale rather than asked as a standalone question to reduce the likelihood of strategic false identification by bad-faith participants. To further obfuscate the brand of empirical interest, the Internet skills rating also included a widely recognizable extant brand (Microsoft), the

[112] *See* Hargittai & Hsieh, *supra* note **Error! Bookmark not defined.**.

same peer brand (Firefox), and a novel but plausibly technology-and-internet–related brand (Byteyield)[113] to reduce respondent scrutiny of and subsequent strategic behavior regarding the "Creative Commons" item.

1. Research Question 1.1

What percentage of respondents recognize the Creative Commons logo?

The author manually reviewed the text-entry of the 262 or 21% respondents who stated they recognized the Creative Commons logo in the main data collection of 1,222 respondents. Eighty-five respondents or about 7% correctly identified the logo represents Creative Commons, meaning that roughly two-thirds of respondents who said they recognized the Creative Commons logo were mistaken. Common misidentifications included Closed Captioning (84 or 6.9%), Comedy

[113] To generate the novel brand name, the author brainstormed a short list of plausible brand names, eliminated any brand names (or variants that might create a likelihood of confusion) used or previously used by searching on Alphabet's Google search engine and the USPTO's Trademark Electronic Search System (TESS) on March 9, 2024, and selected the best remaining candidate.

Central (43 or 3.5%), and Chanel (24 or 2%) and copyright (16 or 1.3%). These findings should be interpreted in light of the logo's presentation alone; a more externally valid presentation of logos would provide more context, given that a valid trademark consists of both a mark and an associated good or service. Ambiguity with very similar logos, i.e. the Closed Captioning mark, would be greatly reduced if used in their distinct contexts.

2. Research Question 1.2

How familiar are respondents with Creative Commons when it is presented by its brand name?

While the "CC in a circle" logo is widely used with Creative Commons-licensed work, the name of the brand itself is also often displayed along with copyright and license information. To capture respondents who are familiar with Creative Commons but do not recognize or recall the logo the third research question in this section asks respondents directly to rate their level of familiarity with Creative Commons from one to five, with five representing "Full" familiarity and 1 representing no familiarity.

| | None | Little | Some | Good | Full |
|---|---|---|---|---|---|
| Creative Commons | 59.76% | 14.16% | 12.8% | 8.48% | 4.8% |
| Byteyield | 90.4% | 6.24% | 2% | 0.96% | 0.4% |
| Microsoft | 0% | 1.36% | 8.72% | 39.20% | 50.72% |
| Mozilla | 6.96% | 11.68% | 20.80% | 31.36% | 29.20% |

About 60% of respondents reported no familiarity with Creative Commons, and only about 25% reported having "some" or more knowledge about it. Less than 5% of respondents rated having "full" knowledge of Creative Commons.

### *D. Vignette Survey Experiment*

#### 1. Control and Treatment Groups

This survey section randomly assigns users to one of three experimental conditions varying in the copyright and licensing information (that is, the independent variables of this experiment), described or shown in the vignettes: standard copyright notices (control condition), Creative Commons license information using the "license abbreviation" setting of the License Chooser tool (Treatment A), and

Creative Commons license information using the "full license name" setting of the same tool (Treatment B).[114] In addition, Treatment B is presented with a short introduction to Creative Commons as a whole as well as each of the licenses, adapted from the "About" page of the Creative Commons website.[115] By including a maximal Creative Commons

---

[114] CREATIVE COMMONS, *License Chooser*, https://chooser-beta.creativecommons.org/ (last visited Feb. 26, 2024). Although licenses were generated for the survey for each vignette on February 26th, the author had to manually re-create the license marking information as they were intended to appear by combining elements from multiple types of configuration because the License Chooser, then marked as "Beta," was producing incorrect licensing information for virtually every configuration by omitting necessary license information or providing the wrong logos for the associated license (in "license abbreviation," displaying only the "BY" logo, regardless of license choice). The author reported these errors to Creative Commons via email and X/Twitter prior to running the survey but no changes were made for over two months. It is not clear how long the Creative Commons License Chooser provided incorrect information but the organization's lack of interest in stopping users from creating license information that is confusing or incorrect does not bode well for the general public's ability to correctly use and interpret the licenses in the future.

[115] CREATIVE COMMONS, *About CC Licenses*, https://creativecommons.org/share-your-work/cclicenses/ (last accessed Mar. 1, 2024). Respondents were presented with all of the text up to "Choosing a License."

marking and providing users with basic information about Creative Commons, I hypothesized the second treatment condition should amplify the salience of the independent variable for respondents.

Generally speaking, where there is a significant difference between groups and I compare the central tendencies of each group in a pairwise analysis, I expected:

$$C > A > B$$

That is, I expected the copyright control group to be the most likely to be discovered, for the license for that work to be the most expensive, and for respondents to rank what punishments should/would be more highly. Furthermore, I expected Treatment B to have a more pronounced effect due to the educational stimulus and verbose licensing caption than Treatment A.

2. Vignettes

For each condition, the subset of users was asked to answer questions about a series of vignettes that highlight different use cases. For each vignette, users were asked about their perceptions of the legality and

potential consequences of copying and/or distributing the work in question.

Each vignette consists of a description of a re-use by the scenario re-user, some information about the re-used work, and some information about the owner. To reduce possible between-scenario variance such as gender effects, the owner's name is represented by a leading initial and a last name based on a color and referenced with non-gendered pronouns. All copyright attributions are fictitious and the subject matter of the copyrighted work is intended to be non-controversial and the context of the re-use or redistribution familiar to the general U.S. public.

Both traditional copyright and Creative Commons licenses in Treatment B are indicated by notice given in a "maximalist" form to better amplify the effect and to ensure respondents notice salient information to the research questions. Copyright condition works are marked with the copyright symbol, year, copyright holder, and the legend "All Rights Reserved"—e.g. "Artwork © 2018 by J. Brown. All Rights Reserved." Creative Commons licensing information for Treatment B is generated from the Creative Commons "Choose a License" tool and includes the license logo, work title, author, and full license name (e.g. Creative Commons Attribution–NonCommercial–NoDerivatives 4.0 International) which is hyperlinked to the associated deed.

Proposed survey questions 2.3 and 2.4 attempt to measure congruence between public sentiment and statutory punishment. Previous research suggests that the public is more likely to obey laws with punishments that align with public sentiment about the appropriate penalty.[116] More specifically for copyright law, Jessica Litman has argued that conforming intellectual property law and punishments to popular expectations will make it easier to teach to the public and make the public more likely to comply.[117]

Vignettes have been chosen to vary the condition of copyright infringement or compliance. The subject matter of the vignettes attempts to avoid ambiguous factors in copyright infringement analysis such as fair use or substantial similarity.

---

[116] *See generally* NORMAN J. FINKEL, COMMONSENSE JUSTICE: JURORS' NOTIONS OF THE LAW (2001); Janice Nadler, *Flouting the Law*, 83 TEX. L. REV. 1399 (2005); Paul H. Robinson & John M. Darley, *The Utility of Desert*, 91 NW. U. L. REV. 453 (1997).

[117] Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 44 (1996).

a. Government-created Work/Public Domain, Non-infringing Across Conditions

In this vignette, respondents are told that a national advertising agency uses the well-known NASA photograph "The Blue Marble" in a public-facing campaign. The image is presented under three conditions: with a standard copyright notice (control), with a CC0 1.0 Universal (CC0 1.0) Public Domain Dedication marking (Treatment A), and with the full license text describing CC0 and its legal implications (Treatment B). This vignette is intended to provoke a minimal response to the accompanying questions across the three groups by presenting a non-infringing use. Because an astronaut created "The Blue Marble,"[118] it is a U.S. government work and as such is not subject to copyright.[119] As a result, the use described in the vignette is not infringing. The described use does not re-produce the credit in the caption, however, which some respondents may find problematic due to widespread misconceptions

---

[118] *See* Ashley Strickland, *The 'Blue Marble': One of Earth's Most Iconic Images, 50 Years On*, CNN STYLE (Dec. 7, 2022) https://www.cnn.com/style/article/blue-marble-photo-50th-anniversary-snap-scn/index.html.

[119] 17 U.S.C. § 105.

about copyright's purpose. The use is also described as widely distributed and is intended to be interpreted as likely to be discovered.

b. Personal Use, Infringing Across Conditions

Here, a homeowner finds a high-resolution image online and prints it for personal display in their living room, without contacting the creator or attributing the work. In the control condition, the image bears a standard copyright notice. In Treatment A, the image is labeled "CC BY–NC 4.0," while in Treatment B, the license is presented with full text of the BY (Attribution) and NC (NonCommercial) terms. This vignette is designed to represent a *de minimis* infringement across all three conditions: the re-use of the work is essentially for personal enjoyment, has a limited potential audience or chance for discovery, and the re-user does not stand to monetarily benefit except by avoiding costs associated with rival goods. This use violates the Attribution clause in the treatments because it strips attribution information from the poster and Creative Commons licensing generally because it does not provide licensing information. Compared to other infringement scenarios, it should elicit responses on the lower end of the scales regarding likelihood of discovery, pursuit, severity of damages, and estimated licensing fees.

c. Educational Use, Non-Infringing (Treatments) v. Infringing (Control)

This vignette depicts a commercial print shop hired by a public school district to reproduce 200,000 copies of a Creative Commons–licensed children's math workbook. In the control condition, the workbook includes a standard copyright notice. In Treatment A, the cover bears a "CC BY-NC-SA 4.0" license designation, and in Treatment B, this same license is accompanied by full license text. This vignette mirrors the facts of the case of *Great Minds v. FedEx*,[120] where a judge held that a commercial provider working as the agent of a valid non-commercial licensee does not infringe by reproducing a Creative Commons NC-licensed work. Because the treatment conditions are non-infringing but the control condition is infringing, there should be a significant difference between conditions if respondents intuit that non-commercial licenses extend to agents of a valid licensor.

---

[120] Great Minds v. FedEx Office & Print Servs., No. 16-CV-1462(DRH)(ARL), 2017 U.S. Dist. LEXIS 26332 (E.D.N.Y. Feb. 24, 2017). *See* discussion of *Great Minds*, *supra* Part II.B.2.

d. Commercial Advertising, Infringing Across Conditions (No Attribution, Non-Commercial)

In this scenario, a bicycle shop uses an image of a bicycle—downloaded from an image-sharing site—in a Facebook advertisement promoting a spring sale. The image includes a copyright notice in the control condition, a "CC BY-NC 4.0" label in Treatment A, and the same license with full text in Treatment B. This vignette tests respondent's perception of infringement that is commercial but does not relate to the direct sale of the infringed work. This ad is infringing across all conditions. It violates the Attribution clause by omitting the copyright-holder's information and violates the Non-Commercial clause by reproducing the work for a commercial purpose, namely advertising. It violates the Creative Commons licensing scheme as a whole by failing to include licensing information.

e. Large Scale, Willful Copying, Infringing Across Conditions (No Attribution, Willful)

This vignette involves an entrepreneur who discovers a poster image online and, without seeking permission or providing credit, sells over 6,000 physical copies under a different brand name. The control condition presents the image with a copyright notice, while Treatments A and B

respectively show a "CC BY 4.0" license designation and the same license with complete text and explanatory material. This vignette represents the common copyright infringement scenario of "knocking off" another's good available on the Internet, where sale of the item itself is the commercial transaction involved. It is infringing across conditions and willful. It violates the NonCommercial and Attribution clauses and violates the Creative Commons licensing scheme as a whole by omitting licensing information.

f. Wikipedia Image Search Result, Infringing Across Conditions

A concert promoter finds a photograph of Willie Nelson on Wikipedia and uses it in online promotional materials for an upcoming event, omitting any attribution or license information. In the control condition, the image includes a standard copyright notice. Treatment A marks the image "CC BY-SA 2.0," while Treatment B pairs this license with full legal text on attribution and share-alike terms. This vignette closely models the fact pattern common to several of the Philpot cases. Notably, the control in this scenario does not follow the typical pattern of license variation and the work is intended to have the same license in all three groups. Instead, the control condition presents a facsimile of a search result on an engine such as Google that shows it appeared on Wikipedia.

As a result, the use described infringes in all cases because it removes attribution, does not reproduce licensing information, and is used commercially. In those cases, defendants located images from Wikipedia through search engine results and used them in a variety of (mostly) commercial contexts without attribution. The images were initially licensed for Creative Commons on another service, then uploaded by Wikipedians where they were then featured prominently in search results due to Wikipedia's popularity. Whether due to carelessness, ignorance, or a misunderstanding of content on the "free" encyclopedia, several defendants subsequently violated the licensing terms. One limitation of this vignette is that the licensing information is not available at the included hyperlink because the image was not taken from Wikipedia and does not appear there.

g. Filesharing, Non-Infringing (Treatments) v. Infringing (Control)

In this final vignette, a university student uploads MP3s from a music CD to a file-sharing platform, making them publicly available. In the control condition, the music is covered by a copyright notice and contains no licensing information. Treatment A embeds Creative Commons "CC BY 4.0" metadata in the MP3 files, while Treatment B includes the full license name. This vignette invokes the mass-litigation

copyright infringement lawsuits brought against members of the public during the initial boom in popularity for filesharing services such as Napster. Here, the treatment conditions are non-infringing, personal uses of a Creative Commons Attribution license with licensing information and attribution included in the album's metadata. The control condition is an infringing personal use. While filesharing services were ultimately spared from annihilation by the courts due to their substantial non-infringing uses, such as the free distribution of music for promotional purposes by independent artists, infringement historically predominated. Although this scenario is dated by its use of physical media and the reduced popularity of file-sharing, it presents one of the most-publicized examples of copyright enforcement. This scenario allows investigation of whether the generalized reputation of a medium for infringement outweighs the licensing condition in the eyes of the general public.

3. Research Questions, Survey Questions, & Analysis

The following question considers each of the research questions and their associated survey questions in turn, presenting results by scenario.

a. RQ 2.1: Likelihood of Legal Consequences

Research Question 2.1

Depending on the copyright condition, how likely are respondents to believe that the scenario re-user will be discovered and that the copyright owner will take action?

Survey Question 2.1

On a scale of 1–7, with 7 being the most likely:

In your opinion, how likely is [*the scenario re-user*] to face legal consequences for this use?

*Discussion*

Respondents were presented with a vertical seven-point Likert ordinal scale from extremely unlikely (1) to extremely likely (7).

This question seeks to measure two related elements fundamental to any lawsuit: discovery of the underlying infringement and the decision to pursue legal action. After careful consideration, I chose the intentionally indefinite language "face legal consequences" rather than asking about the risk of a lawsuit because the broad language would allow respondents to use their own definition. While lawyers, legal scholars, or sophisticated

repeat players in the legal arena with resources at-hand often focus on threats of court-sanctioned negative outcomes such as damages or an injunction, the bar for concern for laypersons may be much lower. Evaluating risk and determining a reasonable course of action after receiving a cease-and-desist letter, such as seeking legal representation or trying to learn from peers who have had similar experiences, can itself represent significant monetary cost and emotional distress for many defendants, particularly given the hyperbolic language and eye-wateringly high values for possible statutory damages.[121]

*Hypothesis*

Respondents will be significantly less likely to think violations of Creative Commons licenses will be discovered and lead to action by the copyright owner. This will be more prominent for Treatment B than Treatment A. This follows a general hypothesis that Creative Commons

---

[121] The possible occasionally becomes actual, albeit rarely against private citizens. *See* Pamela Samuelson & Tara Wheatland, *Statutory Damages in Copyright Law: A Remedy in Need of Reform.* 51 WM. & MARY L. REV. 439, 462 (2009) (discussing punitive statutory damages such as $53.4 million awarded against MP3.com in *UMG Recordings, Inc. v. MP3.com*, 92 F. Supp. 2d 349 (S.D.N.Y. 2000)).

licensing signals to members of the public that the licensor is more likely to disapprove of standard copyright punishment and therefore will be less likely to carefully police their intellectual property.

*Statistical Test*

Because several of the vignettes are intended to invoke a minimal or maximal response, resulting data is likely to be heavily skewed, thereby violating the assumption of normality relied upon by parametric tests such as the analysis of variance (ANOVA). While this weakness is mitigated by the central limit theorem given the sample size, a more pressing issue is that it is unclear whether the units of analysis between the ordinal variables derived from the 7-point Likert scale are equal. As a result, non-parametric testing is a better fit for this data. I employed the Kruskal–Wallis test, which converts raw scores into ranks to evaluate whether there is a difference in the central tendency (ranked sum mean) between groups to determine whether any group significantly

differed from the others.[122] While this analysis may be less familiar, examining the central tendency is a more general species of the same types of analyses that look to differences in means between samples for significance such as ANOVA.[123]

If the Kruskal–Wallis test indicated there was a difference between groups,[124] i.e. that the null hypothesis was rejected, I examined the effect size (partial epsilon squared statistic) to determine how much the licensing condition affected the central tendency of at least one group to

---

[122] William H. Kruskal & W. Allen Wallis, *Use of Ranks in One-Criterion Variance Analysis*, 47 J. AM. STAT. ASSOC. 583 (1952) (describing the development and advantages of the *H* test, later known as the Kruskal–Wallis test).

[123] *Id.* at 598 ("Thus, what [the Kruskal–Wallis test parameter] really tests is a tendency for observations in at least one of the populations to be larger (or smaller) than all the observations together, when paired randomly. In many cases, this is practically equivalent to the mean of at least one population differing from the others.").

[124] Visualizations of the group comparisons and the presentation of statistical results are based on the 'ggstatsplot' R package. *See* Indrajeet Patil, *Visualizations with Statistical Details: The 'ggstatsplot' Approach*, 6 J. OPEN SOURCE SOFTWARE 3167 (2021). *See* Appendix at ____.

significantly differ from the others.[125] I also analyzed the groups pairwise using Dunn's test[126] with a Holm-Bonferroni statistical significance

---

[125] *See* SALVATORE S. MANGIAFICO, *Two-Sample Mann–Whitney U Test in* SUMMARY AND ANALYSIS OF EXTENSION PROGRAM EVALUATION IN R. (2016) (recommending a small effect size range of 0.01–0.08 from 0.5, a medium effect size range of 0.08–0.26 from 0.5, and a large effect size range greater than 0.26 from 0.5 for the evaluation of partial epsilon squared, adapted from the rules of thumb proposed by JACOB COHEN, STATISTICAL POWER ANALYSIS FOR THE BEHAVIORAL SCIENCES (2d ed. 1988) for $r^2$ (small = 0.1, medium = 0.3, large = 0.5) through simulation). Cohen, for his part, saw his effect size cutoffs as a last resort when no other frame of reference was available and came to regret making the suggestion at all. *See* David C. Funder & Daniel J. Ozer, *Evaluating Effect Size in Psychological Research: Sense and Nonsense*, 2 ADVANCES IN METHODS & PRACTICES IN PSYCHOLOGICAL SCI. 156 (2019) (criticizing the psychology literature for frequently failing to interpret effect sizes or omitting them entirely) doi:10.1177/2515245919847202. Unfortunately, a review of the literature showed that research on intellectual property law employing the Kruskal–Wallis test frequently omits interpreting or reporting the effect size, leaving this analysis with no empirical frame of reference for typical effect sizes in similar research. *See, e.g.*, Michael Firth, Oliver M. Rui, & Wenfeng Wu, *The Effects of Political Connections and State Ownership on Corporate Litigation in China*, 54 J.L. & ECON. 573 (2011) (omitting effect size information for Kruskal–Wallis); Rajshree Agarwal & Michael Gort, *First-Mover Advantage and the Speed of Competitive Entry, 1887–1986*, 44 J.L. & ECON. 161 (2001)

adjustment for multiple comparisons[127] to determine which groups differed. To make sense of the values beyond whether they differ, I also report the measure of stochastic superiority, *a*, proposed by Vargha & Delaney.[128]

Stochastic superiority is essentially a different type of odds ratio: it represents the chance that a randomly selected value in the first

---

(same); George G. Djolov, *Patents, Price Controls, and Pharmaceuticals: Considerations from Political Economy*, 6 J. WORLD. INTELL. PROP. 611 (2003) (same); Shine Sean Tu, *Patenting Fast and Slow: Examiner and Applicant Use of Prior Art,* 38 CARDOZO ARTS & ENT. L.J. 391 (2020) (same); S. Sean Tu & Mark A. Lemley, *What Litigators Can Teach the Patent Office about Pharmaceutical Patents*, 99 WASH. U. L. REV. 1673 (2021) (same); Daphna Lewisohn–Zamir, Ilana Ritov, & Tehila Kogut, *Law and Identifiability*, 92 IND. L.J. 505 (2016) (same). As a result, I defer to Dr. Magniafico's adaptation of Cohen's "last resort" rules of thumb for the interpretation of effect sizes.

[126] *See, e.g.*, Alexis Dinno, *Dunn's Test*, R-PROJECT.ORG https://search.r-project.org/CRAN/refmans/dunn.test/html/dunn.test.html.

[127] *See* OFFICE OF EVALUATION SCIENCES, *Adjusting for Multiple Comparisons*, GENERAL SERVICES ADMINISTRATION (last accessed Mar. 13, 2024) https://oes.gsa.gov/assets/files/multiple-comparison-adjustment.pdf.

[128] András Vargha & Harold D. Delaney, *A Critique and Improvement of the CL Common Language Effect Size Statistics of McGraw and Wong*, 25 J. EDU. & BEHAV. STATS. 101 (2000).

distribution will be higher than a randomly selected value in the second distribution. This measure is particularly useful because its result is easy to interpret: a score of 0.5 represents equality between the first and second group compared, while a score of 0 represents complete stochastic dominance of the second term over the first and a score of 1 represents complete stochastic dominance of the first term over the second.[129]

*Scenario Analysis*

i. Summary, Likelihood of Legal Consequences

Means (Standard Deviations)

| **Scenario** | **A** | **B** | **C** |
|---|---|---|---|
| Public Domain | 2.50 (2.09) | 1.47 (1.31) | 2.95 (2.06) |
| Personal Use | 1.39 (1.11) | 1.40 (1.05) | 1.56 (1.29) |
| Educational Use | 6.07 (1.51) | 5.33 (1.98) | 5.62 (1.76) |
| Commercial Advertising | 3.27 (1.87) | 4.09 (1.92) | 3.25 (1.95) |
| Large-Scale Copying | 5.71 (1.62) | 6.11 (1.45) | 5.87 (1.36) |
| Wikipedia Image Search | 4.48 (2.01) | 4.92 (1.93) | 3.94 (2.06) |
| Filesharing | 4.19 (2.19) | 3.35 (2.24) | 4.71 (1.98) |

*Infringing conditions underlined*

[129] *Id.* at 104.

Vargha & Delaney's $A$[130]

| **Scenario** | **A–B** | **A–C** | **B–C** |
|---|---|---|---|
| Public Domain | 0.61*** | 0.42*** | 0.25*** |
| Personal Use | N/S | N/S | N/S |
| Educational Use | 0.62*** | 0.58*** | N/S |
| Commercial Advertising | 0.36*** | N/S | 0.59*** |
| Large-Scale Copying | 0.40*** | N/S | 0.55*** |
| Wikipedia Image Search | 0.42*** | 0.57*** | 0.60*** |
| Filesharing | 0.58*** | 0.43*** | 0.31*** |

*** $p < 0.001$

The overall scores for the likelihood of legal consequences broadly align with expectations: scenarios where the work's re-use has limited distribution such as the personal use scenario are rated on the low end of the likelihood scale, while the scenarios with greater exposure, such as the large-scale copying scenario, rate highly.

The greatest difference between conditions is not a Creative Commons scenario but the public domain scenario: knowledge that U.S. Government work is free of copyright seems to be low but when

[130] Moderate effects underlined; large effects double-underlined.

respondents have that information explicitly supplied, they are able to apply it.

Overall, the Creative Commons licenses led respondents to believe that legal consequences were more likely in every infringing-across-conditions case except Personal Use for the full-text and education condition (Treatment B) but only for the Wikipedia Image Search scenario for Treatment A. Surprisingly, Treatment B1 (education and full-text) had no statistically distinct effect over the control on the Educational Use scenario while Treatment A (abbreviation without training) made respondents think legal consequences were more likely. While both treatments reduced respondents' estimate of the likelihood of legal consequences in the filesharing scenario, in line with the licenses rendering the re-use non-infringing, Treatment B had a greater effect.

ii. Public Domain Scenario

The Public Domain scenario presented a widespread commercial re-use of a work created by the U.S. government. Because U.S. government work cannot be copyrighted, this scenario was intended to invoke a minimal response. Instead of a copyright control with Creative Commons treatments, this scenario captioned the control "U.S. Government Work" and provided two public domain markings—the second explicitly stated that the work was free from copyright. The mean scores are *prima facie*

evidence that respondents thought that use of the control was most likely to lead to legal consequences (2.95, s.d. 2.06), followed by treatment A (2.50, s.d. 2.09), then B (1.47, s.d. 1.31). These results demonstrate that the American public generally understands that U.S. government work is free from copyright infringement and as a result the likelihood of legal consequences is very small. Respondents who are told that a work is in the public domain think those consequences are even less likely, while respondents understand the likelihood of legal consequences is lowest when an explicit statement that the work is free from copyright restrictions is included.

iii. Personal Use Scenario

The Personal Use scenario of a homeowner hanging up a poster without providing attribution is intended to invoke a *de minimis* response: there is infringement, but it is limited in scope, monetary value, and exposure to the public. At the same time, it also isolates the value of attribution.

Here, there is no statistically significant difference between groups. The means of the control (1.56, s.d. 1.28), treatment A (1.39, s.d. 1.11), and treatment B (1.40, s.d. 1.28) are all very low, lower than in the Public Domain scenario.

While it may seem odd on first impression that an infringing scenario would score lower on the likelihood of legal consequences question than a non-infringing scenario, this variance is likely explained by a combination of misunderstandings in the Public Domain scenario (i.e. that the photo does have a copyright), the greater exposure of the work to the public in that scenario, and the ability of the U.S. government to bring suit.

iv. Educational Use Scenario

The Educational Use scenario presents a children's book that is reprinted by a commercial publishing company at the direction of school systems and resold only to school systems in the control condition, Treatment A, and Treatment B1. (Treatment B1 is a smaller sample that replaces Treatment B in the Educational Use scenario due to an error that led to respondents receiving an earlier version of the scenario that materially differed from the other conditions). The two Treatments are non-infringing and the copyright control condition is infringing. Here, the means are above the midpoint, with Treatment A highest at 6.07 (s.d. 1.51), followed by the control (5.62, s.d. 1.76), and then Treatment B (5.33, s.d. 1.98). Treatment A receives a significantly higher score in the likelihood of legal consequences estimation than the control, even though the Treatments are not infringing. Treatment B has the lowest mean, although it is not distinguishable from the control, suggesting that a larger percentage of respondents realized the use was not infringing with the full-text license terms and short education.

v. Commercial Advertising Scenario

The Commercial Advertising scenario presented respondents with a business owner using a photo without attribution for commercial purposes on social media, violating the associated CC BY–NC license and

committing copyright infringement across conditions. The scenario mentioned the number of ad impressions but did not mention monetary benefit. Here, the commercial use is indirect, with the bike shop owner standing to gain from the use of the image to attract customers rather than through the sale of the work itself. The mean scores suggest the results of the control (3.25, s.d. 1.95) and Treatment A (3.27, s.d. 1.87) were very similar, while respondents in Treatment B (4.09, s.d. 1.92) thought the bike shop owner was more likely to face legal consequences.

In this scenario, the full text Creative Commons licensing along with the brief educational materials make respondents more likely to believe that the infringer would face consequences for this use than a standard copyright notice. At least in circumstances where the general public has had some instruction on Creative Commons and the terms are clearly written, Creative Commons licensing appears to signal a greater willingness on the part of the licensor to police the use of photographs violating the non-commercial clause than a standard copyright notice. Without education and with the abbreviated licensing information, however, there is no effect.

vi. Large Scale Copying Scenario

The large-scale copying scenario described an entrepreneur copying a work for commercial sale, licensed under an attribution and non-

commercial clauses, and profiting from the taking after selling the photo as a poster. Respondents thought the entrepreneur was more likely to have legal consequences taken against them than in the previous scenarios, although the means appear closely clustered around the 6-point on the scale (Treatment A: 5.71, Treatment B: 6.11, Control: 5.87). This scenario does not conform with my general hypothesis that members of the public believe the owners of Creative-Commons–licensed work are less likely to enforce their rights. Instead, it appears that Creative Commons makes respondents believe, on average, that an owner of Creative Commons work is slightly *more* likely to take action.

vii. Wikipedia Image Search Result Scenario

For the Wikipedia Image Search Result scenario, the treatments show a Creative Commons Attribution–Non-Commercial license while the control only shows that the image came from Wikipedia, mirroring cases involving a prominent plaintiff. The means show roughly a point of difference between the control (3.94, s.d. 2.06) and B treatment (4.92, s.d. 1.93), with the A treatment (4.48, s.d. 2.01) roughly between them. Again, the Creative Commons licenses appear to make respondents think licensors will be slightly more likely to pursue legal consequences against those in breach, although the control in this scenario is not traditional copyright but Wikipedia, an organization whose tagline "The Free

Encyclopedia" may lead members of the public to believe its materials can be used without restriction.

viii. Filesharing Scenario

The final scenario, filesharing, presented a contrast between non-infringing uses of Creative Commons licenses with an infringing copyright control condition. This scenario provides insight into the public's perception of filesharing long past its media heyday. The means show that respondents believe the copyright condition (4.71, s.d. 1.98) has the greatest likelihood of legal consequences, followed by treatment A (4.19, s.d. 2.19) and treatment B (3.35, s.d. 2.24). While respondents in the treatment groups thought the re-user would be less likely to face legal consequences than the control condition, the difference is not as great as one might expect given that the re-use in the treatments is within the licensing terms. The wide base of B's violin plot suggests that a substantial number of users realized that legal consequences would be unlikely because there was no infringement.

b. RQ 2.2: Legal Consequences, Current Law

Research Question 2.2

By condition, if respondents assume that the re-use is detected and the owner brings suit, what legal consequences do respondents think the re-user would face, given the current law?

*Discussion*

Previous scholars have noted that Creative Commons licensors may be more or less likely to sue for a violation of their license: on the side of lenience, "creators who actively seek out the more permissive Creative Commons license for their work may be more sympathetic to users and less likely to sue for infringement," and on the side of enforcement, specific requests not to alter or sell commercially might be more vigilantly enforced.[131] Elkin–Koren believed it was a fair assumption that Creative Commons licensors would not have chosen to sue infringers using work for non-commercial purposes.[132]

Survey Question 2.2

On a scale from 1–7, with 7 being the most negative:

---

[131] *See* Rothman, *Copyright's Private Ordering*, *supra* note 209 at 1627.

[132] Elkin–Koren, *supra* note 200 at 415.

In your opinion, if [the re-user] was sued for these actions, what legal consequences do you think they **would** face?

*Discussion*

Respondents were presented with a vertical 7-point Likert scale with 1 labeled "No consequences," 4 labeled "Some negative consequences, such a court order to stop and/or a moderate fine," and 7 labeled "Very negative consequences, such as incarceration and/or a large fine." Items 2, 3, 5, and 6 are not labeled.

A fundamental challenge of operationalizing a concept as complex as copyright damages into the constraints of survey research and measured with the paltry bandwidth of a zero-based linear scale is the necessity to compromise. Respondents must recall their past experience with copyright infringement and evaluate their knowledge of the law as it would be in Survey Question 2.2, and then reflect in Survey Question 2.3, perhaps for the first time, on what they think the punishment should be. The survey response must compress the qualitative idiosyncratic richness of that process into less than 3 bits per question.[133]

---

[133] Three bits can represent up to 8 different positions (0–7).

If only monetary damages were available, the goodness of fit for the operationalized linear model of copyright damages would no doubt improve. Damages can reflect many elements, including several determined after trial, not present in the vignettes by necessity of their brevity.[134] Legal consequences might also include non-monetary sanctions such as an injunction or incarceration. Re-users in some scenarios might also be multiply liable for causes of action beyond simple copyright infringement, such as multiple counts based on several reservations or on contributory copyright infringement. Furthermore, the possible award of attorney's fees introduces another source of potent variability given the wide-ranging expense of legal representation and the vagaries of litigation such as aggressive motion practice or large volumes of discovery, disputes, and depositions. Members of the general

---

[134] *See, e.g.*, Bryant v. Media Right Productions, Inc., 603 F.3d 135 (2d. Cir. 2010) ("When determining the amount of damages to award for copyright infringement, courts consider: (1) the infringer's state of mind; (2) the expenses saved, and profits earned, by the infringer; (3) the revenue lost by the copyright holder; (4) the deterrent effect on the infringer and third parties; (5) the infringer's cooperation in providing evidence concerning the value of the infringing material; and (6) the conduct and attitude of the parties.").

public are unlikely to parse or be aware of these subtleties, however, and the utility of more exact information about how members of the public felt about specific outcomes such as injunctions is likely to be limited.

To simplify the complexity of the issue presented to respondents, the scale describes the minimum, midpoint, and maximum, relying on respondent's subjective determination of where the scenario re-users' actions fall on that scale between those points. Those three points provide some frame of reference for respondents to reason around while reducing the complexity of the question. Although the unevenness of the scale points requires the adoption of non-parametric analysis, it ultimately allows for the comparison of damages in a succinct way that fits the constraints of time and cognitive load inherent in the survey experiment format.

*Hypothesis*

Respondents will think re-users violating a Creative Commons license face less severe consequences under the current law than re-users infringing on a typical copyright notice. This will be more pronounced for Treatment Group B than Treatment Group A.

*Scenario Analysis*

i. Summary, Estimate of Legal Consequences–Current Law

Mean (Standard Deviation)

| **Scenario** | **A** | **B** | **C** |
|---|---|---|---|
| Public Domain | 2.37 (1.78) | 1.40 (1.00) | 2.78 (1.70) |
| Personal Use | 1.73 (1.08) | 1.61 (1.04) | 2.00 (1.25) |
| Educational Use | 5.21 (1.39) | 4.31 (1.36) | 4.91 (1.58) |
| Commercial Advertising | 3.08 (1.48) | 3.46 (1.46) | 3.15 (1.39) |
| Large-Scale Copying | 5.08 (1.37) | 5.37 (1.30) | 5.21 (1.25) |
| Wikipedia Image Search | 3.88 (1.55) | 4.11 (1.54) | 3.56 (1.61) |
| Filesharing | 3.96 (1.73) | 3.08 (1.85) | 4.51 (1.49) |

*Infringing conditions underlined*

Vargha & Delaney's $A$[135]

| **Scenario** | **A–B** | **A–C** | **B–C** |
|---|---|---|---|
| Public Domain | 0.62*** | 0.42*** | 0.24*** |
| Personal Use | N/S | 0.44*** | 0.39*** |
| Educational Use | 0.69*** | 0.55* | 0.36*** |
| Commercial Advertising | 0.40*** | N/S | 0.54*** |
| Large-Scale Copying | 0.42*** | N/S | 0.52 |
| Wikipedia Image Search | 0.43*** | 0.56*** | 0.57*** |
| Filesharing | 0.60*** | 0.42*** | 0.27*** |

*** $p < 0.001$ * $p < 0.05$

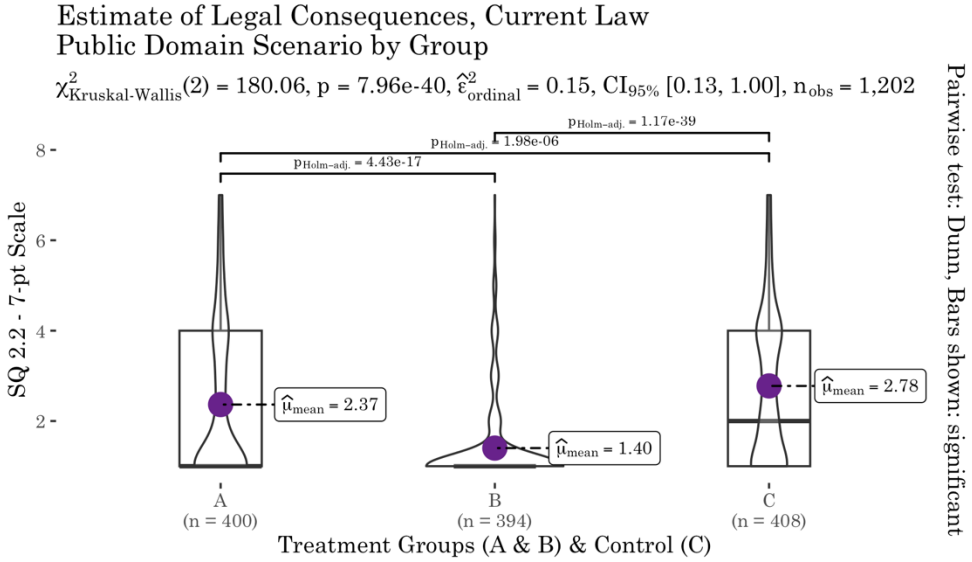
[135] Moderate effects underlined; large effects double-underlined.

For respondents' estimate of the legal consequences under the current law for the non-infringing Public Domain scenario, both treatments again led a larger number of respondents to realize that the re-use of U.S. Government work is non-infringing with a greater effect from the education and full-text treatment.

The greatest difference between the impact of the two treatments came in situations where the control infringed but the treatments did not. In those cases, the full-text and education treatment moderately outperformed the abbreviated licensing condition—Treatment A made respondents think that the current law would treat non-infringing behavior *more* severely than the infringing control.

Similarly, Treatment B made respondents think that consequences were slightly more likely than the control in the Commercial Advertising and Large-Scale Copying scenarios, while there was no difference between Treatment A and the control. Finally, while Treatment A and Treatment B reduced respondent expectations for legal consequences over the control where they did not infringe but the control did, Treatment B had a significantly larger impact.

ii. Public Domain Scenario




Pairwise Effect Sizes (Vargha & Delaney 2000): A–B, a = 0.62* A–C, a = 0.42* B–C, a = 0.24* *p < 0.001

The Public Domain scenario describes widespread re-use of a U.S. government work, namely a photo of the Earth by astronauts called "the Blue Marble." The control condition captions the photo as a U.S. Government work while the treatments provide a concise and verbose explanation of the work's status in the public domain. As in the likelihood scale, the means show that the most explicit explanation of the work's copyright status produces the lowest estimate of legal consequences (Treatment B: 1.40, s.d. 1.00), followed by the concise treatment (A: 2.37, s.d. 1.78), with the largest estimate for the control (2.78, s.d. 1.70). In particular, Treatment B's violin plot with a wide base

at the bottom of the scale and few selections above it make clear that respondents recognized re-using the public domain work, even for commercial purposes, is not infringement.

iii. Personal Use Scenario

The Private Use scenario, intended to represent a *de minimis* infringement, presents a homeowner printing an image found on the internet and hanging it in his home. Here, the means are closely grouped with the control showing the highest mean estimate (2.00, s.d. 1.25), followed by Treatment A (1.73, 1.08) and then Treatment B (1.61, s.d. 1.04). Here, choosing the full text licensing or the abbreviation likely makes no difference or a difference so small the survey did not have the power to detect it. Following the general hypothesis, respondents thought that infringement of Creative-Commons–licensed work would result in slightly less severe legal consequences than a work with a standard copyright notice.

iv. Educational Use Scenario

The educational use scenario presents an author of a children's book who licenses her work under a Creative Commons Attribution–NonCommercial–ShareAlike license whose work is copied on a large scale by a commercial publisher at the direction of several school systems and sold to schools exclusively. This is infringing in the control and non-

infringing in the Treatments. All of the mean estimates of consequences of this re-use fall just beyond the midpoint of the scale of estimates of legal consequences under the current law, starting with Treatment A (5.21, s.d. 1.39), then the copyright control (4.91, s.d. 1.58), followed by Treatment B (4.31, s.d. 1.36).

Despite the fact that the copyright condition is infringing and the Treatments are not, the control's estimate of legal consequences under the current law falls between the Treatments. Some factors for the close spread of these scores could be that that respondents' have a broad (and incorrect) view of fair use that would excuse the wholescale and complete copying of a copyrighted work if it was done on the behalf of an educational institution or respondents did not understand the agency extension of the license or their terms and did not realize the licensed work was non-infringing.

v. Commercial Advertising Scenario

In the Commercial Advertising scenario, the re-user finds the work through an image search and then uploads it for use in an advertisement on Meta's Facebook platform. The means of this group were much higher than the previous scenario and closely clustered. In descending order, the groups ranked from Treatment B (3.46, s.d. 1.46) to the control (3.15, s.d. 1.39) to Treatment A (3.08, s.d. 1.48). For commercial advertising,

respondents think that Creative-Commons–licensed work will have a slightly higher degree of punishment, but only where the full-text licensing caption has been used. This scenario shows that choosing the presentation of licensing can have a small, but statistically significant, effect on how the public views the consequences of infringement.

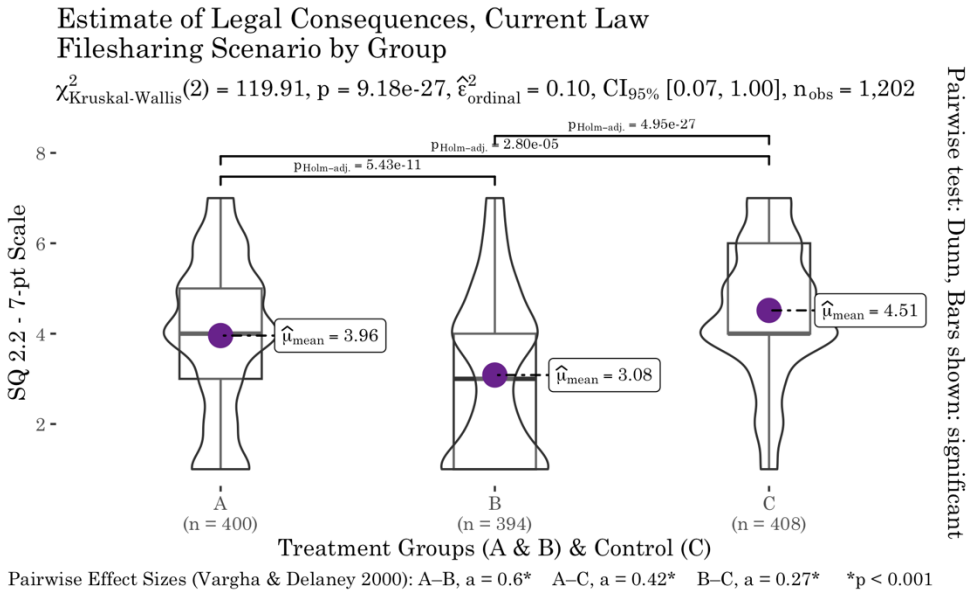
vi. Large Scale Copying Scenario

The Large-Scale Copying scenario presented an entrepreneur who knowingly copied a work available for commercial sale, available under Creative Commons Attribution-NonCommercial licenses in the control. The mean scale ratings for this scenario (A = 5.08, s.d. 1.37, B = 5.37, s.d. 1.30, C = 5.21, s.d. 1.25) increased from the commercial advertising scenario, in line with this scenario's intent to test the public's reaction to willful, large-scale copying. Contrary to my general hypothesis, Treatment B slightly increases the amount of punishment respondents expect the current law to apply; while the mean of Treatment A is below the control, the difference is not great enough to establish that the population's estimate of the two groups differ. These results should be reassuring to artists and other creators who have made their work available under a Creative Commons license with the non-commercial clause.

vii. Wikipedia Image Search Scenario

The Wikipedia Image Search scenario presented a concert promoter using an image of Willie Nelson from Wikipedia found through an image search. The means are tightly grouped (Treatment A = 3.88, s.d. 1.55, Treatment B = 4.11, s.d. 1.54, control = 3.56, s.d. 1.61) and clustered around and slightly beneath the middle of the legal consequences estimation scale. This scenario extends the general trend, except both treatments are distinct from the control group where only a link to the Wikipedia image is available. In sum, respondents think that there should be slightly greater consequences when the work is directly associated with Creative Commons' licenses, with a slightly more pronounced effect in Treatment B. As previously discussed, this finding may partially reflect some misunderstandings about what Wikipedia's tagline, "The Free Encyclopedia," entails.

viii. Filesharing Scenario




Pairwise Effect Sizes (Vargha & Delaney 2000): A–B, a = 0.6* A–C, a = 0.42* B–C, a = 0.27* *p < 0.001

In this scenario, a student uploads music to a filesharing service with metadata about either a Creative Commons license or standard copyright. The treatment conditions are not infringing because they abide by the license terms; the control copyright condition is infringing. Consistent with expectations, on average respondents scored the infringing control scenario with a higher estimate of legal consequences than the treatments (4.51, s.d. 1.49), while the estimate for Treatment A (3.96, s.d. 1.73) is higher than Treatment B (3.08, s.d. 1.85).

Considering the control represents infringement and the treatments represent a valid use of the license, the difference in means is not as high as might be expected. The large base for Treatment B on the violin-plot shows that education and full-text licensing leads a larger portion of

respondents to correctly ascertain that there would be no consequences associated with the current law. In short, if licensors want potential re-users to understand how the license can be used, the full-text explanation with education appears to have a slight advantage over the abbreviated licensing information.

c. RQ 2.3: Estimate of Legal Consequences, Personal Preference & Delta of Current Law–Personal Preference

**Research Question 2.3A**

By condition, if respondents assume that the re-use is detected and the owner brings suit, what legal consequences do respondents personally think the re-user should face?

Survey Question 2.3

On a scale from 1–7, with 7 being the most negative:

In your opinion, what legal consequences **should** the homeowner face for these actions, if sued?

*Discussion*:

The core motivation of the creation of Creative Commons is a belief that traditional copyright does not allow sufficient flexibility in the creation of new works from the materials of the old. This question tests whether the public also believes current copyright restrictions are too onerous by comparing its results to the previous survey question. Other research into copyright licensing has also explored the difference between what respondents "thought the reality *was* for each licensing term as well as what they thought it *should* be."[136]

*Hypothesis*

Respondents will think re-users violating a Creative Commons license should face less severe consequences than re-users infringing on a typical copyright notice. This will be more pronounced for Treatment Group B than Treatment Group A.

---

[136] Casey Fiesler, Cliff Lampe, & Amy S. Bruckman. *Reality and Perception of Copyright Terms of Service for Online Content Creation*. Presented at CSCW, Feb. 27–Mar.2, San Francisco, CA (2016) https://dl.acm.org/doi/pdf/10.1145/2818048.2819931.

*Statistical Test*

This question closely mirrors Survey Question 2.2. As a result, I selected the non-parametric Kruskal–Wallis test, used to compare the central tendency (the mean of the rank-order transformed values) in two or more independent samples, to evaluate whether there was a significant difference between the three subgroups.

If the Kruskal–Wallis test indicated there was a difference between groups, i.e. that the null hypothesis was rejected, I examined the effect size to determine how much the licensing condition affected the central tendency of each group. I also analyzed the groups pairwise using Dunn's test with a Holm–Bonferroni error correction for multiple comparisons to determine which groups differed and reported the effect sizes with Vargha & Delaney's *a*.

Analysis of Research Question 2.3A is combined with Research Question 2.3B, below.

**Research Question 2.3B**

By condition, does the delta between what respondents think the law is and what the law should be significantly differ?

*Discussion*

By asking about what respondents believe the law to be and what the law should be, the study evaluates how closely respondents' personal beliefs align with the current law.

*Hypothesis*

Respondents will find the greatest discrepancy between what the consequences for infringement should be with current copyright law, followed by Treatment A, then Treatment B.

$$\Delta C > \Delta A > \Delta B$$

*Statistical Test*

Delta scores are calculated by subtracting respondent's personal preference about copyright policy from respondent's evaluation of current copyright policy. Positive deltas indicate that respondent's evaluation of current law is that it is too harsh; negative deltas indicate respondent's think the current law is too lenient.

This question's score is derived from Survey Questions 2.2 and 2.3. As a result, I selected the same non-parametric the Kruskal–Wallis test, used to compare the central tendency (the mean of the rank-order

transformed values) in two or more independent samples, to evaluate whether there was a significant difference between the three subgroups.

If the Kruskal–Wallis test indicated there was a difference between groups, i.e. that the null hypothesis was rejected, I examined the effect size to determine how much the licensing condition affected the central tendency of each group. I also analyzed the groups pairwise using Dunn's test with a Holm–Bonferroni error correction for multiple comparisons to determine which groups differed and evaluated the difference using Vargha & Delaney's *a* measure of effect size.

Because Research Questions 2.3A and 2.3B are closely related, I analyze them together in the next section.

*Scenario Analysis*

i. Summary, Estimate of Legal Consequences — Respondent Preference

| **Scenario** | **A** | **B** | **C** |
|---|---|---|---|
| Public Domain | 2.21 (1.70) | 1.38 (1.02) | 2.60 (1.67) |
| Personal Use | 1.53 (1.00) | 1.46 (0.95) | 1.83 (1.21) |
| Educational Use | 5.50 (1.36) | 4.52 (1.60) | 5.04 (1.61) |
| Commercial Advertising | 3.05 (1.46) | 3.33 (1.47) | 3.03 (1.49) |
| Large-Scale Copying | 5.25 (1.38) | 5.43 (1.30) | 5.38 (1.26) |
| Wikipedia Image Search | 3.73 (1.63) | 4.00 (1.59) | 3.34 (1.67) |
| Filesharing | 4.09 (2.02) | 2.88 (1.84) | 4.15 (1.58) |

Vargha & Delaney's *A*

| **Scenario** | **A–B** | **A–C** | **B–C** |
|---|---|---|---|
| Public Domain | 0.61*** | 0.42*** | 0.26*** |
| Personal Use | N/S | 0.44*** | 0.40*** |
| Educational Use | 0.69*** | 0.58*** | 0.39*** |
| Commercial Advertising | 0.42*** | N/S | 0.53*** |
| Large-Scale Copying | N/S | N/S | N/S |
| Wikipedia Image Search | 0.43* | 0.57*** | 0.58*** |
| Filesharing | 0.64*** | N/S | 0.29*** |

*** $p < 0.001$ * $p < 0.05$

At the higher end of the punishment scale for the Large-Scale Copying scenario, licensing condition made little difference in respondents' self-reported preference for legal consequences for infringement. Notably, the full-text and education treatment had a significant impact on respondents' preferred consequences for non-infringing behavior but there was no difference between the abbreviated license term condition and the control.

ii. Delta of Current Law—Respondent Preference Estimates Analysis

Mean (Standard Deviation)

| **Scenario** | **A** | **B** | **C** |
|---|---|---|---|
| Public Domain | 0 | 0 | 0 |
| Personal Use | -0.34 (0.86) | -0.21 (1.1) | -0.43 (1.10) |
| Educational Use | -0.29 (0.78) | -0.21 (1.20) | -0.13 (0.81) |
| Commercial Advertising | 0.04 (0.88) | 0.13 (0.74) | 0.11 (0.78) |
| Large-Scale Copying | -0.18 (0.72) | 0 | -0.18 (0.68) |
| Wikipedia Image Search | 0.14 (0.83) | 0.11 (0.82) | 0.22 (0.95) |
| Filesharing | -0.13 (1.33) | 0.21 (0.91) | 0.37 (1.18) |

*Infringing conditions underlined*

Vargha & Delaney's $A$[137]

| **Scenario** | **A–B** | **A–C** | **B–C** |
|---|---|---|---|
| Public Domain | N/S | N/S | N/S |
| Personal Use | N/S | N/S | 0.54*** |
| Educational Use | N/S | 0.45*** | N/S |
| Commercial Advertising | N/S | N/S | N/S |
| Large-Scale Copying | N/S | N/S | N/S |
| Wikipedia Image Search | N/S | N/S | N/S |
| Filesharing | 0.35*** | 0.21*** | N/S |

Licensing condition made little difference in respondents' preference for legal consequences. Surprisingly, however, respondents thought that consequences should be greater than the law currently allowed for Personal Use across conditions and had a similar preference for more consequences for Large-Scale Copying and the Educational Use scenarios. Respondents indicated that they thought the consequences for re-use in commercial advertising should be slightly lower in both the Commercial Advertising and Wikipedia Image Search scenarios, while respondents thought that infringing filesharing should have the greatest reduction in legal consequences across conditions.

[137] Underlined figures represent a moderate effect size.

iii. Public Domain Scenario

The Public Domain scenario, intended to invoke a minimal response, described a widespread re-use of a U.S. government work, a photo taken by an astronaut, that is not subject to copyright. The control simply states it is a U.S. Government work; Treatment A includes a public domain marker; and Treatment B specified that the work was public domain and not subject to copyright restrictions. Accordingly, Treatment B has the lowest mean at 1.38 (s.d. 1.02) with a wide base showing a large percentage of respondents selected "No consequences," followed by Treatment A (2.21, s.d. 1.70), then the control (2.60, s.d. 1.67). Explaining that a work is free from copyright restrictions leads respondents to estimate lesser punishment compared to only labeling a photo with U.S. Government Work.

Comparing the delta between respondents' estimates of the current law (SQ 2.2) versus their own preferences (SQ 2.3) reveals no difference between groups, however. The raw means are all positive and close to zero: Treatment A, 0.15 (s.d. 0.68); Treatment B 0.02 (s.d. 0.48), and control, 0.18 (s.d. 0.93). While the difference is small for Treatment A and the control, respondents on average thought that the punishment for

infringement should be slightly reduced—in practice, there are already no consequences, however.[138]

iv. Personal Use Scenario

While the Public Domain scenario presents a widespread re-use of a work without copyright protection, the Personal Use scenario presents a *de minimis* infringement: a homeowner reprinting an image for display in his own home. This scenario produced even smaller means, with the full-text Treatment B at 1.46 (s.d. 0.95), followed by Treatment A at 1.53 (s.d. 1.00) and the control at 1.83 (s.d. 1.21).

Here, following the general hypothesis that users would see the infringement of Creative-Commons–licensed work as deserving of less punishment, respondents see the infringement of the standard copyright condition to be deserving of slightly more punishment than the Treatments.

---

[138] One respondent provided an interesting perspective in the survey feedback, showing sympathy for government workers whose work could be freely copied: "When my father worked for HUD, he found his work published by others all the time. That's the breaks - it is government, not copyrighted, material. Other people can sell it, without attribution. It may be despicable, but it is not illegal."

Across conditions, respondents indicated on average that they thought there should be slightly less severe consequences for infringement than the current law allows, with the greatest difference for the control (-0.43, s.d. 1.10), followed by the abbreviated Treatment (-0.34, s.d. 0.86), and with the smallest reduction in the full-text and education Treatment (-0.21, s.d. 1.1).

In sum, respondents on average believed that the penalty for infringement should be slightly lessened across the board, although Treatment B's desired reduction is significantly less than the control. While this result may seem surprising at first, it is worth noting the extreme skew of the underlying distributions. Although Treatment B has the smallest desired change in decreased punishment, Treatment B also had the lowest means in both constituent questions.

v. Educational Use Scenario

The Educational Use scenario presented respondents with the re-use of a children's book through large-scale copying by a for-profit company through agency. Following the *Great Minds* case, this re-use infringes in the copyright control condition and does not infringe in the Treatments. Despite the difference in infringement status, respondents rated all three

groups above the midpoint of the scale when indicating their own preferences for legal punishment.

Here, the selection of how the Creative Commons license is presented to respondents makes a material difference: respondents in Treatment A thought that the re-use should face greater legal consequences than the respondents presented with infringement, while respondents in Treatment B registered a desire for less severe punishment than those in the control.

The mean deltas between what respondents think the law is and what the law should be are all negative and below one-third of a scale-unit (Treatment A: -0.29; Treatment B: -0.21; Control: -0.13). Respondents believe the punishment for the re-use in this scenario should be slightly increased over the current law.

vi. Commercial Advertising Scenario

The Commercial Advertising Scenario featured a small business owner finding a photo through an image search and uploading it to Facebook as an advertisement. The means are closely grouped, with the preferred highest level of punishment for Treatment B (3.33, s.d. 1.47), followed by Treatment A (3.05, s.d. 1.46) and the control (3.03, s.d. 1.49).

For respondents' view of what the law should be, the abbreviated treatment makes no difference over the standard copyright notice, but

the full-text treatment with education slightly increases respondents' estimate of how severe the legal consequences should be.

Comparing what respondents thought the current law is and what it should be, respondents consistently thought that punishment should be slightly less severe than the current law. Respondents on average think that the use of material for commercial advertising on social media, regardless of its licensing condition, should entail slightly lower punishment than they believe the current law provides.

vii. Large Scale Copying Scenario

In an interesting change from the trend so far, there is no difference between licensing conditions when respondents considered their preferred punishment for willful, large-scale infringement for profit. Either with a standard copyright listing or with Creative Commons license term abbreviations, respondents believe the punishment should be slightly increased over their understanding of the current law.

viii. Wikipedia Image Search Scenario

The Wikipedia Image Search Scenario presented respondents with a concert promoter who finds an image of Willie Nelson and used it for assorted commercial advertising. Unlike the typical control condition of a copyright notice, this scenario provided information that the image was

found on Wikipedia and linked to the Wikipedia page for Willie Nelson. The means start at the midpoint of the scale of preferred legal consequences for Treatment B (4.00, s.d. 1.59), dip slightly for Treatment A (3.73, s.d. 1.63), and fall slightly more for the control (3.34, s.d. 1.67). Regardless of condition, respondents believe the consequences for this use should be slightly less severe than their understanding of the current law.

As with respondents' understanding of the current law, the full-text licensing condition with the Creative Commons primer makes a notable difference, with a moderate decrease in preferred legal consequences from the control and a lesser decrease to Treatment A. The abbreviated licensing condition without education, on the other hand, is indistinguishable from the copyright control, despite the fact that Treatment A is non-infringing and the control infringes. Comparing the broad base of Treatment B to Treatment A in the violin plots, it is clear that a much larger portion of Treatment B respondents recognized that the re-use was permitted by the license.

In the control condition and Treatment B, respondents believe that the law should be slightly more lenient than it currently is. Curiously, for Treatment A, respondents believe that treatment should be *more* severe than current law provides.

ix. Filesharing Scenario

In this scenario, a student uploads music to a filesharing service with metadata about either a Creative Commons license or standard copyright. The treatment conditions are not infringing because they abide by the license terms; the control copyright condition is infringing. Consistent with expectations, on average respondents scored the infringing control scenario with a higher estimate of legal consequences than the treatments (4.51, s.d. 1.49), while the estimate for Treatment A (3.96, s.d. 1.73) is higher than Treatment B (3.08, s.d. 1.85).

Considering the control represents infringement and the treatments represent a valid use of the license, the difference in means is not as high as might be expected. The large base for Treatment B on the violin-plot shows that education and full-text licensing leads a larger portion of respondents to correctly ascertain that there would be no consequences associated with the current law. In short, if licensors want potential re-users to understand how the license can be used, the full-text explanation with education appears to have a slight advantage over the abbreviated licensing information.

## III. Applying Empirical Insight to Creative Commons Cases

As the license began to proliferate, it began to appear in cases in the federal docket. This section discusses the development of case-law on Creative Commons in American courts.

### *A. Limits and Ancillary Risks of Creative Commons Licensing*

Creative Commons addresses the bilateral rights between licensor and licensee but the rights of third parties can be significant. Unsophisticated users may be unaware that due diligence to assure other rights have not been implicated is advisable in many situations. Alternatively, coextensive or overlapping rights can impose limits beyond the terms of the Creative Commons license.

Photographs originally uploaded to Flickr, a photo-sharing service founded in 2004 that allows users to select Creative Commons-license variants,[139] are a common source of public access to Creative Commons-

---

[139] matt, *Interview with Flickr*, CREATIVE COMMONS BLOG, (Oct. 1, 2005) https://creativecommons.org/2005/10/01/flickr/. As of 2018, Flickr held the most Creative Commons-licensed work of any platform at 415.1 million images, almost ten

licensed images—as well as potential infringement. Copyright is not the only right that can be infringed, however. In *Chang v. Virgin Mobile USA, LLC*, parents sued on behalf of their minor child featured in an advertisement by Virgin Australia (and displayed only in the Australian market) based on a photograph taken by the child's church counselor and uploaded by the counselor to Flickr under a Creative Commons Attribution (CC BY) 2.0 license.[140] The case was ultimately dismissed due to a lack of personal jurisdiction over the Australian corporation;[141] the court reached no substantive issues. This case is notable, however, because it demonstrates that creators using Creative Commons may not understand what rights they have offered up under the license or the consequences of that use by others, particularly where their photograph may implicate privacy or publicity rights not directly addressed by the license.

---

times as much as the second and third most-licensed platforms, YouTube and Wikipedia. *See State of the Commons 2017*, CREATIVECOMMONS.ORG, https://stateof.creativecommons.org/ (last accessed Mar. 13, 2024).

[140] Chang v. Virgin Mobile USA, LLC, No. 3:07-CV-1767-D, 2009 U.S. Dist. LEXIS 3051 at *1–2 (N.D. Tex. Jan. 16, 2009).

[141] *Id.* at *26–27.

Writing before the decision, Christa Pletcher focused on a significant issue with Creative Commons licensing raised by *Chang*: Members of the public may not understand that Creative Commons grants a license to the work's *copyright*, but that does not necessarily mean the image or other work may be freely used based solely on that license.[142] In *Chang*, the minor child's mother asserted a violation of publicity rights on behalf of the child through an invasion of privacy tort.[143] Based on theories of privacy and personhood, publicity rights prohibit the use of another's image and likeness without their consent. While there is no federal law of privacy or publicity rights, many states and several countries recognize those rights and allow private parties to bring claims against people or businesses using their image commercially.

Creative Commons licenses can also conflict with other areas of intellectual property law. Reagan Joy presents a challenging dispute centered around the innovative distributed-authorship creative writing collaboration known as the SCP Foundation where a foreign trademark

---

[142] Christa Pletcher, *Are Publicity Rights Gone in a Flash? Flickr, Creative Commons, and the Commercial Use of Personal Photographs*, 8 FLA. ST. U. BUS. REV. 25 (2009).

[143] Chang v. Virgin Mobile USA, LLC, No. 3:07-CV-1767-D, 2009 U.S. Dist. LEXIS 3051 at *1–2 (N.D. Tex. Jan. 16, 2009).

conflicts with the project's Creative Commons Attribution–Share-Alike 3.0 license.[144] SCP Foundation authors share a fictional universe any author who is willing to reciprocate the Share-Alike and Attribution terms can join. One "entrepreneurial" SCP promoter, Andrey Duksin, attempted to enclose the commons, however, by registering a Russian trademark for the SCP logo and issuing takedown notices for others' content.[145] Mr. Duksin appears to owe the success of his hijinks largely to the idiosyncrasies of Russian law and the difficulty of bringing intellectual property claims against a Russian national. Under U.S. law, Mr. Duksin's efforts to privatize the SCP project would likely face more difficulty given that he is almost certainly a junior user of the mark to many other authors with superior rights, the need to associate marks with specific goods and services, and carveouts for nominal use. Nevertheless, this dispute highlights that Creative Commons work can be used in ways that are compliant with the licenses but that can create a likelihood of confusion over the use of a trademark in commerce—the

---

[144] Reagan Joy. *The Tragedy of the Creative Commons: An Analysis of How Overlapping Intellectual Property Rights Undermine the Use of Permissive Licensing.* 72 CASE W. RSRV. L. REV. 977 (2022).

[145] *Id.* at 1002–03.

core elements of trademark infringement. Similarly, while a Creative Commons license prevents copyright infringement of that licensed work, that licensed work may itself be infringing as an unauthorized derivative work of other registered work.

The current iteration of the Creative Commons licenses almost completely exempts the licensor from any liability or responsibility, and does not even require the creator to assert that they own the copyright of the licensed work.[146] Essentially, the legal framework of Creative Commons shifts all risk to the licensee. Members of the public may adopt a Creative Commons license under the mistaken belief that it is a complete grant of rights to use the material. Under the impression that

---

[146] *See, e.g.*, CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL PUBLIC LICENSE, § 2.b.1, CREATIVECOMMONS.ORG, https://creativecommons.org/licenses/by/4.0/legalcode (last visited Aug. 7, 2021) ("Moral rights, such as the right of integrity, are not licensed under this Public License, nor are publicity, privacy, and/or other similar personality rights; however, to the extent possible, the Licensor waives and/or agrees not to assert any such rights held by the Licensor to the limited extent necessary to allow You to exercise the Licensed Rights, but not otherwise."); *id.* § 5.a. (exhaustively disclaiming warranties, representations, non-infringement, and more); *id.* § 5.b. (disclaiming liability from damages even if the Licensor had knowledge of problems with the license grant).

their use is fully protected by Creative Commons, licensees could run afoul of privacy/publicity rights of the people in visual media, of other copyrighted material contained within a copyrighted work that is itself derivative,[147] or of trademarked logos used in ways that create a likelihood of confusion. The first iteration of the Creative Commons licenses attempted to protect against this problem with a warranty clause, but this approach was ultimately abandoned after substantial debate and all licenses from version 2.0 on contain a disclaimer of warranty and indemnification clause.[148] Insofar as reducing transaction costs and making copyrighted works more fungible are core goals of the Creative Commons project, this is a significant (if understandable, given the ensuing liability) compromise.[149]

---

[147] *See* Bas Bloemsaat & Pieter Kleve, *Creative Commons: A Business Model for Products Nobody Wants to Buy*, 23 INT'L REV. L. COMPUTERS & TECH. 237, 245–46 (2009) (discussing possible issues with derivative work).

[148] *See* Glenn Otis Brown, *supra* note 61.

[149] Bloemsaat & Kleve, *supra* note 147 at 246 ("Thus, the insecurity that CC was designed to alleviate is largely untouched by its application . . . . Creative Commons may open users acting in good faith to lawsuits. Clearing copyright with all its problems is still a

### *B. Interpreting Creative Commons' Terms*

Some cases address the impact of the Creative Commons licenses and their legal force directly. While the case law on Creative Commons enforcement remains thin, leading cases may prove influential as courts look for guidance on how to address similar issues. Insofar as legal issues often turn on precise wording in licenses, the future value of these cases is complicated by the delay between license release and the opportunity for a license to be tested in court, particularly because Creative Commons has released several iterations of its licenses,[150] although the most recent version of the licenses have now been in effect for more than a decade.

#### 1. *Drauglis v. Kappa Map Group, LLC*: License Complexity Unmasked

---

necessity, as the license offered cannot be trusted. Instead of being a blessing, CC provides a false sense of security, which may be worse.") (typographical error corrected).

[150] *See License Versions*, WIKI.CREATIVECOMMONS.COM, https://wiki.creativecommons.org/wiki/License_Versions (noting new versions in 2002, 2004, 2005, 2007, and 2013).

The icons, short form identifications, and "human readable" deed essential to Creative Commons can belie the complexity of the actual license. In *Drauglis v. Kappa Map Group, LLC*,, a photographer sued a map publisher for using a photograph available under a Creative Commons Attribution–ShareAlike 2.0 (CC BY–SA 2.0) license on the cover of a for-profit atlas covering a single Maryland county.[151] The photo at issue was reprinted on the top half of the front cover of the atlas; the back cover of the atlas attributed the photograph to Mr. Drauglis and his wife along with the legend "Creative Commoms[sic], CC-BY-SA 2.0."[152] The court pointed out that while Mr. Drauglis repeatedly objected to the commercial nature of the use in his pleadings, that his selected license did not prohibit commercial use because it did not include the Non-Commercial (NC) term,[153] suggesting a disconnect between his understanding of the license (even with the aid of legal counsel) and its terms.

---

[151] Drauglis v. Kappa Map Grp., LLC, 128 F. Supp. 3d 46 (D.D.C. 2015).

[152] *Id.* at 50.

[153] *Id.* at 49.

The court analyzed three other terms for breach of the license: first, whether the authors received the attribution required by the Attribution (BY) condition; second, whether the allowed similar permissive use in accordance with the Share-Alike (SA) condition, and third, whether the atlas identified and linked back to the license.[154] Ultimately, the court found that the publisher violated none of the terms, and therefore neither breached the license nor committed copyright infringement.

All concerned agreed some attribution had been given; at issue was its prominence. Mr. Drauglis and his wife received attribution in small type on the back of the atlas, but argued that this was not comparable to the credit for the book as a whole, presented on the copyright page at the beginning of the book.[155] The court disagreed, finding the attribution given to Mr. Drauglis' photograph comparable to the copyright information and attribution given to the individual maps within the atlas, and declined to hold that attribution of a piece within a collection required the same attribution as the collection as a whole.[156]

---

[154] *Id.* at 53.

[155] *Id.* at 58–59.

[156] *Id.* at 59.

Turning to the terms of the license in detail, the court found the Share-Alike condition only applied to derivative works and the atlas that allegedly infringed was instead a collective work that reproduced "the Work in its entirety in unmodified form."[157] In short, if another creator takes a Creative-Commons–licensed work in whole and includes it in a collection of other works, the Share-Alike term has no effect on how the collected work is licensed. Yet if the collector took the same work but excerpted it, added to it, or otherwise created a derivative work, that material would also need a Share-Alike license.

Anticipating this unintuitive result would require careful familiarity with the precise terms of the license and a high degree of sophistication. The deed of the license intended for lay users makes no indication that Share-Alike conditions only apply to derivative works but do not apply to collective works.[158]

Last, the court considered Mr. Drauglis' claim that the license required including the complete license text or a link to the full license

---

[157] *See id.* at 54–55, quoting CREATIVE COMMONS ATTRIBUTION–SHARE-ALIKE LICENSE 2.0, §§(a)–(b), https://creativecommons.org/licenses/by-sa/2.0/legalcode.

[158] *See* CREATIVE COMMONS ATTRIBUTION-SHAREALIKE LICENSE 2.0 GENERIC LICENSE (CC BY–SA 2.0), https://creativecommons.org/licenses/by-sa/2.0/.

and also rejected it, finding that including the Uniform Resource *Name* (URN), "CC BY-SA 2.0," met the license's requirements to provide a Uniform Resource Identifier and that Mr. Drauglis misconstrued the Uniform Resource *Identifier* (URI) requirement as a Uniform Resource *Locator* (URL) requirement, such as a web address or "link."[159]

Notably, both the court and the plaintiff in this case seem to have misunderstood the finer points of the rights and technical requirements associated with the license, indicating the difficulty of correctly using Creative Common licenses for even legally sophisticated non-specialists. Creative Commons can hide the complexity of its licenses and summarize them for the benefits of users, but legal disputes can turn on this same complexity.

2. Novel Licenses, Old Law, and the Mystery of "Non-Commercial": *Great Minds v. FedEx*

---

[159] Drauglis v. Kappa Map Grp., LLC, 128 F. Supp. 3d 46, 57–58 (D.D.C. 2015) (citing TIM BERNERS-LEE ET AL., UNIFORM RESOURCE IDENTIFIER: GENERIC SYNTAX, 5 (Jan. 2005), https://tools.ietf.org/html/std66).

The novelty of Creative Commons licenses can make their straightforward application in traditional areas of law seem strange and improper. In 2017, a district court took up a question of keen interest to the Creative Commons project: the dividing line between commercial and non-commercial use.[160] *Great Minds v. FedEx Office and Print Services* arose from a non-profit organization, Great Minds, using a Creative Commons Attribution–NonCommercial–Share-Alike 4.0 International Public License[161] to offer a free mathematics curriculum for educational use, in addition to traditional commercial printing of the same

---

[160] *See* Park, *infra* note **Error! Bookmark not defined.** (discussing results of a survey of non-commercial use conducted by Creative Commons). *See also Great Minds v. FedEx Office & Print Servs.*, No. 16-CV-1462(DRH)(ARL), 2017 U.S. Dist. LEXIS 24063 (E.D.N.Y. Feb. 21, 2017) (denying application by Creative Commons Corp. to file an amicus curiae brief in support of FedEx's motion to dismiss).

[161] *See* CREATIVE COMMONS ATTRIBUTION–NON-COMMERCIAL–SHARE-ALIKE 4.0 INTERNATIONAL PUBLIC LICENSE (CC BY–NC–SA 4.0), https://creativecommons.org/licenses/by-nc-sa/4.0/ (last visited Mar. 23, 2024) (describing license features for the general public and linking to the "legal code" that enforces the license).

material.[162] When Great Minds discovered that FedEx stores were reproducing the material at their standard for-profit rates at the behest of several school districts, Great Minds first demanded royalty payments from, and then filed suit against, FedEx for violating the non-commercial clause of the Creative Commons license and subsequently infringing Great Minds' copyright.[163]

The case strikes at a key question of what must be non-commercial to meet the terms of the license: the purpose, or the process of production? The school district's purpose was unambiguously educational and non-commercial.[164] According to Great Minds, FedEx was a recipient of the copyrighted work that received an offer to use the work under the terms of the license, and by printing Creative-Commons–licensed work, accepted that offer.[165] The appeals court rejected this argument, essentially pointing out that Great Minds had ignored the entirety of

---

[162] Great Minds v. FedEx Office & Print Servs., No. 16-CV-1462(DRH)(ARL), 2017 U.S. Dist. LEXIS 26332 at *2–3 (E.D.N.Y. Feb. 24, 2017).

[163] *Id.* at *4–5.

[164] *Id* at *10.

[165] *Id.*

agency law.[166] FedEx was not itself party to an entirely new license, but the agent of a party that had already accepted the offered license.

Great Minds' preferred interpretation of the non-commercial clause of the Creative Commons license would have put severe limitations on the use of all works under that license. If the court had found FedEx's work in fulfilling an order by Great Minds commercial, it is unclear where the limits of noncommercial activity would stop and whether it would be practical (or possible) to meet a more expansive definition of noncommercial. Would a remixer need to host creations derived from Creative Commons–Non-Commercial–licensed works through a non-profit internet service provider and server host to avoid breach of the license and subsequent infringement of the non-commercial clause? Would goods as well as services need to be acquired on a non-profit basis? Although Creative Commons' effort to file an *amicus* brief against a licensor may at first seem counterintuitive,[167] given the threat an

---

[166] *Id.* ("Great Minds fails to account for the mundane ubiquity of lawful agency relationships.").

[167] *See* Great Minds v. FedEx Office & Print Servs., No. 16-CV-1462 (DRH) (ARL), 2017 U.S. Dist. LEXIS 24063 (E.D.N.Y. Feb. 21, 2017) (denying application by Creative Commons Corp. to file an *amicus* brief in support of FedEx's motion to dismiss).

adverse ruling posed to the use of the license as a whole, for both licensees and licensors, their position aligns with the interests of the project as a whole.

Strikingly, the *Educational Use* vignette demonstrated that even when the re-use was non-infringing (in Treatments A and B), respondents believed legal consequences were likely, with Treatment A respondents rating it higher (M = 6.07) than even the infringing control group (M = 5.62) (see Table, p. 73). This suggests widespread misunderstanding of non-commercial licensing, and undercuts the presumption that Creative Commons licenses clearly signal their legal affordances to lay users.

3. Repeat Player Enforcement and the "Copyright Trolls"

Some commentators have taken issue with copyright infringement lawsuits brought by photographers, labeling them trolls. Matthew Sag writes that "[t]he essence of [litigation] trolling is that the plaintiff is more focused on the business of litigation than on selling a product or

service or licensing their IP to third parties[.]"[168] As Sag notes, statutory damages available for works with a registered copyright can provide an incentive for copyright holders to litigate, particularly where statutory damages outweigh the potential value of the work on the open market.[169] Like other trolls,[170] some copyright owners are eager to exploit their legal rights, even where their cases are weak, by threatening expensive litigation and simultaneously offering to settle for far less than the cost of litigation.

---

[168] Sag, *Copyright Trolling*, *supra* 168 at 1109, 1119–1121. *But see* Shyamkrishna Balganesh, *Debunking the Myth of the Copyright Troll Apocalypse*, 101 IOWA L. REV. ONLINE 43 (2016) (criticizing Sag's methods and conclusions).

[169] *Id. See also* 17 U.S.C. § 504(c)(2) (setting statutory damages for copyright infringement).

[170] *See, e.g.*, John M. Golden, *"Patent Trolls" and Patent Remedies*, 85 TEX. L. REV. 2111, 2112 n.7 (2006) (describing non-practicing entities that demand royalties from others as one definition of patent trolls and discussing the difficulty of formulating a precise definition). Despite its negative connotation, the federal courts have not shied away from using the terminology. See, e.g., Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920, 1932 (2015) (Scalia, J., dissenting); In re Packard, 751 F.3d 1307, 1325 (Fed. Cir. 2014) (Plager, J., concurring).

A series of cases involve the same plaintiff, Larry G. Philpot, whose repeat lawsuits may represent a passionate copyright holder protecting his livelihood or may resemble what some scholars and courts term "copyright trolling." Mr. Philpot has certainly had an impact on Creative Commons, prompting the organization to release new guidelines describing its enforcement principles.[171] Court records reveal little detail about any settlements Mr. Philpot may have received or requested from other alleged infringers and any ratio of litigation recovery to licensing or other revenue is unknown. He may have inspired another serial litigant, Marco Verch, who also uses deprecated versions of the Creative Commons license that allow no period for cure.[172] Mr. Verch was represented in his cases by Richard Liebowitz, an infamous mass copyright-infringement litigator who filed more than 300 cases in a one-year period between 2021 and 2022[173] who has faced considerable

---

[171] *See supra* Part I.C.3 (discussing Creative Commons' enforcement).

[172] Daxton R. Stewart, *Rise of the Copyleft Trolls: When Photographers Sue After Creative Commons Licenses Go Awry*, 18 OHIO ST. TECH. L.J. 333, 337 (2022).

[173] Melissa Eckhause, *Fighting Image Piracy or Copyright Trolling? An Empirical Study of Photography Copyright Infringement Lawsuits*, 86 ALB. L. REV. 111, 146 (2022) (Table 5: Law Firms).

sanctions and admonishments from the federal judiciary for lax and unprofessional practices.[174]

What differentiates this series of cases from other zealous copyright litigants, however, is the creators' use of a Creative Commons license as the basis of their copyright infringement claim. The following section provides an overview of a selection of cases that have produced court orders or opinions regarding Mr. Philpot's litigation to demonstrate the widespread liability Creative-Commons–licensed works can generate. The majority of these cases are unpublished and have no binding precedential authority—nonetheless, in an area with thin case law, these rulings may become persuasive precedent to other courts, regardless of the intent of the presiding judge. Mr. Philpot has brought more than 150 infringement suits.[175]

Many of the cases center around the same photograph, and one of the survey vignettes focuses on that photograph. In a case adjudicated in 2015, Larry Philpot, as a *pro se* plaintiff, sued 420 Magazine, Inc., for copyright infringement for posting a photograph of veteran country

---

[174] *Id.*

[175] *Id.* at 337.

musician Willie Nelson, available under a Creative Commons Attribution 2.0 Generic License, to its website.[176] Mr. Philpot also initiated a similar *pro se* lawsuit, suing Rural Media Group, Inc., for using the same photograph in a similar way on its own website in violation of the same license.[177] Two additional cases attempted to sue state college radio stations for copyright infringement due to violations of the license for the Nelson photograph; courts found the public radio stations protected by state sovereign immunity and dismissed the lawsuits for lack of subject matter jurisdiction.[178] *Philpot v. Mansion America, LLC*, differed slightly in that the photo of Mr. Nelson in honor of his eightieth birthday was

---

[176] Philpot v. 420 Magazine, Inc., No. 1:14-cv-01790-RLY-MJD, 2015 U.S. Dist. LEXIS 60014, *2–3 (S.D. Ind. Feb. 20, 2015). For context, the defendant is a marijuana-focused periodical, and Mr. Nelson is a well-known consumer of marijuana resulting in well-publicized legal escapades and incidents over several decades.

[177] Philpot v. Rural Media Grp., No. 1:14-cv-1985-WTL-MJD, 2015 U.S. Dist. LEXIS 136743, *3–4 (S.D. Ind. 2015).

[178] *See* Philpot v. WUIS/University of Ill. Springfield, No. 1:14-cv-01791-TWP-TAB, 2015 U.S. Dist. LEXIS 112230 (S.D. Ind. Aug. 25, 2015); Philpot v. WKMS/Murray State Univ., No. 1:14-cv-01789-SEB-DML, 2016 U.S. Dist. LEXIS 42674 (S.D. Ind. Mar. 30, 2016).

posted to Facebook,[179] not a website owned by the defendant, and Mr. Philpot sued after a cease-and-desist letter did not result in the removal of the photograph or licensing fees before the case was dismissed for lack of personal jurisdiction over the originally named defendant.[180] Another suit involved the Nelson photograph posted on the occasion of his eightieth birthday, this time on a radio station's website.[181]

Several years after beginning his Creative Commons lawsuits, Mr. Philpot's cases began to reach substantive issues concerning Creative Commons. Mr. Philpot's claim of copyright infringement over use of the Nelson photograph to advertise an upcoming concert on a radio station's website survived summary judgment in *Philpot v. L.M. Communications of South Carolina, Inc.*[182] That court held that breaking the terms of the

---

[179] 1:14-cv-01357-TWP-DML, 2015 U.S. Dist. LEXIS 103699, *7–8 (S.D. Ind. Aug. 7, 2015).

[180] *Id.* at *8–10.

[181] Philpot v. Dot Com Plus, LLC, No. 1:14-cv-01980-TWP-DKL, 2015 U.S. Dist. LEXIS 105016 (S.D. Ind. Aug. 11, 2015).

[182] Philpot v. L.M. Communs. S.C., Inc., No. 5:17-CV-173-CHB, 2018 U.S. Dist. LEXIS 113927 (E.D. Ky. July 10, 2018).

Creative Commons license without otherwise obtaining permission is copyright infringement and declined to extend fair use protection to a reproduction of the work that was not transformative on a for-profit radio station's website.[183]

In *Philpot v. Media Research Center, Inc.*, Mr. Philpot sued a conservative organization over the use of two photographs uploaded to its website without attribution: a photograph of country musician Kenny Chesney uploaded to Wikimedia under a Creative Commons Attribution 3.0 License used by the defendant in an article about pro-life celebrities, and a photograph of rap-rock/country musician Kid Rock with the same license used by the defendant in an article about Kid Rock's (ultimately short-lived and apparently facetious)[184] Senate bid.[185] The court subsequently found that a material breach of a Creative Commons

---

[183] *Id.* at *20–21.

[184] David Weigel, *Kid Rock says Senate 'Campaign' was a Stunt,* WASH. POST. (8:08am, Oct. 24, 2017) https://www.washingtonpost.com/news/powerpost/wp/2017/10/24/kid-rock-says-senate-campaign-was-a-stunt/.

[185] Philpot v. Media Research Ctr., Inc., 279 F. Supp. 3d 708, 710–713 (E.D. Va. 2018).

license could be the basis for a copyright infringement claim,[186] but granted the defendant's motion for summary judgment against Mr. Philpot's claims due to a successful fair use defense.[187] The court held that the Center's use of the photographs was "transformative and essentially non-commercial" because their use was to put the subjects in the context of political news stories and the non-profit organization made less than $100 at most from the associated articles.[188] Mr. Philpot also did not show any impact on the market for licensing his photographs from the use or revenue, actual or contemplated, derived from the photographs.[189] Most notably for Creative Commons, the court held that value derived from attribution rights should not be considered when

---

[186] *Id.* at 713 (dismissing Mr. Philpot's argument that the defendant was not a party to a license and therefore infringed due to lack of permission, but finding that the license, when breached, could give rise to copyright infringement).

[187] *Id.* at 722. *See also* Philpot v. Alternet Media, Inc., No. 18-cv-04479-TSH, 2018 U.S. Dist. LEXIS 203500 (N.D. Cal. Nov. 30, 2018) (evaluating fair use claims that specifically cite to *Media Research Center* but declining to rule on fair use at the motion to dismiss stage).

[188] *Id.* at 715–18 (considering the first fair use factor, purpose and character of use).

[189] *Id.* at 719–20.

evaluating the economic impact of a use as part of a fair use defense based on Justice Souter's analysis for the majority in the seminal Supreme Court transformative use case, *Campbell v. Acuff-Rose Music*.[190]

The court's ruling in *Media Research Center*, if adopted by other courts, punches a hole through the protection granted by Creative Commons for attribution and points to limits to the scope of protection Creative Commons can grant.[191] The court turned to the seminal Supreme Court case on transformative fair use, *Campbell v. Acuff-Rose*,[192] for the proposition that fair use analysis should only consider market harm to rights granted to the copyright-holder.[193] Since attribution rights and the ability to dictate sharing terms of a derivative or infringing use (i.e. for the Share-Alike license variants) are not

---

[190] *Id.* at 720 ("[H]arm caused by lack of attribution is not generally cognizable under the Copyright Act and should not be considered in evaluating the fourth fair use factor."); Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 590–94 (1994).

[191] N.B., attribution was selected by such a high percentage of users (97–98%) that it is now part of every current Creative Commons license. *See* Glenn, *supra* note 61.

[192] 510 U.S. 569, 591–92 (1994).

[193] *Media Research Center*, at 720.

protected by copyright, they are not taken into account during a fair use analysis. As a result, it appears that where a use is transformative and in breach of the license, the Creative Commons licensor's attempts to keep rights of attribution for the BY term and control the retention of share-alike rights in derivative works for the SA term have no impact on a fair use analysis, consistent with Creative Commons' license terms meant to ensure the license does not restrict extant fair use rights.

Creative-Commons–licensed work available on Wikipedia appears to be an attractive site for inadvertent "copytraps," which "arise when Web sites lure innocent users into downloading expression that seems legal but is actually infringing."[194] Because of the strict liability of copyright damages, good-faith misunderstanding or ignorance is no defense to liability for considerable statutory damages, and users can be held responsible for infringement even if a website provides misleading information about the copyright status of the work in question.[195] While Snow initially imagined copytrap scenarios as the purview of

---

[194] Ned Snow, *Copytraps*, 84 IND. L. J. 285, 285 (2009).

[195] *Id.* at 286–87 ("Where a Web site has led a downloader to mistake the legality of downloading, the fact remains that the downloader made a mistake.").

untrustworthy third party websites, Wikipedia may serve as a more benign and unintentional form of copytrap. Assuming public knowledge of copyright is low and the availability of Wikipedia content is high,[196] a rights-holder looking to set a copytrap would be well-served by placing their works on Wikipedia and then looking for subsequent infringement caused by violations of the attribution and reciprocity terms through a reverse-image search.[197] Members of the public might misunderstand the range of permissions available on Wikipedia, whose slogan "The Free Encyclopedia" and perception as a public resource might induce users to think there are no restrictions on the re-use of its content. Although all

---

[196] Both are likely to be fairly safe assumptions, though information on copyright knowledge is scarce. Wikipedia content is highly placed on many search results and even given special formatting and integration in search results, such as thumbnail images with basic biographical information for search providers such as Google. Relevant to this analysis in particular, the photograph of Willie Nelson at issue in many of the cases appears as the first result for image searches of *willie nelson* on many search providers.

[197] *See, e.g.*, *TinEye Image Recognition*, TINEYE.COM (last accessed Feb. 10, 2019) (explaining how users can upload an image and then locate other websites where that image appears); *see also* Eckhause, *supra* note 173 at 169–171 (listing prominent reverse image search firms that assist in photographic copyright enforcement and describing the process).

of Wikipedia's content is subject to a Creative Commons Attribution–ShareAlike license,[198] attribution of images and other multimedia is more prominent than text and contributors retain broad latitude in how attribution should be provided.[199] Because images are discrete in a way

---

[198] *See Licensing of Content, Terms of Use*, WIKIMEDIA.ORG, https://foundation.wikimedia.org/wiki/Terms_of_Use/en#7._Licensing_of_Content (last visited Mar. 28, 2024) (noting that contributions are available under a CC BY–SA 4.0 license as well as a GNU Free Documentation License).

[199] Notably, attribution is technically still the author's, rather than Wikipedia or Wikimedia's itself. However, Wikimedia's licensing terms restrict the attribution that the author can demand for text: by Wikipedia's Terms of Use, attribution is satisfied by author information provided by the edit history of the underlying use. *See id.* As a result, saying that Wikipedia content is licensed under Creative Commons Attribution is not wholly accurate, in that the broad ability to determine how attribution should be provided in the base license is itself significantly restricted by Wikimedia's licensing. Notably, this means that changes to Wikimedia or its children projects that removed or restricted edit history would open up the organization to truly massive amounts of copyright liability. For a more thorough discussion of a similar "problem of the future" regarding Wikipedia's use of the GFDL, see Molly Shaffer von Houweling, *The New Servitudes*, 96 GEO. L. REV. 855, 943 (2008) ("One generation of creators has made choices about resource use that constrain their own future choices and those of

that textual edits to a constantly-edited encyclopedia are not, there is a greater opportunity to identify infringement of one's copyright and pursue legal action.

The public's heightened sensitivity to infringement risk in online image contexts is also reflected in the *Wikipedia Image Search* vignette. There, respondents in the Creative Commons conditions rated the likelihood of legal consequences significantly higher than those in the control group (Treatment B mean = 4.92 vs. Control = 3.94; see p. 73). These results suggest that public perception may have adapted to reflect the aggressive enforcement strategies pursued by repeat-player litigants like Philpot—even if this adaptation runs counter to the permissive ethos Creative Commons aims to promote.

## IV. EMPIRICAL PERSPECTIVES ON THEORETICAL DEBATES ABOUT CREATIVE COMMONS

---

subsequent generations of creator who participate in the project, under circumstances in which society might benefit from revisiting those choices.").

Creative Commons has sparked vigorous analysis among scholars, free software activists, and creators since its inception. Previous points of contention have largely centered around ideological questions around the foundations of Creative Commons, its integration into the extant copyright system, and its information cost to society. Yet, the empirical results presented in Part II complicate this idealistic framing. Despite the Creative Commons movement's anti-corporate ethos and democratic aspirations, public perception often fails to track those goals. For instance, in the *Wikipedia Image Search* vignette—mirroring the kind of "free culture" reuse Creative Commons sought to normalize—respondents assigned higher perceived enforcement risk to Creative Commons–licensed versions than to standard copyright notices (Treatment B mean = 4.92 vs. Control = 3.94; see p. 73). This suggests that Creative Commons' branding may inadvertently enhance the aura of legal threat rather than reduce it.

### *A. Ideological Criticisms*

In an influential critique made as Creative Commons gained popular momentum, Niva Elkin–Koren concluded Creative Commons possessed an "ideological fuzziness" due to its attempt "to become a public

movement that addresses the public at large."[200] The "menu" approach or *a la carte* offerings of different rights in different licenses increases the complexity and information costs of using Creative Commons, particularly for third parties who simply want to avoid copyright infringement, and could reinforce absolutist property rights.[201] Elkin–Koren argues that Creative Commons has followed mainstream copyright theory and copyright discourse in over-emphasizing the rights of authors when a more clear-eyed analysis shows that it more often serves the needs of the content industries.[202] Niva Elkin–Koren notes

---

[200] Elkin–Koren, *supra* note 1 at 387.

[201] *Id.* at 409. Since 2005, Creative Commons has retired many of the more specific and limited use licenses critiqued by Elkin–Koren. *See id.* at 411. It is unclear if some of the more exotic licenses were completed and publicly released.

[202] *Id.* at 385. Criticism of the power of the content industries over individual expression influences Creative Commons and copyright scholarship more generally. *See, e.g.,* LAWRENCE LESSIG, FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY (2004); MARTIN SKLADANY, BIG COPYRIGHT VERSUS THE PEOPLE: HOW MAJOR CONTENT PROVIDERS ARE DESTROYING CREATIVITY AND HOW TO STOP THEM (2018), GLYNN LUNNEY, COPYRIGHT'S EXCESS: MONEY AND MUSIC IN THE U.S. RECORDING INDUSTRY (2018), HANNIBAL TRAVIS, COPYRIGHT CLASS STRUGGLE: CREATIVE ECONOMIES IN A SOCIAL MEDIA AGE (2018).

that Creative Commons as a movement does not lobby for legislative changes or copyright reform and in fact relies on strong copyright; Creative Commons plays a reactionary role in intellectual property debates regarding statutory reform.[203] The Creative Commons project is normative beyond being simply motivated *by* certain norms or ideology. Instead, the Creative Commons project is normative in that it seeks to *change* the norms of creators in the permissions they grant and the sources they build on.[204]

While acknowledging that introducing new practices of copyright licensing can be fundamentally subversive to the current restrictive public understanding of copyright, Elkin–Koren also points out that relying on property rights for the framework of Creative Commons can have the perverse effect of making the public more aware of these property rights, and thus more fearful to use works without the authorization of a license, regardless of whether re-use is protected by

---

[203] *See* Elkin–Koren, *supra* note 200 at 393.

[204] *Id.* at 395.

fair use.[205] Furthermore, because Creative Commons leaves the decision about what rights to parcel out to licensees, authors may choose terms more restrictive than early Creative Commons supporters advocated for—Elkin–Koren points to early usage statistics demonstrating that the most popular license offered by Creative Commons allows derivative work but only if it is non-commercial, contains attribution, and has license reciprocity.[206] Finally, court cases featuring Creative Commons licenses may also validate restrictive licenses designed by and for corporate actors to limit the ability of end-users to modify or use licensed content.[207]

---

[205] *Id.* at 396, 399. *See also* Severine Dusollier, *The Master's Tools v. The Master's House: Creative Commons v. Copyright*, 29 COLUM. J.L. & ARTS 271, 283 (2006) (joining Elkin–Koren's critique that Creative Commons will never challenge copyright because of its fundamental reliance on copyright).

[206] *See* Elkin–Koren, *supra* note 200 at 401.

[207] *Id.* at 417. In retrospect, enforcement of open source or Creative Commons licenses seems largely epiphenomenal to the determination of whether restrictive licenses or DRM could be enforced. Given the stakes, the well-funded and legally sophisticated content industries were never likely to rely solely on the enforcement efforts of intellectual property reformers to determine (and ensure) the enforceability of their

Jennifer Rothman suggests a potential risk of the Creative Commons project is chipping away at fair use for traditional copyright: for example, courts might be less willing to find commercial uses fair where non-commercial uses are licensed with Creative Commons.[208] "[C]ourts and juries may be less inclined towards users who knowingly violate the express wishes of the copyright holder."[209] Rothman also anticipates that courts will begin to see copyright owners who do not take part in Creative Commons as opting for a stronger form of copyright.[210] Indeed, Rothman's article essentially predicted the holding a case brought by Philpot that touched on fair use.[211]

---

licenses, especially because licensing disputes often arise between equally deep-pocketed corporations in direct economic competition capable of sustaining complex, expensive, and long-running litigation.

[208] Jennifer E. Rothman, *The Questionable Use of Custom in IP*, 93 VA. L. REV. 1899, 1979 (2007).

[209] Jennifer E. Rothman, *Copyright's Private Ordering and "The Next Great Copyright Act,"* 29 BERKELEY TECH. L. J. 1595, 1627 (2014).

[210] *Id.* at 1629.

[211] *See* notes 182–193 and accompanying text, *supra*.

Richard Stallman, an early Creative Commons proponent and GPL author, earlier discussed for his role in the popularization of open licensing,[212] withdrew his support for Creative Commons in 2005 because not all of the license variants grant "the freedom to share, noncommercially, any published work."[213] Benjamin Mako Hill also took issue with the growing prominence of the Creative Commons licenses in the free software community because of its failure to ground its mission in principles equivalent to the four freedoms at the core of free software as defined by Stallman.[214] Without a similar set of guiding principles, Creative Commons either provided "a hodge-podge of pick-and-choose" permissions or tailor-made legal solutions to narrow problems in the form of specific (now-discontinued) licenses that does not set a minimum standard for what should be protected in favor of giving creators

---

[212] *See* Section I.B, *supra*.

[213] Richard Stallman, *Fireworks in Montreal*, FREE SOFTWARE FOUNDATION (Jul. 12, 2010) https://www.fsf.org/blogs/rms/entry-20050920.html.

[214] Benjamin Mako Hill, *Towards a Standard of Freedom*, MAKO.CC (June 29, 2005) https://mako.cc/writing/toward_a_standard_of_freedom.html; *see* RICHARD STALLMAN, *The Free Software Definition*, FREE SOFTWARE, FREE SOCIETY, 3 (2nd. ed. 2004).

flexibility and latitude to set the terms of distribution.[215] Dr. Hill was later involved in writing a similar set of four freedoms for content, the "Definition of Free Cultural Works."[216]

### *B. Information/Transaction Costs*

Although some Creative Commons licenses meet this minimum standard of freedom compatible with his broader ideology of freedom influential within the free software movement, Stallman ultimately concluded that the differences between licenses would be lost on the public and decided to withdraw his support altogether as a result.[217] Similarly, Molly Shaffer Van Houweling recognizes that Creative Commons and other standardized licensing projects reduce the

---

[215] *Id.* ("Lessig personally describes how Creative Commons 'gives creators the freedom to choose how their works are used.' This is not freedom in the sense that term is used in Free Software.").

[216] *See Definition*, DEFINITION OF FREE CULTURAL WORKS. http://freedomdefined.org/Definition; *id., History* (describing Dr. Hill's involvement in the process).

[217] *See* Stallman, note 213.

information costs of identifying the copyright owner and negotiating a license with that owner, but can increase the information cost of copyright transactions where many different versions of licenses proliferate.[218] Niva Elkin–Koren has offered a similar critique with a focus on information costs imposed upon third parties subject to "downstream" use of Creative Commons who are looking to avoid infringement.[219] In an insightful analysis of another type of transaction cost associated with licensing, Zachary Katz used a simple evolutionary model to demonstrate that Share-Alike licenses may proliferate over time to restrict derivative works containing one or more types of Creative Commons-licensed work due to its reciprocal or "viral" property.[220] Mira Sundara Rajan points out that the Creative Commons licensor has a

---

[218] Molly Shaffer van Houweling, *Author Autonomy and Atomism,* 96 VA. L. REV. 549, 634–35 (2009). Legal work on transaction costs has been highly influential in the development of law and economics. *Cf.* Ronald H. Coase, *The Problem of Social Cost*, 3 J. LAW & ECON. 1, 10 (1960) ("With costless market transactions, the decision of the courts concerning liability for damage would be without effect on the allocation of resources.").

[219] Elkin–Koren, *infra* note 200 at 378.

[220] Zachary Katz, *Pitfalls of Open Licensing: An Analysis of Creative Commons Licensing*, 46 IDEA 391, 409 (2006).

remarkable degree of control over attribution greater than that provided by traditional copyright protections: they can choose whatever form of attribution they like, pseudonymous or anonymous, imposing additional information costs on downstream users.[221]

Survey data further suggests that Creative Commons licenses may not meaningfully reduce transaction costs for the public, as many legal scholars had hoped. In the *Educational Use* vignette, where the control condition described a classic copyright scenario and Treatments A and B described valid CC licensing, respondents in Treatment A (license abbreviation only) estimated *greater* legal risk than in the control group (mean = 6.07 vs. 5.62, p. 73). This inversion indicates that in the absence of sufficient explanatory material, Creative Commons signals may not clarify legal status but instead increase confusion—undermining one of the licensing regime's chief rationales.

### *C. Reliability of the Commons and Public Exposure to Liability*

[221] Sundara Rajan, *supra* note 2 at 930.

A core justification for Creative Commons lies in the idea that it offers a legally stable and predictable alternative to traditional copyright. Yet the results of this survey suggest the opposite may be true for many users. Perceived legal exposure under Creative Commons was as high—or higher—than under traditional copyright in several scenarios. For example, in the *Large-Scale Copying* vignette, Treatment B respondents rated legal consequences more harshly than the control group (mean = 5.37 vs. 5.21, p. 74). These results call into question whether Creative Commons delivers the predictability it promises or merely displaces uncertainty from ambiguous doctrines like fair use onto a fractured and poorly understood license schema.

Even if the Creative Commons licenses are free from defect at the moment of drafting, they may be misunderstood or misused by licensors. Users might not specify what works the license applies to, might mix in copyrighted works they do not have rights to with their own works, or fail to provide information on the author necessary to meet the attribution condition.[222] Michal Koščík & Jaromír Šavelka point out that

[222] *See* Michal Koščík & Jaromír Šavelka, *Over-enthusiasm in Licensing Under Creative Commons*, 7 MASARYK U. J.L. 201, 205–09 (2013).

once a work has been licensed, even if the licensor granted a license to an infringing use, it is virtually impossible to stop subsequent use, exposing downstream users to liability.[223] While early versions of the Creative Commons license did contain a warranty clause protecting downstream users,[224] versions since then have not, leaving end-users to take on significant risks if they are not certain of a licensor's claim to the material covered by the license.[225]

Without more widespread public understanding Creative Commons licenses may offer little insulation from risk, especially for under-resourced users misled by the promise of openness.

### *D. Economic Impact of Creative Commons Rights*

---

[223] *Id.* at 217.

[224] *See* Glenn Otis Brown, *On Warranties*, CREATIVECOMMONS.ORG (Apr. 30, 2003) https://creativecommons.org/2003/04/30/onwarranties/ (last visited Mar. 24, 2024).

[225] *See 4.0/Disclaimer of Warranties and Related Issues*, CREATIVE COMMONS WIKI, https://wiki.creativecommons.org/wiki/4.0/Disclaimer_of_warranties_and_related_issues (last accessed Mar. 13, 2024) (discussing and summarizing debates about warranties and limitations of liability).

One critique of Creative Commons is that it devalues the work of creators by offering no avenues for profit. Severine Dusollier cautions licensors should not be naïve to the possibility that "the existing circulation of the work for free under a Creative Commons scheme reduces the commercial interest in the work" because a commercial publisher or producer "might doubt the ability to make money off of a work that is available for free on the internet or anywhere else."[226] Mira Sundara Rajan concludes that Creative Commons is "a solution for those who do not need, or do not want, to earn money for their creative work."[227] "Notwithstanding Lessig's idealistic definition of 'free,' embracing the goal of 'Free Culture' in practice means forfeiting the opportunity to be paid for one's work," she writes.[228] Sundara Rajan's formulation is too absolute, even if the core of her critique hits home. Creators can still be paid for Creative Commons work, either by selling substitute goods (e.g. charging for live performances of a song while giving away recorded copies) or selling traditional licenses for more permissive uses than

---

[226] Dusollier, *supra* note 205 at 281.

[227] Sundara Rajan, *supra* note 2 at 930–31.

[228] *Id.*

allowed by the Creative Commons license selected for the work, such as a Non-Commercial license.[229] Nevertheless, there may be some truth to her statement that "[t]o remove money valuation altogether from creative works is to create an instant bias against the recognition of their value by society."[230]

The data also suggest a potential dampening effect on re-use, especially for commercial actors who might otherwise benefit economically from Creative Commons. In the *Commercial Advertising* vignette, Treatment B respondents perceived significantly greater legal risk than the control group (mean = 4.09 vs. 3.25, p. 73). If license markings and education increase the salience of enforcement without clarifying permissible boundaries, they may chill legitimate or low-risk uses that would otherwise generate value for small businesses and nonprofits.

---

[229] *See e.g.,* Sebastian ter Burg, *It's a Business Model Based on Sharing*, CREATIVECOMMONS.ORG, (Apr. 3, 2018) https://creativecommons.org/2018/04/03/business-model-based-sharing/ (describing a photographer who gained more work by extensive Creative Commons licensing, but also acknowledging that few people globally are able to make the same model profitable).

[230] Sundara Rajan, *supra* note 2 at 930–31.

It is also worth considering the effect widely available, no-cost media has on the overall market for creative content. While Creative Commons can make it easier for users to share material for the use of peers, it also makes it easier for business interests to receive media they otherwise would have likely paid for.[231] Given that one of the main incentives of copyright law as traditionally conceived is to provide monopoly rents to creators to encourage their continued creativity and to spur them to creativity in the first place, the entrance of a large body of substitute goods offered for no monetary compensation must put pressure on the ability of specialist photographers to generate revenue.

## CONCLUSION

---

[231] *See* Herkko Hietanen, *Creative Commons Olympics: How Big Media is Learning to License from Amateur Authors*, 2 J. INTELL. PROP. INFO. TECH. & ELEC. COM. L. 50 (2011) (describing major television network requesting use of hobbyist photographer's image for its Olympics coverage, followed by the hobbyist's agreement to waive the attribution terms for a more convenient display, and possibly the Share-Alike requirement, though his cooperation on that point is unclear).

This Article has provided a pragmatic analysis of Creative Commons' acceptance within the legal system and presents novel information about how the public actually interacts with and interprets Creative Commons licenses in scenarios designed for ecological validity. Contrary to my initial hypotheses, Creative Commons does not appear to currently signal to re-users that consequences for licensing violations are less likely or less severe—in many scenarios, the survey found the opposite effect. Perhaps the most promising finding in this survey for Creative Commons advocates is that, although less than one in ten can accurately recognize the Creative Commons logo and only about one in four have some understanding of the project, a small amount of education—just a few minutes of reading—and the use of full-text licenses tends to lead respondents to think consequences are more likely and more severe when work is infringing. On the other hand, education and full-text terms also lead more members of the public to correctly determine when re-use is permitted. Creative Commons licensors who want their work to be re-used and the terms of their license followed are well served by educating re-users.

It is still an open question as to whether members of the public would be able to differentiate between Creative Commons license terms where one condition infringes and another does not, particularly where the

licenses are not explicit about rights (i.e. Attribution allows commercial re-use and derivative work) and future survey experiments on this topic would be worthwhile. Other formats such as user interviews could explore more complex issues dealing with derivative work and fair use. More broadly, little research exists on the general public's understanding of intellectual property law while opportunities for infringement seem to increase.

Little empirical work on Creative Commons appears to have preceded its introduction and some early ideas that would have shielded members of the public from negative consequences, such as the warranty, were quickly abandoned. Meanwhile, the legacy of earlier versions of the license that can be instantly enforced on breach harms Creative Commons' goals. Academics and activists should weigh both the costs and benefits of their proposals and test them empirically before exposing the public to the possibility of either having their work infringed or inadvertently infringing, particularly when the ethical safeguards for surveying respondents about infringement are greater than the ethical safeguards for releasing a licensing scheme where the public risks infringing others' work or having their work infringed.