JUST THE FACTS: EMPIRICALLY DRIVEN IMPACT LITIGATION AS A ROUTE TO COPYRIGHT REFORM

Vanessa J. Reid†

Abstract

There is extensive evidence suggesting that U.S. copyright law, in its current form, is broken. Legal scholars and practitioners overwhelmingly agree that there is a fundamental disconnect between copyright law's animating purposes and its actual effects. However, little of this evidence has been seriously considered by the courts. This is unfortunate, as sound interpretation of copyright law requires an appreciation of the profound impact that this relatively technical doctrine has on the public interest.

This Article therefore investigates strategies for incorporating empirical evidence into impact litigation aimed at reforming U.S. copyright law. Although direct changes to law by the legislature would provide a more durable solution, it is clear that there is currently insufficient political will to make the needed changes to copyright law through the legislative process. Therefore, empirically-driven impact litigation remains the most realistic avenue for driving substantive reform of copyright law at present. Significant legal scholarship has demonstrated the problems with current copyright law, but the question of how to bring this information before the courts has been largely ignored. The literature contains no systematic examination of how empirical evidence might be incorporated into copyright litigation. This Article seeks to fill that gap.

There are a number of hurdles that copyright litigators must overcome in order to successfully present this type of evidence to the courts. Most importantly, judges who rely on empirical evidence risk the accusation that they are merely substituting their own policy preferences for those of the legislature. Because courts must give a high level of deference to the legislature in matters of statutory interpretation, it is imperative that copyright litigators provide courts with robust doctrinal hooks for considering empirical evidence, and that

† Vanessa Reid is an associate at Bright Line Law in London, where she specializes in white collar and financial crime, and a former judicial law clerk for the U.S. District Court for the Central District of California. Ms. Reid holds a JD from the UC Berkeley School of Law, an LLM from the London School of Economics and Political Science, and a BA from Wellesley College.

such evidence be methodologically unassailable. In particular, advocates may wish to focus on constitutional arguments, as constitutional grounds give courts a more solid footing for potentially contradicting or undermining Congressional intent. The Article demonstrates that current copyright law contains a number of promising doctrinal hooks that do just this. Accordingly, there are ample avenues for litigators to successfully employ empirical evidence to drive much needed reform of copyright law—provided they are careful to heed the lessons of similar efforts in other areas.

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INTRODUCTION

> The . . . theory [that judges only "find" the law, never "make" it] has bred the mistaken view that the law is a closed, independent system having nothing to do with economic, political, social, or philosophical science. If, however, we recognize that courts are constantly remaking the law, then it becomes of the utmost social importance that the law should be made in accordance with the best available information, which it is the object of science to supply.[1]

In the 2003 case *Eldred v. Ashcroft*, the U.S. Supreme Court rejected a challenge to the constitutionality of the 1998 Copyright Term Extension Act.[2] During oral arguments, the following exchange took place between Petitioners' attorney Lawrence Lessig and Justice Anthony Kennedy:

> JUSTICE KENNEDY: Well, I suppose implicit in the argument that the '76 Act, too, should have been declared void . . . is that for all these years the act has impeded progress in science and the useful arts. I just don't see any empirical evidence.

1. MORRIS R. COHEN, LAW AND THE SOCIAL ORDER 380–81 (1933).
2. Eldred v. Ashcroft, 537 U.S. 186, 194 (2003).

> MR. LESSIG: Justice, we are not making an empirical claim at all. Nothing in our Copyright Clause claim hangs upon the empirical assertion about impeding progress. Our only argument is, this is a structural limit necessary to assure that what would be an effectively perpetual term [of copyright protection] not be permitted under the copyright laws.[3]

Lessig has described his response here as a "clear mistake."[4] He believes that his failure in this moment to emphasize the empirical evidence of the harms caused by copyright law may have lost him the case.[5] As Lessig writes, "[t]hat was a correct answer, but it wasn't the right answer. The right answer was instead that there was an obvious and profound harm."[6]

It has become increasingly common for U.S. courts to consider empirical evidence from fields outside the law. While legal formalists believe that every case should be decided on principle alone, legal realists recognize that judges are often swayed by arguments regarding the importance of the rights at stake and the real-world impact of contested laws.[7] Empirical evidence can provide compelling support for such legal arguments, and can be highly persuasive to judges when deployed effectively.[8] This trend, however, has not yet fully arrived in copyright litigation. Although there has been extensive research into the effects of many copyright laws, and numerous legal scholars have advocated for a more evidence-based approach to IP law, little of this evidence has been seriously considered by the courts.[9] In the case of copyright law, empirical evidence can help judges understand how a relatively technical doctrine can have a profound impact on the public interest, and such evidence can therefore be a useful tool for pursuing copyright reform through impact litigation.

This Article will investigate strategies for incorporating empirical evidence into impact litigation aimed at reforming U.S. copyright laws in U.S. courts. This project starts from the assumption that copyright law is in need of some level of reform. As noted below, this proposition has been argued exhaustively by numerous legal scholars, and that debate will not be reopened here. As such,

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3. Transcript of Oral Argument at 10, *Eldred*, 537 U.S. 186 (2003) (No. 01–618).

4. LAWRENCE LESSIG, FREE CULTURE: THE NATURE AND FUTURE OF CREATIVITY 239 (2004).

5. *Id.* at 242–43.

6. *Id.*

7. Richard A. Posner, *Legal Formalism, Legal Realism, and the Interpretation of Statutes and the Constitution*, 37 CASE W. RES. L. REV. 179, 180–82 (1986); *see also Legal Realism*, BLACK'S LAW DICTIONARY (10th ed. 2014) (defining legal realism).

8. *See* Steven I. Miller & Jack Kavanagh, *Empirical Evidence*, 4 J.L. & EDUC. 159, 172 (1975) (discussing the rising use of empirical evidence by judges when making decisions); *see also* Jeremy de Beer, *Evidence-Based Intellectual Property Policymaking: An Integrated Review of Methods and Conclusions*, 19 J. WORLD INTELL. PROP. 150 (Nov. 2016) (stating that empirical arguments are potential game changers in American law).

9. *See* Stef van Gompel, *Copyright, Doctrine and Evidence-Based Reform*, 8 J. INTELL. PROP. INFO. TECH. & ELEC. COM. L. 304, 310 (2017) (exploring how the evidence-based approach to copyright law can be reconciled with the doctrinal approach to developing that law); *see also* de Beer, *supra* note 8 (elaborating on how empirical evidence may strongly influence judicial opinions).

this Article does not propose a specific set of reforms to copyright law. The question of precisely which reforms are needed is a far-ranging and much-debated topic, which lies beyond the scope of the present project. Some of the most common types of reforms advocated for are decreased copyright term limits, prohibitions on retroactively extended term limits, a broader interpretation of fair use on the Internet, elimination of the anti-circumvention provisions of the Digital Millennium Copyright Act, and compulsory licensing for certain categories.[10] It is not within the scope of this Article to argue in favor of these specific reforms. Instead, this Article argues only that the increased use of empirical evidence by the courts will lead to interpretations of the law that are more grounded in copyright's real-world impact, and therefore are likely to drive copyright law in the direction of the reforms for which others have convincingly advocated.[11]

Moreover, the scope of this Article is limited to a discussion of litigation strategies rather than legislative reform or other forms of activism. While comprehensive legislative reform would be the most desirable solution, it is increasingly clear that there is a lack of political will in the U.S. to make any significant changes to copyright law, at least of the type sought by many copyright reformers.[12] Accordingly, this Article assumes that it is not yet time to give up on judicially-driven copyright reform. Although courts must largely defer to the legislature on matters of statutory interpretation, impact litigation may nonetheless be the most realistic avenue for driving substantive reform of U.S. copyright laws.[13]

If so, the question remains: how to best encourage courts to consider empirical evidence of the real-world problems copyright law causes? This is the question this Article will address. Courts are likely to require a robust doctrinal hook for considering empirical evidence and the Author will argue that current

10. JAMES BOYLE, THE PUBLIC DOMAIN 205–30 (2008); NEIL WEINSTOCK NETANEL, COPYRIGHT'S PARADOX 195–218 (2008); *see also* Peter S. Menell, *Adapting Copyright for the Mashup Generation*, 164 U. PA. L. REV. 441 (2016) (citing other popular reform proposals, including affirmative copyright registration requirements, limitations on the rights of copyright holders to control creative derivative works, clearer fair use exceptions for uses that benefit the public, international clearing houses for digital music, limitations on liability for infringers who make a good faith attempt to locate and compensate the rights-holder, and limitations on the moral rights of authors).

11. *See, e.g.*, Jeremy de Beer, *Making Copyright Markets Work for Creators, Consumers and the Public Interes*t, WHAT IF WE COULD REIMAGINE COPYRIGHT? (R. Giblin & K. Weatherall, eds., 2017) (discussing how empirical evidence can expedite copyright reform); *see generally* Maria A. Pallante, *The Next Great Copyright Act*, 36 COLUM. J. L. & ARTS 315 (2013) (discussing the main issues a future copyright address would likely address); *see generally* WILLIAM PATRY, HOW TO FIX COPYRIGHT (2012) (elaborating on possible solutions to current copyright law issues); Jessica Litman, *Real Copyright Reform*, 96 IOWA L. REV. 1 (2010); Pamela Samuelson, *Preliminary Thoughts on Copyright Reform*, UTAH L. REV. 551 (2007).

12. *See, e.g.*, Marsha Blackburn, *Symposium Address: U.S. Representative Marsha Blackburn on Federal Copyright Reform*, 3 BELMONT L. REV. 135 (2016) (noting that while comprehensive legislative reform of copyright law remains an uphill battle, some elected representatives do continue to vocally advocate for change).

13. *See* Matthew Sag, *Copyright Trolling, An Empirical Study*, 100 IOWA L. REV. 1105, 1136 (2015) (recognizing that while "[i]deally, reform [of problematic aspects of copyright law] would come from Congress . . . courts have a statutory and constitutional obligation to oversee [these problems] if Congress continues to ignore [them].").

U.S. copyright law actually contains a number of these hooks that remain quite promising. In particular, the use of constitutional arguments supported by strong empirical evidence may help overcome the reluctance of the courts to contradict the intent of the legislature.

The first Section of this Article will discuss the growing use of empirical evidence by courts in other areas of law, and the lessons that copyright litigators might take from these developments. The second Section will survey existing empirical research on copyright law and policy, and show its impact on legal scholarship. The final Section will discuss potential doctrinal hooks for persuading judges to consider empirical evidence, and how those legal arguments fit in with recent developments in copyright case law. Ultimately, this Article will argue that introducing more empirical evidence to the courts through litigation is a promising strategy for affecting copyright reform, and that there are ample opportunities to do so in the current legal landscape.

I. THE USE OF EMPIRICAL EVIDENCE IN OTHER AREAS OF THE LAW

Over the past fifty years, the use of empirical evidence has become increasingly common in American legal opinions.[14] While courts' reliance on empirical evidence remains controversial in some circles within the legal profession, it has nonetheless become a mainstay of judicial decisions, and therefore of impact litigation strategy.[15] This Section will briefly discuss examples of the incorporation of empirical evidence in equal protection litigation, "cruel and unusual punishment" cases, and antitrust law. It will also discuss what lessons can be drawn from these cases for litigants seeking to introduce empirical evidence in copyright litigation.

One of the most famous—and controversial—uses of social science research in an American legal opinion appeared in Footnote 11 of *Brown v. Board of Education*, the seminal case ruling that racial segregation in public schools was unconstitutional.[16] Chief Justice Earl Warren's unanimous opinion found that educational segregation did psychological harm to African-American children, relying on a list of social science sources.[17] An experiment known as

14. *See* Angelo N. Ancheta, *Science and Constitutional Fact Finding in Equal Protection Analysis*, 69 OHIO ST. L.J. 1115 (2008) (discussing the courts' use of science in the equal protection analysis); Penney P. Azizi, *The Reproducibility of Evolving Social Science Evidence and How it Shapes Equal Protection Jurisprudence*, 44 HASTINGS CONST. L.Q. 433 (2017); Lia Epperson, *The Promise and Pitfalls of Empiricism in Educational Equality Jurisprudence*, 48 WAKE FOREST L. REV. 489 (2013); *see also* Michael Heise, *Brown v. Board of Education, Footnote 11, and Multidisciplinarity*, 90 CORNELL L. REV. 279, 313 (2005) (discussing how judicial use of empirical evidence, such as opinion polls and survey data, is now almost routine).

15. Heise, *supra* note 14, at 313.

16. Brown v. Bd. of Educ., 347 U.S. 483, 494–95 (1954); *see also* Sanjay Mody, *Brown Footnote Eleven in Historical Context: Social Science and the Supreme Court's Quest for Legitimacy*, 54 STAN. L. REV. 793, 801 (2003) (calling Brown's Footnote 11 "the most dispute-laden footnote in American constitutional law.").

17. *Brown*, 347 U.S. at 494.

the "Doll Test" became the most controversial of these sources.[18] In this experiment, schoolchildren were asked to choose between otherwise identical black and white dolls.[19] A majority of both black and white children preferred the white dolls, identifying the black dolls as "bad" and the white dolls as "nice."[20] When the children were subsequently asked to identify "the doll that [is] most like you," several of the African-American children cried or ran out of the room.[21]

Many commentators were critical of the experiment's methodology—which did not include a control group—and the conclusion that the study established a causal relationship between school segregation and the attitudes of the children.[22] This criticism came not just from opponents of desegregation, but also from well-respected scholars who favored racial equality.[23] They feared that the *Brown* decision would prove vulnerable to being overturned were it seen as relying on social science that could be discredited.[24] As legal philosopher Edmond Cahn stated, "I would not have the constitutional rights of Negroes—or of other Americans—rest on any such flimsy foundation as some of the scientific demonstrations in these records."[25]

Several lessons can be learned from the legacy of *Brown* and Footnote 11. The first is that advocates must assess the integrity and methodology of empirical studies with great care, and provide only the most rigorous evidence available. Another is that advocates should frame their legal arguments to withstand scrutiny even if the underlying science changes or is discredited. Empirical evidence should be used to illustrate and support key legal points, but the arguments put forth should not rely *solely* on the conclusions of scientific studies. *Brown* demonstrates the pitfalls of a public perception in that an important legal decision could be vulnerable to the changing winds of a particular scientific discipline.

However, *Brown* also demonstrates that emotionally compelling evidence can be highly persuasive to both judges and the public. The Doll Test captured the imagination of Chief Justice Warren and the American people, and the study remains well-known over sixty years later.[26] Contemporary litigants looking to heed the lessons of *Brown* would do well to focus on presenting empirical

18. *Brown at 60: The Doll Test*, NAACP LEGAL DEF. FUND (last visited Mar. 12, 2018), http://www.naacpldf.org/brown-at-60-the-doll-test; *see also* Heise, *supra* note 14, at 294 (describing the doll test and ensuing controversy); Kevin F. Ryan, *Remembering and Forgetting Brown*, 30 VT. B.J. 5, 7 (2004).

19. Michael Beschloss, *How an Experiment with Dolls Helped Lead to School Integration*, N.Y. TIMES (May 6, 2014), https://www.nytimes.com/2014/05/07/upshot/how-an-experiment-with-dolls-helped-lead-to-school-integration.html.

20. *Id.*

21. *Id.*

22. Heise, *supra* note 14, at 294; Ryan, *supra* note 18, at 7.

23. Ryan, *supra* note 18, at 7.

24. *Id.*

25. Edmond Cahn, *Jurisprudence*, 30 N.Y.U. L. REV. 150, 157–58 (1955).

26. *See* Suzanne Gould, *Why We're Still Talking About the Doll Racism Test*, AAUW (Feb. 10, 2016), http://www.aauw.org/2016/02/10/doll-racism-test-today (discussing the relevancy of the Doll Test).

evidence that is strongly supported and methodologically sound, but without neglecting the importance of telling a poignant story about the harmful impact of a challenged law.

A second area in which empirical evidence has proven important is Eighth Amendment "cruel and unusual punishment" jurisprudence.[27] In a series of cases relating to juveniles and people with intellectual disabilities, the Supreme Court has considered a range of empirical evidence in assessing the applicable "evolving standards of decency" standard. The backlash to these decisions from the Court's more conservative Justices illustrates some of the hazards of relying on empirical evidence in controversial cases.

In *Atkins v. Virginia*, the Court ruled that executing defendants with mental disabilities was a violation of the Eighth Amendment's prohibition on cruel and unusual punishment.[28] Justice Stevens's majority opinion found evidence of a growing "national consensus" based on the enactments of state legislatures, the actions of sentencing juries, and surveys of public opinion.[29]

In *Roper v. Simmons*, the Court found that it was unconstitutional to impose capital punishment for crimes committed while the offender was under age eighteen.[30] Justice Kennedy's majority opinion relied on neuroscience evidence "linking youth with poor decision-making, recklessness, vulnerability to power influence, and underdeveloped character . . . ."[31] Five years later, in *Graham v. Florida*, the Court ruled that juvenile offenders could not be sentenced to life imprisonment without parole for non-homicide offenses.[32] The Court found that "developments in psychology and brain science continue to show fundamental differences between juvenile and adult minds."[33]

In all three cases, the conservative wing of the Court strongly objected. Justice Scalia, in particular, criticized what he saw as the undemocratic nature of the decisions.[34] Scalia argued that the Justices in the majority were, in effect, substituting their own personal moral judgments for those of democratically elected legislatures.[35] He was highly critical of what he characterized as the majority's "picking and choosing [of] scientific and sociological studies" without establishing that those particular studies were methodologically sound.[36]

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27. U.S. CONST. amend. VIII ("Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.").

28. Atkins v. Virginia, 536 U.S. 304, 321 (2002).

29. *Id.* at 317–18.

30. Roper v. Simmons, 543 U.S. 551, 578–79 (2005).

31. Michael N. Tennison & Amanda C. Pustilnik, *"And If Your Friends Jumped Off a Bridge, Would You Do It Too?": How Developmental Neuroscience Can Inform Legal Regimes Governing Adolescents*, 12 IND. HEALTH L. REV. 533, 544 (2015).

32. Graham v. Florida, 560 U.S. 48, 82 (2010).

33. *Id.* at 68.

34. *Roper*, 543 U.S. at 629–30 (Scalia, J., dissenting); *Graham*, 560 U.S. at 108–09 (Scalia, J., dissenting).

35. *Roper*, 543 U.S. at 629–30 (Scalia, J., dissenting).

36. *Id.* at 617 (Scalia, J., dissenting).

Overall, the conservative Justices saw this line of cases as an unjustifiable "arrogation of legislative authority."[37]

The lesson to be drawn from these cases is that courts relying on empirical evidence to strike down laws may be accused of inappropriately substituting their own judgment for that of the legislature, particularly if the empirical evidence is not methodologically sound. It is thus imperative to provide judges with strong doctrinal hooks for examining empirical evidence, and to ensure that any scientific evidence submitted is both reliable and accurately represented.

Finally, consider the use of empirical evidence in antitrust law. Legal scholar Michael Heise notes that antitrust law has been particularly susceptible to the use of empirical evidence in part because a group of influential legal theorists—particularly Robert Bork and Richard Posner—"helped to craft an intellectual foundation that animated antitrust doctrine with economic theory."[38] In 1978, Bork's book, *The Antitrust Paradox*, argued that the federal antitrust statutes were intended to prohibit *only* conduct that "reduced efficiency."[39] This influential theory opened the floodgates to evidence from economists regarding whether a given business practice harmed "efficiency."[40]

Many scholars critiqued Bork's interpretation as "ahistorical" and contrary to the legislative histories of the antitrust laws.[41] Nonetheless, the principles he espoused came to dominate antitrust theory and practice, particularly as President Reagan appointed numerous conservative judges and economists filled the ranks of the antitrust agencies.[42] In 2001, Posner—who subsequently became a federal judge on the Seventh Circuit Court of Appeals—wrote that "nearly everyone" working in the field of antitrust agreed on Bork's principles and the "essential tenets of economic theory" that should be used to apply them.[43] While liberal scholars have pushed backed on Bork's theory, both camps accept that economic evidence should be used to determine whether antitrust law is accomplishing its goals.[44]

The widely accepted use of empirical evidence in antitrust law demonstrates that the incorporation of empirical evidence in judicial decision-making need not always be controversial, particularly when it is grounded in widely accepted legal theories. There are parallels between antitrust and copyright that may make this an instructive example. Like antitrust, copyright

37. *Id.* at 510 (Alito, J., dissenting).

38. Heise, *supra* note 14, at 310.

39. *See generally* ROBERT BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (Basic Books, 1st ed. 1978) (discussing the impact of federal antitrust laws spawning an increased preference for economic analysis of efficiency).

40. Heise, *supra* note 14, at 308–10.

41. *See* Lina Khan & Sandeep Vaheesan, *Market Power and Inequality: The Antitrust Counterrevolution and its Discontents*, 11 HARV. L. & POL'Y REV. 235, 270–71 (2017) (discussing the approach of Bork and others who prioritized efficiency).

42. *Id.*

43. RICHARD POSNER, ANTITRUST LAW ix (Univ. of Chi. Press, 2d ed. 2001).

44. *See, e.g.*, Maurice E. Stucke, *Reconsidering Antitrust's Goals*, 53 B.C. L. REV. 551, 564 (2012) (asserting that the U.S. antitrust community has various goals beyond the promotion of economic welfare).

is fundamentally premised on economic principles—i.e., that copyrights provide economic incentives to authors to create and disseminate works for the benefit of the public.[45] This makes it particularly appropriate for judges to rely on economic evidence in copyright cases. As with the intellectual foundation laid by Bork and Posner in antitrust law, there is a wealth of influential scholarship supporting the use of empirical evidence in determining whether copyright law is meeting its stated purposes.[46] Finally, antitrust law demonstrates that ideologically conservative judges may be amenable to considering empirical evidence when presented with the right doctrinal and theoretical hooks.[47]

These are just a few examples of the growing use of empirical evidence in U.S. legal decisions. While this practice has become widespread in other areas of law, it has not yet become a mainstay of copyright litigation.[48] Nonetheless, as the next section shows, there is a considerable body of empirical evidence from a range of disciplines that courts might consider in copyright cases if litigants wield it correctly.[49]

II. EMPIRICAL EVIDENCE AND COPYRIGHT LAW

This Section provides an overview of empirical evidence relevant to copyright law. Rather than reinventing the wheel, this Section will stand on the shoulders of giants by discussing four representative examples of copyright scholarship that draw heavily upon empirical sources. These are only four examples among many, as there has been an explosion of such literature in recent years as legal scholars have increasingly advocated for an evidence-based approach to intellectual property.[50] This discussion demonstrates both the sheer

45. *See* Mazer v. Stein, 347 U.S. 201, 219 (1954) ("The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare through the talents of authors and inventors in 'Science and useful Arts.'"); Christopher Buccafusco & Paul J. Heald, *Do Bad Things Happen When Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension*, 28 BERKELEY TECH. L.J. 1, 4 (2013) (arguing that the use of "experimental and empirical methods to test longstanding assumptions about how laws operate . . . have been particularly successful when applied to IP, because, unlike some areas of the law, IP law's assumptions about markets, incentives, and human behavior are explicit.").

46. *See infra* Section II.

47. *See* Jonathan B. Baker & Timothy Bresnahan, *Economic Evidence in Antitrust: Defining Markets and Measuring Market Power* (Stan. L. & Econ. Olin Working Paper No. 328, 29–31, 2006), https://ssrn.com/abstract=931225 (arguing that better presentation and clarification can help judges accept empirical economic methods in antitrust cases).

48. *See infra* Section II; FIONA MACMILLAN, NEW DIRECTIONS IN COPYRIGHT LAW 283 (2006) ("Empirical evidence for copyright is quite limited.").

49. *See infra* Section II.

50. *See, e.g.*, John M. Golden, Robert P. Merges & Pamela Samuelson, *Symposium: Steps Toward Evidence-Based IP: The Path of IP Studies: Growth, Diversification, and Hope*, 92 TEX. L. REV. 1757, 1768 (2014) ("Even after decades of growth, IP studies have far to go before we can even hope for consensus about the proper bounds of evidence-based intellectual property. For the present, we can hope that the Articles in this issue contribute 'Steps' toward that end, and we can hope that the Articles' readers are moved to help in the journey."); *see also* Volker R. Grassmuck, *Academic Studies on the Effect of File-Sharing on the Recorded Music Industry: A Literature Review*, SSRN (Apr. 26, 2011), https://ssrn.com/abstract=1749579 (reviewing nearly eighty empirical studies).

amount of readily-available empirical evidence and the diversity of methodologies that can effectively be brought to bear on copyright law.[51]

In his 2015 article *IP in a World Without Scarcity*, Mark Lemley mounted a powerful empirically-informed case for the view that the traditional assumptions underlying copyright law should be reexamined in light of the realities of the Internet Era.[52] Lemley points out that in spite of the prevalence of online infringement—which should in theory reduce incentives for creation and distribution—people are "creating and distributing more content now than ever before."[53] Lemley questions the assumption that copyrights are necessary for creators to get paid for their work, relying on survey evidence showing that professional musicians make over seventy-five percent of their earnings from sources unrelated to copyright.[54] Notably, Lemley draws on a range of disciplines, citing sources ranging from peer-reviewed neuroscience to a YouTube blog.[55] Lemley shows that there is abundant empirical evidence that can be used to test the assumptions of copyright law, and whether copyright law is serving its intended ends.[56]

The central thesis of William Patry's 2011 book, *How to Fix Copyright*, is that copyright law and policy should be grounded in "independent, rigorous, and economically verifiable" evidence.[57] Accordingly, he critiques the "junk science" often presented to legislators by copyright lobbyists.[58] He devotes an entire chapter to his assertion that "[t]he evidence is overwhelming that the current, excessive length of copyright [terms] denies access to vast troves of culture and not only thwarts the preservation of old works, but does not incentivize the creation of new ones."[59] Patry highlights several compelling examples of the harms caused by over-long copyright terms, including one million hours of programming in the BBC archives that cannot be used because the rights holders are unknown, and 600,000 additional books that would be in the U.K. public domain today had copyright terms remained constant since the passage of the first copyright statute in 1710.[60]

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51. *See* Thomas Kelly, *Evidence*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY ARCHIVE, (last visited Mar. 12, 2018), https://plato.stanford.edu/archives/win2016/entries/evidence/ (defining "empirical evidence" as a broad term that encompasses all information gained through observation and experimentation.); *see* Sandra Nutley, Alison Powell, & Huw Davies, *What Counts as Good Evidence?*, ALLIANCE FOR USEFUL EVIDENCE (2013), https://www.alliance4usefulevidence.org/assets/What-Counts-as-Good-Evidence-WEB.pdf (explaining how this term is widely seen to encompass both quantitative and qualitative evidence); *see* A. Brechin & M. Sidell, *Ways of Knowing*, *in* USING EVIDENCE IN HEALTH AND SOC. CARE (R. Gomm & C. Davies ed., 2000) (advocating the use of both quantitative and qualitative evidence as the most comprehensive approach to understanding the real-world impact of copyright law).

52. Mark A. Lemley, *IP in a World Without Scarcity*, 90 N.Y.U. L. REV. 460 (2015).

53. *Id.* at 485.

54. *Id.* at 490.

55. *Id.* at 485–92.

56. *See id.* at 493 (citing empirical studies to test the relation of monetary incentive and creativity).

57. WILLIAM PATRY, HOW TO FIX COPYRIGHT 5–6 (2012).

58. *Id.* at 61–67.

59. *Id.* at 189–209.

60. *Id.* at 190, 195.

Another instructive example is from Pamela Samuelson's 1999 article, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*.[61] Samuelson critiques the anti-circumvention provisions of the Digital Millennium Copyright Act (DMCA), 17 U.SC. §§ 1201-05, which prohibit the circumvention of technological controls of copyrighted materials.[62] Samuelson argues that the anti-circumvention provisions will have unintended harmful consequences because they do not distinguish between circumvention aimed at gaining unauthorized access to a work and circumvention aimed at making non-infringing uses of lawfully obtained materials.[63] Samuelson provides a series of real-world examples of circumventions aimed at legitimate purposes that would potentially be subject to liability under the anti-circumvention provisions.[64] In one example, Samuelson describes a researcher from Xerox's Palo Alto Research Center who circumvented a movie's technical protections in order to make a clip of an Old Western movie to demonstrate the derogatory nature of the term "redskin" for use in a lawsuit challenging the Washington Redskins' trademark.[65] Although this use of the clip would qualify as a "fair use"—and therefore not copyright infringement—Samuelson argues that the researcher would nevertheless face liability under the DMCA if a fair use exception is not read into the statute, as she recommends.[66] Samuelson's article demonstrates how evidence in the form of real-world examples may effectively illustrate the harmful impact of overbroad copyright laws when that harm might otherwise appear abstract or insignificant.[67]

Christopher Buccafusco and Paul J. Heald provide a rigorous empirically-driven analysis of copyright term extensions in their well-known 2013 article, *Do Bad Things Happen When Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension*.[68] Buccafusco and Heald collect data regarding the market for audiobook recordings and conclude that audiobooks of works in the public domain are significantly more available than audiobooks of copyrighted works.[69] This finding calls into question the oft-repeated claim that works will fall out of distribution once they fall out of the public domain, as copyright protection is purportedly needed to incentivize distribution as well as

61. Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 519, 539 (1999).

62. *Id.*

63. *Id.*

64. *Id.* at 540–45.

65. *Id.* at 540.

66. *Id.* at 548–57.

67. *See id.* at 536–37 ("[T]he digital economy sector remains understandably concerned about the potential for overbroad application of the anti-circumvention and anti-device norms, and recent developments suggest that there is reason for this concern.").

68. *See generally* Buccafusco & Heald, *supra* note 45 (discussing the empirical experiment that found more audiobooks of public domain works than copyrighted works).

69. *Id.* at 37.

creation of works.[70] The authors examined existing empirical studies of copyright term extension and gathered their own quantitative data regarding the availability of audiobooks by conducting a human subject experiment regarding the perceived quality of available recordings.[71]

These are four examples among many of copyright scholarship that have effectively marshaled empirical evidence in support of legal arguments, as this Article recommends copyright reformers do in the context of impact litigation. In general, the use of empirical evidence in legal scholarship should serve as a model for copyright practitioners seeking to make use of empirical evidence in the courtroom.[72] The next Section will explain what types of doctrinal hooks might be used to persuade courts to look at this evidence in the first place.

III. DOCTRINAL HOOKS FOR INTRODUCING EMPIRICAL EVIDENCE IN COPYRIGHT LITIGATION

The argument of this Article is that copyright litigants should find ways to persuade courts to consider empirical evidence in copyright cases in order to drive reform of copyright law. As established in Sections I–II,[73] U.S. courts are increasingly willing to rely on empirical evidence in other areas of the law, and there is a wealth of relevant evidence that could prove persuasive in copyright litigation. However, judges will be most willing to take this approach if they are on solid legal footing, and not vulnerable to being seen as simply substituting their own policy preferences for those of the legislature.[74] Judges need doctrinal hooks for looking at empirical evidence without going beyond the bounds of the judicial role.[75] Accordingly, this Section will examine two such potential doctrinal hooks and conclude that there are opportunities for copyright reformers to rely more heavily on empirical evidence, provided they can overcome the hurdles established by recent Supreme Court decisions.

A. The First Amendment

Two provisions of the U.S. Constitution are particularly relevant to copyright law: the First Amendment, which states that "Congress shall make no

70. Paul J. Heald, *How Copyright Keeps Works Disappeared*, 11 J. EMPIRICAL STUD. 829 (2014) (discussing how a corresponding study of books and e-books available from online retailers and reached a similar conclusion, namely that books in the public domain were more likely to be widely available than books remaining under copyright protection, contrary to the assertions of many advocates for extended term limits).

71. *See id.* at 849–60 (describing existing empirical studies and the methodology used by the others in two original studies).

72. *Copyright Evidence: Empirical Evidence for Copyright*, CREATE CENTRE: UNIVERSITY OF GLASGLOW (Koutmeridis et al. eds.) (Oct. 13, 2017, 15:47 P.M.), www.copyrightevidence.org. (discussing how copyright practitioners should also be aware of the Copyright Evidence Project, a free digital resource that catalogues empirical studies relevant to copyright in order to inform public debate and policy).

73. Heise, *supra* note 14, at 313.

74. Roper v. Simmons, 543 U.S. 551, 629–30 (2005) (Scalia, J., dissenting).

75. *Id.*

law . . . abridging the freedom of speech,"[76] and the Copyright Clause, which grants Congress the power "[t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[77] These two provisions are fundamentally in tension, as giving authors and inventors an exclusive right to their works necessarily prevents others from using them in their own expressive works. However, copyright protection was viewed by the Framers "not simply as a limit on the manner in which expressive works may be used, but also as an engine of free expression."[78] In theory, "[b]y establishing a marketable right to the use of one's expression, copyright supplies the economic incentive to create and disseminate ideas."[79] Given their purportedly intertwined purposes, there has been much debate over the extent to which the First Amendment places constraints on the Copyright Clause.[80]

This Section will address two generations of First Amendment challenges to copyright law. The first Sub-section will discuss two landmark Supreme Court cases—the "first generation" cases—that set a clear legal standard for First Amendment challenges to copyright law, as well as clear limitations on such challenges.[81] The second Sub-section will discuss subsequent attempts—the "second generation" cases—to mount First Amendment challenges in light of this legal standard.[82] This Section will argue that there is still ample opportunity for reformers to bring successful First Amendment challenges to copyright statutes—particularly where such challenges are supported by well-chosen empirical evidence.

1. First Generation Cases: Eldred and Golan

The first of these two landmark cases is *Eldred v. Ashcroft*, the 2003 case in which Petitioners brought an unsuccessful constitutional challenge to the Copyright Terms Extension Act (CTEA), 17 U.S.C. §§ 108 et seq.[83] The CTEA extended copyright terms from the life of the author plus fifty years to the life of

76. U.S. CONST. amend. I.

77. U.S. CONST. art. I, § 8, cl. 8.

78. Golan v. Holder, 565 U.S. 302, 328 (2012).

79. *Id.*

80. *E.g.*, Neil W. Netanel, *First Amendment Constraints on Copyright After Golan v. Holder*, 60 UCLA L. REV. 1082 (2013) [hereinafter Netanel] (overviewing the various arguments free speech doctrine may influence copyright law); David S. Olson, *First Amendment Interests and Copyright Accommodations*, 50 B.C. L. REV. 1393 (2009) [hereinafter Olson]; Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. REV. 354 (1999); Robert C. Denicola, *Copyright and Free Speech: Constitutional Limitations on the Protection of Expression*, 67 CAL. L. REV. 283 (1979).

81. *Golan*, 565 U.S. 302 (2012); Eldred v. Ashcroft, 537 U.S. 186 (2003).

82. *See, e.g.*, Memorandum for the Defendant, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. 2016), https://www.eff.org/files/2016/09/30/015-1_memorandum_in_support.pdf (highlighting a recent First Amendment challenge to copyright protections).

83. *Eldred*, 537 U.S. at 186.

the author plus seventy years, extending the terms for both new and already-published works.[84]

Petitioners raised a First Amendment challenge, contending that the CTEA should be subject to the same "intermediate scrutiny" applicable to other regulations of speech.[85] Intermediate scrutiny is a form of proportionality analysis in which the court considers whether the challenged legislation "promotes a substantial government interest that would be achieved less effectively absent the regulation" and does not "burden substantially more speech than is necessary to further the government's legitimate interests."[86] To satisfy its burden under intermediate scrutiny, the government must make an evidentiary showing both that the harms to be addressed by the policy are "real, not merely conjectural" and that the policy "alleviates these harms in a direct and material way."[87] Empirical evidence is clearly relevant to both prongs of this analysis.

Indeed, the Court received a wealth of empirical evidence in *Eldred*.[88] Numerous briefs were submitted in support of Petitioners by *amici curiae*, including the Free Software Foundation, the American Association of Law Libraries, the College Art Association, the National Writers Union, and a group of economists including five Nobel-prize winners.[89] Many of the *amici* identified expression-related harms to their organizations caused by extended copyright terms.[90] The economists asserted that the CTEA provided functionally zero incentive to create new works, and actively reduced innovation by restricting the production of new creative works.[91]

Justice Ginsburg's majority opinion rejected Petitioners' First Amendment argument.[92] She reasoned that the CTEA did not disturb copyright's internal free speech safeguards—the "idea/expression dichotomy" and the "fair use" defense—which serve as "built-in First Amendment accommodations."[93] The idea/expression dichotomy holds that copyright law protects only an author's expression of an idea, not the facts or ideas contained therein, while fair use serves as a defense to infringement where the copyrighted materials are used for a "transformative purpose," such as criticism, parody, news, teaching, or

84. 17 U.S.C. § 302(a) (2018).

85. *Eldred*, 537 U.S. at 193–94.

86. Ward v. Rock Against Racism, 491 U.S. 781, 799 (1989).

87. Ross v. Early, 746 F.3d 546, 556 (4th Cir. 2014).

88. *Eldred*, 537 U.S. at 186.

89. Brief for Free Software Found. Amici Curiae Supporting Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01–618) [hereinafter Free Software Foundation]; Brief for Am. Ass'n of L. Libr. et al. as Amici Curiae Supporting Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01–618); Brief of C. Art Assoc. et al. as Amici Curiae Supporting Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01–618); Brief for Nat'l Writers Union et al. as Amici Curiae Supporting Petitoners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01–618); Brief for George A. Akerlof et al. Amici Curiae Supporting Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) [hereinafter Akerlof].

90. Free Software Foundation, *supra* note 89.

91. *See generally* Akerlof, *supra* note 89 (discussing the real economic impacts the copyright extensions will have).

92. *Eldred*, 537 U.S. at 190.

93. *Id.*

scholarship.[94] The Court found that, while copyright laws were not "categorically immune" from challenges under the First Amendment, "[w]hen . . . Congress has not altered the traditional contours of copyright protection, further First Amendment scrutiny is unnecessary."[95] Ginsburg did not clearly define the term "traditional contours" in *Eldred*, and this ambiguity has caused some confusion for lower courts and litigants, as discussed below.[96] Because the majority declined to engage in any First Amendment review whatsoever, it did not address any of the empirical evidence submitted regarding the CTEA's impact on First Amendment interests.[97] The *Eldred* majority was therefore seen as a potential death knell for future First Amendment challenges to copyright statutes.[98] Nonetheless, as discussed below, recent developments suggest that there may yet be some life left in the First Amendment approach after all.[99]

Two Justices dissented.[100] Breyer argued that "text, history, and precedent" supported subjecting the CTEA to at least "rational basis" First Amendment scrutiny.[101] Justice Breyer reviewed the evidentiary submissions and asserted that he "[could not] find any constitutionally legitimate, copyright-related way in which the statute [would] benefit the public."[102] Rather, he argued, the "serious public harm" inflicted by extending the term for existing works "could not be more clear."[103] Breyer concluded that because the CTEA "[could not] be understood rationally to advance a constitutionally legitimate interest" he would hold the statute unconstitutional under the rational basis standard.[104] Thus, had Breyer's approach won the day, empirical evidence would have played a central role in pushing the Court to embrace Petitioners' requested copyright reforms.[105]

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94. *See* 17 U.S.C. § 102(b) (2018) (detailing the idea/expression dichotomy); 17 U.S.C. § 107 (2018) (discussing fair use); *see also* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569 (1994) (clarifying the standard for fair use).

95. *Eldred*, 537 U.S. at 191.

96. Elizabeth T. Gard, *A Tale of Two Ginsburgs: Traditional Contours in Eldred and Golan*, 62 DEPAUL L. REV. 931, 942–43 (2013).

97. *See Eldred*, 537 U.S. at 218–22 (holding that because "Congress has not altered the traditional contours of copyright protection, further First Amendment scrutiny is unnecessary.").

98. *See id.* at 242 (finding that "[f]airly read, the Court has stated that Congress' actions under the Copyright/Patent clause are, for all intents and purposes, judicially unreviewable.").

99. *See* Kit Walsh, *EFF to Court: Protect Free Speech from Overbroad Use of DMCA*, ELEC. FRONTIER FOUND. (Jan. 19, 2017) [hereinafter Walsh], https://www.eff.org/deeplinks/2017/01/eff-ninth-circuit-protect-free-speech-overbroad-dmca (discussing cases where plaintiffs argue First Amendment challenges to copyright statutes).

100. *Eldred*, 537 U.S. at 222–42 (Stevens, J., dissenting), 242–67 (Breyer, J., dissenting).

101. *Id.* at 244–45, 265 (Breyer, J., dissenting).

102. *Id.* at 266 (Breyer, J., dissenting).

103. *Id.* (Breyer, J., dissenting).

104. *See id.* at 266–67 (Breyer, J., dissenting) (showing that Breyer grounded his rational basis argument in the First Amendment, but relied on the language of the Progress Clause to define the contours of which governmental interests should be considered "legitimate" in the copyright context).

105. *See id.* at 242–68 (discussing the value of empirical support).

Justice Stevens's dissent focused on the purposes of copyright law as embodied by the Progress Clause.[106] He compared the repeatedly extended copyright terms to constitutionally limited patent terms, asserting that the same limiting rationale should apply to both.[107] He wrote that ex post facto extensions of copyright terms "result in a gratuitous transfer of wealth" from the public to copyright owners and "do not even arguably serve either of the purposes of the [Copyright Clause]."[108]

The second landmark decision came nearly ten years later, in *Golan v. Holder*.[109] Petitioners brought a First Amendment challenge to the Uruguay Round Agreements Act (URAA), which implemented the Marrakesh Agreement of 1994 by granting copyright protection to works from treaty member countries that were protected in their country of origin, but had previously been in the public domain in the U.S.[110] Petitioners argued that the statute should be subject to intermediate scrutiny, distinguishing this case from *Eldred* by arguing that the URAA altered the traditional contours of copyright by removing works from the public domain.[111] After *Eldred*, many scholars believed that the "traditional contours" of copyright protection must have some additional functional or historical components that went beyond fair use and the idea/expression dichotomy.[112] The Tenth Circuit agreed, finding that the URAA violated the traditional contours of copyright law by deviating from the "bedrock principle" that works in the public domain must remain there.[113]

The Supreme Court disagreed.[114] Justice Ginsburg, writing for the majority, found that the URAA left the traditional safeguards of fair use and the idea/expression dichotomy intact, as well as adopted additional measures to ease the transition from a national to an international copyright regime, and that there was no "exceptional First Amendment solicitude" for the public domain.[115] As in *Eldred*, Ginsburg found that the statute did not disturb the traditional contours of copyright law, and therefore no First Amendment scrutiny was warranted.[116] Justice Breyer dissented, this time joined by Justice Alito.[117] Breyer argued that the empirical evidence of speech-related harms caused by the URAA should have triggered heightened scrutiny of the statute.[118]

106. *Id.* at 222–23 (Stevens, J., dissenting).
107. *Id.*
108. *Id.* at 227–40 (Stevens, J., dissenting).
109. Golan v. Holder, 565 U.S. 302, 306–336 (2012).
110. *Id.* at 306.
111. *Id.* at 330.
112. *See, e.g.*, Olson, *supra* note 80, at 1397 (arguing that because of the alteration of traditional contours of copyright, "the idea/expression dichotomy and fair use doctrines cannot come close to adequately protecting the public's interests").
113. Golan v. Gonzales, 501 F.3d 1179, 1187–88 (10th Cir. 2007).
114. Golan v. Holder, 565 U.S. at 328–30.
115. *Id.*
116. *Id.* at 328, 330.
117. *Id.* at 344 (Breyer, J., dissenting).
118. *Id.* at 359–60 (Breyer, J., dissenting).

So, what role did empirical evidence play in these cases? In both, numerous *amici* submitted briefs providing evidence that the contested statutes did real and immediate harm to their First Amendment interests.[119] As discussed above, *Eldred* counsel Lawrence Lessig believes that his failure to emphasize this empirical evidence may have doomed the case:

> I can see a hundred places where . . . the truth about the harm that this unchecked power [of current copyright laws] will cause could have been made clear to this Court . . . I can't help but think that if I had stepped down from this pretty picture of justice [as immune from the influence of empirical evidence], I could have persuaded.[120]

While the majorities in *Eldred* and *Golan* were not persuaded by the empirical evidence, the dissenting judges appear to have been strongly influenced by it.[121] Breyer's dissents in particular indicate that, for the right judge, empirical evidence of the real-world impact of copyright laws may be very compelling.[122] While Justice Breyer is known for being particularly open to empirical evidence,[123] the fact that he was joined in his *Golan* dissent by the conservative Justice Alito indicates that more traditionally-minded judges may also be willing to look to empirical evidence in copyright cases, if given an adequate doctrinal hook.[124]

The *Eldred* and *Golan* dissents also echo a key lesson from *Brown*. While rigorous scientific evidence can be highly persuasive, so, too, can emotionally compelling anecdotal evidence.[125] In addition to relying on statistics from Nobel-prize winning economists, Breyer's *Eldred* dissent cites to individual examples that illustrate the harms done by the CTEA.[126] Breyer notes, for instance, how licensing fees have deprived youth orchestras of sheet music for early 20th-century works, and how lengthy copyright terms have made it

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119. *See, e.g.*, Brief for Google, Inc. as Amicus Curiae in Support of Petitioners, Golan v. Holder, 565 U.S. 302 (2012) (No. 10–545), 2011 WL 2533006 (arguing that section 514 is a law abridging the freedom of speech, warranting searching First Amendment scrutiny); Brief for Eagle Forum Education & Legal Defense Fund and the Association of American Physicians & Surgeons, Inc. as Amici Curiae Supporting Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1041834 (arguing that the First Amendment limits new expansions in copyright law).

120. Lessig, *supra* note 4, at 244–45.

121. *Golan*, 565 U.S. at 359 (Breyer, J., dissenting) (arguing that the empirical evidence of speech-related harms caused by the URAA should have triggered scrutiny of the statute); *Eldred*, 537 U.S. at 249 (Breyer, J., dissenting) (citing multiple amici curiae briefs and stressing that the likely amounts of extra royalty payments are large enough to suggest that high prices will restrict distribution of classic works in practice).

122. *Golan*, 565 U.S. at 359 (Breyer, J., dissenting); *Eldred*, 537 U.S. at 261–62 (Breyer, J., dissenting).

123. Stephen Breyer, *Science in the Courtroom*, ISSUES IN SCI. & TECH. 16, 4 (2000), http://issues.org/16-4/breyer; *see* Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 322 (1970) (noting Justice Breyer's review of empirical evidence in a copyright context).

124. *See, e.g.*, *Leading Cases*, 125 HARV. L. REV. 261, 270, n. 80 (2011) (noting Justice Alito's review of empirical evidence in the Eighth Amendment context).

125. *See, e.g.*, *Eldred*, 537 U.S. at 250–51 (Breyer J., dissenting) (discussing examples where copyright holders are able to control content of historical and cultural works).

126. *Id.*

difficult for documentarians and archivists to obtain permission to use important historical film clips and documents.[127] As with the Doll Test in *Brown*, these humanizing examples of a law's harmful effects carry a lot of weight. Copyright litigators would do well to remember that a combination of rigorous scientific evidence and personally compelling anecdotal evidence is likely to be most persuasive to judges. Statistics alone, regardless of their rigor, are unlikely to move the needle.

By limiting First Amendment scrutiny of many copyright statutes, *Eldred* and *Golan* appeared to foreclose a previously promising avenue for empirically-informed constitutional challenges to copyright law.[128] If a court engages in no constitutional review at all, then there is no opportunity to submit empirical evidence regarding the lack of a weighty governmental interest and whether a law fails to serve such an interest.[129] Nonetheless, as will be discussed below, there is still hope for First Amendment challenges, provided they can clear the hurdles set by these first generation cases.

Indeed, copyright scholar Neil Netanel has argued that *Eldred* and *Golan* represent a modest victory for First Amendment restraints on copyright law.[130] Previous Supreme Court precedent suggested that fair use was *not* an indispensable First Amendment safeguard, and that the idea/expression dichotomy comprised the entirety of copyright law's built-in First Amendment protections.[131] *Eldred* and *Golan* refuted that premise, making clear that "neither Congress nor the courts may eviscerate copyright law's idea/expression dichotomy or the fair use privilege without running afoul of the First Amendment."[132] Thus, these cases establish a floor of First Amendment protection below which Congressional legislation cannot dip without being subject to heightened scrutiny.

Accordingly, Netanel contends that this leaves some newer copyright statutes—like the DMCA—vulnerable to First Amendment challenges, insofar as they arguably go beneath this constitutionally mandated floor.[133] Statutes that do not adequately incorporate fair use and the idea/expression dichotomy could be challenged and receive heightened First Amendment scrutiny, *Eldred* and *Golan* notwithstanding.[134] This provides an opening for litigants to submit empirical evidence regarding the impact of such laws as part of the tailoring analysis.

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127. *Id.*

128. *Eldred*, 537 U.S. at 219 (rejecting imposition of strict scrutiny on a copyright scheme that incorporates its own speech-protective purposes and safeguards despite empirical evidence); *Golan*, 565 U.S. at 329 (echoing the *Eldred* decision on not heightening scrutiny for copyright statutes).

129. *See Eldred*, 537 U.S. at 219 (noting that "copyright law contains built-in First Amendment accommodations.").

130. Netanel, *supra* note 80, at 1086–87.

131. Harper & Row Publishers, Inc. v. Nation Enter, 471 U.S. 539, 556–57 (1985).

132. Netanel, *supra* note 80, at 1086.

133. *Id.* at 1087.

134. *Id.*

Indeed, a recent challenge to the DMCA in *Green v. DOJ* shows that the First Amendment may live to fight another day.[135] *Green* argues that the DMCA fails to incorporate a fair use defense, and should therefore be subject to intermediate scrutiny under *Eldred* and *Golan*, opening the door to empirical evidence.[136] *Green* thereby employs a doctrinal hook for empirical evidence that circumvents the limits of the first generation cases.[137] Accordingly, the next Section will discuss second generation challenges in the wake of *Eldred* and *Golan*, and the role that empirical evidence can play in these cases.

2. Second Generation Cases: Green and the DMCA

Green brings a First Amendment challenge to sections 1201 and 1204 of the DMCA, the much-maligned anti-circumvention provisions.[138] This challenge may succeed because the DMCA and its anti-circumvention provisions arguably fail to incorporate the fair use doctrine, thereby altering one of the "traditional contours" of copyright protection. Under *Eldred* and *Golan*, this leaves room for the statute to be subject to heightened scrutiny, providing a doctrinal hook for incorporating empirical evidence into the analysis.[139] While it is unclear whether this challenge will ultimately succeed, this Section will argue that *Green* demonstrates that the First Amendment remains a viable means for presenting empirical evidence to courts in copyright litigation.

The DMCA is not a traditional copyright statute. It does not define or control copyright infringement.[140] Rather, its anti-circumvention provisions create freestanding civil and criminal liability for individuals who attempt to hack or circumvent the technological controls placed on digital copyrighted materials, or who traffic in methods of doing so.[141] Numerous scholars and critics have argued that these provisions are overbroad in their restrictions on otherwise legitimate activities, and therefore not compatible with the First Amendment.[142] One

135. Walsh, *supra* note 99.

136. Memorandum of Points & Authorities in Support of Motion for Preliminary Injunction on Behalf of Plaintiff at 15, 25, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. 2016), https://www.eff.org/files/2016/09/30/016-1brief_iso_of_motion_for_pi.pdf.

137. *Id.*

138. *Id.* at 5–6.

139. Golan v. Holder, 565 U.S. 330–31 (2012) (discussing that the copyright law does not challenge fair use); Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1041834, at 219–20 (maintaining that the CTEA does not challenge fair use).

140. 17 U.S.C. §§ 1201–04 (2018).

141. 17 U.S.C. § 1201 (2018) (prohibiting circumventing, or trafficking in any technology designed to circumvent, any "technological measure that effectively controls access to a work protected under the [Copyright Act]."); 17 U.S.C. § 1201(a)(2) (2018) (defining trafficking as including the manufacture, importation, offering to the public, or providing of such a technology, product, service, component, or part thereof); 17 U.S.C. § 1204 (2018) (imposing criminal penalties for violations of Section 1201 if they are willful and for the purpose of financial gain).

142. *See, e.g.*, David Nimmer, *A Riff on Fair Use in the Digital Millennium Copyright Act*, 148 U. PA. L. REV. 673, 705–06 (2000) [hereinafter Nimmer] (discussing the failings of the DMCA statute in certain scenarios); Jennifer E. Rothman, *Copyright's Private Ordering and the "Next Great Copyright Act,"* 29 BERKLEY TECH. L.J. 1595, 1632 (2014) (discussing how the DMCA disallows otherwise permissible activities);

significant First Amendment concern raised by scholars and courts is that the text of the DMCA does not incorporate a fair use defense.[143] A fair use defense to the DMCA would allow a person charged with violating the anti-circumvention provisions to avoid liability by establishing that they were engaged in circumvention for the purpose of making fair use of copyrighted materials, and were therefore not engaged in copyright infringement.[144] Because fair use is defined as an exception to the exclusive rights of copyright holders, it typically serves only as a defense to an infringement action.[145] It is therefore not clear whether a fair use defense should be read into the anti-circumvention provisions.

One way that a fair use defense can be read into the statute is by interpreting the anti-circumvention provisions to require a "nexus" to copyright infringement before liability can be imposed.[146] Because the DMCA was purportedly passed in order to prevent copyright infringement, the argument goes, the statute must have been intended to prohibit only activities that were reasonably related to genuine copyright infringement.[147] Thus, some courts have read an implicit "infringement nexus" requirement into the statute, pursuant to which liability under the anti-circumvention provisions requires a "nexus" between the circumventing activity or technology and an instance of actual copyright infringement.[148] If such a nexus were required, a showing of fair use would negate any underlying copyright infringement, which would provide a complete defense to the DMCA violation. Courts and scholars are split on this issue.[149] The Federal Circuit has found that

Samuelson, *supra* note 61, at 539–45 (explaining that anti-circumvention provisions are not compatible with the First Amendment).

143. 17 U.S.C. §§ 1201–04 (2018); *see, e.g.*, Realnetworks, Inc. v. DVD Copy Control Ass'n, 641 F. Supp. 2d 913, 941–42 (N.D. Cal. 2009) (discussing that "fair use is never a defense to DMCA liability"); Ryan L. Van Den Elzen, *Decrypting the DMCA: Fair Use as a Defense to the Distribution of DeCSS*, 77 NOTRE DAME L. REV. 673, 697 (2002) [hereinafter Van Den Elzen] (describing the issues of DMCA lacking a fair use defense).

144. *See* Van Den Elzen, *supra* note 143, at 689 (using the example, "[u]nder [§] 1201(b) of the DMCA, it is illegal for Jack to create a program, such as DeCSS, and distribute it to Ben so that Ben can make lawful fair use of his DVDs. In fact, it is illegal for anyone to make DeCSS available to Ben. While Ben has a legal right to make fair use of his DVDs, it is impossible for him to do so because it is illegal for anyone to provide him with the means to do so.").

145. Nimmer, *supra* note 142, at 731 (explaining that fair use is a defense against infringement action, not an action for tort of unauthorized circumvention).

146. *See* Theresa M. Troupson, *Yes, It's Illegal to Cheat a Paywall: Access Rights and the DMCA's Anticircumvention Provision*, 90 N.Y.U. L. REV. 325, 340 (2015) [hereinafter Troupson] (describing that "[i]n *Chamberlain*, the Federal Circuit read into the statute a nontextual infringement-nexus requirement, such that a plaintiff copyright owner would have to establish not only circumvention, but also that the circumvention caused or enabled traditional copyright infringement.").

147. *Id.* at 346.

148. *See infra* notes 150–51.

149. *See* Troupson, *supra* note 146, at 360 n. 15 (providing an overview of the legal scholarship examining these two opposing interpretations of the anti-circumvention provisions).

such an "infringement nexus" is required for liability under the anti-circumvention provisions,[150] while the Second and Ninth Circuits have rejected this argument.[151]

In an attempt to break this deadlock regarding what would otherwise be an issue of statutory interpretation, some reform-minded litigants have started to use the First Amendment to argue that recognizing a fair use defense to the DMCA is, in fact, constitutionally required.[152] This is the strategy being pursued in *Green*, which this Section analyzes in depth below. Before turning to *Green*, however, note that in one early First Amendment challenge to the DMCA, empirical evidence—or the lack thereof—played a determinative role.[153] In *Universal City Studios v. Reimerdes*, a group of movie studios brought a DMCA action to enjoin three website owners from posting software that decrypted DVDs or posting hyperlinks to other websites that made such software available.[154] The defendants raised a First Amendment challenge, contending that the anti-circumvention provisions were unconstitutionally overbroad in that they prevented people from making fair use of copyrighted works.[155] The Second Circuit declined to rule on the overbreadth challenge, reasoning that "'the evidence as to the impact of the anti-trafficking provisions of the DMCA on prospective fair users is scanty and fails to adequately address the issues.'"[156] This suggests that the court was open to being persuaded by empirical evidence, but was not willing to rule on the First Amendment question without a more expansive showing of actual harm.

This brings us to *Green*, the latest attempt to litigate the relationship between the DMCA and the First Amendment.[157] The *Green* plaintiffs are Dr. Matthew Green, a cryptographer and computer security researcher at John Hopkins University, and Dr. Andrew "[B]unnie" Huang, an electrical engineer and inventor.[158] Dr. Green investigates the security of electronic systems, and

150. Storage Tech. Corp. v. Custom Hardware Eng'g & Consulting, Inc., 421 F.3d 1307, 1319 (Fed. Cir. 2005) (requiring a nexus between copyright infringement and the circumventing activity for liability under section 1201); Chamberlain Grp., Inc. v. Skylink Tech., Inc., 381 F.3d 1178, 1202-03 (Fed. Cir. 2004).

151. MDY Indus. v. Blizzard Entm't, 629 F.3d 928, 945 (9th Cir. 2010) (arguing section 1201 creates a "a new anti-circumvention right" that is distinct from the traditional rights of copyright owners); Universal City Studios, Inc. v. Corley, 273 F.3d 429, 443–44 (2d Cir. 2001) (arguing section 1201 applies even where the circumvention has no connection to copyright infringement); *see also* U.S.A. v. Crippen, No. CR-09-703, 2010 U.S. Dist. LEXIS 143583, at *6–7 (C.D. Cal. Nov. 23, 2010) (arguing fair use is not a defense to criminal charges under section 1204 of the DMCA).

152. *See, e.g.*, Universal City Studios v. Reimerdes, 111 F. Supp. 2d 294, 304 (S.D.N.Y. 2000) (discussing defendants claim that the DMCA does not reach their conduct because of a fair use defense), *aff'd sub nom*; *Corley*, 273 F.3d at 458 (discussing appellants' argument that DMCA unconstitutionally eliminates the fair use defense); Memorandum of Points & Authorities in Support of Motion for Preliminary Injunction on Behalf of Plaintiff at 15, 25, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. 2016), https://www.eff.org/files/2016/09/30/016-1brief_iso_of_motion_for_pi.pdf (challenging the constitutionality of the DMCA based on the absence of fair use provision in the act).

153. *Reimerdes*, 111 F. Supp. 2d at 338, n. 246 (noting that the empirical evidence on the issue of the impact of DMCA on fair users was insufficient and therefore the constitutional challenge was improper).

154. *Id.* at 303.

155. *Id.* at 338.

156. *Corley*, 273 F.3d at 459 (quoting *Reimerdes*, 111 F. Supp. 2d at 338 n. 246).

157. Complaint for Declaratory and Injunctive Relief at 2, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. July 21, 2016) [hereinafter Complaint], https://www.eff.org/files/2016/07/21/1201_complaint.pdf.

158. *Id.* at ¶¶ 5–6.

publishes information obtained via this research in academic literature.[159] He is also writing a book on the subject, in which he plans to include detailed information regarding how to circumvent various security systems.[160] Dr. Huang has developed an open source technology for manipulating digital video streams, and wishes to manufacture and sell the technology.[161] Both plaintiffs assert that they fear prosecution under the DMCA if they proceed with these otherwise lawful activities.[162] Green and Huang challenge the constitutionality of the anti-circumvention provisions both as applied to themselves and as a facially overbroad law that chills the protected speech of others.[163] They emphasize that the anti-circumvention provisions lack the "traditional safeguards—such as the fair use doctrine—that are necessary to protect free speech and allow copyright law to coexist with the First Amendment."[164] They also contend that the triennial rulemaking process through which the public may seek exceptions to Section 1201 from the Library of Congress does not alleviate the problem and is, on the contrary, itself an unconstitutional speech-licensing regime.[165]

Rather than arguing directly for or against an "infringement nexus" requirement, the plaintiffs contend that "[t]o the extent that [s]ection 1201 forbids circumvention even where such activity would be a noninfringing use (such as a fair use), or facilitates other lawful uses, it undermines the constitutionally required balance between copyright liability and the First Amendment and thereby disturbs the traditional contours of copyright."[166] In essence, they ask that the court either strike down the anti-circumvention provisions or clarify that a fair use defense is constitutionally required.[167]

It is submitted that *Green* presents an opportunity to bring empirical evidence before the court in a manner that is consonant with the legal standards set forth in the first generation First Amendment cases.[168] As discussed above, *Eldred* and *Golan* appear to allow traditional First Amendment challenges to copyright statutes that do not incorporate fair use, as this appears to disturb the "traditional contours" of copyright protection.[169] Given this result, First Amendment challenges can be brought in the traditional way: litigants can argue to the court that the statute impermissibly burdens speech and should therefore be subject to heightened First Amendment scrutiny.[170] This, in turn, is likely to

159. *Id.* at ¶¶ 75–77.
160. *Id.*
161. *Id.* at ¶¶ 89–90
162. *Id.* at ¶¶ 81, 86, 109, 110.
163. *Id.* at ¶¶ 87, 109–10.
164. *Id.* at ¶ 1.
165. *Id.*
166. *Id.* at ¶ 23.
167. *Id.* at ¶ 1.
168. Golan v. Holder, 565 U.S. 332 (2012).
169. *Id.* at 329; Elizabeth Townsend Garde, *A Tale of Two Ginsburgs: Traditional Contours in Eldred and Golan*, 62 DEPAUL L. REV. 931, 942–43 (2013).
170. *Golan*, 565 U.S. at 329.

mean that intermediate scrutiny applies (as it is the lowest form of "heightened" scrutiny).[171] As noted above, this test requires the government, in defending a challenged law, to show that the law furthers an *important* government interest by means that are *substantially related* to that interest.[172] The *Green* plaintiffs have accordingly submitted several types of empirical evidence in support of their argument that the DMCA fails this "substantial relationship" requirement—i.e., does not promote important governmental interests with sufficient efficacy.[173]

First, Green and Huang have submitted evidence that they have been individually harmed by the DMCA, in that they have been chilled from publishing and selling their respective research.[174] This is standard in all federal litigation, as individual plaintiffs must establish that they have been harmed in order to have standing to bring a case in federal court.[175]

Second, plaintiffs have provided a litany of requests for exemptions from section 1201 for lawful purposes that have been rejected by the Librarian of Congress.[176] These rejected requests include: education of K-12 students in media literacy or critical media studies; educational use by students and instructors outside the school environment or by students in open online courses; educational uses by museums, libraries, and nonprofits; "format shifting" (converting lawfully-acquired media from one format to another); "space shifting" (moving lawfully-acquired media from one device to another); and the creation of noncommercial films using more than short clips.[177]

Third, plaintiffs have requested that the court take judicial notice of a June 2017 Copyright Office Report consisting of a "comprehensive public study on the operation of [s]ection 1201."[178] Plaintiffs highlight that the Report recommends "changes to the Office's administration of the triennial rulemaking" and that the Copyright Office "shares the concern that [s]ection 1201(a)'s protections for access controls have the potential to implicate activities far outside the traditional scope of copyright law."[179]

In sum, the *Green* plaintiffs have submitted types of empirical evidence that have proven effective elsewhere: compelling examples of specific harms to sympathetic individuals, evidence of widespread harm to broad swaths of the non-

171. *Id.* at 330–31.

172. Ward v. Rock Against Racism, 491 U.S. 781, 799 (1989).

173. Memorandum of Points & Authorities in Support of Motion for Preliminary Injunction on Behalf of Plaintiff at 25, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. 2016), https://www.eff.org/files/2016/09/30/016-1brief_iso_of_motion_for_pi.pdf.

174. *Id.* at 29.

175. Lujan v. Defs. of Wildlife, 504 U.S. 555, 560 (1992).

176. Complaint, *supra* note 157, at ¶¶ 10–11.

177. *Id.*

178. Plaintiff's Request for Judicial Notice, Green v. Dep't of Just., No. 1:16-CV-01492 (D.D.C. Jul. 18, 2017) [hereinafter Judicial Notice].

179. *Id.* at 3.

infringing population, and evidence that the very agency that oversees copyright enforcement is concerned about the overbreadth of the contested law.[180]

Nonetheless, they have not yet applied all the lessons of previous efforts to effect empirically-driven reforms through impact litigation. There are three additional types of evidence that would further bolster their case. Indeed, plaintiffs are in an excellent position to heed the lessons of Section I, as *Green* has not yet reached the summary judgment stage, as needed to progress to trial.[181] There should therefore be ample opportunity to submit this additional empirical evidence as the case progresses.

First, plaintiffs should provide more robust evidence of widespread harm to the public. The government challenges plaintiffs' overbreadth challenge on the grounds that their assertion of a chilling effect on "others" is vague, and that plaintiffs "rely almost exclusively on their own asserted First Amendment rights[.]"[182] While the numerous examples of rejected applications to the Librarian of Congress suggest the existence of more far-reaching harm,[183] plaintiffs should solicit amicus briefs that provide more examples of a direct chilling effect on a broader group of people.

Second, plaintiffs should submit economic evidence addressing whether the anti-circumvention provisions genuinely serve an important government interest, as required to survive intermediate scrutiny. As discussed above, numerous legal scholars contend that—particularly absent a fair use defense—the anti-circumvention provisions do little to stem copyright infringement or spur the creation of new works, and much to stifle innovation and free expression.[184] Empirical evidence of this claim would help establish that the anti-circumvention provisions should be struck down under intermediate scrutiny. This is also an opportunity to provide emotionally compelling, anecdotal evidence of harms to individuals that has proven so effective elsewhere. The *Green* plaintiffs have taken on the ambitious goal of convincing a court to strike down or reinterpret a key provision of a significant federal law.[185] In order to have a chance of succeeding, they must take every opportunity to educate the court on the real-world harms done by the DMCA, and its failure to serve the goals of copyright law.

Third, plaintiffs should submit evidence regarding the overwhelmingly negative public opinion of the DMCA and its anti-circumvention provisions. Various scholars have noted that courts are most receptive to relying on

180. Judicial Notice, *supra* note 178.

181. *See* Green et al v. U.S. Dep't of Just., et al., PACERMONITOR (last updated Mar. 12, 2018) https://www.pacermonitor.com/public/case/15286226/GREEN_et_al_v_US_DEPARTMENT_OF_JUSTICE,_et_al (showing the current docket of the case).

182. Defendants' Motion to Dismiss [Doc. # 15-1] at 2, Green v. Dep't of Just., No. 1:16-CV-01492, (Sept. 29, 2016).

183. Complaint, *supra* note 157, at ¶¶ 10–11.

184. Samuelson, *supra* note 61, at 539.

185. Complaint, *supra* note 157, at ¶ 2.

empirical evidence when there is evidence of a growing public consensus.[186] This has notably been the case with respect to the death penalty and desegregation.[187] Here, Plaintiffs have provided evidence that the Copyright Office itself has begun to question the efficacy and fairness of the anti-circumvention provisions.[188] This type of expert opinion can be highly compelling, as it was in *Roper* and *Graham* with respect to the cognitive development of juveniles.[189] However, there is also considerable evidence of widespread consensus among the general public that copyright laws are not working as they should.[190] There is also evidence that many internet users do not strictly abide by copyright laws.[191] Showing widespread non-compliance with a law does not justify striking it down, but does indicate a disconnect between the law and public opinion.

The *Green* case is an example of how a strong doctrinal hook—in this case, the First Amendment combined with the lack of a fair use defense—can provide an opportunity to present the courts with empirical evidence of the impact and operation of a law in the real world.[192] The next Section will investigate a second potential doctrinal hook for introducing empirical evidence to courts in copyright cases—namely, the Copyright Clause of the Constitution.

B. The Copyright Clause

While recent Supreme Court decisions suggest that it will be an uphill battle to mount a Copyright Clause challenge in the immediate future,[193] it is nonetheless worth discussing the role that empirical evidence could play in such a case, were the predominant judicial attitude to shift. Particularly as technologies continue to develop, and intellectual property only becomes more important to the economy,

186. *See, e.g.*, Amy Rublin, *The Role of Social Science in Judicial Decision Making: How Gay Rights Advocates Can Learn from Integration and Capital Punishment Case Law*, 19 DUKE J. GENDER L., & POL'Y 179, 212–13 (2011) (analyzing the Supreme Court's willingness to consider empirical data in Brown v. Board of Education).

187. *Id.*

188. Judicial Notice, *supra* note 178.

189. Graham v. Florida, 560 U.S. 48, 79 (2010); Roper v. Simmons, 543 U.S. 551, 578–79 (2005).

190. *See, e.g.*, Murat Akçayir & Gökçe Akçayir, *Internet Use for Educational Purposes: University Students' Attitudes and Opinions About Copyrights*, 7 EDUC. TECH. THEORY & PRAC. 1, 105 (2017) (discussing that students tend to overlook copyright issues when using the Internet for educational purposes); Glenton Davis, *When Copyright is Not Enough: Deconstructing Why, as the Modern Music Industry Takes, Musicians Continue to Make*, 16 CHI.-KENT J. INTELL. PROP. 373 (2017) (discussing how copyright law sets musicians up for failure); Leif Larsen & Torgeir Nærland, *Documentary in a Culture of Clearance: A Study of Knowledge and Attitudes Toward Copyright and Fair Use Among Norwegian Documentary Makers*, 8 POPULAR COMM. 1, 46 (Feb. 4, 2010) (discussing how copyright laws affect documentary makers).

191. *See, e.g.*, Luis Aguiar & Bertin Martens, *Digital Music Consumption on the Internet: Evidence from Clickstream Data* (Eur. Comm'n Joint Research Ctr. Tech. Reports, Inst. for Prospective Tech. Studies, Digital Econ. Working Paper 2013/04, 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id= 2265299 (discussing digital music piracy); Shoshana Altschuller & Raquel Benbunan-Fich, *Is Music Downloading the New Prohibition? What Students Reveal Through an Ethical Dilemma*, 11 ETHICS & INFO. TECH. 1, 49–50 (Mar. 2009) (discussing how downloading music through illegal channels is widespread).

192. Complaint, *supra* note 157, at ¶¶ 5–6.

193. Netanel, *supra* note 80, at 1086–87.

it may soon be worth asking the courts again to reopen the question of whether Congress has remained within bounds of the powers granted by the Copyright Clause.

The Copyright Clause grants Congress the power "[t]o promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[194] There are a number of plausible arguments regarding the Clause's limitations on Congressional power. The petitioners in *Eldred* and *Golan* focused on claims related to the "limited times" language, but were ultimately rejected.[195] This Section will focus instead on the argument most likely to provide an opportunity to present empirical evidence: namely, that copyright statutes must serve the stated purposes of the Copyright Clause in order to pass constitutional muster. This Article will henceforth refer to this as the "Aims of Copyright" argument.

As noted above, the preamble to the Copyright Clause expressly states that the power to pass copyright laws is granted to Congress in order "[t]o promote the progress of science and useful arts . . . ."[196] The Supreme Court has long held that the primary purpose of the Copyright Clause is to advance the "public welfare" by incentivizing the efforts of authors and artists to create and disseminate their works.[197] Some advocates and courts have reasoned that copyright statutes issued by Congress must therefore serve the goals of the Copyright Clause—the "Aims of Copyright" argument.[198] Accordingly, any copyright statute that failed to "promote the progress of arts and sciences" for the public's benefit—or actively hindered such progress—would go beyond the authorization of the Copyright Clause, rendering the law unconstitutional.

This "Aims of Copyright" argument was clearly laid out by the two dissenting opinions in *Eldred*, and again by Justice Breyer's dissent in *Golan*.[199] In *Eldred*, Justice Breyer asserted that copyright statutes must be reviewed "in light of the Copyright Clause's own purposes"—namely encouraging the creation and dissemination of new works and adding to the public domain.[200]

194. U.S. CONST. art. I, § 8, cl. 8.

195. *See* Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618), 2002 WL 1041834 (rejecting petitioner's argument that by retroactively extending the terms of copyrights for existing works, Congress created de facto perpetual grants of copyright in violation of the "limited times" requirement.); *Golan*, 565 U.S. at 327 (rejecting petitioner's argument that granting Congress the power to remove works from the public domain at will was contrary to the "limited times" language because it rendered copyright term time limits essentially irrelevant).

196. U.S. CONST. art. I, § 8, cl. 8.

197. *Eldred*, 537 U.S. at 227 (Stevens, J., dissenting); *see also* United States v. Paramount Pictures, 334 U.S. 131, 158 (1948) (quoting Fox Film Corp. v. Doyal, 286 U.S. 123, 127 (1932) ("'The sole interest of the United States and the primary object in conferring the monopoly lie in the general benefits derived by the public from the labors of authors' . . . . [R]eward to the author or artist serves to induce release to the public of the products of his creative genius."). This contrasts with the European model, which is more concerned with the "natural" rights of authors and artists to control and benefit from the distribution of their own works). *See* PETER BALDWIN, THE COPYRIGHT WARS: THREE CENTURIES OF TRANS-ATLANTIC BATTLE (2014) (chronicling the history of these two opposing schools of thought).

198. *Eldred*, 537 U.S. at 227 (Stevens, J., dissenting); *Golan*, 565 U.S. at 345 (Breyer, J., dissenting).

199. *Eldred*, 537 U.S. at 227 (Stevens, J., dissenting); *Golan*, 565 U.S. at 345 (Breyer, J., dissenting).

200. *Eldred*, 537 U.S. at 245 (Breyer, J., dissenting).

Justice Stevens agreed, arguing that these "twin purposes" provide "the only avenue for congressional action under the Copyright/Patent Clause" and that "any other action is manifestly unconstitutional."[201]

Both Justices concluded that the CTEA could not "even arguably" be understood to serve either of these purposes, given the empirical evidence of how the statute really operated, and deemed it unconstitutional.[202] Justice Breyer reiterated this argument in his *Golan* dissent, asserting that "the statute before us . . . does not encourage anyone to produce a single new work" and that "the Copyright Clause [therefore] does not authorize Congress to enact this statute."[203]

In essence, the "Aims of Copyright" argument holds that the Copyright Clause's preamble and Supreme Court precedent limit the constitutionally legitimate governmental interests that may justify the passage of copyright statutes. Accordingly, the only legitimate interests which Congress may promote through copyright statutes are the specific purposes of the Copyright Clause, i.e., benefiting the general public by incentivizing the creation and dissemination of new works that will eventually fall into the public domain. This argument provides a particularly useful opening for presenting persuasive empirical evidence to the court. If the government bears the burden of presenting evidence that a copyright statute serves to promote the creation and dissemination of new works for the benefit of the public, the other party may present evidence that the law does not, in fact, promote those ends, and in many cases, actively hinders such progress. This presents an ideal opportunity for litigants to introduce some of the wealth of scholarship showing the negative impact of modern copyright laws on the promotion of creativity and learning, in addition to the harms done to free expression and First Amendment values.[204]

The majority opinions in *Eldred* and *Golan* accept the core premise of the "Aims of Copyright" argument, but show far more deference to Congressional judgment on the matter than Breyer and Stevens do.[205] The *Golan* majority reasoned that incentivizing the *creation* of new works was not the only legitimate way to promote the progress of science and art, emphasizing that the *dissemination* of works was also an important goal of copyright law.[206] The Court found that Congress was empowered to determine the "overall" intellectual property regime that, in its judgment, "serve[d] the ends of the Copyright Clause."[207] The *Eldred* and *Golan* majority opinions thus grant significantly more deference to Congress than would the dissenting Justices—

201. *Id.* at 226 (Stevens, J., dissenting).

202. *Id.* at 227 (Stevens, J., dissenting), 266–67 (Breyer, J., dissenting).

203. *Golan*, 565 U.S. at 345 (Breyer, J., dissenting).

204. *See, e.g.*, NEIL WEINSTOCK NETANEL, COPYRIGHT'S PARADOX 13–29 (Oxford U. Press 2008) (collecting examples of copyright law hindering free speech).

205. *See Eldred*, 537 U.S. at 222 (stating that Congress has broad latitude to enact legislation that "will serve the ends of the Clause"); *Golan*, 565 U.S. at 325 (discussing how the Clause empowers Congress).

206. *Golan*, 565 U.S. at 326.

207. *Id.* at 325 (quoting *Eldred*, 537 U.S. at 222).

creating a higher hurdle for future constitutional challenges.[208] Nonetheless, the majority opinions do not foreclose the possibility of introducing empirical evidence to establish that a statute does not serve the aims of the Copyright Clause.[209] Future litigants could introduce evidence that a challenged statute hinders rather than promotes the dissemination of works. For example, Justice Breyer's *Golan* dissent noted that reinstating copyright protection over works previously in the public domain exacerbated the difficulty of finding the owners of "orphan" works in order to negotiate a copyright license.[210] Similarly, as shown in Section II of this Article, legal scholars like Mark Lemley and William Patry have relied on a wide range of sources of empirical evidence to make this very argument.[211] This sort of evidence is precisely what litigants should be battling over in future copyright litigation.

While the *Eldred* and *Golan* majority opinions suggest that the Supreme Court may not be receptive to a renewed Copyright Clause challenge any time soon,[212] the acceptance by the Court of at least the core premise of the "Aims of Copyright" argument provides an opportunity for copyright reformers to present empirical evidence to courts.[213] Thus, the Copyright Clause may yet serve as a useful doctrinal hook for empirically-informed judicial reform of copyright law.[214]

C. Fair Use and Market Harm

A final strategy for incorporating empirical evidence into copyright challenges is to focus on the fourth factor of the fair use test. As discussed above, fair use is a common law defense to copyright liability that has been enshrined by federal statute in 17 U.S.C. § 107.[215] In considering whether a given use falls under the exemption, courts consider four factors: (1) the purpose and character of the use, (2) the nature of the copyright work, (3) the amount and substantiality of the portion used in relation to the copyrighted works as a whole, and (4) the effect of the use upon the potential market for or value of the copyrighted work.[216] While the first three factors involve subjective determinations by the court, the fourth factor requires at least some evidence of

208. *See Eldred*, 537 U.S. at 222 (discussing Congress' broad powers); *Golan*, 565 U.S. at 325 (discussing the broad latitude given to Congress by the clause).

209. *See, e.g.*, *Eldred*, 537 U.S. at 202–05 (finding relevant that the CTEA is within the scope of Congressional oversight granted by the clause).

210. *Golan*, 565 U.S. at 355 (Breyer, J., dissenting).

211. Lemley, *supra* note 52; Patry, *supra* note 57.

212. *See, e.g.*, *Eldred*, 537 U.S. at 222 (stating that "the wisdom of Congress' action . . . is not within our province to second guess.").

213. *See, e.g.*, *id.* at 205–06 (discussing that the CTEA "reflects judgments of a kind Congress typically makes.").

214. *See, e.g.*, *Leading Cases*, *supra* note 124, at 271 n. 80 (2011) (noting Justice Alito's review of empirical evidence in the Eighth Amendment context).

215. 17 U.S.C. § 107 (2018).

216. 17 U.S.C. § 107(1)–(4) (2018).

actual or potential market harm that is not entirely speculative.[217] The market harm factor carries considerable weight in the fair use determination, and has been described as "undoubtedly the single most important of all the factors."[218]

The market harm factor of the fair use analysis therefore provides another strong doctrinal hook for submitting empirical evidence to the courts. This may be particularly effective in the context of creative derivative works, such as music sampling and fan fiction. Many scholars and advocates have argued that these uses do not affect the market for the original work, and in many cases actually enhance the reputation and value of the original work.[219] Such uses also significantly enrich the diversity of works available to the public, as well as providing valuable creative outlets to individuals creating derivative works for non-commercial purposes.[220] The introduction of methodologically strong empirical evidence in such cases could help drive a judicial understanding of fair use more grounded in contemporary realities of the digital era.

Like the constitutional hooks discussed above, this approach has its limitations.[221] Evidence of a lack of market harm will generally be applicable only to the specific works at issue in a given case.[222] While judicial precedents can help establish categories of exceptions for uses like sampling or fan fiction, evidence of market harm (or lack thereof) will need to be re-established on a case-by-case basis.[223] The market harm approach is therefore unlikely to be effective in driving more sweeping judicially-led reform or the striking down of laws of general applicability. Nonetheless, because the fair use analysis explicitly invites a consideration of an empirical issue—damage to the economic value of a copyright—it can be a powerful tool for opening the door to empirical evidence in copyright litigation.

CONCLUSION

This Article first examined the increased use of empirical evidence in judicial opinions in a range of legal areas, including equal protection, cruel and unusual punishment, and antitrust, and what copyright impact litigators can learn

217. A.V. v. iParadigms, 544 F. Supp. 2d 473, 484 (E.D. Va. 2008), *aff'd in part, rev'd in part sub nom.* A.V. v. iParadigms, LLC, 562 F.3d 630 (4th Cir. 2009) ("Because Plaintiffs have presented no evidence of harm and the potential harm alleged is both speculative and highly unlikely, the fourth factor strongly favors a finding of fair use."); *see* Sofa Entm't, Inc. v. Dodger Prods., Inc., 782 F. Supp. 2d 898, 910 (C.D. Cal. 2010), *aff'd*, 709 F.3d 1273 (9th Cir. 2013) ("the Court agrees with Defendant that the notion that any such market could ever materialize is speculative at best.").

218. Elvis Presley Enter., Inc. v. Passport Video, 349 F.3d 622, 630 (9th Cir. 2003) (quoting *Harper & Row Publishers*, 471 U.S. at 566).

219. Kaelyn Christian, *Fan Fiction and the Fair Use Doctrine*, 65 THE SERIALS LIBR. 277, 279 (2013); Terry Hart, *License to Remix*, 23 GEO. MASON L. REV. 837, 838 (2016); Peter S. Menell, *Adapting Copyright for the Mashup Generation*, 164 U. PA. L. REV. 441, 445–46 (2016); Kate Romanenkova, *The Fandom Problem: A Precarious Intersection of Fanfiction and Copyright*, 18 INTELL. PROP. L. BULL. 183, 184–85 (2014).

220. Menell, *supra* note 10, at 489.

221. *See, e.g.*, LESSIG *supra* note 4, at 143–47 (explaining that while fair use continues to play a key role in balancing copyright protection and creativity, the doctrine is being asked to bear too large a burden in terms of helping copyright law adapt to the digital era).

222. *See, e.g.*, Sofa Entm't, Inc. v. Dodger Prods., 782 F. Supp. 898, 910 (C.D. Cal. 2010) (discussing the difficulty of predicting market trend).

223. *See, e.g.*, *id.* (discussing the nature of the market as it pertains to the issue at hand).

from these cases. Next, this Article presented three examples of influential legal scholarship that incorporate empirical evidence in support of copyright-reform-oriented legal arguments, and discussed how legal scholarship may serve as a useful guide for practitioners in terms of effectively presenting empirical evidence in the courtroom. Finally, this Article examined three potential doctrinal hooks for challenging and reforming copyright law, namely the First Amendment, the Copyright Clause, and the market harm factor of the fair use test. It was submitted that, in spite of the hurdles established by recent Supreme Court case law, there are still ample opportunities for copyright litigants to introduce empirical evidence to the courts through reform-oriented impact litigation. Such evidence is likely to be highly persuasive to judges, if presented strategically, and may ultimately prove to be one of the more effective avenues for pursuing judicially-driven copyright reform.