NEGLECTING THE NATIONAL MEMORY: HOW COPYRIGHT TERM EXTENSIONS COMPROMISE THE DEVELOPMENT OF DIGITAL ARCHIVES

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I. INTRODUCTION

On October 9, 2002, the United States Supreme Court heard argument in what may be the most important copyright case of the past two decades, *Eldred v. Ashcroft.*¹ The plaintiff, Eric Eldred,² brought his suit to challenge the Copyright Term Extension Act, a 1998 law that extended the term of copyright for both future and subsisting works by twenty years.³ More than just a challenge to the law, however, Eldred's challenge was to the basic imbalance that exists today in the copyright law—an imbalance weighted heavily in favor of corporate copyright interests and steeply against public interests and public access. In particular, Eldred argued that the CTEA's expansive copyright term inhibits much of the promise that digital technology and the Internet offer to citizens and users of computers worldwide. Like *Reno v. ACLU*,⁴ *Eldred* presents the

3. Sonny Bono Copyright Term Extension Act, Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified in 17 U.S.C. §§ 104A, 302, 303, 304).

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^{1. 534} U.S. 1126 (Feb. 19, 2002) (granting certiorari).

^{2.} Eldred is an online publisher of public-domain books who depends on new works entering the public domain in order to expand his catalog. *See* http://www.eldritchpress. org> (accessed Nov. 13, 2001; copy on file with Journal of Appellate Practice and Process).

^{4. 521} U.S. 844 (1997)

Court with a critical opportunity to decide who controls public access to online knowledge and information.

To support Eldred in his high court challenge, a group of amici joined his brief. Among these amici were fifty-three intellectual property professors, five constitutional law professors, seventeen world renowned economists (including five Nobel prize winners), and three digital archives.⁵ The digital archive brief focused primarily on the way in which copyright term extensions have failed to "promote the Progress of Science" (a constitutional requirement of copyright law) in the field of electronic media because they stifle the development of digital archives and other public resources that depend on a naturally-increasing supply of public domain works.

This article highlights these costs as they negatively affect academic, research, and judicial communities. In particular, we will discuss ways in which judicial and academic communities depend on historical and cultural knowledge to achieve justice in our society and how institutions such as digital archives play a key role in providing such information. We will then go on to discuss how copyright extensions are detrimental for the public good and how they are frustrating the progress that digital archives are striving to achieve. Finally, the article will discuss a key question raised at oral argument in *Eldred*—the implications of Eldred's CTEA challenge on other copyright laws, such as the 1976 Copyright Act.

II. BACKGROUND-COPYRIGHT LAW AND THE ELDRED CASE

The Constitution gives Congress the power to "promote the Progress of Science" by granting "exclusive Right[s]" to "Authors" for "limited Times."⁶ Despite the Framers' use of the word "limited," Congress has passed laws extending the copyright term on preexisting works eleven times in the past forty years. While several of the most recent extensions have been relatively short (one or two years), in 1976 Congress extended the term nineteen years, and then, in 1998, extended it

^{5.} The authors of this article represented and wrote the amicus brief for the digital archives.

^{6.} U.S. Const. art. I, § 8, cl. 8.

another twenty years. Thus, works authored in 1923 and scheduled originally to fall into the public domain in 1998 after their full term are still under copyright and will remain so until 2019.

Eldred challenged the CTEA on two grounds.⁷ First, Eldred argued that under the *Lopez* trilogy,⁸ Congress's power to pass copyright laws is both explicitly and implicitly limited by the constraints of the constitutional language in Article I. section 8. clause 8. Thus, just as Congress cannot pass laws under the Commerce Clause regulating guns in schools or acts of violence against women unless they substantially relate to commerce, Congress is similarly prohibited from passing laws that affect copyright unless they "promot[e] the Progress of Science" within "limited Times." More explicitly, Eldred argued that while there may well be some merit to providing longer copyright terms as incentive for future authors of works not vet created, prolonging existing copyrights cannot promote creation retrospectively, nor can it guarantee the public that the copyright will be subject to "limited Times." A constitutional limitation on Congress's power is a substantive limitation. Thus, copyright laws must promote the sciences within limited times, else they exceed Congress's constitutional grant.

Eldred's second argument was based on the First Amendment, arguing that while nominally a property right, copyright is just as much a law about speech as it is about incentives. Specifically, many copyrighted works by their nature express ideas in writing, sound, imagery, and the like. Therefore, the First Amendment and its associated protections must intersect with copyright and to some extent govern the limitations of laws prohibiting dissemination of copyrighted works. Under the Court's jurisprudence, content neutral laws such as the CTEA that attempt to limit distribution of speech are analyzed under the First Amendment with "intermediate scrutiny." Intermediate scrutiny requires that Congress justify

^{7.} See Pet.'s Br. 11-47, *Eldred v. Ashcroft*, No. 01-618 (May 20, 2002), available at http://www.eldred.cc/legal/supremecourt.html (accessed on Nov. 21, 2002; copy on file with Journal of Appellate Practice and Process).

^{8.} United States v. Morrison, 529 U.S. 598 (2000); Jones v. United States, 529 U.S. 848 (2000); United States v. Lopez, 514 U.S. 549 (1995). See also Kimel v. Florida Bd. of Regents, 528 U.S. 62, 81 (2000).

the regulation based on an important government interest—an interest that has more than a rational basis to it. Eldred again argued that while there may be some marginal justification for offering future copyright authors extra incentive to create works, no important or even rational interest can be served by providing additional years of protection to authors who long ago contributed their work to the canon and quite possibly are no longer alive. Or, put another way, it is simply not rational either to attempt to provide incentives for what has already been created or to attempt to encourage the production of creative works by those who are already dead.

III. WHY IS THE ELDRED CASE IMPORTANT?

A. Intellectuals and Advocates Depend on Access to Our Cultural History

Historical and cultural information in the judicial system has always been both a priority and a necessity. The pursuit of truth leads many lawyers down paths of investigation far more similar to those followed by private investigators than those known to philosophers. Historical trends, social science research, and economic analysis are but a few of the many forms of data lawyers and judges use to argue or decide cases. We have seen evidence in many Supreme Court decisions, and in cases from the state and federal appellate courts—for example, those involving the death penalty.⁹ While these studies include information that is not subject to copyright protection, they also often include anecdotes and analysis that is. Lower court cases, arbitrations, and mediation similarly depend on such information to balance equities and decide difficult issues.

Beyond statistical inquiries, access to cultural information also allows lawyers, judges, and researchers to understand the context and import of the subjects before them. Reading a single newspaper clipping reporting the death of President Kennedy could convey the factual description of his death and the surrounding investigation, but it cannot complete the picture of

^{9.} See e.g. McCleskey v. Kemp, 481 U.S. 279 (1987).

what life was like before and after his death in America in the 1960s. For that picture, an entire volume of cultural literature on those times could be required. Thus, access to only a single copyrighted work, or even to a handful of copyrighted works, is often inadequate; global access to numerous diverse works from a given era is often required to fully understand the issues of the day.¹⁰

For example, in some patent litigation work, researching the cultural history of a particular industry or of a particular technology is equally important. The primary method of invalidating a patent issued in the United States is to show that it was "anticipated"-that someone else had invented the idea in the patent before the patentee did." Proving such a historical event is often a hotly contested factual battle. Thus, having access to archival information stored on digital archives such as the Internet Archive's Wayback Machine¹² allows lawyers to travel back in time, not only to find specific factual information about early technological achievements, but also to follow trends and discussions within an industry. Through such a process, one can learn who the key players are, what the main topics of discussion were, and how companies and their employees were affected by the changes taking place at a given time. These insights are often the most critical clues to uncovering lost artifacts of innovation and proving to a judge or jury who really invented what. Yet if such information is tied up in serial copyright extensions, advocates and researchers will not be able to harness it in support of their cases and theories. Thus, Eldred's challenge is about more than just copyright. It is about access to information about our history and cultureinformation necessary for advocates and intellectuals to succeed in their work.

^{10.} See generally notes 49-50, infra, and accompanying text.

^{11.} See 35 U.S.C. § 102.

^{12.} The Wayback Machine is a digital archive of the World Wide Web from 1996 to the present. *See* http://www.archive.org> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

B. Copyright Term Extensions Deprive Us of Our Cultural History

The Supreme Court has historically recognized the role of such information in furthering social progress and social good. As the Court stated in Harper & Row Publishers, Inc. v. Nation Enterprises, "copyright is intended to increase and not to impede the harvest of knowledge."¹³ To reap these benefits, the public should be permitted not only to make certain uses of works during the copyright term, but must also be free to make unfettered use of works through public consumption, study, and re-exposition after the copyrights expire. As the Harper & Row Court explained, copyright "is intended to motivate the creative activity of authors and inventors by the provision of a special reward, and to allow the public access to the products of their genius after the limited period of exclusive control has expired."¹⁴ Thus, promoting public access to information is as important to intellectual property policy as are creative incentives.

Yet the modern Congress has shown little respect for these benefits or their safeguards. From its origin in the Copyright Act of 1790 until Congress's revision of the Act in 1976, copyright law required authors to register their copyrights for a distinct first term, with an option to renew for a separate extended term.¹⁵ At the time of the 1976 Act, the term of copyright was twenty-eight years, with an option to renew for an additional twenty-eight.¹⁶ The registration and renewal processes were part of the so-called "formalities" of copyright law. Each of these formalities provided different but equally important checks on the limited monopolies granted by copyright. First, registration ensured that authors or those who held the rights to their works could be located by those who wished to license a work. Second, by requiring the copyright owner to actively renew his or her

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^{13. 471} U.S. 539, 545 (1985).

^{14.} Id. at 546 (emphasis added).

^{15.} See generally Tyler T. Ochoa, Patent and Copyright Term Extension and the Constitution: A Historical Perspective, 49 J. Copy. Socy. 19, 29-45 (2002). While the Court interpreted the 1909 Act as requiring at least notice if not registration, see Washingtonian Publg. Co. v. Pearson, 306 U.S. 30 (1939), the language of the Act itself was not officially changed to remove the registration requirement until 1976.

^{16.} Ochoa, supra n. 15, at 39.

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rights in a work, it forced the owner to consider the value, ensuring that added protection was only afforded when the rights-holders remained actively interested in exploiting their works. The formalities eliminated the problems of absent, missing, dead, out of business, or uncaring rights-holders, thus providing some balance to the additional years of protection offered by Congress.

1976. In Congress undertook а tremendous and unprecedented overhaul of the Copyright Law. Having passed a series of short-term extensions in 1965, 1967, 1968, 1969, 1970. 1971, 1972, and 1974, Congress finally removed the registration requirements, extending copyright for all works, registered or not, to the full life of the author plus fifty or seventy-five years. Later, in 1992, Congress automatically renewed all remaining copyrights, regardless of whether the owner sought to renew the work.¹⁷ So expired the procedural guardians of the public domain; so began Congress' efforts to undermine the constitutional protections of "promot[ing]... Progress" and "limited times."

A quick look at the registration and renewal data for years before 1976 shows that an overwhelming majority of works fell into the public domain because creators did not seek extended copyright protection.¹⁸ For example, of the 25,006 works

^{17.} Copyright Amendments Act of 1992, Pub. L. No. 102-307, 106 Stat. 264, 266 (June 26, 1992) (amending § 304 of Title 17 to make renewal automatic and renewal registration optional for works originally copyrighted between January 1, 1964 and December 31, 1977). In fact, Congress enacted this unprecedented change directly against the recommendation of the Register of Copyrights. In a report submitted to Congress in 1961, the Register specifically recommended that if a term extension was warranted, Congress should retain the two-term structure and simply extend the renewal term to forty-eight years. Ochoa, *supra* n. 15, at 39.

^{18.} See Register of Copyrights, Register's Report, in 2 Studies on Copyright 1251 (Arthur Fisher Meml. ed., Copy. Socy. of the U.S. 1963) ("Experience indicates that the present initial term of 28 years is sufficient for the great majority of copyrighted works: less than 15 percent of all registered copyrights are being renewed at the present time.") (emphasis added); Barbara A. Ringer, Study No. 31: Renewal of Copyright, in 1 Studies on Copyright 513-514 (Arthur Fisher Meml. ed., Copy. Socy. of the U.S. 1963) (relying on H.R. Rept. 7083, pt. I, at 14 (1907): "The committee reports accompanying these bills [proposals in 1906-1908 to change copyright term and renewal periods] indicate clearly that the purpose of adding the renewal device was to allow the large bulk of copyrighted works to fall into the public domain at the end of a short definite term, while permitting a much longer term for works of lasting value.") (footnote omitted).

registered in 1883 a mere 894 were renewed in 1910.¹⁹ Thus over ninety-six percent of works from that year fell into the public domain after only twenty-eight years—despite the availability of additional copyright protection. Later numbers show that copyright owners continued to let the overwhelming majority of their works lapse throughout the first part of the twentieth century.²⁰ As a result of the 1976 Act and the 1992 amendments, all copyrighted works under this two-tiered system received forty-seven additional years of protection, regardless of whether or not the copyright owner intended to register the work. Under the CTEA, these works now have sixty-seven more years. If ninety-six percent of owners did not care enough to renew their copyrights after twenty-eight years, there is no reason to expect that when handed decades of additional, unsought "protection" they will become devoted caretakers.

C. Copyright Extensions Inhibit the Progress of Innovative Digital Tools That Can Dramatically Improve the Quality and Availability of Our Cultural History

Serial copyright extensions also frustrate technological progress. When one asks the leading experts on digital archiving "What is the single most significant barrier to preserving our cultural heritage?" one uniform answer resounds: copyright concerns.²¹ Digital archives depend on a predictable and

^{19.} The numbers for a selected series of years that includes 1883 are shown in the following chart:

Year Registered	Number	Renewed (Year)	Percent
1883	25,006	894 (1910)	3.57
1890	42,789	1854 (1917)	4.31
1900	94,798	4,686 (1927)	4.94
1910	108,067	8,589 (1937)	7.94
1920	124,450	13,201 (1947)	10.60
1930	166,855	21,473 (1957)	12.86
1932	145,847	21,441 (1959)	14.70

Ringer, supra n. 18, at 618, tbl. 2.

20. Id.

21. Panel on Digital Libraries, Pres. Info. Tech. Advisory Comm., Digital Libraries: Universal Access to Human Knowledge 21 (2001), available at http://www.ccic.gov/pubs

reasonable limit to copyright terms. Until works reach the end of their term, it is simply impossible for librarians and archivists to seek rights from millions of copyright owners. Unless copyrights expire after "limited times," millions of historical and cultural works will be unavailable to the majority of the public and will continue to disappear in their original form.²²

Consider some statistics. In the year 1930, 10,027 books were published in the United States.²³ In 2001, all but 174 of these titles are out of print.²⁴ While a copy or two may exist in a library or a used bookstore, the copyright holders cannot or do not make these titles available to the public. But for the CTEA, digital archives could inexpensively make the other 9,853 books published in 1930 available to the reading public starting in 2005. Yet because of the CTEA and the likelihood of future term extensions, we must continue to wait, perhaps eternally, while works disappear and opportunities vanish.

Digital archives can provide public access to these "rare" works that are no longer made available by the copyright holder *if* they enter the public domain. A case in point is the Steven Spielberg Digital Yiddish Library, which houses twelve thousand digitized Yiddish books. This library has helped turn a dying literature into "the most in-print literature on the

[/]pitac/pitac-dl-9feb01.pdf> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process); Michael Lesk, *Practical Digital Libraries: Books, Bytes and Bucks* 223 (Morgan Kaufman 1997) ("Issues related to intellectual property law are the most serious problems facing digital libraries."). *See also Copyright Term Extension Act: Hearings on H.R.* 989 *Before the Subcomm. on Courts and Intellectual Property of the House Comm. on the Judiciary*, 104th Cong., 1st Sess. 10 (1995) (statement of Dennis S. Karjala, Professor of Law, Arizona State University College of Law) ("As a result [of passing the CTEA], current authors who wish to make use of any work from this period [after 1923], such as historians or biographers, will need to engage in complex negotiations to be able to do so. Faced with the complexities of tracking down and obtaining permission from all those who by now may have a partial interest in the copyright, a hapless historian will be tempted to pick a subject that poses fewer obstacles and annoyances.").

^{22.} But for the CTEA, digital copies of the original *Winnie the Pooh* by A. A. Milne (1926), *The Magic Mountain* by Thomas Mann (1927), *The Great Gatsby* by F. Scott Fitzgerald (1925), and *The Prophet* by Khalil Gibran (1923) could all be universally available online.

^{23.} Am. Library Annual for 1955-1957 at 80-81 (Wyllis R. Wright ed., R.R. Bowker Co. 1956).

^{24.} Books in Print—Internet Edition, available at http://www.bowker.com>. BIP is a subscription-access database searchable only by those who have paid the required fee. It was searched by the authors on November 21, 2001.

planet."²⁵ Digitization of these works, most of which are in the public domain, brings both a literature and an enriched understanding of the Yiddish culture to people across the globe.²⁶

Other parts of our culture and heritage remain obscured behind the wall of copyright. The early volumes of periodicals, such as *The New Yorker*, *Time Magazine*, and *Reader's Digest* provide an unparalleled window into early twentieth century American life and culture.²⁷ Unlike the Yiddish literature in the Spielberg library, few if any of these works can be found online because they are still under copyright. Until they fall into the public domain, the process of clearing rights for each article, drawing, and photograph makes digital archiving of such composite works practically impossible.

The Prelinger Archive faces this dilemma every day. Rick Prelinger, its founder, began collecting "ephemeral" films films of critical social and historic value that have been orphaned or abandoned by their copyright owners—in the early 1980s.²⁸ His collection includes industrial motion pictures, home movies, advertising clips, training and educational films, outtakes, and newsreels—the kind of images featured in shows like *The Twentieth Century* with Walter Cronkite and in the ground-breaking historical documentary *Atomic Café*.²⁹ In 1985,

^{25.} Eric Goldsheider, For a Dying Literature a Digital Savior, N.Y. Times A19 (May 6, 2002).

^{26.} See also The Bibliotheca Alexandrina: A Truly Digital Library for the 21st Century, available at <http://www.archive.org/news/bibalex_p_r.php> (accessed Nov. 14, 2002; copy on file with Journal of Appellate Practice and Process) (documenting the Internet Archive's donation of facilities to scan 50,000 Arabic books for distribution on the Internet).

^{27.} The promise of reviving these early icons of Americana from obscurity is not merely speculative. The Frank Capra movie *It's a Wonderful Life* lay gathering dust in a movie studio until in the early 1970s when its copyright expired. Soon after becoming part of the public domain, it was aired by public broadcast stations and quickly became a Christmas tradition on many stations and for many families. *See* Roger Ebert, *It's A Wonderful Life*, available at <htp://www.suntimes.com/ebert/greatmovies/wonderful_life. html> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process). Had the CTEA extension been in place, this classic film would not have reemerged until 2041.

^{28.} See Rick Prelinger, An Informal History of Prelinger Archive, available at <http:// www.prelinger.com/shorthistory1.html> (accessed Nov. 22, 2002; copy on file with Journal of Appellate Practice and Process).

^{29.} Id.

Prelinger formalized his archive to promote the reuse of public domain moving image works.³⁰

Of the 48,000 films in the Prelinger Archive, close to sixty percent (approximately 28,800) are in the public domain. The other forty percent (approximately 19,200) remain under copyright. A peculiar attribute of Prelinger's collection, and almost all film archives, is that the dividing line between publicdomain films and copyrighted films splits almost exactly along the year 1964. Close to eighty-five percent of Prelinger's pre-1964 films are in the public domain, compared to only twentyeight percent of post-1963 films.³¹ This disparity results almost entirely from Congress's multiple extensions of copyright from 1964-1976 and the automatic renewal of 1992, making 1963 the last year in which non-renewed works actually fell into the public domain. Prelinger cannot offer copyright-protected films for stock footage or allow off-site public access. The 1992 amendment obliterated the public's pending rights to these films and kept the films cloistered behind the walls of their copyright—despite the lack of interest from their owners in renewal or use of their rights.³² Because of the elimination of the renewal requirement, the perpetual extension of the copyright term, and the enormous clearing costs imposed by the post-1976 lack of formalities, a substantial portion of Prelinger's growing collection of important social and historical films remains off limits to the public.

^{30.} Id.

^{31.} Of the 16,226 films Prelinger has formally researched for copyright clearance, 9,128 (56.26%) are pre-1964 and 7,098 (43.74%) are 1964 and later. Interviews with Rick Prelinger, Founder, Prelinger Archive (May, June, & July 2001) (copies of notes on file with authors). Of the pre-1964 films, 1,110 are still copyrighted (15.81%) and 6,022 (84.19%) are public domain. *Id.* For films 1964 and later, 1,432 (72.32%) are copyrighted and only 548 (27.68%) are public domain. *Id.* Prelinger believes these numbers are typical, and he expects that as he searches the remainder of his collection, he will find similar percentages on either side of the 1964 cut-off date. *Id.*

^{32.} See supra nn. 18-20. See also Letter from Larry Urbanski, Chairman, Am. Film Heritage Assn., to Senator Strom Thurmond (Mar. 31, 1997) (opposing S. 505: "There is an important industry in the United States, dependent on film in the public domain. Past copyright legislation has reduced the number of motion pictures in public domain considerably, causing hardship for this industry. Commercial film archiving and film preservation has already stopped for works created after 1962 thanks to 'automatic renewal.' [The CTEA's] extension will further hamper commercial archives."), available at http://www.law.asu.edu/HomePages/Karjala/OpposingCopyrightExtension/letters.html> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

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IV. DIGITAL ARCHIVES CONTRIBUTE TO THE PRESERVATION OF OUR CULTURAL HERITAGE

A. Copyright Owners Fail to Preserve the Vast Majority of Creative Works for Public Access

Millions of copyrighted works are created every year. In comparison, the number of works actually maintained and available to the public is quite small. Today, the number of volumes available for purchase in the United States is a tiny fraction of the volumes published in this country.³³ Libraries and archives preserve some of the books no longer for sale. However, public access to literary works under a system of physical archiving is fiscally and spatially constrained. The combined archives of public research libraries in the United States hold approximately 600 million titles total, a small percentage of the world's published works over the last 200 years.³⁴ Moreover, every year, physical decay and accidental loss (not to mention limited shelf and storage space) reduce the

^{33.} For example, in 1910, 13,470 books were published in the United States. Am. Library Annual, supra n. 23, at 80-81. In 2001, only 180 of these titles were available for purchase from any publisher in the United States. Books in Print, supra n. 24. The numbers for other decade years are similar: 1920 (8422 published, 307 in print by 2001); 1930 (10,027 published, 174 in print by 2001); 1940 (11,328 published, 224 in print by 2001); 1950 (11,022 published, 431 in print by 2001). Am. Library Annual, supra n. 23, at 80-81; Books in Print, supra n. 24. The number of published books has dramatically increased. In 1984, 51,058 were published, Bowker Annual of Library & Book Trade Info. 420 (Filomena Simora, ed., 31st ed., R.R. Bowker Co. 1986), in 1995, 67,717 were published, Bowker Co. 1997), and in 1996, 73,528 were published, Bowker Co. 1998), which suggests that the number eventually lost to the public because of excessive copyright terms will be even greater in years to come.

^{34.} Natl. Ctr. for Educ. Statistics, *Academic Libraries: 1998* tbl. 5A (Off. of Educ. Research & Improvement, U.S. Dept. of Educ 2001) (providing total number of paper volumes: 878,906,177; total number of paper titles: 495,724,813; total number of microform units: 1,062,082,077; total number of electronic titles: 3,473,225, and total number of audio-visual materials-units: 92,305,707), available at http://nces.ed.gov/pubs2001/2001341.PDF> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

number of books actually available. This diminution of available copies applies equally to movies and sound recordings.³⁵

Like the D.C. Circuit, the authors believe that "[p]reserving access to works that would otherwise disappear . . . 'promotes Progress.'"³⁶ Despite the supposed incentives copyright offers to authors and publishers, today much of our cultural heritage lies fallow, withheld from the public domain by bloated copyright terms, and removed from the stream of commerce because copyright holders reap little profit from them. The truth is that by the time even pre-CTEA copyright terms expire, few books, movies, or musical works are being published for profit. Most copyright owners let their works fall out of print, which means that they languish in literary limbo.³⁷

The full benefits of our entire cultural heritage await us while a few copyright holders derive profit from a relatively small number of works. For some works, extending the period between their decline in profitability and their entry into the public domain is more than just a delay—it is abandonment. For works recorded on film and other less stable mediums, the CTEA extension locks them up beyond the time when they can be truly preserved. If the CTEA stands, the public's share of the copyright bargain will in many instances literally blow away on a breeze. The only way to revive these works is to let them reach the natural end of their term so that they fall squarely into the public domain. Once there, digital archives can save these works for future generations.

^{35.} In 1994, the Librarian of Congress stated, "Of America's feature films of the 1920s fewer than 20% survive; and for the 1910s, the survival rate falls to half that." James H. Billington, *Preface*, in *Redefining Film Preservation: A National Plan: Recommendations of the Librarian of Congress in Consultation with the National Film Preservation Board* (Aug. 1994) available at <http://www.loc.gov/film/plan.html> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process). According to Rick Prelinger, many films are lost every year because many small copyright holders, like educational publishers, must eliminate their stock for the next year's supply; worse yet, these firms commonly go out of business or file for bankruptcy, often resulting in loss of all copies of past works. Prelinger Interviews, *supra* n. 31.

^{36.} Eldred v. Reno, 239 F.3d 372, 379 (D.C. Cir. 2001).

^{37.} See supra n. 33 and accompanying text. It is worth noting that the rights afforded to copyright owners under 17 U.S.C. § 106 do not address maintenance of copyrighted works. Therefore, it can be presumed that there are few if any incentives for copyright owners to preserve their works. That responsibility has been, and should be, left to our public libraries and archives as guardians of the public domain.

B. Digital Archives Preserve Copyrighted Works and Prevent Their Permanent Loss

Digital archives offer a solution to the problem of preservation. Films, books, and sound recordings that enter the public domain can be digitized quickly, efficiently and cost-effectively ensuring the availability of their content and protecting the original work against further deterioration. Every week, Project Gutenberg publishes the e-texts of approximately fifty public domain books.³⁸ Digitizing a film, a book, or a sound recording makes a perfect copy of the work. Without harming the original, further copies can be rendered as backups, preventing a catastrophe such as the great fire in Alexandria from destroying our heritage.

Our culture is exploding off the printed page into film, video, and sound. The world produces between one and two exabytes of information each year.³⁹ Only a tiny percentage (0.003) of this creativity takes the form of a printed page.⁴⁰ The vast majority of this information takes the form of sound, images, and numeric data.⁴¹ With each passing day it becomes increasingly important that our libraries have the ability to collect and store these formats. Without digital archiving, the increasing cost and diminishing opportunity to preserve these works will nullify our efforts to save them for future generations. Using currently available digital technology, we can build comprehensive collections that capture media works in their most pristine forms and preserve them forever.

^{38.} See <http://www.gutenberg.net/index.html> (indicating that 203 new ebooks were released during October 2002) (accessed Nov. 14, 2002; copy on file with Journal of Appellate Practice and Process). Project Gutenberg is also currently putting the scores of various works of classical music on line. These scores are available for use by students and performers, who can mark them up for their own performances. Creation of computer-generated performance from the scores is also supported. See <htp://www.ibiblio.org/gutenberg/music/InProgress/in-progress.html> (accessed Nov. 14, 2002; copy on file with Journal of Appellate Practice and Process).

^{39.} Peter Lyman & Hal R. Varian, Abstract of *Executive Summary*, in *How Much Information*? (2000), available at <http://www.sims.berkeley.edu/how-much-info> (accessed Nov. 14, 2002; copy on file with Journal of Appellate Practice and Process). An exabyte is a billion gigabytes. *Id.*

^{40.} *Id*.

^{41.} *Id*.

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Librarians and archivists have long been the stewards of our cultural history. The passage of the CTEA does not change authorial incentives in support of preservation. Instead, it keeps creative works from librarians and archivists who stand ready to preserve them *all*, not just a favored few.

V. DIGITAL ARCHIVES PROMOTE FULL PUBLIC ACCESS TO OUR CULTURAL HERITAGE

Digital archives hold out the promise of universal access to our cultural heritage. Today's libraries provide free physical access for some people to some of this heritage. However, any single physical library can contain only a small fraction of humanity's cultural artifacts⁴² and primarily serves its proximate community. As mentioned above, millions of copyrighted works are created every year, yet after ninety-five years, few remain in circulation. Most books are out of print; many movie reels and recordings are lost or damaged.⁴³ For a large segment of the public, especially those in rural and remote locations and those searching for material on a tight timetable, our cultural reserves are essentially out of reach.

In contrast, the Internet—the dominant platform for access to digital archives—provides relatively unlimited low cost capacity to support both the archiving of, and universal access to, traditional printed works, as well as audio, video, and still images.⁴⁴ As the Court explained in *Reno v. ACLU*, the Internet is comparable to "a vast library including millions of readily available and indexed publications."⁴⁵ The Internet "was created to serve as the platform for a global, online store of knowledge, containing information from a diversity of sources and

^{42.} United States public libraries contain approximately 784,562,000 volumes. Natl. Ctr. for Educ. Statistics, *Public Libraries in the United States: Fiscal Year 1998* tbl. 7 (Off. of Educ. Research & Improvement, U.S. Dept. of Educ. 2001), available at http://nces.ed.gov/pubs2001/2001307.pdf (accessed Nov. 14, 2002; copy on file with Journal of Appellate Practice and Process).

^{43.} See supra nn. 33-35 and accompanying text. See also Redefining Film Preservation, supra n. 35, at § 1 ("The key conclusion of Film Preservation 1993 is that motion pictures of all types are deteriorating faster than archives can preserve them. Film is a fragile medium, intended for brief commercial life.").

^{44.} Digital Libraries, supra n. 21, at 2.

^{45. 521} U.S. 844, 853 (1997).

accessible to Internet users around the world."⁴⁶ Just as this platform has lifted so-called "public records" out of "practical obscurity" and provided the fodder for controversial new products and services, it offers the chance to bring the creative works housed in the stacks and files of our libraries and archives to the public on a scale that heretofore seemed unimaginable.⁴⁷

Most libraries may have a copy of the *Complete Works* of Shakespeare, a few volumes of Plato, two or three of Mark Twain's novels, and perhaps a smattering of Dickens. Project Gutenberg offers several full editions of Shakespeare, thirty-one works by Plato, fifty by Twain, and fifty-six by Dickens.⁴⁸ Online access to Milton's *Aeropagitica* (Gutenberg #608) or Leonardo Da Vinci's *Notebooks* (Gutenberg #5,000) is also available. Whether one's taste runs to *Gulliver's Travels* (Gutenberg #829) by Jonathan Swift or *The Adventures of Tom Swift* by Victor Appleton (available in separate volumes under various Gutenberg numbers), access is easy, no matter how small or underfunded the local library.

Digital film archives also provide unique benefits. The analog nature of film means that every viewing of the original work slowly consumes the very film being viewed. The Internet Archive recently borrowed 1,001 key public domain archival films from Prelinger Archives. These films were transferred to videotape, digitized, and published online at http://www. moviearchive.org. Between January 2001 and April 2002 alone, these movie files were downloaded over 1.2 million times by individuals all over the world. By contrast, in the entire year 2000, the public only accessed approximately 2,000 physical film clips through Prelinger's designated representatives and held approximately 200 physical access events. By removing the barriers of time and distance, digital access to Prelinger's films

48. Sinclair Lewis, on the other hand, is represented by only two works in Project Gutenberg, as his *Elmer Gantry*, first published in 1927, will not be available for another nineteen years under the CTEA.

^{46.} ACLU v. Reno, 929 F. Supp. 824, 836 (E.D. Pa. 1996), aff'd, 521 U.S. 844 (1997).

^{47.} For example, the public downloads a million copies of ebooks from Project Gutenberg's main server each month. Project Gutenberg publishes from scores of servers around the world, *see* ">http://dist.html> (accessed Nov. 15, 2002; copy on file with Journal of Appellate Practice and Process), including over a dozen in the United States; thus, the total monthly downloads worldwide are probably several times those downloaded from the main servers in the United States.

outpaced physical access by a ratio of over 500 to one, while still preserving the original copies for future generations.

This kind of exponential increase in access is the key to disseminating information about some of our nation's most influential moments in history. Consider for instance, the that documents President Kennedy's Zapruder film assassination. Television specials every year license this clip. It is one of the most shocking and important bits of film in American history. Almost every analysis of the assassination of John F. Kennedy depends on the film's contents, just as it requires the Warren report. Yet when will the Zapruder film, like the Warren Report, be available to the public unconditionally?

The importance of these ephemeral films to our society cannot be overlooked. Film is the rare medium of full immersion. Its ability to transport us to distant times and places is unmatched. It imparts intimate knowledge of ourselves as a society and documents our advances and shortfalls in technology, culture, politics, economics, and civil rights. It allows to bear witness. Films provide literally us contemporaneous and visceral exposure to the real events, feelings, and reactions of Americans during critical moments in our history-the violence in Birmingham and Martin Luther King's March on Selma, the Watergate Hearings, and the Tet Offensive-events that influenced the political and moral opinions of millions of Americans.⁴⁹ Similarly the images from September 11, 2001, shaped our views of national security, terrorism, and world affairs. Under the CTEA, copyrighted films and television reports of these events will not be available until

^{49.} See generally David J. Garrow, Protest at Selma: Martin Luther King, Jr. and the Voting Rights Act of 1965 (Yale U. Press 1979) (discussing the influence of television on the politics of the civil rights movement); see also http://exchanges.state.gov/education/ engteaching/pubs/AmLnC/br40.htm> (noting that the "police violence, shown on national television, sickened the country; within hours, tens of thousands of volunteers were heading south to join King in the march") (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process); Peter Braestrup, Big Story: How the American Press and Television Reported and Interpreted the Crisis of Tet 1968 in Vietnam and Washington (Westview Press 1977); Robert J. Donovan & Raymond L. Scherer, Unsilent Revolution: Television News and American Public Life, 1948-1991 (Cambridge U. Press 1992), excerpted at http://www.mtr.org/seminars/satellite/civilrights/civil1.htm (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

2097. This means that most of us who witnessed the tragedy will be deceased by the time Americans can view them freely.⁵⁰

As the public domain shrinks, so too does the ability of digital archivists to preserve and provide public access to cultural works. But digital archives can, if free to do so, bring the public domain into schools, libraries, and homes across the globe. Indeed, for most works, *only* digital archives could do so.

A. Digital Archives Support Rich and Diverse Use of Our Cultural Heritage

Digital archives also foster new and innovative use of works in the public domain. For the Prelinger Archives, the transition to digital format created a dramatic increase in public screenings, classroom screenings, individual scholarly research projects, and low-budget productions. Very few if any of these users would have been able to access the archives previously, according to Prelinger.⁵¹

Digital archives also offer academics and cultural inquisitors the opportunity to exploit highly efficient and productive search tools. The Library of Congress preserves a collection of nearly 121 million items, more than two-thirds of which are in media other than books. Previously, physically searching through the index to this collection, assuming one was able to make the trip to our nation's capital, took days or even weeks. Now, one can simply go to www.loc.gov and search the catalog within minutes.

But many answers needed by researchers lie beyond a title, author or abstract, especially for media other than books. Technologies now exist that allow one to search the actual

^{50.} See e.g. Letter from David K. Allison, Chairman, Info. Tech. & Socy., Behring Ctr., Smithsonian Natl. Museum of Am. History, to Brewster Kahle, Founder, Internet Archive (Oct. 10, 2001) ("Much of the most valuable historical information of our time is being communicated over the Internet and broadcast channels. By developing a systematic and cost effective way to preserve this information in a central repository, you are building an invaluable collection that will serve scholars and the general public for years to come... I can think of no better example of the importance of your work than your capture of the global response to September 11."), available at http://www.archive.org/images/smithsonian50pct1.jpg (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

^{51.} Prelinger Interviews, supra n. 31.

contents of the Library of Congress collection, i.e., the words on the pages, the images on the films, or the sounds on the recordings, from one's home, school, or office computer. Many software programs now include the capability to perform Optical Character Recognition, a process by which the program will allow the user to search the pages of the digitized document for each and every occurrence of a word.⁵² The e-books at Project Gutenberg are already available for search via OCR technology.

Imagine that any child, student, philosopher, reporter, or scholar could simply go to an Internet library the size of the Library of Congress from his or her home or work computer, search for documents in the public domain, and then search and view those documents within a matter of minutes. Imagine that those who are blind or deaf could use tools that translate these works—on the fly—into a format that meets their needs. Imagine that individuals in other countries had the tools to translate these works into their native tongue in real-time. This is the promise of the digital archive.

B. Digital Archives Make Preservation and Access More Economical

Although much is currently done with volunteer labor and donations, digital archiving is not free. Yet because they need only a single digital copy of a work to preserve it in perfect condition for a virtually unlimited duration and for universal use, digital archives make preservation and enhanced access realistic and cost effective.

For example, the costs for physically preserving a single color feature film by copying can run to \$40,000 or more, and the short lifespans once thought to be a problem only for nitrate now confront nearly all films.⁵³ By contrast, the entire cost of digitizing a film is \$200.00 per hour of footage.⁵⁴ It is a single cost, paid once per film per lifetime. Once digitized, the cost of

^{52.} For more information on OCR Technology, *see* Adobe Sys., Inc., *Adobe Acrobat Capture 3.0*, available at <http://www.adobe.com/products/acrcapture/fullfeature.html> (accessed Nov. 3, 2002; copy on file with Journal of Appellate Practice and Process).

^{53.} See Redefining Film Preservation, supra n. 35, § 3, ¶ 3.

^{54.} Interview with Brewster Kahle, Founder, Internet Archive (December 3, 2001). (notes on file with authors).

storing, maintaining, transmitting and making back up copies of the film approaches zero.⁵⁵ Digital files can be maintained, transferred, and backed up automatically by current software without human intervention. Digital archives will cheaply and efficiently save millions of works from dereliction and destruction.⁵⁶

The return on digital archiving is higher still. Federal and state governments continue to spend taxpayer funds to connect our schools, libraries, and community centers to the Internet.⁵⁷ As a nation we have made a commitment to provide a broad swathe of the public with access to this new platform for communication, research, and publishing. But to what have we provided access? If the CTEA stands it will not be the wealth of information and knowledge housed in our cultural institutions. For most of the next two decades no new treasures will enter the public domain—they will remain offline and out of reach. We will have given our children the keys to this library, but they will enter only to find half-empty shelves.

VI. WHAT'S GOOD FOR THE GOOSE: THE IMPACT OF *ELDRED* ON THE 1976 COPYRIGHT ACT

In considering these facts and issues at oral argument, the Supreme Court raised an interesting question regarding the impact on cultural and historical resources, should the Court strike down the CTEA. The question centered on what impact, if

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^{55.} The cost estimates for maintaining a digital book range from Michael Lesk's low of \$4.00 to the National Archives and Records Administration estimate of \$13.99 to Yale University's estimate of \$15.37 to the EPA's estimate of \$250.00 per book. See Anne R. Kenney, Digital to Microfilm Conversion: A Demonstration Project, Final Report to the National Endowment for the Humanities tbl. 6 (Library, Cornell U. 1997), available at <htp://www.library.cornell.edu/preservation/publications.html> (accessed Nov. 13, 2002; copy on file with Journal of Appellate Practice and Process).

^{56.} For example, the Bibliotheca Alexandria's Digital Manuscripts Library digitizes manuscripts and rare books and makes them available on CDs. *See* http://www.archive.org/about/bibalex_p_r.php (accessed Nov. 21, 2002; copy on file with Journal of Appellate Practice and Process).

^{57.} The Telecommunications Act of 1996 created the Universal Service Fund for Schools and Libraries (commonly known as the "E-Rate" program), which provides discounts on the cost of telecommunications services, including Internet access and equipment, to all public and private schools and libraries. *See* Telecommunications Act of 1996, Pub. L. No. 104-104, § 110 Stat. 56 (1996).

any, striking down the CTEA would have on previous copyright extensions and the works they governed. Specifically, would striking down the CTEA's retrospective extension create "catastrophic" consequences by also calling into question the retroactive extension of the 1976 Act? This issue had been raised by amicus for the government AOL Time Warner in its brief,⁵⁸ which professed that because there had recently been "a host of mergers and acquisitions [that] have occurred, and innumerable licenses and contracts [that] have been executed, that depend on valuations of copyrighted works made in line with prior [retroactive extensions]," striking down the CTEA would lead to striking down all retroactive extensions, thus creating an enormous wealth transfer that would "wreak havoc with current business plans, settled property rights, and related investment-backed expectations."⁵⁹ However, AOL's only evidence of this alleged "havoc" were casual references in its Interest of Amicus section to the 6,500 film titles, 32,000 television episode titles, 8,000 cartoon titles and "hundreds of thousands of copyrighted musical compositions and sound recordings" that it owns, in addition to the more than 2,000 new albums it releases and the more than 100 million compact discs it sells in the United States every year.⁶⁰

Yet, not surprisingly, AOL failed to mention how many of those works would *actually be affected* by loss of any of the retroactive extensions. In fact, when one looks at some of the numbers for works that would be affected, it becomes clear that most of AOL's stockpile is not among them. The key factor, of course, is the year that copyright began for each work. If the CTEA is struck down, works from 1922 through 1926 will fall into the public domain. If the 1976 retroactive extension is struck down, works from 1927 through 1946 will fall into the public domain.⁶¹ Thus, the real question AOL needed to answer

^{58.} AOL Time Warner Inc.'s Br. Amicus Curiae, *Eldred v. Ashcroft*, No. 01-618 (Aug. 5, 2002), available at http://www.eldred.cc/legal/supremecourt.html (accessed on Nov. 21, 2002; copy on file with Journal of Appellate Practice and Process).

^{59.} Id. at 3.

^{60.} Id. at 1.

^{61.} Copyright terms before the 1976 Act were set by the 1909 Act, which gave copyright owners an initial twenty-eight-year term with rights to a second twenty-eight-year extension. In 1992, Congress automatically renewed all copyrights under the 1909 Act, thus giving all owners fifty-six years of protection.

was not how many works it owned, but rather how many of its "hundreds of thousands" of works were copyrighted before 1946. This is a question that AOL never addressed in its brief and one that was never answered before the Court.

When one does look at relevant numbers, one sees little of the feared havoc. For example, from 1927 to 1946, 187,280 books were published in the United States.⁶² Today, in 2002, only 4,267 of those books are available from publishers at any *price.*⁶³ In other words, of the entire universe of books published in the United States that are potentially affected by the retroactive 1976 extension, only just over two percent remain commercially available, while 183,013, or roughly ninety-seven percent of those works, remain commercially dormant and inaccessible. Should the 1976 retroactive extension be struck down, the most significant impact of such a decision would not be a monumental loss of contracts or corporate mergers, but rather a dramatic increase in reading. To free these works and allow digital archives to make them universally accessible would allow more families, teachers, scholars, and citizens to read, learn from, and enjoy ninety-seven percent of our nation's literature from one of its most historically significant erassomething copyright holders have failed to do.

The numbers for films are also interesting. According to the Internet Movie Database, 36,386 motion picture titles were released from 1927 to1946.⁶⁴ Of those, only 2,480 are currently available on videotape; only 871 are available on DVD; only 114 are available on Pay-Per-View/TV; and only thirteen are available in theaters.⁶⁵ Assuming that the videotape titles are the most encompassing, this means that only about seven percent of films from 1927 to 1946 are available from their exclusive owners while about ninety-three percent remain commercially dormant and inaccessible to the public.

^{62.} The Bowker Annual of Library & Book Trade Info. 67 (R.R. Bowker Co. 1971).

^{63.} Books in Print, available at http://www.booksinprint.com/bip/. This is a subscription-access database searchable only by those who have paid the required fee. It was searched by the authors on October 30, 2002.

^{64.} See The Internet Movie Database, available at <http://www.imdbpro.com>. IMDBPro is a subscription-access database searchable only by those who have paid the required fee. It was searched by the authors on December 5, 2002.

^{65.} Id.

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Again, these numbers would imply that the most likely "dramatic" impact of extending Eldred's argument to the 1976 Act would be to enable digital archives to host the world's largest and most affordable historic film festival.

VII. CONCLUSION

The Supreme Court decided *Eldred* as this article was going to press,⁶⁶ holding that its enactment of the CTEA was in fact an appropriate exercise of Congressional power. The authors disagree, for a review of the relevant history, an analysis of the CTEA's likely impact on access to and use of the artifacts of our cultural heritage, and a frank acknowledgement of copyright holders' demonstrated reluctance to preserve their works leads them to conclude that the Supreme Court should have credited Eldred's arguments against the CTEA. They also believe that the 1976 Act's retroactive extension, like the CTEA, inhibits rather than promotes the public good. And they hope that the Supreme Court eventually sees this imbalance and chooses to return copyright term to a more productive and progressive form.

66. Eldred v. Ashcroft, ____ U.S. ___, 2003 U.S. LEXIS 751 (Jan. 15, 2003).