

HOW COPYRIGHT MAKES BOOKS AND MUSIC DISAPPEAR (AND HOW SECONDARY LIABILITY RULES HELP RESURRECT OLD SONGS)

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One justification for granting authors a property right in their creations is the assumption that copyright stimulates the production of new works.¹ An alternative justification of growing importance claims that after a work is created, it needs to be protected for a significant period of time in order to assure its continued availability and distribution.² In the words of one commentator, a work may need “proper husbandry” in order to assure its continued exploitation.³ Powerful copyright lobbyists presently circle the globe advocating ever longer terms of copyright protection based on this second argument--that bad things happen when a copyright expires, the

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¹ See *Sony Corp. of America v. Universal Studios, Inc.*, 464 U.S. 417, 450 (1984) (“The purpose of copyright is to create incentives for creative effort.”); *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.’”)

² See *Eldred v. Ashcroft*, 537 U.S. 186, 207 (2003) (concluding that Congress “rationally credited projections that longer terms would encourage copyright holders to invest in the restoration and public distribution of their works.”); *Mills Music, Inc. v. Snyder*, 469 U.S. 153, 187 (1985) (“[The] fundamental objective of the copyright laws requires providing incentives both to the creation of works of art and to their dissemination.”); H.R. REP. NO. 105-452, at 4 (1998) (“the 1998 extension would “provide copyright owners generally with the incentive to restore older works and further disseminate them to the public.”); William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 475 (2003) (““an absence of copyright protection for intangible works may lead to inefficiencies because of impaired incentives to invest in maintaining and exploiting these works.”); Miriam Bitton, *Modernizing Copyright Law*, 20 TEX. INTELL. PROP. LJ. 65, 77 (2011) (“If [works enter] the public domain, they [become] obscure and thus no one [will] invest in them due to the problem of free riding. Items which retain enough value for future use should be given indefinite copyrights to maintain their value.”).

³ See Dennis S. Karjala, *Harry Potter, Tanya Grotter, and the Copyright Derivative Work*, 38 ARIZ. ST. L.J. 17, 37 (2006). It should be noted that Karjala is an opponent of copyright term extension.

work loses its owner, and it falls into the public domain.⁴ By analyzing present distribution patterns of books and music, this article tests the assumption that works will be under-exploited unless they are owned and therefore questions the validity of arguments in favor of copyright term extension.

So far, a number of studies have tested the assumption that works need owners to be adequately exploited.⁵ Those studies relied on lists of bestselling books and songs from 1913-32 and charted patterns of use and availability both before and after those works fell into the public domain.⁶ The research, summarized in Part I, casts doubt on the wisdom of copyright term extension. The new data presented in this article raise the same question but from a very different perspective. Rather than starting with a pre-established list of older famous works, the present research collects data from a random selection of new books for sale on *www.amazon.com* (“Amazon”) and music found on new movie DVD’s for sale on Amazon.⁷ By examining what is for sale “on the shelf,” the analysis of this data reveals how copyright makes works disappear rather than preserving their availability. Shortly after works are created and proprietaryized, they tend to disappear from public view only to reappear in significantly increased numbers when they fall into the public domain and lose their owners.⁸ For example, three times as many new books originally published in the 1850’s are for sale by Amazon than books from the 1950’s, despite the fact that many fewer books were published in the 1850’s.⁹

⁴ For a summary of extensive international lobbying efforts, see Christopher Buccafusco & Paul J. Heald, *Do Bad Things Happen When Works Enter the Public Domain?: Empirical Tests of Copyright Term Extension*, 27 BERK. J. OF LAW & TECH ___, at Part II.B (2013).

⁵ See *infra* notes ___ - ___ and accompanying text.

⁶ See *infra* notes ___ - ___ and accompanying text.

⁷ See *infra* notes ___ - ___ and accompanying text.

⁸ See *infra* notes ___ - ___ and accompanying text.

⁹ See *infra* notes ___ - ___ and accompanying text.

After establishing copyright's negative affect on the availability of books and music, this article survey popular songs from 1930-60 uploaded on YouTube and suggests secondary liability rules in the U.S. facilitating notice and takedown regimes help to ameliorate the effect of inadequate shepherding by copyright owners.¹⁰ An intermediary platform like YouTube allows consumers to signal to copyright owners which works retain value and radically reduces the transaction costs that make trading in some music markets excessively costly.¹¹ Indeed, on YouTube, the very phrase, "notice and takedown" is misleading. The YouTube study establishes that one routine transaction is for owners to "notice, leave up and monetize."¹² Secondary liability rules allow non-owners of copyrighted music to partially resolve the access problems that are caused by copyright ownership.

Part I briefly summarizes the hypothesis to be tested--that copyright is necessary to assure the adequate exploitation of creative works--and reviews the existing empirical literature. Part II sets forth the methodology of new studies that examine the mix of public domain and copyrighted books and music presently available on Amazon. Part III presents the data and reveals the eye-poppingly disproportionate number of new Amazon books initially published before 1923 and new Amazon books initially published after 1923 ("book study"). The study of songs available on DVD's sold by Amazon ("song study") shows less dramatic but still significant, differences in the availability of music initially published before and after 1923. In short, copyright makes both books and songs disappear. In Part III, a third study is used to reveal how in one market non-owners preserve and maintain the availability of music despite the constraints of copyright law. Secondary liability rules that shield YouTube from infringement liability until it receives a notice and takedown request have facilitated the preservation of old

¹⁰ See infra notes ___ - ___ and accompanying text.

¹¹ See infra notes ___ - ___ and accompanying text.

¹² See infra notes ___ - ___ and accompanying text.

songs and performances in multifarious forms. Uploaded versions of number one songs on YouTube from the US, France, and Brazil from 1930-60 are charted along several dimensions. Between the outright tolerance of infringing uploads and the willingness of owners to monetize infringing uploads rather than to take them down, a robust market for old songs and performance of them thrives.

The article concludes that present efforts by copyright owners to both extend the term of protection for copyright and to undermine current rules on secondary liability are unsupported by the empirical evidence and contrary to the public interest.

I. THE STORY THUS FAR

Copyright owners are in the business of collecting royalties on existing works, so they advocate extending copyright terms in order to perpetuate revenue streams.¹³ Once a work has been published, however, lobbyists lose the ability to make pro-extension arguments based on incentive-to-create rationales because the work already exists.¹⁴ Instead, they argue--without empirical support--that bad things happen will happen to the work when it falls into the public domain.¹⁵ The public interest, so the story goes, requires term extension to prevent a public domain calamity. I have chronicled the history and effectiveness of this argument at length elsewhere,¹⁶ but one persistent assertion bears repeating: Creative works need owners who will

¹³ Lobbying efforts by copyright owners are detailed in Buccafusco & Heald, *supra* note ____ at 6-12.

¹⁴ *Id.* at 3-4.

¹⁵ See, for example, *Copyright Term, Film Labeling, and Film Preservation Legislation: Hearing on H.R. 989, H.R. 1248, and H.R. 1734 Before the Subcomm. on Courts and Intellectual Property of the H. Comm. On the Judiciary*, 104th Cong. 217-18 (1995) (statement of Bruce Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks). (“One reason quality copies of public domain works are not widely available may be because publishers will not publish a work that is in the public domain for fear that they will not be able to recoup their investment or earn enough profit.”). See also *infra* note 36. For a summary of arguments, see Buccafusco & Heald, *supra* note ____ at 13-17.

¹⁶ See Buccafusco & Heald, *supra* note ____.

assure their availability and adequate distribution.¹⁷ Although Congress in 1998 relied on this argument in extending the term of protection in the U.S. by 20 years,¹⁸ empirical studies have thus far failed to support this key assertion made by copyright lobbyists.

In fact, Heald (2008) studied bestselling novels from 1913-32 and found that public domain status significantly increased the chance that a book would be in print and increased the number of publishers of it.¹⁹ In the sub-market for audiobooks created from the same set of 1913-32 bestsellers, Buccafusco & Heald (2013) showed that a significantly higher number of the public domain books had audio versions for sale on *www.audible.com*.²⁰ Although music data is harder to gather, Brooks (2006) showed that non-owners of popular songs from 1890-1965 had converted a significantly higher percentage of them into digital formats than had their owners.²¹ Finally, Heald (2009) studied a set of popular songs from 1913-32 and showed that the public domain songs were no less likely to be in a movie than the copyright protected songs.²²

The dates 1913-32 are important to the studies summarized above because the sub-set published from 1913-22 fell into the public domain from 1988-98 (they had a 75-year copyright term), while properly renewed works from 1923-32 are still protected by copyrighted (they have

¹⁷ See *supra* note 15.

¹⁸ See H.R. REP. NO. 105-452, at 4 (1998) (finding the 1998 extension would “provide copyright owners generally with the incentive to restore older works and further disseminate them to the public.”).

¹⁹ See Paul J. Heald, *Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Copyrighted and Public Domain Fiction Bestsellers*, 92 MINN. L. REV. 1031 (2008) (studying 334 books and finding that after 2001 significantly more of the public domain books were in print and by significantly more publishers).

²⁰ See Buccafusco & Heald, *supra* note ___ at ___ (studying 334 bestsellers from 1913-32 and identifying available professionally recorded audio versions of each book).

²¹ See TIM BROOKS, NAT’L RECORDING PRES. BD., LIBRARY OF CONG., SURVEY OF REISSUES OF U.S. RECORDINGS 7–8 & 7 tbl. 4 (2005) (demonstrating that copyright owners had made only an average of 14% of popular recordings from 1890 to 1964 available on CD’s, while non-owners had made 22% of them available to the public on CD’s).

²² See Paul J. Heald, *Bestselling Musical Compositions (1913-32) and their Use in Cinema (1968-2008)*, 6 REV. OF ECON. RES. ON COPY. ISSUES 31 (2009) (studying 1294 popular songs from 1913-32 as they appeared in films released from 1968-2008).

a 95-year term).²³ Studying books and music within a decade of the 1923 divide enables researchers to study what happened to works from 1913-22 after they fell into the public domain and then compare their behavior with a control group of copyrighted works from approximately the same era. As useful as such comparisons are, they do not tell policymakers what mix of public domain books and movies are currently “on the shelf.” Published studies look only at a specific set of older works and track them through time. Critically, availability can also be measured by looking at the age and legal status of works presently for sale to the public. If public domain works are underrepresented on the world’s largest on-line marketplace, Amazon, then copyright owners may have a valid point about under-exploitation.

The two studies discussed below offer a completely new take on availability by observing books and music presently available to consumers when they shop.

II. METHODOLOGY: SAMPLING THE METAPHORICAL STORE SHELF

Given that Amazon.com currently offers over 8 million hardback and 21 million paperback books for sale in a number of different fiction and non-fiction categories,²⁴ the book study used a randomly sampling technique to collect representative titles in two categories:

²³ Calculating the copyright term is tedious, and explanation of changes in term length will only offered when necessary. The first copyright statute (1790) Act provided authors with a fourteen-year term of protection that could be renewed for an additional fourteen years. In 1831, Congress extended the initial term of protection to twenty-eight years with a fourteen-year renewal term, and the 1909 Copyright Act extended the renewal term to twenty-eight years. The last major revision of the copyright statute, the 1976 Act, further lengthened the period of copyright protection. For existing works that had not yet entered the public domain, the Act added forty-seven years of protection to the twenty-eight-year term resulting in a total of seventy-five years of protection. The Act, which went into effect in 1978, did not retroactively revive copyright protection for works that had already entered the public domain; consequentially, all works published prior to 1923 remain in the public domain. The 1998 Sonny Bono Copyright Term Extension Act (“CTEA”) added an additional twenty years of protection to the copyright term for all existing works. Works created between 1923 and 1978 now receive ninety-five years of protection, while works created since 1978 would be protected for the duration of the lives of their authors plus seventy years, with anonymous works, pseudonymous works, and works made for hire receiving a defined ninety-five-year term of protection.

²⁴ See http://www.amazon.com/books-used-books-textbooks/b/ref=sa_menu_bo?ie=UTF8&node=283155 (last visited June 24, 2013).

general fiction²⁵ and science books. In order to collect a random sample, my research assistant wrote a computer program to generate random ISBN numbers which were then submitted as search requests to Amazon using its publicly available application programming interface. In the category of fiction, only about one percent of the random ISBN numbers actually corresponded to a new book for sale by Amazon. Since Amazon allows no more than 2000 requests per hour, it took several weeks of continuous searching to generate a random list of 7000 new fiction works for sale. An inspection of the list revealed a small percentage of works of literary criticism and history scattered among the novels, but not enough to warrant their removal.²⁶ It should be noted that quite a few titles in the list were foreign language titles, making the elimination of the small percent of literary criticism problematic.

The next step was to identify the initial publication date of as many of the 7000 books as possible. Since Copyright Office records before 1978 are not digitized,²⁷ using hard copy registration data at the Copyright Office to determine initial publication date was not feasible.²⁸ In fact, using registration data would be a proxy for date of initial publication because the works can be initially published before or after registration.²⁹ Instead, my research assistant wrote a program to search U.S. Library of Congress (LOC) records for the earliest edition of each book. The earliest edition in the LOC is decent proxy for initial publication date as U.S. copyright law

²⁵ The following sub-categories were grouped together and searched in order to create a general fiction category from the Amazon browse nodes: 10016 – British; 4465 - Comic Literature; 10129 - Contemporary Literature; 2159 – Drama; 16260301 - Foreign Language Fiction; 23 – Romance; 10132 - Literary Books; 10248 – Poetry; 9822 - United States; 542654 - Women's Fiction; 10311 - World Literature; 18 - Mystery & Thrillers; 16190 – Fantasy; 16272 - Science Fiction.

²⁶ It is not always clear when a work is a novel or a work of literary criticism.

²⁷ See <http://www.copyright.gov/records/> and <http://www.copyright.gov/circs/circ23.pdf>

²⁸ In fact, Thomson charges \$750 per work for searching through physical copyright registration records in order to determine the initial registration date and renewal of a single work. See <http://trademarks.thomsonreuters.com /searching/title-copyright-entertainment-searches?id=node/230> (the phone number must be called to confirm the price).

²⁹ For example, the registration date on my first novel is 1998, yet it will not be published until 2014. See http://cocatalog.loc.gov/cgi-in/Pwebrecon.cgi?Search_Arg=Heald+Paul&Search_Code=NALL&PID=wxFkZq0vibbxBnyceD7fQ37fckR&SEQ=20130624090254&CNT=25&HIST=1.

provided and still provides incentives to deposit a copy of the first published edition with the library.³⁰ Deposit is still a routine business practice with major publishers.

Nonetheless, not every publisher deposits a book with the LOC, and not every book there is represented by a first edition. A book initially published in 1920, for example, may only be represented in the LOC by a later edition from 1935. For this reason, it is likely that the dates we take from LOC editions are biased upward. A copy deposited in the LOC may often be an edition published after the initial publication date; it should seldom be a copy deposited years before it was published.³¹ Some of the upward dating bias may be ameliorated by changes weakening the deposit requirements in the 1976 Copyright Act,³² but even under its predecessor, the 1909 Copyright Act, a failure to make an initial deposit did not result in the forfeiture of copyright, but rather the possibility of sanction if an author ignored an LOC request for a copy.³³ Penalties for failure to deposit were more serious under prior acts, which may help partially correct any dating bias for works initially published prior to 1909. There is little doubt, however, that an upward dating bias remains in the sample, which makes the results of the study discussed below even more significant and striking.

Of the 7000 randomly selected new fiction works for sale on Amazon.com, the software program located 2500 of the titles in the LOC catalog. At least three factors prevented the discovery of all 7000 titles. First, some authors, of course, never deposit a copy of their work.³⁴ Second, the data scraped from Amazon is derived from a book it is selling, which is not necessarily the same edition as the deposit copy. Therefore, discrepancies in the form an

³⁰ See 2-7 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT §7.16(B)(6)(a) (2010) (explaining changes in the deposit requirement over time).

³¹ *But see supra* note 27.

³² *See supra* note 28.

³³ *Id.*

³⁴ For example, the copyright in my second novel, *No Regrets*, published in 2002 by St. James Music Press has never been registered.

author's first name or the choice to include middle initials are common. The LOC copy of a first edition of *The Lion, the Witch, and the Wardrobe* might list the author as Clive Staples Lewis, whereas the Amazon edition published decades later might list the author as C.S. Lewis. And even when Amazon is selling the same edition as the one found in the LOC, the Amazon digital record might diverge slightly from what is listed in the title page of the hard cover edition it is selling. Furthermore, LOC records tend to rely on the author's name as listed in the copyright registration document, and publishers may use a variant of that name. For example, the author of *The Hunt for Red October* might be Tom Clancy in one place and Thomas M. Clancy in another. Finally, a great many of the Amazon titles not found in the LOC were foreign language titles. Foreign authors may have a lower rate of deposit (most foreign jurisdictions do not require deposit³⁵) or discrepancies in spelling between Amazon editions and LOC editions may proliferate when accent marks and long foreign words may not match perfectly as required by the software.

Collecting a valid random sample of music proved to be more challenging. Initially, *I Tunes* seemed to be a logical choice for collecting data, but Apple only sells digital versions of songs and the Brooks (2006) study mentioned above found that copyright owners had only made 14% of well-known songs from 1890-1965 available in digital form.³⁶ The lack of digital versions of older music would likely bias any sample of *I Tunes* heavily toward new music. The same would be true of a sample of CD's for sale on Amazon, while any attempt at sampling the market for vinyl would clearly bias the sample toward older music. YouTube was also

³⁵ The Berne Convention, which the US only joined in 1989, requires its members to drop all formalities as a prerequisite to the grant of copyright protection. Most countries around the world are longtime members of Berne and did away with deposit requirements long ago.

³⁶ See Brooks, *supra* note ___ at 7-8.

considered, but pulling a random sample from YouTube is difficult because its search algorithm is not randomized, but rather based on the queries presented in prior searches.³⁷

The Brooks study, however, did not track the use and digitization of songs as they appeared in film sound tracks. Despite copyright owners' failures to convert old vinyl recordings to digital mp3's, movie directors are unlikely to be deterred by the absence of a digital version of a musical composition. Almost all music selected for a movie must be adapted in form in order to be included in the soundtrack, so it seems likely that a sample of music in film would be less age-biased. Whether a director is working from a piece of sheet music or a vinyl recording or an mp3 file, the musical format must be adapted before it can be heard in theaters.

Choosing to sample music in movies has a further advantage. Each song in a movie is approved by the director who has determined that it will enhance the value of the film. Since the core debate over term extension revolves primarily around works that hold their value over time,³⁸ approval by film directors provides an independent indication of the ongoing value of the music chosen. Finally, musical compositions as they appear in movies are derivative works. The director must pay a band or orchestra to record the piece or obtain a license to use an existing recording. Advocates for term extension make a special point of arguing that public domain works will not attract investors interested in making derivative works because they cannot exclude competitors from making the same investment.³⁹ Tracking music in movies, permits evaluation of the claim that derivative works will be underproduced.

³⁷ See <http://searchenginewatch.com/article/2218696/YouTube-Algorithm-Change-Time-Watched-Key-to-Higher-Video-Search-Rankings> (detailing changes to the YouTube algorithm to account for the amount of time a prior video was watched).

³⁸ See Landes & Posner, *supra* note ___ at ___.

³⁹ Professor Arthur Miller worries that new works deriving from and based on materials in the public domain will be under-produced. Copyright law gives owners the exclusive right to make or license

Two samples of music were collected. First, 134 movies were sampled randomly from the *www.boxofficemojo* (BoxOfficeMojo) website.⁴⁰ Movies from this sample that were not for sale on Amazon were eliminated and replaced with movies that were available in a new DVD version. The music in the 134 movies was identified using the soundtrack search function on *www.imdb.com*⁴¹ (IMDB) and 1078 songs were identified in those movies. Next, the top 100 highest grossing movies of all time (adjusted box office figures) were identified from a list on BoxOfficeMojo.⁴² A number of those films either contained no songs or lacked soundtrack information, so a soundtrack search on IMDB generated a shorter list of 836 songs.

Determining the initial publication dates of almost 2000 songs was challenging and required several research assistants to consult several sources, including Google, Wikipedia, a list of 3700 most popular songs from 1880-1965,⁴³ and scanned volumes of the Catalog of Copyright Entries.⁴⁴ Although in some circumstances, images of original sheet music or other

derivative works like adaptations, sequels, and translations that are based on the original work. Miller argues that derivative works recordings of musical compositions, adaptations, sequels, and translations will not be made without copyright term extensions. Symposium, *The Constitutionality of Copyright Term Extension: How Long is Too Long?*, 18 CARDOZO ARTS & ENT. L.J. 651, 693 (2000) (panel comments of Arthur Miller) (Miller reasons that “you have to provide incentives for [producers] to produce the derivatives, the motion picture, the TV series, the documentary, whatever it may be—perhaps even a musical! . . . We must incentivize the dissemination industries, the preservation industries, and the derivative work industries.”).

⁴⁰ See <http://www.boxofficemojo.com/movies/>. The web site is organized by movie title from A-Z and within each letter group also divided alphabetically. For example, the letter sub-divided A-Ac, Ad-Af, Ag-AI, etc. The fifth movie listed in each of the 134 alphabetical sub-divisions was selected. If a movie was eliminated as not available on Amazon, then the sixth movie was chosen and so forth.

⁴¹ See <http://www.imdb.com/search/> (drop down menu under “title search” lists “soundtrack” option).

⁴² See <http://boxofficemojo.com/alltime/adjusted.htm> (listing top 100 movies in terms of box office gross during the first release of the film adjusted by ticket price inflation).

⁴³ Compiled from JULES MATTFIELD, *VARIETY MUSIC CAVALCADE* (1965) (compiling the most popular songs in American history by year).

⁴⁴ Although copyright registration records before 1978 are not available on-line at the copyright office web site, The Internet Archive has OCR scanned copies of many volumes available. See <http://archive.org/details/copyrightrecords>. Unfortunately, Boolean searching of these .pdf copies is not possible, so identifying songs within them is extremely unwieldy, and the quality of the OCR scanning renders them less than completely reliable. The records were therefore not the initial source consulted by my research assistants.

authoritative sources could be examined, the publication date used for a song was often the year of its popularity, e.g. when it was a hit on the Billboard charts. Radio chart dates or dates when sheet music sales peaked were often used as a proxy for first date of publication. Since songs are not technically published when they are played on the radio, but rather when the underlying sheet music is sold, Billboard chart appearance is not an unfailing measure of publication date. However, since songs are published both before and after their sound recordings are popularized, a systematic bias upward or downward may not be present. Most importantly, popular songs are usually published within several years of the release of the sound recording when the market for sheet music is hottest, another factor reducing bias. To further reduce any dating errors, the data is presented by decade rather than year-by-year.

III. THE CASE OF THE DISAPPEARING WORKS

The academic literature tells two stories about what happens to works when they fall into the public domain. First, some economists like Landes and Posner suggest that “[a]n absence of copyright protection for intangible works may lead to inefficiencies because . . . of impaired incentives to invest in maintaining and exploiting these works.”⁴⁵ This is the under-exploitation hypothesis in a nutshell. Why exploit a work that others can also exploit for free and erode your market? Others have argued that when works fall into the public domain, they become attractive targets for exploitation because no license fee need be paid to the former owner of the work.⁴⁶ Despite potential competition, exploitation will occur, just as it does in other markets where no one has a monopoly over the object of exploitation, e.g. the markets string, milk, and pencils. The data collected from Amazon demonstrates the power of the second hypothesis, that books and music become more attractive targets for exploitation after they fall into the public domain.

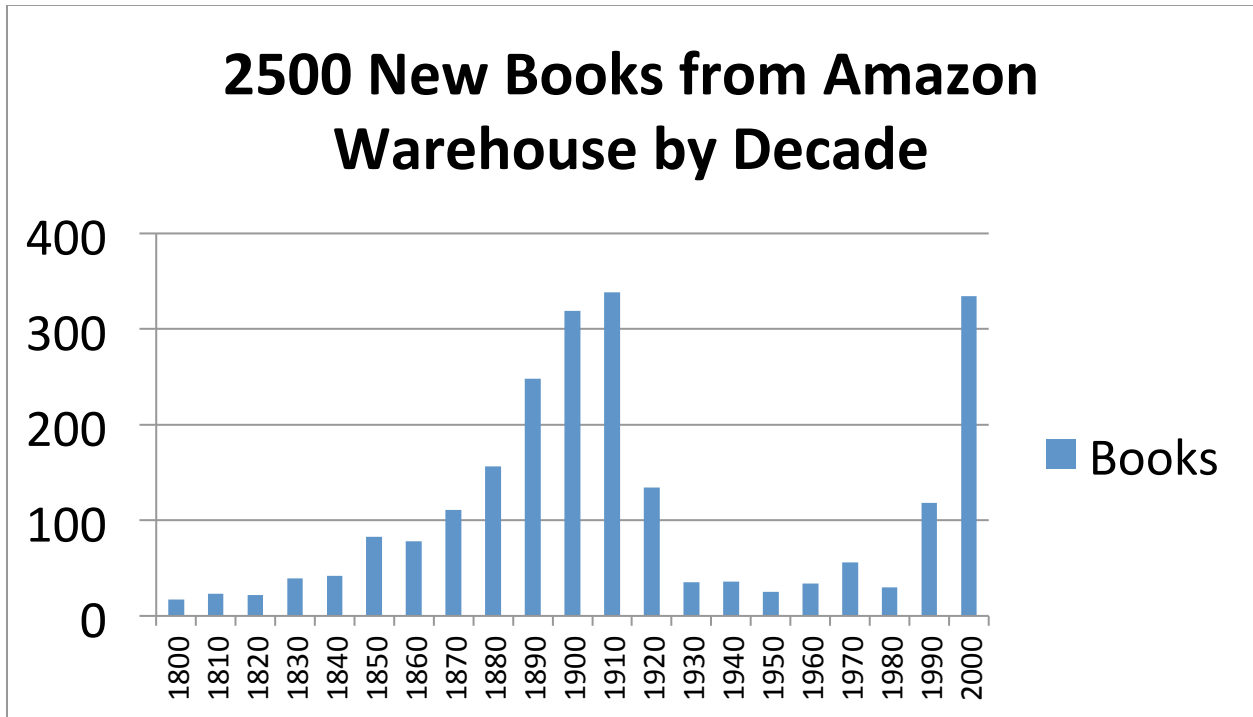
⁴⁵ William M. Landes & Richard A. Posner, *Indefinitely Renewable Copyright*, 70 U. CHI. L. REV. 471, 475 (2003).

⁴⁶ See Buccafusco & Heald, *supra* note ____ at ____.

A. The Market for New Books on Amazon

The 2500 random titles of new fiction books available on Amazon during the fall of 2012 are charted in Figure 1 below by the decade of their original publication date. Note that works published prior to 1923 are now in the public domain:

Figure 1



In a world without copyright, one would expect a fairly smoothly downward sloping curve from the decade 2000-2010 to the decade of 1800-1810 based on the assumption that works generally become less popular as they age (and therefore less desirable to market). If age were the only factor, one would expect to see fewer books available from each successively older decade. Instead, the curve declines sharply and quickly, and then rebounds spectacularly for books currently in the public domain initially published before 1923. Since age should be a factor that depresses availability, the most plausible conclusion from the data is that copyright (in combination with book publishing models) makes books disappear.

Age seems to be very relevant within both the sub-set of post-1923 books still under copyright and the sub-set of pre-1923 books in the public domain. Note, however, the steeper decline in the number of books from the decade of 2000-2010 (334 titles) to the 1990's (118 titles) to the 1980's (30 titles). This is not a gently sloping downward curve! Publishers seem unwilling to sell their books on Amazon for more than a few years after their publication. The data suggest that publishing business models make books disappear fairly shortly after their publication and long before they are scheduled to fall into the public domain. Copyright law then deters their reappearance as long as they are owned. On the left side of the graph, the decline from 1910's (338 titles) to the 1900's (319 titles) to the 1890's (248) and the 1880's (156) and so forth presents the more gentle time-sensitive downward slope that one might expect. The difference in the rate of decline between the public domain sub-set and the copyrighted sub-set is very likely due to publishers' preference for marketing books that are less than twenty years old.

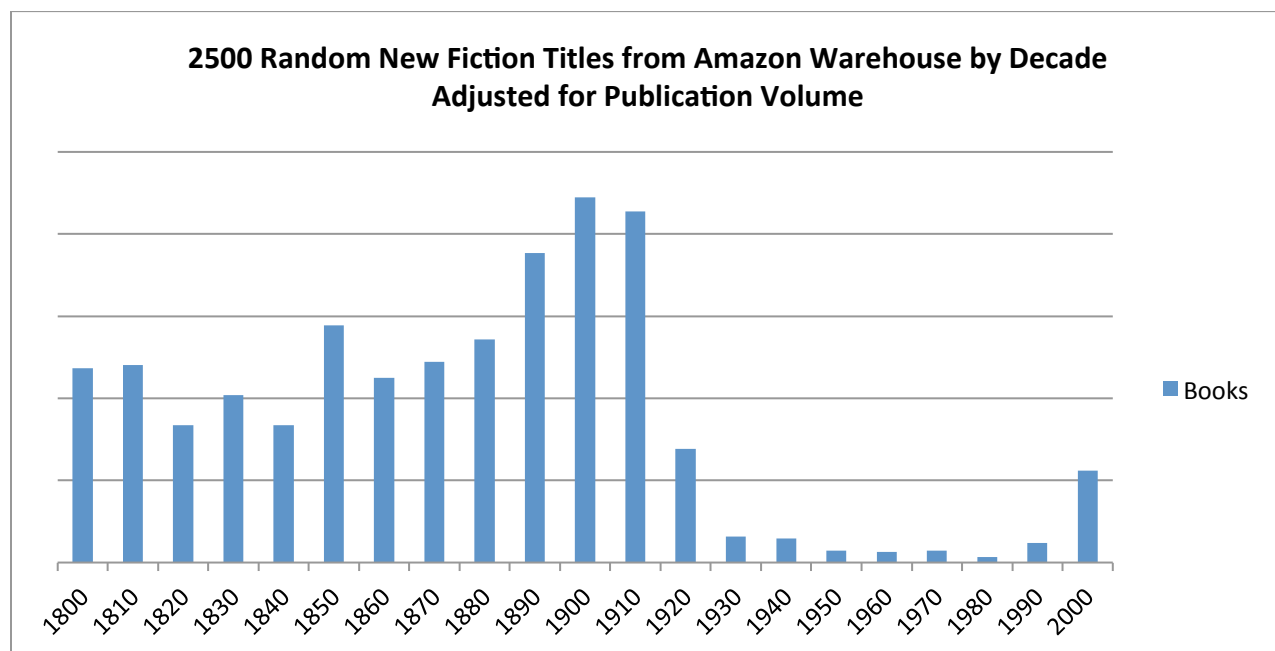
The chart, of course, is somewhat misleading because it fails to account for the difference in the number of book titles published each year. Although the number of books published each year for the last 200 years is not known, fewer books were undoubtedly published in the 1800's when type was set by hand as compared with more efficient methods developed during the mechanical typesetting and computer eras. Of course, the population of the United States also increased over the same time, generating more readers, and, as education became more universal in the late 18th and early twentieth century, more literate citizens. As a proxy for the actual number of books published each year, a search was conducted on the WorldCat library catalog which includes the entire collections of 72,000 libraries around the world.⁴⁷ The search

⁴⁷ <http://www.worldcat.org/> & <http://en.wikipedia.org/wiki/WorldCat> (stating that two billion items are searchable in its global consortium of 72,000 cooperating libraries).

identified titles in the entire WorldCat collection from each publication year between 1800 and 2010, counting those titles published in English but not originating in English speaking countries outside the United States.⁴⁸ Surely, more titles were actually published each year than were returned by the WorldCat search, but as long as the number of missing titles does not vary much from year to year, then the ratio of books found in the search and ratio of books actually published should be approximately the same. As one would predict with a direct measure of publication rates, the number of books counted each decade increases steadily until the year 2000 when the well-documented decline in the number of physical books published began.⁴⁹

Figure 2 below accounts for the difference in the number of books published each year, normalizing to the decade of the 1990's when the highest number of books was published. The negative effect of copyright seen in Figure 1 becomes even more exaggerated:

Figure 2



⁴⁸ The search string used in the WorldCat search was “la= "eng" not pl: scotland not pl: ireland not pl: britain not pl: wales not pl: britain not pl: australia not pl: canada and yr: 1800.”

⁴⁹ See UNESCO, STATISTICAL YEARBOOK (1990-2010).

Consider the comparison of 1950 to 1850 as an illustration. Of the 2500 fiction titles, only 25 were published in the 1950's whereas 83 were published in the 1850's. Our WorldCat search, not surprisingly, suggests that six times as many books were published in the 1950's than in the 1850's. Figure 2 above accounts for the difference in the number of books published and provides a more accurate sense of the distortion (approximately 18x) in availability.

B. The Market for Music on Amazon

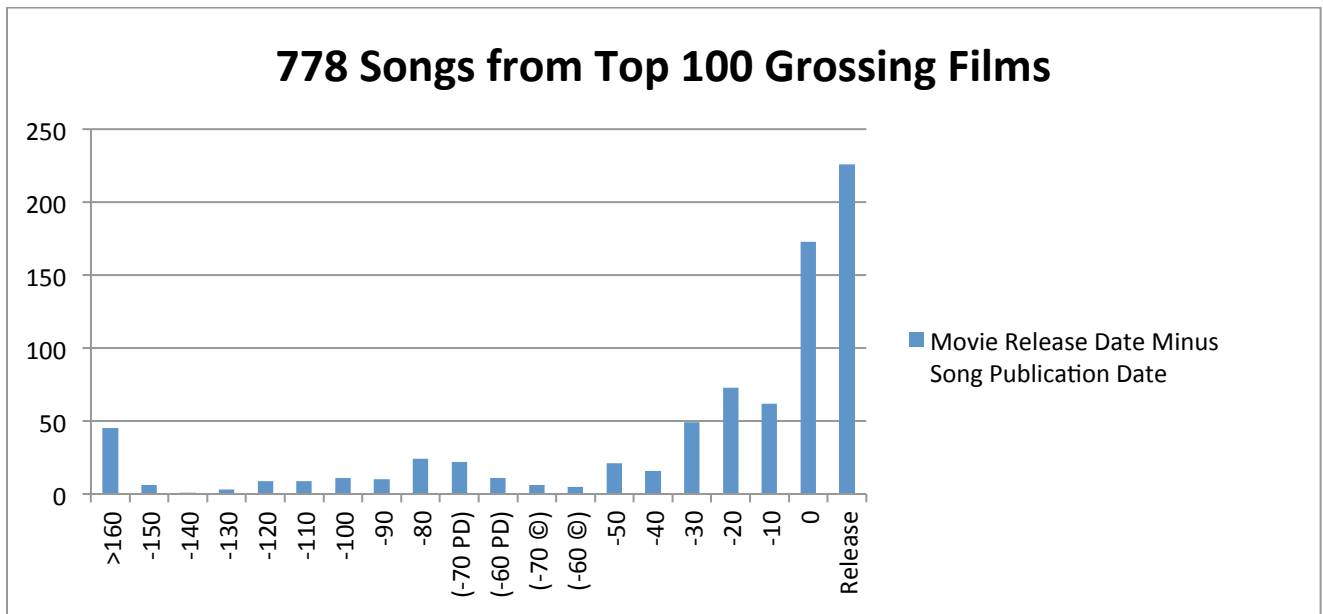
The effect of copyright law on the availability of music as it appears on new DVD's sold by Amazon is also negative, but not quite so dramatic. Figure 3 below displays the distribution of songs found in the top 100 highest grossing movies of all time. Rather than organize the data by the year of song publication or movie release date, the chart illustrates the difference between the two. In other words, it measures how far backward movie directors were looking for music. Because the study attempts to measure the effect of legal status on the decision to use a song in a movie, it was necessary to compare the date of the movie release with the date of the song's publication to learn whether the use of the song correlates with its copyright status at the time the movie was released.

Figure 3 divides songs published between 60-80 years before movie release into two extra categories—songs that were in the public domain at the time of the movie release and those that were not. In all other categories, copyright status is self-evident (80-plus-year-old songs are always in the public domain while 60-minus-year-old songs are always copyrighted).⁵⁰ The 60-80 year sub-divisions are made necessary by changes made in the 1976 Copyright Act (and during some years immediately prior thereto) extending the term of protection from 56 to 75

⁵⁰ In theory, songs that were 56-59 years old at the time of the movie release could also be in the public domain, but the study reveals only a handful of outliers in that category.

years for a certain sub-set of the works.⁵¹ For example, a song that was published sixty years before it appeared in a 1950 film was in the public domain when the director chose to include it. A 60-year-old song appearing in a 1985 movie was not in the public domain at the time of the movie release. Comparing the legal status of songs in the 60-80 year prior-to-release categories illustrates in a nutshell the effect of legal status on use:

Figure 3



Although the shape of the curve in Figure 3 roughly tracks the curve for books seen in Figure 1, the reappearance of older songs is much less pronounced. Still, the upward slope starting with songs in the public domain of more than 60 years old is statistically significant.⁵² Three times as many 60-80 year-old public domain songs (33 titles) were used in movies than 60-80 year-old songs still protected by copyright (11 titles) at the time of movie release. Twenty-four 80-90 year-old songs, all in the public domain, were included in soundtracks, while only sixteen 40-50 year-old songs were used. Not surprisingly, the sample is dominated by

⁵¹ See *supra* note ____ for details on copyright term calculation and historical changes to term length.

⁵² [INSERT DETAILED STATS FOOTNOTE]

songs published the same year as the movie's release date because many songs were written especially for the movie in which they appeared (29%). A high percentage of songs (22%) were less than ten years old at the time of movie release, perhaps reflecting the commonness of the choice to set a movie plot in the near-present day.

The difference in the magnitude of the effect of legal status on books and music-in-movies is probably explained by the comparative economics of the book and film trades. A book publisher wishing to sell a public domain title need only find the title in the public library and scan it (or find it on Google Books), choose the typeface and graphics with any widely available publishing software program, and send the manuscript off to be printed.⁵³ The former copyright owner need not be contacted and no license fee need be paid. These tasks can be performed in less than a day,⁵⁴ if necessary, and the savings over locating a copyright owner, negotiating and paying a licensing fee are substantial.

A movie director likely saves marginally less by choosing a public domain musical composition. Sheet music, standing alone, cannot be employed in a film; it must be played and recorded first. Therefore, a director must hire a singer, band, or orchestra to make a new recording appropriate for inclusion in the film or pay a fee to the copyright owner of an existing sound recording for permission to adapt that recording for the film. A director choosing a recording of the Sex Pistols singing "God Save the Queen" must pay a fee to the owner of the sound recording even though the musical composition is in the public domain.⁵⁵ Although no fee need be paid to the composer, the savings are marginal and are perhaps often dwarfed by cost of making a new recording or obtaining permission to use an existing recording. If the marginal

⁵³ See ANDRA MIKOS, *THE PUBLIC DOMAIN PUBLISHING BIBLE* (2009); ADAM PEARSON, *HOW TO CREATE, FORMAT, PUBLISH, PROMOTE, AND PROFIT FROM THE EBOOK OPPORTUNITY* (2012).

⁵⁴ See *id.*

⁵⁵ The Wikipedia entry for *God Save the Queen* includes an image of sheet music dating from 1745. See http://en.wikipedia.org/wiki/God_save_the_queen.

savings of choosing a public domain composition for a film are smaller than the marginal savings of choosing to publish a public domain book, then one would expect to see the more modest increase in the upward curve of older public domain songs depicted in Figure 3.

The sample of songs from the top 100 grossing movies of all time has particular interest because the songs are likely to have been encountered by a wide variety of the public. By definition, the list contains no obscure art films that barely reached the silver screen, containing a sound track that was heard by virtually no one. Nonetheless, a completely random sample of all films listed on BoxOfficeMojo was also conducted and the data from the songs told an interesting story. The sample of random movies contained many fewer public domain songs than the sample of top grossing movies. At the time of movie release, only 8% (69/887) of songs from the randomly selected movies were in the public domain, whereas 25% (140/647) of the songs appearing in the top grossing movies were in the public domain at the time of release.

This difference presented a puzzle: Why would the top grossing films have three times as many public domain compositions as the randomly selected films? Top grossing films presumably have bigger budgets than randomly selected films, so it seemed unlikely that directors of top grossing films were more price sensitive and therefore chose to include marginally cheaper public domain compositions. The top grossing films might have contained more historical plots and settings than the random films, requiring a further reach back into the musical past, but this turns out not to be true. Luckily, in prior research, I had uncovered a bias in the BoxOfficeMojo database caused by its decision to only list movies with known box office returns. Not surprisingly, movies where box office data are available tend to be newer movies. The box office gross for a 1953 film by a defunct studio may not be available, but almost all newer films report their box office receipts. For this reason, the median age of the 100 randomly

sampled movies from BoxOfficeMojo was 2002. The median age of the top 100 grossing movies of all time was 1977, a striking difference.

This difference modified the puzzle: Why would directors of movies with a median release date of 1977 more frequently choose songs that were 60, 70, 80 or more years old at the time of production than did directors of movies with a median release date of 2002? Consistent with the evidence that both legal status and age are relevant to the availability of a work, a testable hypothesis emerged. Because of changes in the duration of copyright, directors of movies released before 1976 did not have to look backward so far to access free public domain material. Since the analysis of both books and music above suggested that the age of a song is also relevant to the movie inclusion decision (51% of songs are published within 10 years of movie release date), one would expect that movie directors who only had to look backward 56 years to access the public domain (e.g. directors of movies from the 1930's to 1960's) would have been more likely to choose a public domain movie than the director of a movie, say, in 2010 or 2011, who had to look backward 87 years or 88 years respectively to find a public domain song.

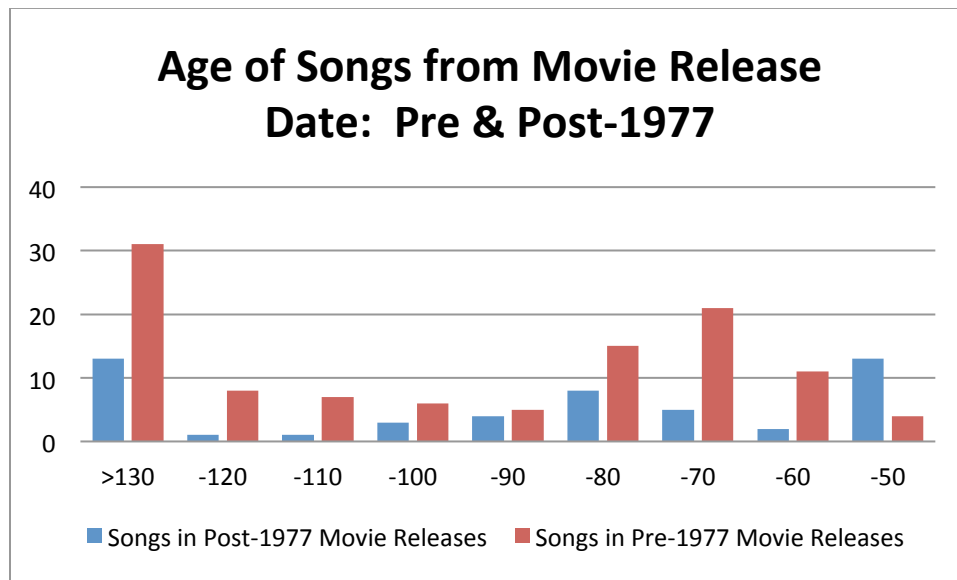
This hypothesis was testable by a further examination of the song sample from the top 100 grossing movies (examining the random song sample was fruitless because the earliest song was from 1981). The top grossing movies contained equal numbers of films from before and after 1977, a convenient date, given the timing of 1976 term extension. With an equal amount of movies (and an almost equal amount of songs in them) from either side of 1977,⁵⁶ the sample provided sufficient data to test whether age and therefore accessibility to free public domain material had influenced the availability of older songs in blockbuster movies.

⁵⁶ 384 songs from the pre-1977 movies and 341 from the post-1977 movies.

An initial analysis of the distribution of public domain songs in movies on both side of the 1977 median date supported the hypothesis that a combination of age and legal status mattered. Of the 129 public domain songs in the entire sample, 76% (98/129) were found in movies released prior to 1977. Only 24% (31/129) were found in movies release after 1977.

A more sophisticated analysis appears below in Figure 4 which compares the difference in years between the publication dates of songs and the release dates of the movies in which they appeared for both the pre- and post-1977 sets of movies. The chart begins on the right side with songs, all protected by copyright, that are between 50-60 years old and then shows the difference between the two sets as the copyrighted songs are considered:

Figure 4



One notices immediately that the songs from the pre-1977 movies dominate every age category except the songs published 50-60 years before the movie release date, all of which are still protected by copyright. Statistical analysis confirms the significance of the difference observed,

although it is impossible to sort out the relative importance of legal status and age as they are confounding factors.⁵⁷

The inability to measure the precise relevance of legal status in explaining Figure 4 does not detract from the prior conclusion that copyright status does have a significant effect on the availability of songs in movies. The comparison of songs on both sides of the 1977 median date for the 100 top grossing movies was conducted to explain why the sample of 100 randomly selected movies with a 2002 median contained so many fewer public domain songs. The analysis in Figure 3 had already provided independent evidence of the relevance of legal status to availability unconfounded by age and that conclusion retains its power.⁵⁸

IV. HOW SECONDARY LIABILITY RULES REANIMATE COPYRIGHTED SONGS ON YOUTUBE

Figures 1 & 3 above demonstrate the relevance of age to availability. Of 2500 new fiction works for sale on Amazon, 334 were initially published after 2000, 118 were published in the 1990's, and only 30 were published in the 1980's, an alarmingly steep drop off.⁵⁹ As publishers take editions off the metaphorical bookshelf, copyright law stands as an obstacle to others in the market wanting to exploit the missing titles and fill the chasm. Evidence from the music-in-movies market tells a similar story. Over 51% of all music appearing in movies was published within 10 years of the movie release date.⁶⁰ Given that copyright law is meant to facilitate the advancement of learning and the distribution of information for the public benefit,⁶¹ the impediment it seems to raise to the recovery of once available works is disturbing.

⁵⁷ [INSERT DETAILED STATS FOOTNOTE]

⁵⁸ See *supra* note ____.

⁵⁹ See *supra* notes ____ - ____ and accompanying text.

⁶⁰ See *supra* notes ____ - ____ and accompanying text.

⁶¹ See U.S. CONST., ART I, SEC. 8, CL. 8 (“Congress shall have the power to . . . promote the progress of science and useful arts by granting to authors and inventors the exclusive rights to their writings and

In at least one market, however, secondary liability rules have the potential to ameliorate the accessibility dilemma. Despite copyright owners' ongoing efforts to modify the current law,⁶² anyone with a computer and an internet connection can upload infringing music on YouTube without rendering the web site liable.⁶³ Under either the Digital Millennium Copyright Act safe harbor provisions⁶⁴ or analogous common law rules, YouTube is generally neither directly,⁶⁵ contributorily,⁶⁶ nor vicariously⁶⁷ liable for infringement until it receives notice from a complaining copyright owner.⁶⁸ When it obtains actual knowledge of infringement, it is potentially liable and has an obligation to take down the infringing upload. YouTube, however, typically asks a question [paraphrased] of the copyright owner before taking down an infringing upload: "Instead of having the infringing post taken down, would you like us to leave it up and insert an advertisement that would allow you to profit from subsequent views of the upload?"⁶⁹

creations."); Orrin D. Hatch & Thomas R. Lee, "To Promote the Progress of Science": *The Copyright Clause and Congress' Power to Extend Copyrights*, 16 HARV. J. L. & TECH. 1, 7-11 (2002) (discussing historical understandings of the word "science").

⁶² [CITES]

⁶³ See *Viacom Int'l v. YouTube, Inc.*, No. 07 Civ. 2103 (S.D.N.Y., 4-18-2013) (granting Google summary judgment in lawsuit brought by Viacom claiming YouTube was liable for hosting infringing uploads). Although the Viacom litigation is still on appeal, the bulk of academic commentary has concluded that YouTube will prevail in cases where it lacks actual knowledge that uploaded material is infringing. [CITES]

⁶⁴ See 17 U.S.C. § 512 (internet service providers that allow storage of infringing material are not liable unless they have specific knowledge of the infringing upload). It is unclear whether intermediaries like YouTube qualify as "internet service providers" under the statute.

⁶⁵ See *Religious Technology Center v. Netcom On-Line Communication Services, Inc.*, 907 F. Supp 1361 (1995) (on-line platform that provided open storage for uploaded material was not directly liable for infringement unless it committed a voluntary act beyond merely making space available). The voluntary act doctrine comes from criminal law. [CITE] For example, when a photocopy shop makes its machines available to the public, it is not directly liable for an infringing use of that machine, absent a voluntary act on its part.

⁶⁶ [CITES]

⁶⁷ [CITES]

⁶⁸ Since liability requires actual knowledge, it is possible that such knowledge could come from a source other than the copyright owner, e.g. YouTube's own Content ID program.

⁶⁹ See <https://support.google.com/youtube/answer/2490020?hl=en-GB> (explaining how videos can be monetized by content owners).

To facilitate this sort of exchange, YouTube has developed its Content Id software⁷⁰ that helps it identify infringing music uploads, enabling it to present monetization opportunities to copyright owners.

YouTube therefore has the potential to be low cost intermediary between three types of parties: 1) those who possess copies of music in various forms (vinyl recordings and CD's; film or television clips; recordings of live performances); 2) those who want to hear the music; and 3) copyright owners who, for whatever reason, do not make their back catalogs of music available on-line. YouTube can transmit a signal from someone who possesses a copy to the market that is observable virtually costlessly by the copyright owner.⁷¹ In cases where YouTube's Content Id service initiates contact with the copyright owner, a business opportunity is presented to the rights holder in such a fashion that an automated response can seal the deal⁷² and initiate a stream of profits, circumventing the normally high transactions costs associated with music licensing.

In order, to see how and whether this potential has been realized, lists of number one songs from the U.S., France, and Brazil from 1930-1960 were collected and each song was tracked on YouTube. Since all the musical composition studied were published after 1923, they were all still be protected by copyright, as are all sound recordings of the compositions under a 1972 amendment to the Copyright Act.⁷³ Importantly, the songs come from decades where the studies discussed above suggest the most works disappear. The title of each song was entered into the YouTube search engine and the first 10 search results retrieving the song were analyzed.

⁷⁰ See https://support.google.com/youtube/answer/2797370?p=cid_what_is&rd=1 (explaining how YouTube software helps identify uploaded music that is subject to a claimed copyright).

⁷¹ Either YouTube initiates contact via its Content Id program or the owner can easily find videos in systemized searches.

⁷² <http://www.youtube.com/t/contentid> (listing the option to have all unauthorized uploads monetized).

⁷³ See 17 U.S.C. § 301(c) (extending protection to pre-1972 sound recordings to the year 2067).

Data was collected on the identity of the uploader, the date and type of upload, the number of views, and whether the upload had been monetized. It was assumed, as required by the YouTube terms of agreement,⁷⁴ that all monetization was conducted by the copyright owner. The data collected provides a snapshot of uploads as of May 2013. Like the Heraclitean stream,⁷⁵ the content and status of uploads on YouTube is constantly changing, so the study catches a moment in time and freezes it.

Perhaps the most striking statistic to emerge from the data is that at least 95% of the videos appear to have been uploaded by non-owners/infringers. Very few uploads seem to originate with the owner of the copyright in the underlying musical composition, sound recording, or film/television clip. Although it's impossible to tell for certain that "wehavejoy," an uploader who posted a video of Bill Haley's *Rock Around the Clock*,⁷⁶ is an infringer, a click on other videos posted by "wehavejoy"⁷⁷ reveals a clear amateur who also has posted a video of his or her cute Yorkshire Terrier named "Molly."⁷⁸ This is absolutely typical. Only a handful of uploaders of hit music published before 1960 seem to be the copyright owners. Those who appear to be owners, like "TheEdSullivanShow"⁷⁹ or "BingCrosbyVevo,"⁸⁰ not surprisingly, use

⁷⁴ See <https://support.google.com/youtube/answer/97527?hl=en> (stating that in order to monetize an upload, one must be able "to provide documentation proving you own commercial rights to all audio and video content").

⁷⁵ Wikipedia, Heraclitus, <http://en.wikipedia.org/wiki/Heraclitus> (last visited Aug. 29th 2011). See also Jay Tidmarsh, *Procedure, Substance, and Erie*, 64 VANDERBILT L. REV. 877, 893 (2011) ("Reduced to its simplest expression, Heraclitus's view was that "all things flow." Perhaps the most vivid--and certainly the most quoted--statement of his position is that "you cannot go into the same water twice.").

⁷⁶ <http://www.youtube.com/watch?v=F5fsqYctXgM>

⁷⁷ <http://www.youtube.com/user/wehavejoy?feature=watch> (home page of all uploads by "wehavejoy").

⁷⁸ <http://www.youtube.com/watch?v=KYU8dyAFecQ&feature=c4-overview&list=UUQSU8yVbSz2ERAgqLq1LL1w>

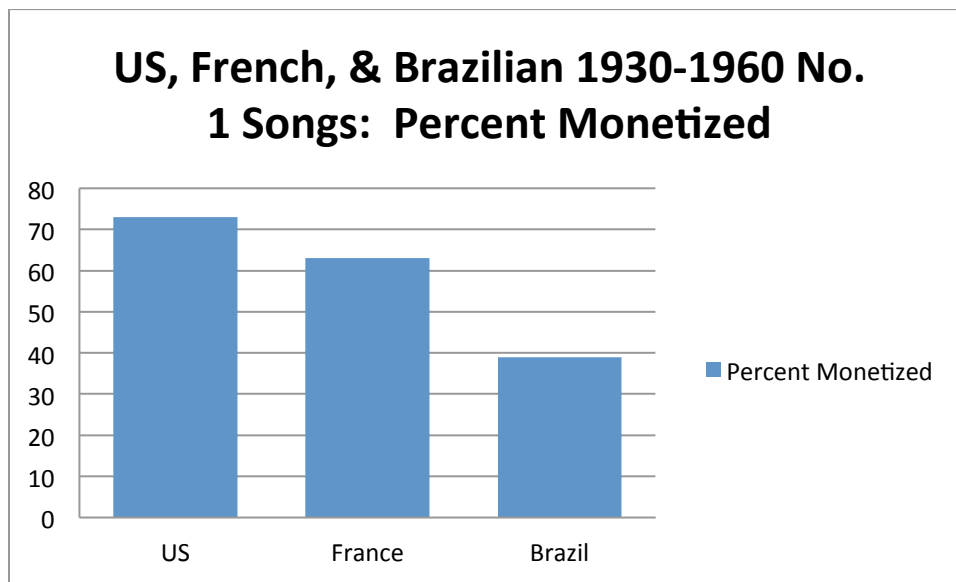
⁷⁹ <http://www.youtube.com/watch?v=X31GQTS7C1c> (*Rock-Around-the-Clock* posted by the "EdSullivanChannel").

⁸⁰ http://www.youtube.com/watch?v=aShUFAG_WgMm (*White Christmas* posted by "BingCrosbyVevo"). According to Wikipedia, "**Vevo** (stylized **vevo**) is a joint venture music video website operated by Sony Music Entertainment, Universal Music Group, and Abu Dhabi

more identifiable names to clearly associate themselves with the legal owners of the material. Any measure of the percentage of unauthorized uploads can only be an estimate (even legitimate-sounding uploaders might just have adopted fake names or maybe Sony Music secretly uploads under names like “calism23”⁸¹), but even a brief sampling of typical uploaders leaves little doubt that the job of uploading old music is primarily performed by non-owners. This is consistent with the Brooks’ study discussed above that found non-owners had digitized more historic sound recording than copyright owners.⁸²

The uploaded videos in the sample are made available to listeners in two different formats. Monetized uploads confront the listener with an advertisement which generates revenue for the content owner, while non-monetized uploads are available without advertisements. Figure 5 below depicts the percentage of monetized uploads:

Figure 5



Media^[3] with EMI licensing its content to the group without taking an ownership stake.” See <http://en.wikipedia.org/wiki/Vevo>.

⁸¹ <http://www.youtube.com/user/calism23?feature=watch> (home page of all uploads by “calism23”).

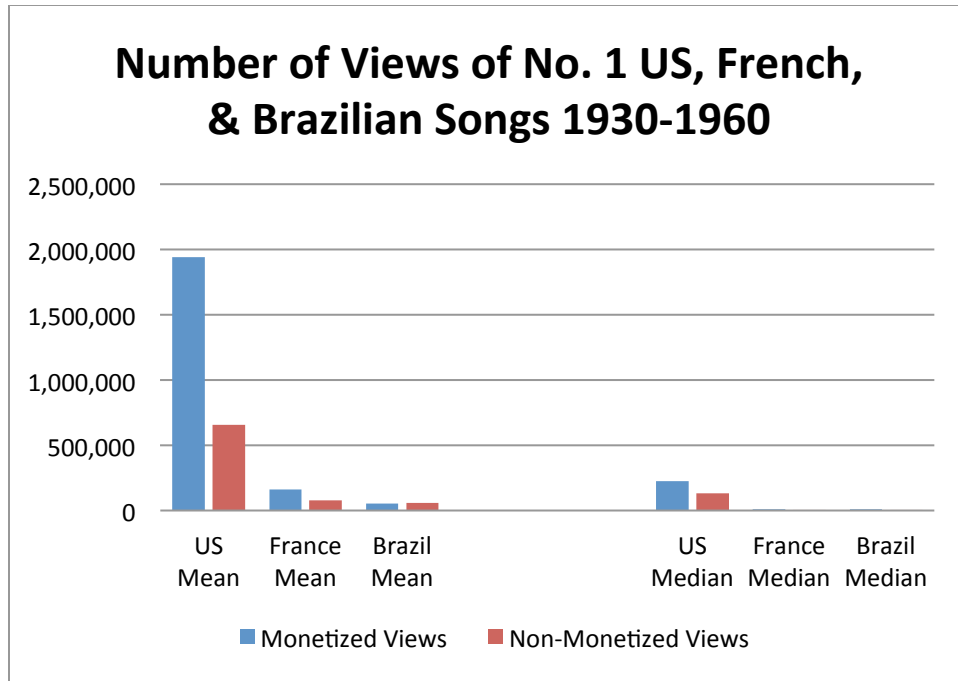
⁸² See *supra* note ___ and accompanying text.

Most infringing U.S. uploads (73%) have been monetized by the copyright owner, but a large percent have not. Twenty-seven percent of apparently infringing uploads of U.S. number one hits were not monetized and remained available and tolerated by the copyright owner(s). Notably, the non-monetized uploads are not primarily recent posts, as yet undiscovered by the copyright owner. In the spring of 2013, the median upload date of the non-monetized sub-set was March 2009, while the median date for the monetized set only two months earlier, January 2009. Four years of availability on YouTube is plenty of time for a copyright owner to detect an infringement. The non-monetized uploads appear, therefore, to be consciously tolerated.⁸³ And in many cases, more than one copyright owner appears to be tolerant. When a non-monetized upload is a television clip, for example, both the owner of the musical composition and the owner of the copyright in the video clip have the independent right to request a take down.

Notable, U.S. copyright owners seem to be more eager to monetize uploads than their French and Brazilian counterparts. This may be because French and Brazilian songs, although they have a strong presence on YouTube, do not attract nearly as many views as American hits, as illustrated in Figure 6 below. Many of the French and Brazilian videos may not be worth monetizing, although a simple email request would result in take down.

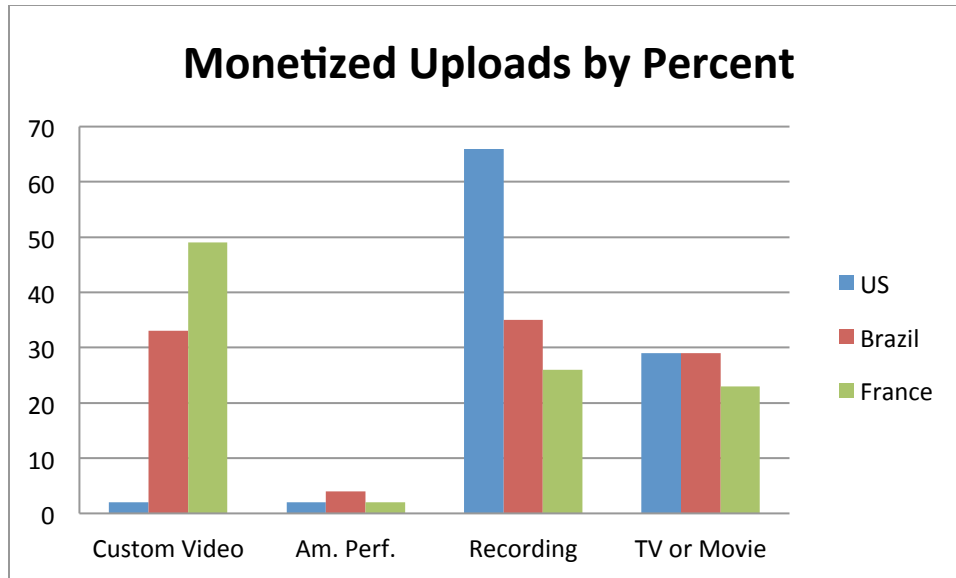
Figure 6

⁸³ Of course, the works could be orphaned, in the sense that their copyright owner does not realize it's the owner, but this seems unlikely with chart topping songs.



Whether an uploaded video has been monetized or not, it remains available to the listener, and further examination of the data shows the rich variety of forms in which the music is encountered by users. Figures 7 and 8 below depict the different sorts of uploads uncovered by the study and reveal different patterns of monetization by upload type and national origin of the hit song:

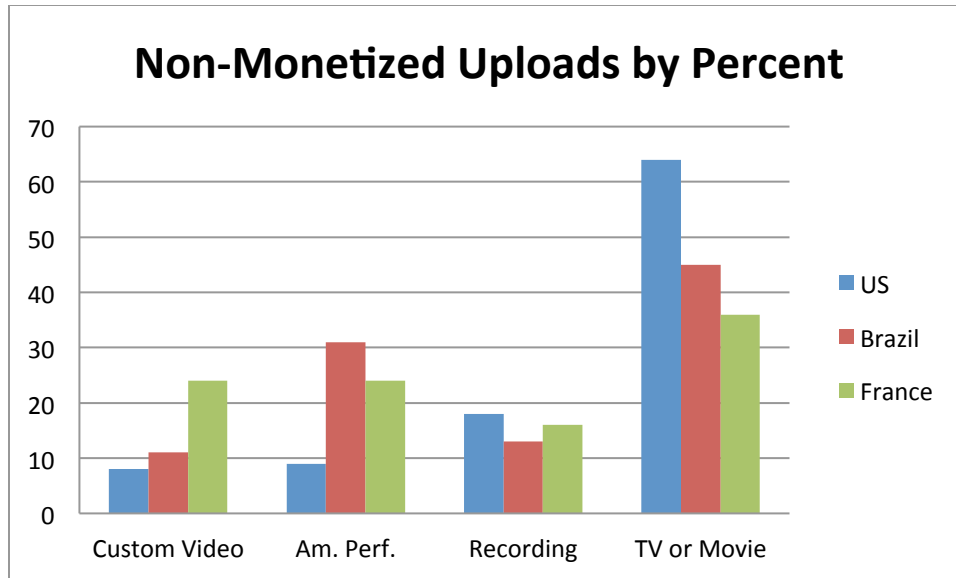
Figure 7



The custom video category contains primarily amateur videos with copyrighted music in the background, including karaoke versions of the song. American copyright owners show little interest in monetizing these uploads or in monetizing amateur performances of their songs. French and Brazilian owners are more likely to monetize a custom video containing their music, although amateur performances are seldom exploited. American copyright owners focus on monetizing uploads of simple sound recordings, usually uploads of songs off vinyl albums or CD's with a photo of the jacket cover or list of lyrics or maybe a single photo of the artist.

More striking, perhaps, are the types of uploads that are typically *not* monetized, uploads which appear to be entirely tolerated examples of infringement. Figure 8 below reveals that television and movie clips are the most common sort of non-monetized uploads for U.S., French, and Brazilian songs:

Figure 8



Two theories might explain the non-monetization of many television and film clips. First, in order for an upload to be monetized, YouTube requires that the claimant have rights to both the musical and visual aspects of a video.⁸⁴ In other word, a television clip from a 1950's variety show cannot be legitimately monetized without the active cooperation of both the owner of the musical composition (probably a music publishing company) and the owner of the copyright in the visual performance (probably the original television station or network or its assigns). Because there are typically two copyrights to deal with, the cost of coordination may depress the rate of monetization. Interestingly, either owner has the right to take the clip down by sending notice to YouTube, but each owner independently might see a benefit in leaving the clip up. The owner of the copyright in the composition may welcome increased interest in the song via YouTube exposure, while the owner of the visual clip may be agnostic if it perceives no threat to its current profits.

⁸⁴ <https://support.google.com/youtube/answer/2490020?hl=en>

Second, many of the older television clips might be orphan works. For years, television stations did not routinely tape all live programming,⁸⁵ and when they did, did not always archive copies.⁸⁶ For this reason, the technical owners of uploaded video programming may no longer have their own copies of the works and may not even know precisely what they own. In addition, most of the uploaded performances on YouTube do not provide an explanation of the source of the work, so copyright owners in video content (as opposed to musical content subject to Content Id) are not so easily put on alert that their works are being exploited.

Whether a particular upload is monetized or not, it is accessible to the public for free, which helps to counter some of the negative affect of copyright on availability. Moreover, the work is often accessible in multiple forms, including uploads of music straight from CD's, digitizations of old vinyl recordings, and clips from television shows and films that are frequently more than 50 years old. Yet, despite YouTube's ability to revive and reanimate old works, it cannot make a work fully available. First of all, the music composition itself is not made available, just recordings of it. Moreover, videos containing music cannot be downloaded from YouTube by users, and potential listeners may have to wait through commercials in order to hear the music they desire. YouTube is not a particularly flexible platform for users, compared to CD's or digital downloads of music, but it ameliorates some of the negative effects of copyright on availability. This author has not discovered web site that functions similarly for the thousands of books from the twentieth century that are no longer in print.

⁸⁵ http://en.wikipedia.org/wiki/List_of_lost_television_broadcasts (listing many lost television shows and noting, for example, that “[a]lmost all of NBC's *The Tonight Show* with Jack Paar and the first ten years (1962–1972) hosted by Johnny Carson were taped over by the network and no longer exist.”).

⁸⁶ See, e.g., *Pacific and S. Co. v. Duncan*, 572 F. Supp. 1186 (1983), *aff'd in part, rev'd in part*, 744 F.2d 1490 (11th Cir. 1984) (plaintiff television station WXIA-Atlanta admitted to taping over or destroying all recordings of its newscasts).

YouTube functions as an intermediary that lowers the cost of transacting over valuable cultural goods. Although the providers of the goods are usually not the rights holders, the law permits non-owners to signal their possession of the goods without imposing liability on the marketing platform itself. YouTube signals the potential transaction to the copyright owner and facilitates a “yes” or “no” decision by the owner who can then profit from the deal or nix it at a very low cost. The system lowers transaction costs and keeps some form of access to music available.

Economists are sometimes overly-effusive in their praise of the wisdom of common law rules, but in the case of YouTube, principles of secondary liability facilitate the development and creation of a fairly efficient market. Courts have so far usually held that market-making intermediaries not liable for the maintenance of platforms that welcome infringers until those intermediaries have actual knowledge of the infringement. In this way, the rules that encourage take-down and notice regimes help keep promote access to cultural works will leaving the ultimate decision in the hands of rights holders. These rules, however, are under attack as advocates push for a strict liability regime that would destroy the market just described.⁸⁷

CONCLUSION

Data show that business models designed to offer a work only for a relatively brief period of time can make that work disappear. In most circumstances, the evidence shows that copyright law then keeps the work “off the shelf” until the expiration of the copyright term, now a minimum of 95 years and eventually, for post-1976 works, the life of the author plus 70 years. The data presented in this article demonstrate that there is a market for these missing works, illustrated bluntly by the fact that there are three times as many new books from the 1850’s for sale on Amazon than books from the 1950’s. Ever longer term extensions exacerbate the

⁸⁷ [sting CITE of articles advocating against YouTube]

availability and distribution crisis by delaying the moment when the market can intervene and restart production. As Senator Orrin Hatch explained in his defense of the 1998 term extension, maintaining the availability and distribution of works is at the heart of the meaning of “progress” in the Copyright Clause of the Constitution.⁸⁸ He is absolutely correct and therefore the upcoming attempt to extend the copyright term again should be resisted. Copyright was not designed by the framers of the Constitution as a means by which Congress could make works disappear.

Congress should also resist calls to dismantle platforms like YouTube which take advantage of current limits on secondary liability to create a marketplace that radically reduces the high transaction costs of negotiating over rights to music and visual content. The access YouTube provides to valuable cultural products is far from perfect, but it provides a partial solution to the problem of disappearing works, at least in the music context. In any event, no new legislative initiative should proceed in the absence of concrete data testing the claim by copyright owners that their proposals make works more, rather than less, available to the public.

⁸⁸ See *supra* note ___ at 7 (“the founding-era understanding of “progress” clearly extends to the dissemination or distribution of existing artistic works”).