Legal scholars usually analyze copyright as an incentive and sometime obstacle to creation. This encourages us to see publishers as middlemen who siphon off rents that would be better spent on authors. By comparison, recent social science research emphasizes that word-of-mouth markets are highly imperfect. This means that many deserving titles will never find readers unless some publisher takes the trouble to market them. But this second view is deeply subversive. After all, the need for publishers – and reward – does not end when a book is published. At least in principle, copyright should last forever.

The trouble with this argument is that it assumes what ought to be proven. How much effort do publishers really invest in finding forgotten titles? And does vigorous marketing attract more readers than high copyright prices deter? This article looks for answers in the history of 20th Century print publishing and today’s Print-on-Demand and eBook markets. We argue that, far from promoting dissemination, copyright frequently operates to suppress works that would otherwise erode the price of new titles. This pathology has gotten dramatically worse in the Age of eBooks.

Meanwhile, public domain publishers are facing their own crisis. Mid-20th Century books had large up-front costs. This deterred copyists. By comparison, digital technologies make it easy for copyists to enter the market. This has suppressed profits to the point where many public domain publishers spend little or nothing on forgotten titles.

The article concludes by reviewing possible reforms. Partial solutions include clarifying antitrust law so that firms have more freedom to implement price discrimination; modifying copyright so that consumers can re-sell used eBooks; letting on-line markets limit the number of publishers allowed to post redundant public domain titles on their sites; and strengthening non-commercial institutions for finding, curating, and delivering quality titles to readers.

**Keywords:** Copyright, Publishing

**JEL Classification:** 031, 034
THE ECONOMICS OF MEMORY: HOW COPYRIGHT DECIDES WHICH BOOKS DO (AND DON'T) BECOME CLASSICS

STEVEN MAURER

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I. INTRODUCTION

Legal scholars usually analyze copyright as an incentive and sometime obstacle to creation. This perspective invites us to see publishers as middlemen who siphon off rents that would be better spent on authors. The trouble with this view is that it is mostly theoretical: By most accounts few authors (and fewer legal scholars) earn any significant royalties at all.1 But in that case, why have copyright in the first place? If we follow the money, the only possible answer must be: “To fund publishers.” For this justification to work, however, we must first be satisfied that publishers perform some socially useful function.

Recent scholarship provides an intriguing rationale. Word-of-mouth literary markets, it turns out, are extraordinarily fickle. Without intelligent intervention, many deserving and even excellent titles will be lost forever.2 The good news is that...
this randomness disappears for titles that start off with a substantial number of readers. It follows that publisher efforts to find and advertise worthwhile titles make markets more efficient. Yet this view is deeply subversive. After all, the need to find and market titles does not end with publication. For some books, at least, the need for copyright might last forever.

Theory can only take us so far. This article asks (a) how often publishers have actually found and promoted forgotten titles in the past and (b) whether their marketing efforts attract readers faster than the price of copyrighted books deters them. We proceed as follows. Section II introduces the book market in miniature by examining the shelves of a typical Barnes & Noble “superstore.” This is already sufficient to show that copyright gives publishers powerful reasons to suppress older titles. We also argue that older works appear on store shelves far less often than quality would dictate. Section III argues that finding and marketing forgotten classics is inexpensive and provides good value for money. Sections IV through VI ask how much effort commercial publishers actually put into finding and marketing older titles in the 20th and early 21st Centuries. We argue that publisher incentives to suppress copyrighted titles have gotten worse in the age of eBooks while public domain publishers’ ability to find and market titles have nearly collapsed. Sections VII and VIII review possible solutions including (a) reforming antitrust law so that firms have more freedom to implement effective price discrimination strategies, (b) letting Amazon and other on-line platforms restrict the number of publishers who are allowed to sell the same public domain title, (c) reforming copyright so that consumers are allowed to re-sell used eBooks, and (d) strengthening public domain institutions for finding and marketing forgotten books. Section IX presents a brief conclusion.

II. A TRIP TO THE SUPERSTORE

The modern book market is so vast that it is hard to develop useful policy intuitions. This section introduces the problem in miniature by studying the roughly

and that the rest are “pale from hunger”); see generally, George Haven Putnam, Authors and Their Public in Ancient Times, p. 250 (Cooper Square Publishers, 3rd ed. rev. 1966) (1893) (“[M]artial refers more than once to many amiable and deserving authors who, despite their talents, succeeded in reaching no public at all…”).

3 The argument is presented at length in Stephen M. Maurer, “From Bards to Search Engines,” supra note 3.

4 The idea of perpetual copyright was famously championed by the late Sonny Bono. Wikipedia, “Mary Bono” Available at http://en.wikipedia.org/wiki/Mary_Bono. Bono may or may not have known that English printers had advocated a similar idea in the debates that led to the Statute of Anne (1709), Richard B. Scher, The Enlightenment and the Book: Scottish Authors in Eighteenth Century Britain, Ireland & America (Chicago Univ. Press; 2006) at 25. For a more sophisticated presentation, see William A. Landis and Richard Posner, “Indefinitely Renewable Copyright,” 70 U. Chi. L. Rev. 471, 473 - 74 (2003) (arguing that old titles are costly to maintain); but see Paul J. Heald, “Property Rights and the Efficient Exploitation of Copyrighted Works: An Empirical Analysis of Public Domain and Copyrighted Fiction Bestsellers, 92 Minn. L. Rev. 1031 (2008) (presenting empirical evidence that copyrighted classics are no more available than their public domain counterparts.)
5,500 “Fiction and Literature” titles found in a typical brick-and-mortar superstore.\(^5\) Table 1 summarizes this data.

<table>
<thead>
<tr>
<th>Original Publishing Date</th>
<th>Percent of All Titles</th>
<th>Percent Priced Above $14.99</th>
<th>Percent of Titles by Authors Listed in Top 1,000 “Books People Ought to Read”(^6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 - 2014</td>
<td>53%</td>
<td>74%</td>
<td>4%</td>
</tr>
<tr>
<td>1995 - 2004</td>
<td>12%</td>
<td>83%</td>
<td>9%</td>
</tr>
<tr>
<td>1985 - 1994</td>
<td>8%</td>
<td>63%</td>
<td>14%</td>
</tr>
<tr>
<td>1975 - 1984</td>
<td>9%</td>
<td>66%</td>
<td>38%</td>
</tr>
<tr>
<td>1965 - 1974</td>
<td>4%</td>
<td>50%</td>
<td>67%</td>
</tr>
<tr>
<td>1955 - 1964</td>
<td>7%</td>
<td>57%</td>
<td>33%</td>
</tr>
<tr>
<td>Pre-1955</td>
<td>8%</td>
<td>25%</td>
<td>88%</td>
</tr>
</tbody>
</table>

### A. Age

The first thing to notice is that the average title is remarkably recent. Indeed, more than half of the books in our sample were published in the last decade\(^7\) and only one-fifth (21\%) were published before 1980. Restricting the sample to former bestsellers tells a similar story: While Barnes & Noble stocks nearly all Number One annual bestsellers published since 1990,\(^8\) the figure falls to sixty percent for the Seventies and Eighties before leveling out at around twenty percent for the half century between 1920 and 1969.\(^9\) There are almost no titles before that.\(^10\)

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\(^5\) All data in this section are based on the author’s inspection of one hundred randomly selected ‘Fiction and Literature’ titles available for sale at Barnes & Noble’s El Cerrito, California superstore. (Last visited October 24, 2014).


\(^7\) The figure is even greater when one considers that current bestsellers are shelved elsewhere in the store.


The most natural way to interpret this data is to assume that book quality depends both on age and inherent literary quality. While most books quickly drop from sight, some titles possess enough literary merit to justify fresh editions for the millions of readers who come of age each year. At this point the title never goes out of print and becomes a classic.

B. Price

The second surprise in Table 1 concerns price. Most modern fiction is sold in luxurious “trade paperback” formats. The fact that 55% of our titles are priced in the narrow band between $14.99 and $16.00 suggests that publishers possess excellent price discipline. This is still more impressive when we recall that the $14.99 figure includes a two-thirds (67%) markup over each book's estimated $9.00 manufacturing and distribution cost. The high prices are presumably stabilized by some combination of industry concentration and extreme product heterogeneity.

11 Literary quality noticeably increases around the half-century mark. Four of the five 1970s-era books in my Barnes & Noble superstore sample are transparent potboilers (Robert Ludlum's Bourne Identity, Peter Blaty's The Ninth Configuration, Mario Puzo's Fools Die, and Anne Rice's Interview With the Vampire.) The only arguable exception is Margaret Atwood's Surfacing. Books from earlier eras are markedly more literary, including Pynchon's The Crying of Lot 49 (1965), Berger's Little Big Man (1964), Bellow's Herzog (1961), Lee's To Kill a Mockingbird (1961), Rand's Anthem (1961), Lawrence's Women in Love (1920), and Poe's Fall of the House of Usher (1839). Even so, older titles still include straightforward entertainments like Exodus (1958) and downright embarrassments like Valley of the Dolls (1966).

12 The point was already familiar to George Orwell, who worried that “borderline writers” like Jack London could be forgotten if some accident took their books out of print for a few years. George Orwell, Tribune, "As I Please" (30 June 1944). Available at http://www.telelib.com/authors/O/OrwellGeorge/essay/tribune/index.html.

13 "Trade paperbacks" are large softcover volumes whose pages are nearly identical to the original hardcover. Wikipedia, "Paperback," available at http://en.wikipedia.org/wiki/Paperback#Trade_paperback.


16 Economic theory argues that competition is suppressed when consumers possess strong idiosyncratic preferences for some nearly-identical products and not others. Harold Hotelling,
Table 1 shows that this phenomenon also holds for older books: Prices are remarkably stable for titles published since 1995 and decline only slightly going back to the 1970s. While the discounts for pre-1955 titles are steeper, this difference is more apparent than real since the cheapest copies are usually low-quality “mass paperback” formats that deliver less value for money.

C. Suppressing Older Books

The high price and recentness of titles are so striking that it is natural to suspect a connection. We start with a puzzle. Given current production and distribution costs, it would be easy to sell old titles for, say, ten dollars and still earn a profit. Indeed, many consumers would prefer to buy less topical titles in exchange for a cash discount. Authors and heirs should be similarly willing to earn lower royalties from titles that are currently out-of-print. So why doesn’t it happen? Plainly, the answer must lie with publishers. Unlike readers and authors, they much prefer selling high margin new books — In the language of business, offering low-priced alternative titles would “cannibalize” their business. More formally, economists have known since the 1970s that monopolists can often earn higher profits by suppressing cheap, low quality versions of their products. If society gives publishers the power to suppress old titles, we should expect them to use it.

This insight is very different from the usual assumption in American case law and scholarship that IP owners will never suppress their property. While the

“Stability in Competition,” Economic Journal 39: 41-57 (1929). Send the average reader to a modern big box store and she will be lucky to find even one title she likes. The fact that the store offers 100,000 alternatives is essentially irrelevant.

17 The argument implicitly assumes that there is some fixed limit to the number of books consumers are prepared to buy each year.


19 Suppression can also occur without copyright. Some commentators have charged that Google suppresses its free public domain scans in order to collect more ad revenue from publishers selling commercial editions. Charles Eicher, “Copyfraud: Poisoning the Public Domain: How Web Giants are Stealing the Future of Knowledge,” The Register (26 June 2009) available at http://www.theregister.co.uk/2009/06/26/copyfraud/?page=2. Similar allegations have been made about Amazon. See, e.g., Techdirt, “Amazon Hides Classic Free Public Domain Ebooks” (July 25 2012) https://www.techdirt.com/articles/20120725/03312419822/amazon-hides-classic-free-public-domain-ebooks.shtml (quoting anonymous commentator: “[T]here are a number of works on Amazon which were scanned by Gutenberg, but don’t exist because someone is flogging them for $4.99 or more.”)


21 See, e.g., Joel Waldfogel and Imke Reimers, “Storming the Gatekeepers: Digital Disintermediation in the Market for Books,” supra, at p. 9. (“If publishers and authors had perfect foresight about books’ appeal to consumers, they would release all works with (ex ante and therefore ex post) revenue in excess of costs.”) Available at http://imkereimers.weebly.com/uploads/2/7/9/9/2799121/storming_the_gatekeepers.pdf.
shortage of old titles has been noticed before, it was ascribed to superficial causes like case law that forced publishers to renegotiate royalty agreements or changes in tax law. This encouraged us to hope that minor, ad hoc reforms could fix the problem. The case looks very different once we realize that suppression is part and parcel of profit maximization. Assuming that it can be fixed at all, reform will require major changes to copyright and antitrust law.

There is a deep irony here. Suppression would not pay if each publisher owned one and only one title. Instead, the trouble arises because real publishers manage portfolios. Normally this is a good thing. I have argued elsewhere that copyright’s greatest innovation was that it let publishers spread risk across titles that were too unpredictable to invest in individually. But now we find that portfolio investing also encourages publishers to make other, older titles disappear.

D. Price Discrimination

The competition between old and new titles is less acute where publishers find ways to price discriminate, i.e. charge different readers different prices for identical texts. For most of the 20th Century, publishers issued new titles in luxurious hardcover editions followed by cheap “mass market” paperbacks a year later. Because high-end consumers wanted their favorites early and in hardcover, paperbacks boosted profit with little downside. Since the 1980s, however, mass market formats have given way to “trade paper,” “print on demand” and most recently “eBook” formats. We argue below that each successive technology has changed publishers’ willingness to tolerate older titles.

E. The Role of Literary Elites

So far we have assumed that book markets consist entirely of publishers and readers. In fact, mid-20th Century copyright supported a vast ecosystem of actors including bookstores, public and commercial libraries, university scholars, high school teachers, literary agents, professional reviewers, and movie studios. Like publishers, all of these players made a living by persuading readers to try unfamiliar titles. How successful were they? At the level of my local superstore, the only obvious

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25 Id.
26 Roughly one-fourth of the 200,000 titles published in 2010 was eventually reviewed. Most reviews are aimed at libraries and bookstores instead of the general public. Joel Waldogel and Imke Reimers, “Storming the Gatekeepers: Digital Disintermediation in the Market for Books,” supra at p. 7.
footprint is the popularity of mandatory high school readings\footnote{The US has 26,407 high schools. US Dept. of Education, “High School Facts at a Glance.” Available at http://www2.ed.gov/about/offices/list/ovae/pi/hs/hsfacts.html. College reading lists are markedly less influential. This may be because the total number of students is smaller and – apart from a handful of “Great Books” courses – university reading lists are more diffuse.} like \textit{To Kill a Mockingbird} (ten copies in stock) and \textit{The Great Gatsby} (eleven copies).\footnote{Goodreads conducted a survey of assigned high school reading in 2008. Out of 535 respondents participating, \textit{To Kill a Mockingbird} received 235 votes with \textit{Romeo and Juliet} (191 votes) second and \textit{The Great Gatsby} (165 votes) third. See Goodreads, “Required Reading in High School - A List of Books That You Were Required to Read in High School.” http://www.goodreads.com/list/show/478.Required_Reading_in_High_School?page=1. \textit{Mockingbird} and \textit{Gatsby} also appear on the National Governor’s Association list of Common Core “text exemplars.” National Governors’ Association, “Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects: Appendix B: Text Exemplars and Sample Performance Tasks” (2013). Available at http://www.corestandards.org/assets/Appendix_B.pdf.} But this power is plainly limited. If high school purchases were everything, \textit{The Old Man and the Sea} should have two copies instead of eight while Sinclair Lewis titles like \textit{Arrowsmith} and \textit{Elmer Gantry} should not be present at all.\footnote{The Goodreads survey recorded 235 votes for \textit{Mockingbird} compared to just 32 for \textit{Old Man}.} Plainly, assigned readings are just part of the story.

The influence of actors who rely on persuasion is harder to trace. The largest and most visible effect – movie tie-ins – probably accounts for less than five percent of all Top-Selling Paperbacks.\footnote{Movie tie-ins date back to the Twenties when silent films elevated Rafael Sabbatini’s \textit{The Sea Hawk} (1915) and \textit{Mistress Wilding} (1910) to Top Ten Bestseller status in 1923–1924. Strikingly, neither title had achieved this status the first time around. Wikipedia, “Publishers’ Weekly Lists of Bestselling Novels in the United States,” supra at note 9. More recently, titles with movie tie-ins accounted for roughly seven percent of the top paperbacks sold in 2012. Publishers Weekly, “The Highs and Lows in Paperbacks: Facts & Figures 2012,” available at http://www.publishersweekly.com/pw/by-topic/industry-news/bookselling/article/56405-the-highs-and-lows-in-paperbacks-facts-figures-2012.html (2013)(reporting sales for \textit{A Game of Thrones, A Clash of Kings, The Hobbit, Cloud Atlas, Life of Pi, The Host, and Team of Rivals}). Many of these titles were already classics that would have earned substantial revenues with or without Hollywood’s help.} Beyond this, we know that trusted third parties can sometimes attract enough readers to give forgotten titles a new lease on life. This famously includes academic scholars’ efforts to revive Shelley\footnote{Sylvia Norman, \textit{Flight of the Skylark: The Development of Shelley’s Reputation} (1954).}, James\footnote{Joseph Epstein, \textit{The Afterlife of the Lion}, \textit{Wall Street Journal}, Jan. 14, 2012. Available at http://online.wsj.com/news/articles/SB10001424052970204257504577150981748541906 (James’ reputation was restored in 1943 after twenty years of being “out of print, out of readers and out of luck.”).} and Melville.\footnote{Melville’s \textit{Moby Dick} (1851) sold poorly during the author’s lifetime but acquired a cult following in the 1890s. This was followed by a critical revival in the 1920s. Melville’s current lofty reputation only emerged in the 1940s. Chris Gaylord, “Herman Melville Books: At first ‘Moby Dick’ was a Total Flop, \textit{Christian Science Monitor} (Oct. 18, 2012). Available at http://www.csmonitor.com/Innovation/Tech-Culture/2012/1018/Herman-Melville-books-At-first-Moby-Dick-was-a-total-flop.”} Yet this power seems benign. If readers like a title and tell their friends,
the market is improved. If readers do not like the recommendation, the book will sink harmlessly into obscurity.

**F. The Value of Memory**

Most book sales data are proprietary. We use rare 2012 data to benchmark the relative sales of classic and average titles among 150 Top-Selling Paperbacks. Even more than in our superstore survey, the titles are incredibly recent: Indeed, the median entry is just two years old with more than two-thirds of all titles (69%) published in the past five years. At the same time, classic titles continue to matter: Books published more than forty years ago still account for roughly one-tenth (9%) of all sales. This durability implies an outsized importance to readers. The average Top-Selling Paperback on our 2012 list can expect to sell about one million copies over its lifetime. By comparison, most classics sell 100 - 150,000 copies year in and year out. Assuming that classic status lasts a century, we expect these works to serve at least 10-15 times more readers than ordinary titles.

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36 Id. I exclude the *Fifty Shades of Grey* series which sold more copies than the *Harry Potter* books and at one point accounted for one-fifth of all US fiction sales. These sales almost certainly include a large fraction of purchasers who do not normally participate in the book market. See Business Insider: “By the Numbers: the ’50 Shades of Grey’ Phenomenon” (n.d.). Available at http://www.businessinsider.com/by-the-numbers-the-50-shades-of-grey-phenomenon-2012-6#a href=htedefault16-million-copies-of-the-50sog-series-have-been-sold-so-far-in-the-us-1.


38 As of 2012, the subset of Top-Selling Paperbacks published in the preceding five years averaged about 220,000 copies per title per year. Publishers Weekly, “The Highs and Lows in Paperbacks, supra note 32.


40 One might think that future sales should be discounted. However, this runs into the impossibility of comparing one consumer’s utility against another. Reader A can indeed trade present enjoyment for interest income that will allow more consumption in the future. The same this logic does not apply when we try to compare her enjoyment against that of the still-unborn Reader B. This suggests that we should treat present and future readers identically. For a recent survey of the long debate over intergenerational discounting, see Gregory Ponthiere, “Should We Discount Future Generations’ Welfare? A Survey on the ‘Pure’ Discount Rate Debate,” Centre de Recherche en Economie Publique et de la Population (CREPP) Working Paper, University of Liège Working Paper (2003). Available at http://www2.ulg.ac.be/crepp/papers/crepp-wp200302.pdf.
In fact, even this estimate is low. Economists have known since the 1890s that prices are determined at the margin, i.e. by the last copy sold. This means that relatively useless commodities (e.g. diamonds) often command higher prices than those (e.g. drinkable water) we care about.\footnote{Wikipedia, “Paradox of Value,” available at http://en.wikipedia.org/wiki/Paradox_of_value.} If books were less plentiful, it is a safe bet that Hemingway and Fitzgerald would command more market share than they do today. The final column of Table 1 makes this point explicit by comparing current Barnes & Noble store shelves against a consumer poll of 1,000 “Books that People Ought to Read.”\footnote{Goodreads, “Books That Everyone Should Read at Least Once (2008). Available at http://www.goodreads.com/list/show/264.Books_That_Everyone_Should_Read_At_Least.Once.}

Finally, classics offer important externalities. While most people enjoy discussing books with friends,\footnote{For a recent argument stressing the importance of network effects in publishing, see Anita Elbourse, Blockbusters (2013).} better titles surely increase the fun. Classic titles also show aspiring authors how to write. As Hemingway tells us, “the good writer competes only with the dead.”\footnote{Quoted in Raymond Chandler, “The Simple Art of Murder,” Atlantic Monthly (Dec. 1944) at 53. While Chandler supplied the quotation from memory, Hemingway expressed similar sentiments on other occasions. Arnold Samuelson, With Hemingway at p. 12 (1984) (“Compete with the dead ones you know are good. Then when you can pass them up you know you’re going good.”).}

G. How Well Are We Doing?

The question remains how well today’s book industry searches for and markets older titles. Here, the obvious problem is that we cannot be sure how many quality titles have yet to be discovered. Fortunately, we can estimate this. Suppose that a recognized expert mounts an intense search into some narrow subject like “mothers” or “loneliness.” No matter how large the literary universe,\footnote{The world has accumulated about 129 million distinct book titles since Gutenberg. Jean-Baptiste Michel et al., Quantitative Analysis of Culture Using Millions of Digitized Books,” Science 331:176 - 182 at p. 177 and Fig. 1 (2011).} a sufficiently narrow search will always be exhaustive and can reliably turn up many if not most of the best titles.\footnote{This is the same strategy that astronomers use to estimate undiscovered objects. If an exceptionally long photographic exposure turns up seven asteroids, the fact that three were previously unknown goes a long way toward measuring our ignorance. See Bruce L. Gary, “Asteroid Hunting,” Available at http://brucegary.net/AsteroidHunting/x.htm.}

As it happens, the Wall Street Journal’s “Five Best” column invites a different expert to do this every week. I randomly selected twenty columns containing 99 separate titles.\footnote{I had previously read four titles and heard of seven more. These were heavily biased toward topics I follow and have occasionally looked for university libraries.} Confirming our earlier results, the average book was much older than those shelved at my local superstore: The median publication date was 1992 and twelve of the titles preceded the 1923 copyright cutoff.\footnote{The sample included columns from 2011-2015. One title appeared twice.}
deliberately emphasize obscure titles, 49 the titles they do find are excellent. 50 This strongly suggests that population of forgotten masterpieces is both large and valuable. 51

This evidence that older titles have been systematically forgotten should not surprise us. After all, publishing is full of anecdotes about the discovery of forgotten books including many titles now taught in freshman “Great Books” courses. 52 Given that so many famous titles have barely escaped oblivion, it seems overwhelmingly likely that many equally deserving titles have yet to be discovered.

III. SEARCH COSTS

Our discussion so far suggests that copyright suppresses older titles. Even so, reform will be pointless if finding forgotten titles turns out to be hopelessly expensive. This section reviews the available search strategies and argues that the required effort is actually quite modest.

A. Available Search Methods

Most ‘forgotten’ titles have already accumulated extensive metadata. Publishers can use this information to economize on search costs.

1. Current Sales

The first and simplest way to remember old titles is to keep selling them. In this inertial memory case, good titles are stored in the same way that people repeat an unfamiliar telephone number until they can write it down. 53 For most of the 20th century, publishers have been able to maintain a steady flow of sales for their older titles. This helps to ensure that the titles remain in the minds of readers and booksellers alike.

49 I saw no evidence of this.

50 I have followed the column’s recommendations a half-dozen times over the years and can confirm its excellence.


52 See text accompanying notes 34-36, supra. “Nobel Prize Spurs Demand for Translations of Patrick Modiano’s Books” (Oct. 9 2014) (noting limited US availability of books by Patrick Modiano and Jean-Marie Gustave Le Clezio prior to their respective Nobel Prizes.)

53 George Orwell makes the point with characteristic precision:

“Six million books, it is said, perished in the blitz of 1940, including a thousand irreplaceable titles. Most of them were probably no loss, but it is dismaying to find how many standard works are now completely out of print... About a year ago I had to do a broadcast on Jack London. When I started to collect the material I found that those of his books that I most wanted had vanished so completely that even the London Library could not produce them... And this seems to me a disaster, for
Century the US replaced about twenty percent of its readers every decade. This naively meant that any title whose first edition sold more than five times its minimum feasible print run could be republished every ten years. The good news in the Digital Age is that print runs are affordable down to a dozen so copies per year. Naively, this keeps them available for rediscovery if and when tastes change.

The trouble, as we have seen, is that real literary markets are inefficient. This means that titles that sell a handful of copies each year are overwhelmingly likely to die out unless some publisher intervenes.

2. Human Memory and Metadata

Inertial memory apart, the cheapest way for publishers to identify forgotten titles is to harvest instances where other humans have already read the book and formed a judgment. Publishers and sales representatives routinely ask readers, authors, and other book people for remembered favorites. This human memory can persist for generations. The second strategy is to search old metadata including historic sales figures, publisher reputation, genre, short summaries, literary and newspaper reviews, the author’s literary or non-literary fame, and whether the book was published by bona fide publishers.

Jack London is one of those borderline writers whose works might be forgotten altogether unless somebody takes the trouble to revive them. Even *The Iron Heel* was distinctly a rarity for some years, and was only reprinted because Hitler’s rise to power made it topical…


54 US birthrates have consistently hovered between 15 and 25% since 1930. See, e.g. InfoPlease, “Live Births and Birthrates, By Year.” Available at http://www.infoplease.com/ipa/A0005067.html.

55 This is only a lower bound. A more refined estimate would take account of the fact that books become steadily less topical and hence less desirable over time.

56 For example, small publisher Turtle Point Press sold about 1300 copies when it brought out a new edition of *Bertram Cope’s Year* (1919) in 1998. The firm’s *Cope* sales have since dipped to less than a dozen copies per year. Jonathan Rabinowitz (Turtle Point Press NY) (personal communication; Jan. 1 2015).


59 Ironically, even the non-commercial Gutenberg Project brags that “all our ebooks were previously published by bona fide publishers.” *Welcome*, Gutenberg Project, http://www.gutenberg.org/wiki/Main_Page.

60 Our “Five Best” sample contains seventeen unknown – to me at least – titles by authors I had already heard of. This suggests that author names are an excellent search proxy. Some publishers build whole business strategies around finding and publishing once-famous authors. *Home Page*, Reinkarnation Books, http://reinkarnationbooks.com/ (“We source authors who were once commissioned and fêted in their time but whose books are now out-of-print and hard to find. Their work deserves to be given a new lease of life.”)

61 Our “Five Best” sample contains nine titles by authors whose names I already knew on non-literary grounds.
successful in foreign markets. The rise of search engines and machine intelligence should make these data still easier to exploit in the future.

3. Brute Force Search

The most expensive way to find forgotten books titles is brute force search, i.e. pulling books off shelves and reading them. This work is mostly done by editors and literary agents and is the unavoidable last step once metadata and human memory have identified promising titles.

B. Total Effort

It is only prudent to ask how a wise social planner would deploy these tools and what it would cost. We start by noticing that valuable books can be divided into two distinct categories each of which requires a slightly different search method.

1. Fixing Past Mistakes

We have already said that many deserving books have never received a fair hearing. But how often should we revisit these titles? Hemingway’s dictum teaches that living writers should compete with the dead. If this were all, we would expect publishers to revisit old titles as often as new ones – a truly backbreaking prospect.

In fact the situation is not nearly so bad. First, the number of titles published in 1950 was thirty times smaller than it is today. This implies less volume to search through. Second, the Hemingway argument ignores topicality. This means that metadata searches can quickly eliminate categories like temperance novels or spiritualist screeds. More sophisticated cuts can probably reduce the number of candidates by an order of magnitude. Finally, there is information in the fact that older titles have been rejected once already. Suppose that editors mistakenly overlook 20% of all deserving books the first time around. Then a second (and comparably faulty) search should drive the error rate to 5% and a third search to just over one percent. This suggests that publishers should revisit older titles far less often than new ones.


63 Literary agents are almost always responsible for discovering and screening titles in the first instance. Slush File, Wikipedia, http://en.wikipedia.org/wiki/Slush_pile (2013) (editors seldom read titles that do not come through recognized literary agents.). See also, Interview With Erin Clarke, Robin Friedman, http://www.robinfriedman.com/interviews/ErinClarke.html. (Alfred A. Knopf editor: “A very small percentage of manuscripts are published from the slush pile” but “[o]ne of our most successful authors ... was found in the slush pile.”)

64 We focus for concreteness on a hypothetical search for books published between 1920 and 1950. The analysis for other eras is similar.

2. Accommodating Changing Tastes

As Orwell reminds us, titles that were correctly rejected in the past can sometimes gain value when recent events make them more topical or readers become more sophisticated. The good news is that these changes usually happen on generational time scales so that it is sufficient to revisit titles every twenty years or so. The bad news is that decades of copyright suppression have encouraged publishers to let their records of older titles atrophy.66 Like highway overpasses, this neglected infrastructure will require large one-time repair costs.

C. Knowing When to Quit

However self-congratulatory, Hemingway’s dictum that the good writer should compete with the dead sounds like the correct economic prescription. At the same time, search should stop when the cost of wading through thousands of awful books exceeds any likely benefit to consumers. Marketing should similarly stop once a forgotten title gets a fair hearing from market.

Commercial institutions respect these limits automatically. We expect profit-maximizing publishers to fund whichever searches promise the highest quality titles for a given effort. Total effort, in turn, is defined by the copyright reward. In principle this limit does not apply to voluntary collaborations like Gutenberg that operate outside the market. That said, they depend on a very small subset of the reading public for labor. This suggests that any danger of oversupply is mostly theoretical.

The case is fundamentally different for taxpayer-funded programs. These have no natural upper limit and can easily overinvest. Carefully designed programs should normally include explicit tests (e.g. numbers of downloaded copies) to avoid this problem.

IV. Memory in the Print Era

Theory can only take us so far. This section looks at how often traditional print publishers remembered and rediscovered Twenties titles from 1930 to 1990.

A. Business Models

Twentieth Century publishing included two very different industries. Publishers that specialized in copyrighted texts had little to fear from pirates and focused on extracting maximum profit from their portfolios. By comparison, public domain publishers knew that lucrative titles would eventually attract competing editions that

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66 My admittedly anecdotal experience with copyright permissions suggests that publishers often have no idea who owns 1970s-era books.
put a ceiling on profits. Despite this, self-help methods gave them a quasi-monopoly up to about twice their typesetting costs.

1. Copyrighted Titles

We have argued that copyright encourages publishers to suppress old titles. The good news, for much of the 20th Century, was that markets can mitigate this effect. Starting in the Thirties, publishers discovered powerful price discrimination strategies in which luxurious, high-margin first editions were followed by cheap “mass market” paperbacks a year or so later.67 This protected new book margins while extracting large revenues from consumers who would never have bought the original hardback.68 Crucially, the system aligned the publishers’ private interest in making money with readers’ desire for access. The more publishers segregated the market, the more readers benefited.

2. Public Domain Titles

Mid-century public domain publishers relied on print technology’s large up-front costs to deter copyists. To see how, consider a publisher who brings back a forgotten title. At first, she receives 100% of all sales. But this changes abruptly once expected revenues are large enough for a second publisher to launch its own edition. At this point the original publisher can expect to lose half its market share along with a sharply eroded markup. Revenues then start to grow again until a third (fourth, fifth…) publisher repeats the process.

In practice, this sawtooth pattern was probably blurred by publishers’ imperfect knowledge of demand.69 Even so, public domain publishers could safely expect to

68 This was particularly true for entertainment titles like mysteries. See Anne Trubek, How the Paperback Novel Changed Popular Literature, Smithsonian.com (Mar. 30, 2010), http://www.smithsonianmag.com/arts-culture/how-the-paperback-novel-changed-popular-literature-11893941/?all. The expanded market for low value titles like mysteries was astonishing. The hardback edition of Raymond Chandler’s The Big Sleep sold 4,000 copies in its first nine months; the paperback sold 300,000 copies. Tony Williams, A Mysterious Something in the Light: Raymond Chandler, A Life at pp. 175, 178 (2012). For the current state of so-called “windowing” strategies, see U.S. v. Apple, Inc., 952 F.Supp.2d 638, 701–02 (S.D.N.Y 2013).
recover about twice their upfront costs on average. In an age where typesetting was expensive, this provided a generous margin for search and marketing investments. Clever business tactics could increase these advantages still further:

Specialized Manufacturing Technologies. Niche publishers optimized their presses for short print runs. This suppressed competition from conventional printers and permitted an additional markup.\(^{71}\)

Distribution Networks. Niche publishers built private sales channels that sold to libraries, special interest customers, and enthusiasts. These captive audiences found it easier to pay modest markups than to comparison shop elsewhere.

Quality and Repeat Business. Publishers that sold enough books to expect repeat business could charge a premium for quality.\(^{73}\)

The main drawback of these methods was that older titles almost always had smaller print runs. This implied high unit costs that kept the price of revived titles similar to new ones.\(^{74}\) This was a deep handicap for rediscovered titles trying to rebuild an audience.

B. Remembering Bestsellers

We have argued that contemporary publishers have good reason to suppress titles. By comparison, cannibalization risk seems to have been much manageable before the 1980s. After all, if cheap paperbacks adequately protected new titles, republishing older titles was a fortiori safe. I used the exhaustive Worldcat database\(^{75}\) to track how often 20th Century publishers actually republished older titles.

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\(^{71}\) This would not have mattered if public domain publishers competed among themselves. However, Worldcat records suggest that two firms – Amereon and Thorndike – dominated the market.


\(^{73}\) Carl Shapiro, Premiums for High Quality Products as Returns to Reputations, 98 Q. J. Econ. 659, 659–60 (1983).

\(^{74}\) Leading public domain publisher Amereon charged $20-30 per volume in the 1990s. Towey & Chase, supra note 71.

\(^{75}\) Worldcat describes 2.2 billion books held by 72,000 libraries around the world. Paul J. Heald, supra, note 9 at 20. Spot checks against used book markets confirm that Worldcat provides a reasonably complete record of print editions through 1990. See, e.g. Bookfinder, http://www.bookfinder.com/?ref=bf_s3_ft_o1. I include all English language editions published worldwide in what follows. This makes sense given the near-simultaneous publishing of new bestsellers across the US, UK, and Canadian markets.
1. *Top Ten’ Bestsellers*

I started by reconstructing the history of all 93 “Top Ten Bestsellers” from 1918 to 1927. Since Worldcat does not record how long individual editions remain in print, I added the arbitrary-but-reasonable assumption that a title is “forgotten” when it goes ten years without a new edition. (Changing this interval by a few years does not qualitatively change our insights.) By this measure sixteen percent of our titles have stayed in print ever since they were published, i.e. persisted through “inertial memory.” Conversely, most of our bestsellers (56 titles) were forgotten by the end of the 1930s and fully eighty percent (73 books) by 1950.

But this was not the end of the story. Instead, forgotten titles could be rediscovered and sometimes even achieved inertial memory:

1940s. Ten “forgotten” titles (10%) were rediscovered in the 1940s. Of these three were immediately forgotten for the rest of the 20th Century, five were

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76 The sample contains just 93 books because some titles appeared as bestsellers in more than one year. Fifty-four of these are now in the public domain. The slight preponderance of public domain over copyrighted titles reflects the fact that some post-1923 bestsellers were originally published before the cutoff date. Additionally, two bestsellers – *The Plastic Age* (1924) and *Beau Geste* (1926) – were never renewed. Like Prof. Heald, I chose this interval to compare pre-1923 titles against books that remain in copyright. Heald, supra, note 5. Current copyright status was determined from Google’s authoritative “US Renewal Data,” available at http://dl.google.com/rights/books/renewals/google-renewals-20080516.zip.

77 The ten year cutoff is deliberately conservative. Today’s new titles typically go “out of print” after three to five years. See, e.g. Robin Friedman, Interviews posted at http://www.robinfriedman.com/# (reporting that estimates by editors at Knopf, Simon & Schuster, Penguin and five smaller presses). Revived titles sell more slowly and may remain in print longer. The Barnes & Noble website commonly lists ten year old paper reprints of Twenties bestsellers by Dodo, Echo Library, Wildside and other publishers.


79 Database on file with the author.


81 *Mine With the Iron Door, Gentle Julia* and *Sonia: Between Two Worlds*. 
sporadically reprinted,\textsuperscript{82} and one remained in print for the rest of the century.\textsuperscript{83}

1950s. Five “forgotten” titles (5\%) were rediscovered in the 1950s.\textsuperscript{84} Of these one was immediately forgotten,\textsuperscript{85} two were sporadically reprinted,\textsuperscript{86} and one remained in print for the rest of the century.\textsuperscript{87}

1960s. Two “forgotten” titles (2\%) were rediscovered in the 1960s.\textsuperscript{88} Both were sporadically reprinted later in the century.\textsuperscript{89}

1970s. Much of our sample entered the public domain in this decade. Among those that did not, two titles (5\%) were rediscovered.\textsuperscript{90} Though was promptly forgotten, the other was continuously reprinted for the rest of the century.\textsuperscript{91}

1980s. One title (3\%) of those still in copyright was rediscovered in this decade.\textsuperscript{92} It remained in print for the rest of the century.\textsuperscript{93}

Overall, the chances that publishers would bring back a copyrighted bestseller were about three percent per title per decade.\textsuperscript{94}

\textsuperscript{84} The Breaking Point (1950), Call of the Canyon (1950, 1952, 1953), The Homemaker (1952), The Keeper of Bees (1952, 1958), and The Perennial Bachelor (1953).
\textsuperscript{85} The Perennial Bachelor.
\textsuperscript{88} Her Father’s Daughter (1961) and A Daughter of the Land (1967). We ignore books that were briefly forgotten a second time and then revived. Call of the Canyon (1966), Mistress Wilding (1964), If Winter Comes (1963), and The Sheik (1953).
\textsuperscript{89} Her Father’s Daughter (1976) and A Daughter of the Land (1976, 1997).
\textsuperscript{90} Enchanted April (1972, 1973) was the first new edition since 1947. Doomsday (1972) was the first new edition since 1934. I ignore a third candidate, Beau Sabreur (1966, 1978), which was forgotten for just two years according to our definition.
\textsuperscript{92} Twilight Sleep (1989) was the first new edition since 1937. There were also two marginal cases. The Wanderer of the Wasteland (1980) was the first new edition since 1968. Enchanted April (1986) was the first new edition since 1973.
\textsuperscript{93} Twilight Sleep (1996).
\textsuperscript{94} Authors and publishers plainly anticipated this possibility, renewing copyright for 38 of the 40 post-1923 bestsellers in our sample. The two exceptions were Beau Geste and The Plastic Age. Gentleman of Courage was only renewed in French.
2. Public Domain Titles

The end of copyright\(^{95}\) triggered an all-time high of nine rediscoveries (17%).\(^{96}\) Six of these were published a year or two after copyright expired.\(^{97}\) Two-thirds of these quickly disappeared\(^{98}\) but three titles were regularly reprinted until the end of the century.\(^{99}\)

Rediscoveries fell back to three editions (6%) in the 1980s.\(^{100}\) Neither was reprinted for the rest of the century. Within the limits of our small sample, these numbers were comparable to the rediscovery rate for copyrighted titles. This confirms our intuition that cheap paperback formats were a powerful strategy for managing cannibalization risk and that high typesetting costs were the main impediment to rediscovery in the classical era. The fact that three of the revived public domain titles went on to achieve something like inertial memory is particularly impressive.

C. Remembering Mid-List Titles

The WorldCat database does not stop with bestsellers. This section tracks 100 randomly-selected midlist titles published from 1918 to 1927.\(^{101}\) Because libraries try to please patrons the list almost certainly reflects more popular titles than a truly random selection would. This is most visible in the presence of two bestsellers\(^{102}\) and a relatively large fraction (25%) of big name publisher titles.\(^{103}\) Despite this, most of the sample is reliably obscure and includes many small American (26%)\(^{104}\) and UK

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\(^{95}\) Fifty-eight percent of our bestseller sample entered the public domain in the Seventies.


\(^{97}\) Desert of Wheat (1975), River’s End (1976), Dawn (1977), and Great Impersonation (1977). Two additional public domain titles – Greatheart (1979) and Mistress Wilding (1974) were published years after entering the public domain. Some copyright owners brought out new editions immediately before their rights expired. See Valley of the Silent Men (1976), The U.P. Trail (1973), and Her Father’s Daughter (1976). This was probably designed to preempt demand for a few more years.

\(^{98}\) Greatheart (1978, 1980) is a partial exception.


\(^{101}\) The WorldCat site does not perform searches if the title field is left blank. I avoided this limit by inserting the words “a novel” – a dummy phrase that appears in hundreds of titles – in the space provided. I then arrived at the sample by generating a chronological report for each year in my date range and discarding titles that had been published at least once in earlier years.

\(^{102}\) Oh Money! Money! (1918) and The Portygee (1920). I exclude them from my analysis in what follows.

\(^{103}\) The detailed distribution is: Grosset & Dunlap (6%), Doubleday (4%), Burt (3%), Harper (3%) and Doran (2%).

houses that never published a single Top Ten bestseller throughout the Twenties. We focus on this subset in what follows.

Unlike bestsellers, only five midlist titles were still remembered by the end of the Thirties. Thereafter, there were six rediscoveries in the 1940s before the pattern settled down to one or two rediscoveries per decade through the 1980s. However, almost all of these texts had originally been issued by big publishers at the popular end of our sample. This left just two small press rediscoveries for the entire 20th Century:

*Hope's Highway* (1919, 1973, 1994) was an early race relations novel that was rediscovered by a university professor and republished by small press AMS while still in copyright. This may have influenced Big Six publisher MacMillan to bring out its own edition in 1994.

*Bertram Cope's Year* (1919, 1998) was an early gay rights novel. A small publisher (Turtle Point) discovered the title through a series of intergenerational friendships and released a new edition in 1998. By then the book had entered the public domain. The new edition was moderately

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106 The un-forgotten books were Sherwood Anderson's *Poor White* (1930, 1948), John Galsworthy's *Saint's Progress* (1930, 1931, 1934, 1935, 1950), Robert Service's *House of Fear* (1930, 1932, 1950), Talbot Mundy's *Guns of the Gods* (1938), David English Camack's *June of the Hills* (1931, 1946), and Paul Trent's *Delilah* (1932, 1937). Service, Galsworthy, and Anderson were first-rank literary figures while Talbot Mundy was a well-known pulp fiction writer. *Poor White* and *Saint's Progress* went on to achieve multiple reprints throughout the 20th Century.

*June of the Hills* (1946) was a regional South Carolina title republished by the Junalaska Women's Club (1946) and the Southern Historical Press (1984) and I ignore it in what follows. *Delilah* (1932, 1937) was written by a comparatively unknown author and was never reprinted after the Thirties.

107 Responsibility (1943), Privilege (1943), Andorra (1946), Bridget (1946), All the Brothers Were Valiant (1949), Some Do Not (1948, 1964).


111 The author was well-known but forced to self-publish because of the book’s controversial subject. Publisher Jonathan D. Rabinowitz ((personal communication; Jan. 1 2015).

112 See supra, note 59.

113 The publisher would have tried to license the title in any case. Jonathan Rabinowitz (Turtle Point Press) (personal communication; Jan. 31 2015).
successful and was even reviewed by *The New York Times*.\textsuperscript{114} While *Cope* never found a big name publisher, it still commands more sales than most midlist titles.\textsuperscript{115}

Based on this sample, the odds against small press titles being rediscovered were less than one percent per decade. This would not have surprised our midlist authors. Small presses almost never bothered to renew their copyrights.\textsuperscript{116}

The fact that both of our resurrected books address hot button social issues suggests that only the most extreme social changes could make midlist titles topical again. Even Feminism was insufficient: Apart from *Hope's Highway*, only one (3\%) of the thirty female-authored titles in our midlist sample was republished after the 1940s.\textsuperscript{117} Finally, none of our midlist titles was revived because of changing literary tastes, although this clearly happened on occasion.\textsuperscript{118}

V. THE DIGITAL ERA: PRINT-ON-DEMAND AND EBOOKS

Price discrimination strategies built on cheap “mass market” paperbacks unraveled in the 1990s. This increased cannibalization risk and made copyright suppression more attractive. Meanwhile, revolutionary print-on-demand (“PoD”) technologies slashed print run sizes. The combined effect of these developments was that publishers rediscovered more titles than ever before – but only in the public domain.

A. Changing Production and Distribution Methods

Digital publishing methods slashed publishers’ fixed costs. For the first time since the invention of printing, profits no longer depended on publishers’ ability to market and predict sales. At the same time, new actors challenged publishers’ control over hardcover prices, eroding price discrimination. Publishers responded by shifting from cheap paperbacks to high margin “trade paper” formats that were close substitutes for


\textsuperscript{115} The Barnes & Noble search site listed fourteen paper and ten eBook editions for *Cope*, far more than most of its midlist peers.

\textsuperscript{116} All of the large publishing house titles in our sample were renewed. Among small publishers, only *June of the Hills* (Junaluska Woman’s Club) and *Don Coyote* (International Fiction Library) were renewed.

\textsuperscript{117} *That Which Hath Wings* (1967). The exact number is hard to estimate since some women (“Richard Dehan”) wrote under male pseudonyms. Virago, which specializes in rediscovering female authors, hardly ever dips beneath the level of former best-sellers and first-tier authors. Readers can find a complete list of Virago titles at http://www.virago.co.uk/books/.

hardbacks. This increased cannibalization risk so that copyright suppression became much more attractive.

1. Digital Production

The invention of desktop publishing in the 1980s made print runs profitable down to a few thousand copies.\textsuperscript{119} By the 1990s, PoD technologies had cut minimum batch sizes to fifty and sometimes single copies\textsuperscript{120} so that fixed costs were negligible.\textsuperscript{121} This meant that publishers’ profitability no longer depended on predicting sales: Search and marketing were now essentially optional. Many PoD publishers\textsuperscript{122} responded by issuing large, indiscriminate catalogs\textsuperscript{123} that dumped the search task onto readers. What marketing did exist focused on narrow targets like the author’s friends,\textsuperscript{124} enthusiast networks,\textsuperscript{125} and libraries.\textsuperscript{126} At the same time, PoD lacked scale economies. This meant that traditional methods remained cheaper above 1,000 copies.\textsuperscript{127}

\textsuperscript{119} Desktop publishing cut typesetting costs by up to seventy percent. Anon., “Book Publishing,” Encyclopedia of Business (2d ed.), supra at n. 72 (modern first editions routinely include just 5,000 copies); Nicole Howard, The Book: The Life Story of a Technology (Greenwood Press: 2005) at p. 150 (modern methods support batch sizes in the “thousands”).

\textsuperscript{120} Nicole Howard, The Book, supra note 120 at p. 150.


\textsuperscript{125} Morris Rosenthal, “Questions About Books Sales: How Many Copies Did My Book Sell?” (2006), Available at http://www.fonerbooks.com/q_sales.htm. (“Many successful small publishers don’t do well on Amazon, they primarily succeed through aggressive marketing to niche audiences through direct marketing.”).

\textsuperscript{126} A search of the Vancouver Public Library's Bibliocommons site lists 35 “Kessinger Publishing” volumes. http://vpl.bibliocommons.com/. (Last checked Jan. 5 2015). Libraries were ideal PoD customers because they were staffed by professionals who already knew what they wanted.

\textsuperscript{127} The two methods became comparably expensive at around 750 copies, neglecting storage and return costs. Morris Rosenthal, “Print on Demand – And How It Can Make More Money for You,”
The net result was that PoD titles were systematically more expensive and less well-marketed than print. This produced a deeply segmented market. As of 2009, the average PoD title sold just 200 copies\textsuperscript{128} and only one in twenty PoD titles overlapped the 1,000 copy boundary where print became cheaper.\textsuperscript{129} This made it hard for rediscovered titles to attract significant readerships, let alone achieve inertial memory.

2. Shared Production

Digitization meant that titles only needed to be typeset once. This encouraged public domain publishers to use (and sometimes improve) the Gutenberg Project’s base texts.\textsuperscript{130} But mobilizing unpaid volunteers is difficult.\textsuperscript{131} This almost certainly meant that eTexts were undersupplied.\textsuperscript{132} Some PoD publishers tried to fill the gap by donating revenue back to the collaboration.\textsuperscript{133}

3. New Distribution Channels

Big box stores like Barnes & Noble began forcing publishers to slash new bestseller prices in the 1990s.\textsuperscript{134} This made price discrimination – and the original rationale for cheap paperbacks – pointless. Not surprisingly, publishers reacted by turning to luxurious “trade paper” editions that earned high margins but also increased cannibalization risk. This made copyright suppression attractive. The rise of

\textsuperscript{128} Victoria Strauss, “Sales Statistics,” supra at note 125 (reporting data from leading PoD players Xlibris, iUniverse, Authorhouse, and Lulu.com).

\textsuperscript{129} Id. The total number of PoD books on the market was nevertheless impressive. The largest PoD firm, Lightning Source reportedly turned out 500,000 books per month. Chris Holifield, “Print on Demand,” Writers Services (n.d.) available at http://writersservices.com/resources/print-demand-inside-publishing.

\textsuperscript{130} PoD publishers could also produce books from scanned Google Book images. However, these usually contained so many errors that quality publishers preferred to make their own scans. Hardpress Manager Darren Scott (personal communication; Nov. 25 2014).

\textsuperscript{131} Gutenberg volunteers act from various motives including making digital copies for their own personal use, rescuing books that deserve wider audiences, and pursuing an ideological commitment to the public domain. See generally, Project Gutenberg, “Volunteer’s Voices” available at http://www.gutenberg.org/wiki/Gutenberg:Volunteers%27_Voices. On-line searches show that many volunteers are librarians and university employees who, one assumes, work on company time.

\textsuperscript{132} The penalty was partly offset by Gutenberg volunteers’ comparative advantage in finding physical copies and tapping human memory. Project Gutenberg, “Volunteer’s Voices” available at http://www.gutenberg.org/wiki/Gutenberg:Volunteers%27_Voices. (Volunteers haunt used bookstores, yard sales, friends, and even “elderly neighbors who wanted to lend me favorite books they have saved”).

\textsuperscript{133} Tredition Classics, “Literature Projects” (Tredition uses Gutenberg texts for 15,000 of its 100,000 titles and returns 15% of its profits to the project). Available at http://www.tredition.com/projects.

on-line bookstores aggravated the situation by increasing competition from titles that brick and mortar stores would never have stocked.135

B. Memory in the PoD Era

I used the Barnes & Noble website136 to identify new paper editions sold by PoD137 and traditional print publishers138 since 2000. By this point roughly half the bestsellers in our sample and nearly all of the midlist titles had entered the public domain.

Traditional print technologies had limited publishers' ability to bring back older titles regardless of copyright status. PoD broke this barrier – but only for public domain titles. Because of suppression, copyrighted books remained as scarce as ever.

I. Copyrighted Titles

The PoD revolution had almost no impact on our copyrighted bestsellers. Indeed, the number of remembered titles rose by just two percent between 1990 and 2014.139 The average price of these titles was $17.39 and the lowest $14.25 – firmly within the range for new trade paperbacks. While the era's most familiar titles were sometimes available at significantly lower prices,140 this made it harder for more obscure titles like The Green Hat ($12.55), let alone Sorrell & Son ($25.99) to build a following.


136 The Barnes & Noble search site is available at http://www.barnesandnoble.com/. Worldcat data are consistent but less complete. The Barnes & Noble data are particularly useful since many publishers never delete old listings so that extensive price/date information are available back to 2004. I have excluded Call of the Canyon because its copyright status is obscure. On the one hand, Gutenberg lists Call of the Canyon as public domain and many public domain presses offer low priced editions. On the other, its copyright was renewed. I am unable to resolve this puzzle. Compare Google, “US Renewal Data,” supra note 77 With Project Gutenberg, Listing: “Call of the Canyon by Zane Grey,” available at http://www.gutenberg.org/ebooks/1881.


138 I identified small presses by examining publisher home pages, and, in a few cases, contacting individual presses by e-mail.

139 Lost Ecstasy moved from the “remembered” to “forgotten” column while The Silver Spoon was rediscovered.

140 The lowest prices were for Arrowsmith ($7.95), Elmer Gantry ($8.95), Enchanted April ($5.60) and Wanderer of the Wasteland ($6.99).
2. Public Domain Titles

PoD’s impact on public domain books was transformative: The number of remembered bestsellers exploded from 17 titles in 1990 to all 54 titles in our sample as of 2014. The downside was massive duplication. Our Barnes & Noble data show that the average former bestseller had 11.8 competing editions while the average midlist title had – despite much lower sales – 4.3.141 This restricted publishers' ability to fund search and marketing and probably explains why most rediscovered midlist titles belong to the popular, big publisher end of our sample.142

Formally, readers had never had so much choice. However the actual benefits were limited. Because of topicality, most readers need a cash discount to try older titles. This condition was weakly satisfied for PoD editions of former bestsellers, which sold for an average price of $20.74143 but almost always had cheap copies available below the $14.99 price point for new bestsellers.144 The average lowest price for midlist titles, on the other hand, was 16.06.145 For these titles, PoD availability was probably more constructive than actual.

C. The Rise of eBooks

The Digital Revolution climaxed with the rise of eBooks. Naively, one might have expected cheap, easily copied texts to revolutionize availability. In fact, the benefits were mostly confined to public domain titles while copyright suppression got worse.

1. Technology and Economics

The modern eBook era opened with the launch of Amazon’s Kindle in 2007.146 Six years later eBooks had exploded to just under one-third (27%) of all titles.147 Then, just as abruptly, growth stopped.148 Today, eBooks are just one of many formats.

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141 Extreme examples included Poor White (16 publishers), Patchwork (11); Bertram Cope’s Year (10), Guns of the Gods (8), All the Brothers Were Valiant (6) and The Loyalist (6).
142 All but one of the re-discovered titles had originally been released by publishers who had placed at least one title on the era’s Top Ten Bestseller lists. The sole exception, Patchwork, was a regional title describing Pennsylvania’s Amish community.
143 Amazon’s Createspace subsidiary was particularly aggressive in offering low priced editions.
144 The average lowest available price for former bestsellers in our sample was $8.67. All but two titles (Sonia, Greatheart) had editions priced below $16.00. The blockbuster Age of Innocence was the only title with an average price ($15.43) under $16.00.
145 The average figure concealed substantial variability ranging from $3.99 (Patchwork) to $25.88 (The Big Heart).
Strikingly, they colonize the same niche that cheap paperbacks once occupied. This is a broad hint that publishers could restore significant price discrimination if Big Box stores ever lose control of hardback prices.

2. Copyrighted Titles

I used Barnes & Noble’s on-line marketplace to reconstruct eBook prices and availability since the mid-2000s. As of October 2014, only about one-third (31%) of the copyrighted bestsellers in our sample were available as eBooks, slightly fewer than the number available as PoD titles. The picture was similar for midlist titles, just one of which was available as an eBook, compared to two in PoD editions.

It is natural to ask whether this suppression is tied to price. On average, publishers charged $5.68 for the copyrighted eBooks in our sample. Adjusting for lower manufacturing costs, this implied roughly the same margin as a $12.00 trade paper edition compared to the $14.99 benchmark price for new titles. This suggests that publishers were making almost no effort to price discriminate. This was

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149 Like mass market paperbacks, eBooks are cheap to make: Scholars estimate that the average manufacturing cost is about $2.00 per copy compared to $7.00 for trade paper. Joel Waldfogel and Imke Reimers, “Storming the Gatekeepers: Digital Disintermediation in the Market for Books,” supra at p. 6. eBooks demand is also disproportionately focused on throwaway genres like light fiction and mysteries. Julie Bosman, “The Dog-Eared Paperback,” supra at n. 135 (noting similarities between eBooks and mass market paper); Michael Cader, “Real Data on Print Sales in the eBook Era, supra at n. 149 (reporting selected sales data). That said, there are also significant differences. Consumers probably find eReader screens easier to read than the tiny, smudged typefaces that characterized older paperbacks. More importantly, modern book piracy implies that strategies in which publishers wait nearly a year to release downmarket editions lose too many readers to be realistic. US v. Apple Inc., 952 F.Supp. 2d 638, 701–02 (S.D.N.Y 2013). At p. 653.


151 I was unable to find eBook counterparts to the PoD editions of Beau Sabreur, The Green Hat, Enchanted April, Gentelman of Courage, and Gentlemen Prefer Blondes. Conversely, three titles – The Carolinian, Doomsday, and The Private Life of Helen of Troy – were available as eBooks but not PoD.

152 Some Do Not. This very unusual midlist title has always been prominent in literary circles and attained near-classic literary status in the 1980s. Prof. Heald finds a similar disparity. Thomas J. Heald, “The Demand for Out-of-Print Works and Their (Un)Availability in Alternative Markets,” supra at note 24 (69% of books reviewed in the New York Times from 1923-1932 are available in paper but only 9% as eBooks).

153 Some Do Not and Don Coyote.

154 Specific prices ranged from $11.99 (Show Boat) to $1.99 (Arrowsmith).

155 Imke Reimers, Gatekeepers at p.6. (estimating that average per copy cost of eBooks is $3.00 compared to $9.00 for paper).

understandable in an industry where Big Box stores keep bestseller prices relatively low.

3. Public Domain Titles

On the face of things, the picture for public domain titles is more encouraging. Not only is every public domain bestseller available as a commercial eBook, but eBooks appeared sooner than copyrighted titles.\(^{157}\) By 2014, publishers were offering an average of 14.2 competing editions for each public domain bestseller\(^{158}\) and the number was growing rapidly.\(^{159}\) The resulting competition drove down prices so that the great majority of titles were available in 99¢-editions\(^{160}\) – the lowest price allowed on Barnes & Noble’s website.\(^{161}\)

The proliferation of nearly-identical editions probably did not bother platforms like Amazon. From their standpoint, it hardly mattered whether their 30% royalty was paid by one publisher or fifty.\(^{162}\) But the proliferation of nearly-identical titles practically guaranteed that 99¢ publishers would earn little or no economic profit. The situation was only slightly better for publishers that controlled private sales networks\(^ {163}\), possessed a reputation for quality\(^ {164}\) or found particularly interesting titles.\(^ {165}\) These typically commonly charged up to $2.99 for titles.\(^ {166}\) More generally, thin industry margins led to a variety of editing and marketing problems:

157 The average first publication date for copyrighted bestsellers is 2010.9. The corresponding figure for public domain bestsellers is 2008.8.
158 For copyrighted bestsellers, the Barnes & Noble site identifies an average of 1.5 publishers per title.
159 Eighty-three percent of all titles had seen at least one new edition in the previous nine months and all titles had undergone at least one new edition since 2011. Extreme examples included *The Age of Innocence* (110 editions), *Main Street* (43), *Babbit* (42), *The Sea Hawk* (34) and *The Mysterious Rider* (33).
160 The bargain edition emerged six months after the first edition on average. In many cases the bargain edition was the first edition.
162 The statement assumes that the 99¢ floor accurately reflects the profit-maximizing (monopoly) price.
163 Many publishers sell books by directing readers who come from their web page to Amazon. *Questions About Book Sales*, FONER BOOKS (2013), available at http://www.fonerbooks.com/q_sales.htm Any market power in this case is presumably controlled by the publisher.
165 See, e.g. Floating Press Editor Simon Wilson (personal communication; Oct. 10, 2014) (“We do endeavour to pick the best of the texts that are available to us. The original plan was to work through the ‘Western canon,’ but we also get happily sidetracked on digging up the less influential but still fascinating works out there.”)
166 Quality ePublisher Floating Press charged $3.49 for its 2014 edition of *It Pays to Smile*. 
Search. Commercial eBook publishers published every available Gutenberg title while finding and digitizing almost none of their own. This made them little more than a conduit for titles chosen and digitized by Gutenberg volunteers.

Availability. While Gutenberg made a concerted effort to digitize bestsellers, its overall coverage was thin. Even though 81 of our midlist books have entered the public domain, only 11 (14%) are available as eBooks compared to 30 (63%) in PoD.

Quality Assurance. Most editions make little or no effort to fix Gutenberg’s many typos and formatting errors, although some quality publishers do a better job. Splitting quality assurance across multiple texts is also wasteful. Physically, at least, it would make more sense to focus industry effort on a single shared eText.

Marketing. Even high margin eBook publishers seem to do relatively little marketing. While platforms like Amazon theoretically have an incentive

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167 Since eBooks hardly ever list their source texts – in many cases the publisher does not even list its own name – the case for copying is necessarily inferential. That said, the evidence is overwhelming. I found 37 instances in which WorldCat listed eBooks for bestseller or midlist titles in our sample. In ninety percent of these cases the first commercial edition was published after the first Gutenberg text, usually by just a year or two. Furthermore the four exceptions (Pawn’s Count, The Arrow of Gold, Main Street, and Age of Innocence) were all published before 2003 by Barnes & Noble or its Fictionwise subsidiary. I found just one instance in which a commercial publisher created a title (Beauty and Mary Blair) which is not available from Gutenberg. Strangely, I found no commercial counterpart to Gutenberg’s eText of To Him That Hath. Commercial publishers’ adherence to Gutenberg even includes mistakes. As previously noted, publishers have followed Gutenberg’s lead in treating Call of the Canyon as public domain even though its copyright appears to have been renewed.


169 All the Brothers Were Valiant, Bertram Cope’s Year, It Pays to Smile, Patchwork, Poor White, The Loyalist, Beauty and Mary Blair, Guns of the Gods, Peter Binney, Linda Lee Incorporated, Mystery Girl.

170 Prof. Heald similarly finds that just 27% of the 192332 bestsellers stil in copyright are available as eBooks. Paul Heald, The Demand for Out-of-Print Works and Their (Un)Availability in Alternative Markets, supra note 24 at p. 7 (2014 data). Sixty-nine percent of less popular titles culled from The New York Times Book Review in the same era are available in paper but only 9% as e-books. Id. at p. 8.

171 For a typical sampling of on-line complaints, see Amazon Customer Discussion Site: “Publishing Public Domain Works Through KDP” (complaining of “inferior junk they’ve simply copied from Gutenberg that’s generally full of both grammatical and formatting errors.”) Available at http://www.amazon.com/forum/kindle%2520publishing%3F_encoding%3DUTF8%26cdForum%3DFx21HB0U7MPK8XI%26cdThrea%3DTx14R3IRNAZFPOI

172 Quality publishers pay humans to find and correct automated formatting errors and then pay still more humans to check the work. Floating Press Editor Simon Wilson (personal communication; Sept. 29 2014).

173 Floating Press Editor Simon Wilson (personal communication; Oct. 8 2014) (“We don’t do any marketing at all, nor do we do any direct sales.”)
to step in, their internal cultures seem poorly suited to the task. Meanwhile, the proliferation of duplicative titles complicates search making it nearly impossible for consumers to judge quality or comparison shop.

VI. MARKETING EFFORT

So far we have concentrated on publishers’ efforts to find forgotten titles. But this effort means nothing unless the titles actually reach readers. For very inefficient markets one can imagine situations where copyright-funded marketing attracts more readers than high markups deter. Does this happen in life?

Consider first the very simple case where consumers have identical taste and differ only in their appetite for reading. Then a socially efficient system should invest resources so that the best book has the largest readership, the second-best book has the second-largest, and so on. This suggests an empirical test: In a well-designed system, on-line book polls should find that titles with more reader reviews also have

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174 In principle, Amazon should invest one dollar of marketing every time it promises to generate $1 \div 0.30 = $3.34 in new sales.
175 See George Packer, Cheap Words: Amazon is Good for Customers. But is it Good for Books? THE NEW YORKER (Feb. 17, 2014), http://www.newyorker.com/magazine/2014/02/17/cheap-words. According to Packer:

Amazon didn’t seem to know what it was doing. “There are certain things it takes to be a publisher,” the head of one New York house said . . . “We care more than they do. Bezos has moved on to diapers and jewelry—we’re still doing books.” A former Amazon employee who worked in the Kindle division said that few of his colleagues in Seattle had a real interest in books: “You never heard people say, ‘Hey, what are you reading?’ Everyone there is so engineering-oriented. They don’t know how to talk to novelists.” . . . “Book publishing is a very human business, and Amazon is driven by algorithms and scale,” Sargent told me. When a house gets behind a new book, “well over two hundred people are pushing your book all over the place, handing it to people, talking about it . . . That’s pretty hard to replicate in Amazon’s publishing world, where they have hundreds of thousands of titles.”

Id.

176 The market defect seems evident from the fact that publishers often post multiple prices for the same edition on the same day. These sometimes vary by several dollars. Vendors are presumably trying to catch readers who find comparison-shopping prohibitively difficult.

177 The fact that consumers have a limited appetite for books introduces a further complication. Suppose that each title in a series has exactly the same quality. Then we expect bored readers to rate the first title they read higher than the second, the second higher than the third, and so on. This could mimic our optimality signal if readers consume titles in the same order, for instance by original publication date or abundance on store shelves.

178 We assume that the number of reviews scales with the number of readers. This proxy differs from the usual approach of trying to infer the number of book purchases from Amazon sales rank. See, e.g., Judith A. Chevalier and Dina Mayzlin, The Effect of Word of Mouth on Sales: Online Book Reviews, JOURNAL OF MARKETING RESEARCH 345 Vol. XLIII 345–354 (Aug. 2006); Calculate How Many Books Amazon Sells from Ranks, FONER BOOKS (2013), available at http://www.fonerbooks.com/surfing.htm. However Amazon’s algorithm is biased toward recent purchases and changes at unpredictable intervals. This suggests that the number of Goodreads reviews could be an appealing proxy for sales when comparing titles written by the same author in the same genre. Table 3 tests this hypothesis by comparing Goodreads reviews and Amazon rank against the 2012 sales figures for seven James Patterson novels. See Daisy Maryles, The Highs and
high average quality scores. In practice, this signal is usually obscured by the fact that
real readers have heterogeneous tastes. But this objection drops away for authors
who set out to write the same book over and over again. Table 2 tests our hypothesis
against Goodreads data for Edgar Rice Burroughs’ *Tarzan* novels.

<table>
<thead>
<tr>
<th>Title</th>
<th>Goodreads Reviews</th>
<th>Amazon Rank</th>
<th>Total 2012 Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private London</td>
<td>6,762</td>
<td>24,609</td>
<td>307,805</td>
</tr>
<tr>
<td>Kill Alex Cross</td>
<td>16,829</td>
<td>31,624</td>
<td>212,976</td>
</tr>
<tr>
<td>10th Anniversary</td>
<td>21,060</td>
<td>16,379</td>
<td>199,606</td>
</tr>
<tr>
<td>Now You See Her</td>
<td>19,617</td>
<td>210,227</td>
<td>175,480</td>
</tr>
<tr>
<td>Guilty Wives</td>
<td>19,743</td>
<td>63,904</td>
<td>175,277</td>
</tr>
<tr>
<td>Kill Me If You Can</td>
<td>14,520</td>
<td>124,068</td>
<td>151,439</td>
</tr>
<tr>
<td>Private Games</td>
<td>11,539</td>
<td>35,858</td>
<td>113,594</td>
</tr>
</tbody>
</table>

A simple linear fit shows that the Goodreads data reliably predicts relative sales for six titles to
within ± 15%. Strikingly, both methods wildly underestimate Patterson’s biggest-selling title (*Private London*). The problem could possibly be due to missing sales data for 2013 and 2014.

179 For example, Goodreads readers routinely give Steven King’s fantasy books (*e.g.* *The Dark Tower*) higher marks than his horror entries (*e.g.* *Carrie*). At the same time, the fantasy titles attract smaller audiences with very distinct tastes. The net result is that King’s horror entries have bigger sales but lower quality scores. Compare GOODREADS, http://www.goodreads.com/book/show/10592.Carrie?from_search=true&search_version=service (last visited May 30, 2015) (rating Carrie as 3.88 stars out of 5 with 267,671 ratings) with GOODREADS, http://www.goodreads.com/book/show/5091.The_Dark_Tower?from_search=true&search_version=service (last visited May 30, 2015) (rating The Dark Tower as 4.23 stars out of 5 with 75,764 ratings).
Table 2: The *Tarzan* Series – Quality vs. Estimated Readership

<table>
<thead>
<tr>
<th>Installment</th>
<th>Quality Score</th>
<th>Number of Reviews</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.85</td>
<td>20,122</td>
<td>1912</td>
</tr>
<tr>
<td>2</td>
<td>3.77</td>
<td>4,204</td>
<td>1913</td>
</tr>
<tr>
<td>3</td>
<td>3.71</td>
<td>2,593</td>
<td>1914</td>
</tr>
<tr>
<td>4</td>
<td>3.74</td>
<td>2,436</td>
<td>1916</td>
</tr>
<tr>
<td>5</td>
<td>3.82</td>
<td>1,950</td>
<td>1916</td>
</tr>
<tr>
<td>7</td>
<td>3.75</td>
<td>1,472</td>
<td>1919</td>
</tr>
<tr>
<td>8</td>
<td>3.75</td>
<td>1,284</td>
<td>1921</td>
</tr>
<tr>
<td>6</td>
<td>3.66</td>
<td>1,229</td>
<td>1919</td>
</tr>
<tr>
<td>11</td>
<td>3.74</td>
<td>975</td>
<td>1928</td>
</tr>
<tr>
<td>10</td>
<td>3.62</td>
<td>971</td>
<td>1924</td>
</tr>
<tr>
<td>20</td>
<td>3.70</td>
<td>939</td>
<td>1938</td>
</tr>
<tr>
<td>12</td>
<td>3.71</td>
<td>880</td>
<td>1928</td>
</tr>
<tr>
<td>9</td>
<td>3.73</td>
<td>869</td>
<td>1923</td>
</tr>
<tr>
<td>16</td>
<td>3.69</td>
<td>835</td>
<td>1938</td>
</tr>
<tr>
<td>14</td>
<td>3.66</td>
<td>771</td>
<td>1930</td>
</tr>
<tr>
<td>15</td>
<td>3.69</td>
<td>704</td>
<td>1935</td>
</tr>
<tr>
<td>17</td>
<td>3.63</td>
<td>692</td>
<td>1934</td>
</tr>
<tr>
<td>21</td>
<td>3.68</td>
<td>689</td>
<td>1939</td>
</tr>
<tr>
<td>18</td>
<td>3.62</td>
<td>683</td>
<td>1935</td>
</tr>
<tr>
<td>22</td>
<td>3.7</td>
<td>572</td>
<td>1947</td>
</tr>
<tr>
<td>19</td>
<td>3.7</td>
<td>547</td>
<td>1935</td>
</tr>
<tr>
<td>24</td>
<td>3.68</td>
<td>487</td>
<td>1941</td>
</tr>
<tr>
<td>24</td>
<td>3.65</td>
<td>485</td>
<td>1964</td>
</tr>
<tr>
<td>23</td>
<td>3.54</td>
<td>237</td>
<td>1963</td>
</tr>
</tbody>
</table>

The first thing to notice about Table 2 is that Burroughs’ public domain titles consistently offer more social value. This includes *both* larger readership *and* higher
quality. At the same time, commercial marketing matters: While readers consume public domain titles strictly in order of publication date this is not true for commercial titles. This shows that editors are actively guiding readers to some (hopefully superior) titles and not others.

The Burroughs data confirms the usual intuition that high prices suppress competition. Still, Burroughs is well-known and it would be informative to study more

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180 There is no obvious reason to think that Burroughs’ quality abruptly declined in 1923. Plainly, readers consider quality differently for public domain books they acquire cheaply or “for free.” This makes sense if the ratings reflect consumers’ net utility including price.

181 There are 11 Barsoom novels in all. We display post-1923 (copyrighted) titles in gray:

<table>
<thead>
<tr>
<th>Title</th>
<th>Average Rating</th>
<th>Number of Reviews</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A Princess of Mars</td>
<td>3.77</td>
<td>29014</td>
<td>1917</td>
</tr>
<tr>
<td>2. Gods of Mars</td>
<td>3.84</td>
<td>8850</td>
<td>1918</td>
</tr>
<tr>
<td>3. Warlord of Mars</td>
<td>3.84</td>
<td>7200</td>
<td>1914</td>
</tr>
<tr>
<td>4. Thuvia Maid of Mars</td>
<td>3.73</td>
<td>4740</td>
<td>1920</td>
</tr>
<tr>
<td>5. Chessmen of Mars</td>
<td>3.81</td>
<td>4016</td>
<td>1922</td>
</tr>
<tr>
<td>6. Mastermind of Mars</td>
<td>3.82</td>
<td>2910</td>
<td>1927</td>
</tr>
<tr>
<td>11. John Carter of Mars</td>
<td>3.79</td>
<td>2768</td>
<td>1918</td>
</tr>
<tr>
<td>7. A Fighting Man of Mars</td>
<td>3.8</td>
<td>2255</td>
<td>1930</td>
</tr>
<tr>
<td>8. Swords of Mars</td>
<td>3.79</td>
<td>2089</td>
<td>1935</td>
</tr>
<tr>
<td>9. Synthetic Men of Mars</td>
<td>3.75</td>
<td>1909</td>
<td>1939</td>
</tr>
<tr>
<td>10. Llana of Gathol</td>
<td>3.75</td>
<td>1596</td>
<td>1941</td>
</tr>
</tbody>
</table>

Unlike the Tarzan series, the pre- and post-1923 Barsoom titles have a slight overlap. The reason is that the sixth installment in the series was published out-of-order.

182 The four “Pellucidar” novels are, with copyrighted titles in gray:

<table>
<thead>
<tr>
<th>Title</th>
<th>Average Rating</th>
<th>Number of Reviews</th>
<th>Publication Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. At the Earth’s Core</td>
<td>3.73</td>
<td>2125</td>
<td>1914</td>
</tr>
<tr>
<td>2. Pellucidar</td>
<td>3.75</td>
<td>1292</td>
<td>1915</td>
</tr>
<tr>
<td>3. Tanar of Pellucidar</td>
<td>3.72</td>
<td>604</td>
<td>1928</td>
</tr>
<tr>
<td>4. Savage Pellucidar</td>
<td>3.72</td>
<td>521</td>
<td>1941</td>
</tr>
</tbody>
</table>
obscure titles. Cowboy author Zane Grey provides a half-step in this direction. Once again, the lesson is broadly similar: While public domain titles account for just one-third (29%) of Grey’s output, they receive nearly two-thirds (65%) of all reviews. The average perceived quality is also higher – 3.74 stars compared to 3.57 for copyrighted works.

Ideally, we would like to repeat the test for authors who never wrote a single bestseller. Naively, this ought to be easy: The eBook revolution, after all, has republished plenty of forgotten authors. The trouble is copyright suppression: The rediscovered authors completely disappear after 1923.

**VII. REFORMS (A): COPYRIGHTED TITLES**

We have argued that copyright operates to suppress older titles and that this pathology has only gotten worse in the Age of eBooks. This section considers how antitrust and copyright law can address the problem.

**A. Antitrust Interventions**

Copyright gives publishers the power to suppress unauthorized competitors. But legal rights only matter when they are monetized. The task of antitrust is to specify which business strategies are and are not legal.

1. **Divestiture**

We have argued that copyright suppression exists because the Big Five publishers who dominate today’s bestseller lists also control older titles. Forcing the Big Five to

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183 See GOODREADS, “Popular Zane Grey Books,” https://www.goodreads.com/shelf/show/zane-grey (last accessed Aug. 29, 2014) (on file with author). I excluded a small number of titles devoted to travel, sports, and other subjects outside Gray’s usual Western focus but included titles set in Grey’s own time, most notably his pre-WWI novel *The Desert of Wheat*.

184 Id. Grey’s most popular title (*Riders of the Purple Sage*) had 5,862 Goodreads reviews as of October 2014. Id. (last accessed Oct. 2014). The corresponding figure for Burroughs’ most popular title (*Tarzan of the Apes*) was 20,122. Id.

185 Grey was a household name in the Thirties and has been frequently reprinted since.

186 Comparing Barnes & Noble author searches against Wikipedia bibliographies shows that eleven of legal thriller writer Arthur Cheyney Train’s twelve public domain titles are available as e-books but none of his thirteen titles still in copyright. Bestseller writer Temple Bailey similarly has eBooks for seven of her nine public domain titles but none of her nineteen more recent works. The pattern even holds for serious literature: While eBooks are available for 28 of Booth Tarkington’s 34 public domain titles, none of his 20 post-1923 works is electronically available.

divest their backlists to reprint houses would immediately fix the problem. The trouble
is finding a legal predicate: Prosecutors would have to show that the Big Five acquired
their portfolios through a Section One conspiracy or one of the narrowly-defined
unilateral behaviors barred by Section Two. This seems unlikely.

2. Empowering Price Discrimination

The eBook format has handed publishers their most powerful price discrimination
lever in decades. Given the academic consensus that price discrimination makes
markets and intellectual property more efficient, judges should normally permit
whatever “ancillary restraints” are needed to segment the market. While publishers
are unlikely to replicate their Thirties-era successes, even modest price discrimination
would be well worth having.

The difficulty is that book prices are contested: Publishers want high eBook prices
to protect hardback sales, Amazon wants low prices to promote tablets, and brick-
and-mortar stores want cheap hardbacks. At least in principle, antitrust doctrine
should steer control to whichever party can implement price discrimination most
effectively so that more readers receive access.

The issue has already been joined. Two years ago US v. Apple, Inc. held that
the Big Five had violated the Sherman Act by conspiring to destroy Amazon's control
over eBook prices. Their motive, predictably, was to eliminate the “wretched” $9.99
price that was “eating into sales of their more profitable hardcover books” Since no
publisher had the clout to challenge Amazon individually, they enlisted Apple to help them.

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188 Charging each user a different price improves efficiency by reducing the number of lost sales
("deadweight loss") generated by the copyright monopoly. This lets society enjoy the same inventive
effort at less cost. See, e.g. Suzanne Scotchmer, INNOVATION AND INCENTIVES 37 (2004). The devil, as
usual, is in the details. Price discrimination is unambiguously desirable for the benchmark case where
the monopolist knows each consumer’s willingness to pay and bills them accordingly. See, e.g., Lars
A. Stole, Price Discrimination and Competition, 3 HANDBOOK OF INDUSTRIAL ORGANIZATION 2221,
2229 (2007). However, the situation is more complicated where price discrimination is practiced by
competing firms that rely on imperfect proxies like selling products in different quality levels. Id. at
2262-2267. Despite this, theoretical economists seem to have arrived at a broad consensus that there
are “many theories where … price discrimination increases welfare…” compared to a relatively small
collection of "exceptions and counterexamples.” Id. at 2292.

189 See generally, Thomas A. Piraino, Jr., A Proposed Antitrust Approach to Collaborations Among

190 This practice can also improve efficiency. See Michael L. Katz and Carl Shapiro, Systems
Competition and Network Effects, 8(2) JOURNAL OF ECONOMIC PERSPECTIVES 93, 93–115 (1994)
(assuming that penetration pricing can improve dynamic efficiency).


192 Id. at 649. The Court added that new bestsellers were often “priced at thirty dollars or more.”

193 The fears were well-grounded. In 2014 Amazon tried to win a royalty and pricing argument
with Hachette by deliberately understocking the latter’s titles and refusing to accept preorder. See
Evan Hughes, Bringing Down the Hachette, SLATE (May 30, 2013) available at
http://www.slate.com/articles/technology/technology/2014/05/amazon_hachette_dispute_how_the_big
_five_publishers_could_have_avoided_the.html.

favored nation” clause that promised to match any discount by Amazon. Id. This guaranteed that any
The Court analyzed the case as a straightforward conspiracy to fix prices. But a close look at its findings shows that the Amazon and the publishers were really fighting about who would set prices. So long as Amazon held this power prices would be low. Conversely, each publisher would immediately use control to raise prices even if the market was perfectly competitive. The question remained which arrangement would be best for society. Maddeningly, the Court refused to say, acknowledging only that both market structures were potentially legal so long as they emerged from “regular market forces.”

3. Rationalizing Antitrust Law

The Court’s reticence does not provide much guidance. The basic point seems to be that the publishers should not have enlisted Apple’s help in the first place. But in that case the publishers would have no counterweight to Amazon’s enormously larger market power. The resulting “Amazon always wins” rule cannot possibly be right.

Things become clearer when we include price discrimination in the analysis. We have already argued that price discrimination not only improves market efficiency, but also increases profits for those who practice it. This immediately suggests a rule for implementing Judge Cote’s “market solution”: Let the parties bid for the right to set prices with the winner sharing part of its profit with the losers.

Looking back, the real problem with Apple was that the negotiations proceeded almost entirely by threats and coercion. These may well have been antitrust violations. By comparison, letting parties pay for the right to set eBook prices would have facilitated socially beneficial pricing.

Publisher that let Amazon set prices would have to subsidize each copy sold by Apple. Apple’s market share guaranteed that this de facto penalty would be ruinous. Id. at 659–681. The Court’s findings make it clear that – given control – the publishers would independently raise eBook prices. For instance, the Court found that Apple expected the publishers to “raise e-book prices sky high” and that Amazon and Apple both assumed that publishers would set prices at whatever price cap was agreed to. Id. at 708.

While the Court said that the publishers could band together for a “simultaneous negotiation,” it said nothing about when this would shade into an illicit “conspiracy.” Id. at 708. The trouble is that the antitrust laws are strongly asymmetric so that Amazon’s unilateral behavior under Sherman Act §2 was much less likely to be challenged the publishers’ joint actions under Section 1. See generally, Verizon Comms. Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004) (Section 2 offenses are limited to much narrower categories compared to Section 1’s Rule of Reason liability).

The payment should be made as a fixed fee. Fees that track the number of units sold change the parties’ marginal costs and, indirectly, the prices they charge. This can support illicit cartels. See generally, S. Maurer and S. Scotchmer, The Essential Facilities Doctrine: The Lost Message of Terminal Railroad, 5 CALIF. 278 (2014).

Our proposed rule does have significant rhetorical drawbacks. Authorizing cross-payments could lead to situations where, for example, publishers compensated Amazon for hardbacks sold by Barnes & Noble stores. This could easily invite charges that the agreement was a “sham” hiding some underlying cartel. Suffice to say, judges who understand the social value of price discrimination should demand additional, independent evidence before taking the bait.
B. Copyright Interventions

Antitrust is not the only way to loosen the Big Five publishers’ grip on older titles. Copyright reform can also override suppression. The trick is to leave constructive behaviors in play. In practice, this means nominating someone – big publishers, reprint houses, authors, or government – to override copyright if (and only if) suppression occurs.

1. Copyright Renewal: Letting Big Publishers Decide

Profs. Landes and Posner have famously argued that publishers can be trusted to discard copyright when books are forgotten. Requiring owners to renew at regular intervals, they claim, would immediately show which companies plan to republish the work. But the Landes and Posner argument does not address copyright suppression, which rewards publishers for renewing copyrights for titles that will never see the light of day. Furthermore, they assume that publishers make case-by-case renewal decisions even though, as we have seen, big 20th century publishers always renewed all of their titles. Given these objections, indefinite renewal rights would probably pose no more than a de minimis barrier to suppression.

2. March-In Rights: Letting Small Publishers Decide

The Bayh-Dole Act famously gives government agencies ‘march-in’ rights to recover unused IP. The trouble is that government – whether for reasons of politics or bureaucratic inertia – seldom invokes them. This suggests that it would be better for Congress to vest march-in rights with parties that have a direct financial stake in asserting them. This could be done letting reprint houses publish any title that has been unavailable for some minimum period of years. Even then, the solution would be clumsy, forcing publishers to bring out new editions solely to preserve their options and raising various drafting issues.

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202 Landis and Posner, supra at note 5.
203 A secondary objection is that fees and effort spent on renewals are lost to the system and, in particular, do nothing to find and market lost titles.
205 The Google Books settlement would have done something similar by authorizing new editions for titles that were no longer in print and whose authors did not object. Authors Guild, Inc. v. Google, Inc., 770 F.Supp.2d 666 (SDNY 2011) (rejecting proposed settlement).
206 For example, a practical statute would need to reject instances where dominant publishers tried to preempt march-in by offering titles at deliberately unaffordable prices. This would raise the usual difficulties for judges trying to define “reasonable prices” without a market. Legislators would also have to decide whether the new right would be exclusive or non-exclusive. The former would restore the “true” copyright incentive but-for suppression. Finally, legislators would have to decide
3. Reversion: Letting Authors and Heirs Decide

US law already lets authors and heirs reclaim their copyrights after 35 years. However, this gives authors fewer rights to sell to publishers in the first instance and could depress royalties. Courts usually fix this by letting authors waive the right.

This traditional difficulty would drop away if Congress created a second right that was only available when a book had been out-of-print for some fixed number of years. For this system to work, however, authors and heirs would still have to find a replacement publisher. Scholars who study so-called “Anticommons” effects have often been skeptical that such licenses can be negotiated where, as here, the expected profits are small. Whether this is right or not depends on why Anticommons effects are claimed to exist in the first place. Conventionally, there are three possibilities.

First, game theory predicts that rational negotiators can sometimes increase their share of an eventual payoff by being deliberately unreasonable. But in that case bargainers should actually become more reasonable as the expected profit declines. Second, copyright owners may identify with and overvalue their work. Naively, at least, this bias should be much attenuated for heirs. Finally, business negotiations sometimes fail when parties seek non-financial goals. This also seems unlikely for old titles except, perhaps, where heirs find their ancestors’ work embarrassing and seek to suppress it. While these arguments are hardly conclusive, reversion rights are worth a try.

4. Library Models

Copyright suppression represents a particularly ferocious attempt to stop the emergence of so-called “durable goods” markets in which previously-sold products constrain new goods prices. However, leasing lets producers go on setting prices for both old and new goods indefinitely. The model also has practical precedents: Commercial lending libraries were a pillar of British publishing from the late 18th to mid-20th Centuries while companies like Netflix have offered subscription video since the Nineties.

Unlike outright sales, leasing models do not reward suppression. The reason is that subscription becomes more valuable to consumers – and lucrative to sellers – every time the collection grows. At least two companies – Oyster and Scribd – have recently

what the new royalty rate was. Adopting the parties’ previously agreed rate would narrowly target suppression but also require the original publisher to disclose proprietary data.

210 Id.
212 Maurer, supra at note 3 at 29. As George Orwell – who worked for one of the libraries as a clerk – once pointed out, “It is book-borrowing and not book-buying that keeps authors and publishers alive.” George Orwell, As I Please, THE TRIBUNE (June 2, 1944), text available at http://www.telelib.com/authors/O/OrwellGeorge/essay/tribune/AsIPlease19440602.html.
launched eBook subscription services.\textsuperscript{213} This suggests that the market may eventually fix at least part of the suppression problem on its own.

5. Restoring Used Book Markets

Despite occasional protests,\textsuperscript{214} second-hand paper copies never had much impact on new book prices.\textsuperscript{215} But used physical books can be unattractive and hard to locate.\textsuperscript{216} These drawbacks no longer apply in the Age of eBooks. While current law disfavors resale rights in digital goods, there seems to be no very deep reason for this.\textsuperscript{217} Probably the biggest concern is that consumers will resell the same digital content over and over again. This is surely manageable in a world where large sellers already construct tracking systems so that readers can “lend” digital titles to one another.\textsuperscript{218}

VIII. REFORMS (B): REVITALIZING THE PUBLIC DOMAIN

We have argued that public domain eBook publishers earn too little to support robust search, marketing, or curation efforts. This presents a deep choice between making the commercial publishing system more profitable and replacing it entirely.

\textsuperscript{213} Geoffrey A. Fowler, \textit{Why the Public Library Beats Amazon—for Now}, \textit{Wall Street Journal} (Aug. 12 2014) (stating “Amazon.com recently launched Kindle Unlimited, a $10-per-month service offering loans of 600,000 e-books. Startups called Oyster and Scribd offer something similar.


\textsuperscript{216} On-line used book sellers like Alibris reduce these effects.


\textsuperscript{218} Corey Sandler, \textit{How to Lend NOOK Books on a NOOK Tablet}, \textit{For Dummies}, available at \url{http://www.dummies.com/how-to/content/how-to-lend-nook-books-on-a-nook-tablet.html}.}
A. Commercial Reforms

I began this article by pointing out that society’s need to find and market existing titles argues for perpetual copyright. However, this monopoly need not be statutory. Publishers have filled similar gaps with self-help methods since Roman times.219

1. Exclusive Publisher Agreements

The most obvious way to make commercial public domain eBooks more profitable is to limit free entry. There are various ways to do this:

Fixed Fee Access. Platforms like Amazon could charge a fixed fee for each title posted to their site. This option would deliver all profits to the platform and do little for publishers. The situation might still improve, however, to the extent that the platform reinvested at least part of its proceeds in marketing.

Exclusive Rights Auctions. Platforms could let publishers bid for the exclusive right to sell, say, 1,000 public domain titles of their choosing. This would deliver most of the reward to the platform with a small premium for publishers who were unusually successful at finding and marketing titles.

First Come, First Served. Platforms could limit entry to the first two (or five, or seven…) publishers who offered a specific title. This system would leave all of the profits with publishers.220 Strangely, this might be the platform’s best option if bigger marketing budgets expanded the market.

The question remains whether antitrust law permits such schemes. While courts routinely say that firms can refuse to do business with anyone, they invariably add that this power cannot be used for an improper purpose.221 A more principled analysis starts from the proposition that the publishing markets are highly imperfect so that ancillary restraints are justified. The trouble is that the usual test for Sherman Act violations – does the intervention increase price or reduce output?222 – is ambivalent. After all, a successful scheme would raise prices and output simultaneously. Still, we have argued that low prices are cold comfort if most readers never finding a deserving title. Our touchstone must therefore be output, not price.

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219 Maurer, supra note 3 at 1, 15.
220 The profits are likely to be at least partly dissipated by racing. Amazon would continue to extract profits through its thirty percent royalty on sales.
221 See, e.g., Colgate & Co. v. US, 250 U.S. 300 (1919).
2. Library Models

We have already argued that selling eBooks through subscription download services would reduce copyright suppression. However, the benefits do not end there. Commercial libraries have always delivered consumer value (and justified higher fees) by helping readers find good titles.223 This incentive rewards discovery even for public domain titles.

3. Re-Empowering Literary Agents

The modern publishing industry conducts most of its search through literary agents. The obvious problem for public domain books is that the agent does not own her “property.” One traditional solution is for publishers and agents to negotiate non-disclosure agreements. However, it could well be sufficient for publishers to offer a fixed finder’s fee to whichever agent first identifies a promising title. So long as the publisher pays someone for the suggestion and does not simply pocket the money, agents who do not receive a fee can usually trust the system.224

Finally, we have seen that metadata can drastically reduce search costs. In order to be effective, literary agents must similarly access search tools. These could be deployed either as an open source-style collaboration or on a commercial, fee-for-search basis.

B. Non-Market Alternatives

We have seen that Gutenberg volunteers already dominate the supply and selection of public domain eBook titles. But in that case, why have commercial publishers at all?

1. Viral Licenses

We have argued that publishers could find and fix errors much more efficiently by focusing their efforts on a single shared document. As it happens, open source already has a mechanism for doing this: So-called “viral” contracts that require users to donate any improvements back to the community.225

223 Maurer, supra note 3 at 38.
225 Stephen M. Maurer, The Penguin and the Cartel: Rethinking Antitrust and Innovation Policy for the Age of Commercial Open Source, 1 UTAH LAW REVIEW 269, 301 (2012). These clauses can be hard to define in the software context where the dividing line between, say, improvements to an open source operating system and a formally separate application program are easily manipulated and evaded. However, these problems are very unlikely for eBooks distinguishing where fixed typos or formatting issues are entirely distinct from hyperlinks or new commentary.
The rub, in practice, is that forced cooperation could reduce commercial publishers’ incentives to invest in the first place. This could persuade some publishers to create their own base texts and stop using Gutenberg altogether. Clever collaborations can minimize this effect by letting members delay sharing for commercially-reasonable periods.\textsuperscript{226} The deeper problem is that viral licenses \textit{ipso facto} guarantee that no collaboration member can offer better quality than any other member.\textsuperscript{227} This means that even those who remain in the collaboration could invest less effort. Fortunately, this problem already has a well-established solution. Antitrust authorities have long argued R&D joint ventures are not anticompetitive so long as they face at least four comparably strong competitors.\textsuperscript{228}

2. Expanding Gutenberg

Gutenberg’s volunteers are already good at finding and digitizing titles. This makes it reasonable to think that existing quality and volume issues could be solved by expanding the collaboration’s manpower. It would be natural for the nation’s libraries to take up this cause.\textsuperscript{229}

The deeper challenge is that Gutenberg does very little marketing apart from reporting download statistics. Similarly, crowd-sourced services like Goodreads and Listopia are still in their infancy. For now, they are still just collections of reviews – Too numerous, too idiosyncratic, and too conflicting to offer convincing advice. In order to take the next step, open institutions will need to offer a much more coherent product. This might include generating clear, bottom-line recommendations that reliably tell consumers which titles are available and worth reading.\textsuperscript{230} Because human taste is heterogeneous, this advice would have to be customized for each user. This could require sophisticated algorithms that analyze how the user had rated known titles in the past and selects reviews by collaboration members that most nearly fit the user’s estimated profile.

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{226} See Joachim Henkel, \textit{Selective Revealing in Open Innovation Processes: The Case of Embedded LINUX}, 35 \textit{RESEARCH POLICY} 953, 953–969 (2006). This is already routinely done in the so-called “embedded LINUX” industry that provides software for everything from refrigerators to fighter jets. \textit{Id.}
\item \textsuperscript{227} Stephen M. Maurer, \textit{The Penguin and the Cartel: Rethinking Antitrust and Innovation Policy for the Age of Commercial Open Source}, 1 \textit{UTAH LAW REVIEW} 269, 269-318 (2012).
\item \textsuperscript{229} Vinjamuri, \textit{supra} note 66. If each of the 16,000 US library branches in the US reviewed just one title per month they would cover 192,000 titles a year. This is 58% of all books published in 2010 or nearly twenty years’ worth of pre-1950 publications.
\item \textsuperscript{230} The recommendation could, of course, be tailored to each consumer. For example, consumers could be asked to submit ratings for recently read titles. The collaboration would then weight its advice accordingly.
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IX. CONCLUSION: THE ECONOMICS OF MEMORY

This Article has argued that finding and marketing worthwhile books is just as important as writing them. The only question is how best to fund the work. We have argued that commercial solutions have important drawbacks. On the one hand, copyright frequently suppresses old titles and this problem has gotten worse in the Age of eBooks. On the other hand, public domain publishers face spectacular free-rider pathologies that cripple search, marketing and quality control. Meanwhile, voluntary institutions like Gutenberg are still systematically understaffed.

The cures for suppression are mainly statutory. On the principle of “do no harm,” the most attractive intervention is to revise antitrust doctrine to promote more price discrimination. Restoring something like the publishing industry’s mid-century regime would leave copyright incentives intact while opening many more texts to consumers. The question is what to do if price discrimination never returns. Here the main possibilities include copyright reforms that introduce new digital resale, author reversion and march-in rights.

The public domain analysis is more conflicted. One approach is to double down on capitalist solutions by relaxing the antitrust laws. This should not shock anyone: Publishers have built their businesses on self-help ever since Roman times. The alternative is to recognize that most commercial eBooks already start off as Gutenberg titles. Improving the quantity and quality of eTexts is mostly a matter of giving Gutenberg more resources. The deeper issue is whether open, volunteer-based institutions can perform the traditional marketing function of matching and steering readers to titles they value.

The eBook Revolution was supposed to put all of human knowledge at our fingertips. Instead, current institutions systematically suppress and undersupply older titles. This impoverishes us individually and as a culture. We can do better.