How Many Copies Are Enough Revisited: Open Access Legal Scholarship in the Time of Collection Budget Constraints

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This article discusses the results of a study into the open access availability of law reviews, followed by a discussion of why open access has such a high rate of adoption among law reviews, especially in comparison to the journal literature in other disciplines.

Introduction

1 Over 15 years ago I wrote about using citation studies to figure out how many copies of a law journal title a library might hold.1 At that time, the University

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of Michigan law library held as many as four copies of a journal (three in print, one in microfiche) for some titles. And now? One copy or no copies in print or microform. Obviously, things have changed in both the legal education and publishing worlds with the rise of electronic publishing, the legal market crash, and bad press about legal education.

2 Law libraries have had to cut copies and titles of print law journals to meet cuts in library budgets as law schools shift budgetary dollars from the library to other law school programs, such as financial aid, new and additional clinics, upgraded facilities, and expanded legal skills education offerings. The cost of a single law review is small change compared to the cost, plus the high inflationary rate, for legal publications by the likes of Lexis, West, or Aspen, but canceling a few law reviews can make up for the price increase in a single trade publisher title. Additionally, it is no longer feasible for any library to hold titles “just in case”; all libraries must be selective to constrain costs. Law reviews are easy targets for cancellation, not because of their cost but because of their ubiquity. Law reviews are available electronically in full text and/or page image in a variety of sources that will be among the last resources that hit the library’s budgetary chopping block, including Lexis, Westlaw, HeinOnline, LegalTrac, Index to Legal Periodicals Full-text, and JSTOR.

3 Law journals have also been available for free, via open access on the Internet, in varying degrees for approximately 20 years now. Open access is defined here using the 2002 Budapest Open Access Initiative definition:

free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself.

4 Journal editorial boards have been posting articles and issues on journal websites at least since the turn of the century, and more recently journals have been freely available in many law school and university institutional repositories. But how widely are journals available via open access, and how does open access integrate into other legal education and economic issues of the day? That is the focus of this article.

5 For now it suffices to say that since open access has come to law reviews, the time of open access legal scholarship has come. After all, law reviews “are the primary repositories of legal scholarship . . . influenc[ing] how attorneys argue cases,

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2. Id. at 305, ¶ 11.


how judges decide cases, what regulations administrative agencies adopt, and what laws legislatures enact.6

Law Review Open Access Study

§6 In 2016 and 2018, I performed studies wherein I looked at law reviews and journals for currency via open access, using print publication and HeinOnline (as the primary platform offering page-image law review content) as benchmarks for comparison. I found that more than three-quarters of all law reviews and journal articles were current in open access and half of all law review historical content is available via open access.7 If anything, this study undersells the percentage of current law review scholarship that is available in open access because the survey is limited to the more official open access channels of law journal publishing, the journal’s website, and the journal’s institutional repository. The survey undersells law review open access as it does not attempt to study other open access avenues such as author websites, faculty scholarship collections in the institutional repository of the author, or Social Science Research Network (hereinafter “SSRN”).

Methodology

§7 To create a finite list of journals, I limited my study of open access law journals to student-edited law school journals. So law journals from publishers such as the American Bar Association or Oxford University Press were not part of this study. Even so, the vast majority of long-form scholarly articles are published in student-edited law reviews,8 so the fact that a wide majority of these works are available in open access9 represents a success for the open access movement and increased access to legal scholarship worldwide.

§8 To generate the list of journals, I searched each law school’s website for its journals.10 To figure out the most recent published issue of a journal, I reviewed the journal website; the institutional repository, if any; HeinOnline; and the same law school library’s catalog.11 I omitted titles that had ceased publication or had not published an issue within a year, since those journals could no longer be considered “current.” Also omitted were online companions, since those are a different type of publication,12 and any title that was co-published with other schools in the

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7. See discussion infra pages 555–56.
8. See Sudha Setty, Student-Edited Law Reviews Should Continue to Flourish, 32 Touro L. Rev. 235, 239–40 (2016) (regarding the inability of peer-reviewed journals in law to replace law reviews in such numbers as to be able to handle the volume needed for tenure scholarship at U.S. law schools).
10. Some titles may have been missed as law schools were not always perfectly accurate with the list of journals on their websites; this was especially true with title changes, which I tracked so as to not duplicate journal titles in the study.
12. One scholar likens the increased tempo of law blogs and companions to be “more like journalism.” Jack M. Balkin, Online Legal Scholarship: The Medium and the Message, 116 Yale L.J. Pocket
university, an association, or faculty editors, since those titles are not purely law student-edited law school journals.

¶9 To discover a journal’s “most recent volume,” I looked at the most recent issue and then went backward to complete the volume, based on the title’s recent publication schedule. If an issue was published out of order, I made a complete volume using all issue numbers because many journals will have a special issue, book review issue, or symposium in the same issue number each year.

¶10 To count the number of scholarly articles in each issue and volume, I counted authored articles, essays, notes, book reviews, comments, symposia articles, and tributes, omitting items like editor introductions, letters, and forewords. For the purpose of determining an article’s availability through open access, if the journal website linked to the institutional repository or vice versa for the actual article document itself, it was counted as available only on the one site where the document was hosted.

Findings

Currency in All Journals

¶11 In 2016, 597 journals met the survey criteria. Of those 597 journals, 423 (71 percent) were current, meaning “as or more current than the print,” in free open access. In comparison, 422 titles (71 percent) in HeinOnline were as current. Only 5 journals were not current in either HeinOnline or open access. In 2018, 555 journals met the survey criteria. In the two-year time span, the number of journals “as or more current than the print” in open access had risen to 80 percent (446 titles). In comparison, the percentage current in HeinOnline remained about the same (70 percent, or 387 titles). Seven titles in 2018 were not as current as the print in either open access or HeinOnline.

Initial Online Access for All Journals

¶12 In 2016, of the 597 journals, 170 (28 percent) were more current in open access than HeinOnline, while 169 (28 percent) were more current in HeinOnline. In 2018, 161 titles (29 percent) were more current in open access than HeinOnline, while the percentage of journals more current in HeinOnline had dropped by approximately a third (to 18 percent, or 98 titles).

14. For example, if a volume of XYZ Law Review is complete in four issues and 44#2 was the most recently published, the most recent volume for my purposes consisted of issues 43#3, 43#4, 44#1, and 44#2.
15. For example, if a volume of ABC Law Review is complete in four issues and 21#1, 21#2, and 21#4 were published, 20#3 was considered to make a complete volume for my purposes.
Institutional Repositories and Journal Websites

§13 Of the 423 current open access journals in 2016, 206 (35 percent of the total of 597 journals) were current in their law school or university institutional repository, and 260 (44 percent of the total of 597 journals) were current on the journal’s website. Forty-three journals were current in both open access platforms. In 2018, the percentage of open access journals that were current in their law school or university institutional repository rose by approximately a quarter (to 43 percent, or 239 titles), while the rate of currency on the law journal’s website remained about the same (45 percent, or 252 titles). Forty-five journals were current in both open access platforms in 2018.

Top Journals

§14 When the list of journals is restricted to top journals, the adoption of open access publication is even more striking. In 2016, when the top 101 (because of a tie) student-edited journals in the survey were considered, 84 were current via open access (32 via institutional repository, 62 via journal website, 10 in both). Fifty-eight of the same journals were current in HeinOnline. When the top 25 student-edited journals in the survey were considered, 24 (96 percent) were current via open access (9 via institutional repository, 21 via journal website, 6 in both). Nine of these same journals were current in HeinOnline. In 2018, the numbers were higher. For the top 100 student-edited journals, 88 were current via open access (32 via institutional repository, 69 via journal website, 13 in both), while 62 were current in HeinOnline. All of the top 25 student-edited journals were current in open access this year (7 via institutional repository, 23 via journal website, 5 in both), while only 12 were current in HeinOnline.

Issues and Articles

§15 The adoption of open access is more pronounced when current-volume issues and articles are studied. For all 597 journals in the 2016 study, 77 percent of current-volume issues (1716 total) and 77 percent of current-volume articles (11,528 total) are open access. For the top 101 journals, the adoption of open access rises to 88 percent of the 475 current-volume issues and 86 percent of the 3541 current-volume articles. For the top 25 journals, the percentages rise again to 98 percent of the 158 current-volume issues and 97 percent of the 1089 current-volume articles. The percentages rise due to the high adoption rate of open access for top journals combined with the fact that the top journals tend to publish more issues and articles per volume than lower-ranked titles. In 2018, for the 555 current journals, 83 percent of current-volume issues (1583 total) and 84 percent of current-volume articles (10,315 total) are available via open access. For the top 100 journals, the numbers rise to 92 percent of the 472 current-volume issues and 91 percent of the 3394 current-volume articles. For the top 25 journals, 100 percent of the current volume issues (161 total) and articles (1121 total) are available via open access.

Total Volume Coverage

¶16 When the entire run of current student-edited law reviews and journals were surveyed in 2016, almost half (48 percent) of journal content for the 597 surveyed journals was available for free either on the journal website and/or the school’s institutional repository. This percentage drops for top journals (45 percent for top 100 journals and 43 percent for top 25 journals) as those titles tend to have more years of backfiles to digitize and post. By 2018, the percentage of all journal content available via open access for the 555 current journals in the survey rose to 55 percent, with over 10,900 volumes of open access student-edited law review content available. When including law review titles that were not currently published, the percentage dips to 54 percent, with over 11,500 volumes of open access content.

Growth of Open Access Law Reviews and Journals

¶17 How did we reach this level of open access for law reviews and journals? In this section, I discuss the forces in play that propelled us to where nearly three-quarters of student-edited law journals provide open access to their most current content.¹⁸

Law Library Economics

¶18 The collection budgets of law libraries have contributed to the push toward open access law review publishing. The cost of commercial publications continues to increase exorbitantly, resulting in what a pair of commentators termed a library “serials crisis.”¹⁹ Looking at the 2014 AALL Price Index for Legal Publications, the five-year increase in all serials was over 42 percent, with an average 2014 price of $1,587.97.²⁰ When periodicals are excluded from the serials definition, the increase is over 47 percent, with an average price of $2,511.73.²¹ The increase is even higher looking at specific categories of publications, like reporters (over 117 percent) and digests (over 61 percent).²²

¶19 The increased cost of legal materials also must be viewed alongside the reality of flat or declining law library budgets. Especially since the economic downturn in 2008 and the focus on the costs of legal education vis-à-vis debt load and job prospects,²³ law schools have had to reorganize their priorities and programs to respond to criticism and to attract students while having fewer tuition dollars to spend with the drop in law school enrollment.²⁴ Law schools are rerouting dollars...

¹⁸. Another commentator also performed a survey of student-edited journals and found that 83 percent of 591 journals have made at least one issue available online for free. Sarah Glassmeyer, How Open and Free Are Us Law Journals? (Aug. 23, 2016), archived at https://web.archive.org/web/20161105211053/http://sarahglassmeyer.com:80/?p=1602 [https://perma.cc/SVV6-D4QZ].


²¹. Id.

²². Id.

²³. See supra note 4.

to programs such as alumni relations, career services, entrepreneurship, and technology laboratories, so libraries have to meet collection needs without budget increases. Accordingly, libraries have been canceling serials and continuations so that “legal scholars can no longer assume that the law library can afford subscriptions beyond these basic databases to meet proliferating and increasingly narrow faculty research needs.”

The George Washington University library system has gone so far as to post an infographic inflation statement that highlights the high costs of journals and resources and the necessity to cancel; the statement is labeled “scholarly resources are not luxury goods [b]ut they are priced as though they were.” For law school library cancellations, law reviews are low-hanging fruit even though they sit outside the monopoly rent area described by Hunter. Law reviews are readily canceled because they are available in so many other venues, and even though they are individually inexpensive, they are expensive as a collection because they contain so many titles. The combination of budget restrictions and the increasing costs of continuations has forced libraries, even large academic research libraries, to move to a “just in time” collection model, where alternatives to the historical all-encompassing research collection must be considered. In this current state, open access legal scholarship, especially law review content, is an important and necessary alternative to relying only on a library’s print collection.

The Economics and Place of Law Reviews (aka Law Reviews Are Different from Journals in Other Disciplines)

As Jessica Litman notes in her seminal article on the subject of open access and law reviews, the actual costs of publishing a law review dwarf both the official budget and the review’s revenue. As Litman acknowledges, her discussion model sets law review budgets and costs artificially low as she omits items such as rent, electricity, law school clerical staff, and other administrative overhead like printing and computers. On the budget and costs side, I argue that the unseen costs of publishing law reviews are even higher when you factor in (a) direct costs such as interlibrary loan and journal website hosting (if hosted outside of the law school’s website environment), and (b) indirect opportunity costs of law school or university personnel who could be performing other work instead of interacting with the journal (e.g., by resolving conflicts among law review student editors or providing research consultation).
¶21 On the reverse side of law review finances, subscription revenues are even less likely to cover even the costs of printing today than in 2006 when Litman wrote her article. Law reviews are inexpensive compared to scholarly journals in general, and for most law reviews, subscription prices have increased little in the last decade. Law reviews have thus escaped the inflationary pressures of other legal publication types, as well as journals in other scholarly fields, because of their law school–subsidized publication system. The stagnant subscription monies combined with a lack of royalties do not offset the inflationary increase in production costs and postage or the decline in subscription rates as subscribers cancel print in reliance on electronic sources. Two commentators describe journal economics as “a massive and unsupportable investment in what benefits a few people in a narrow universe.”

¶22 The cost of law journal publishing and decreasing revenues from subscriptions has helped push many student-edited journals toward publishing in electronic format only and in open access. The cost of printing and mailing journal issues is the largest expense in a journal’s budget, so posting articles in open access cuts journal expenses generally by more than half. Accordingly, open access works well for law reviews because it saves money, attracts more readers, retains the valuable pedagogical exercise of staffing a law school journal for law students, and continues a forum for law professors to publish. This attraction of additional readers via open access helps a law review’s prestige and branding. Litman agrees there is “no financial or reputation benefit to universities restricting access” to law review articles. The economic case alone will force many journals to migrate to online-only, open access publications. One scholar estimates that nearly 10 percent of law reviews are already online only. Some journals that have recently decided to publish online open access only include Berkeley Journal of African-American Law & Policy, Hastings Business Law Journal, Oklahoma Law Review, and Santa Clara High Technology Law Journal.

¶23 Of course, a big factor in the rise of open access law school journals is that by their very nature they differ from journals published by the large trade publishers. True, the two share similarities: they provide forums for faculty to gain tenure and to exhibit new research and knowledge, and they provide a historical record for scholarship. The obvious difference is commercial journals are expected to turn

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34. From an average price of $39.43 in 2006 to $51.90 in 2014 per AALL Price Index for Legal Pubs., supra note 20. The increase is a large percentage (over 30 percent), but not a large increase in terms of actual dollars ($12.47).
36. See also Schaffzin, supra note 12, at 244–45.
37. See discussion infra pages 568–69.
38. Litman, supra note 31, at 790.
40. Available at http://scholarship.law.berkeley.edu/bjalp/ [https://perma.cc/8WC8-RG5C].
41. Available at https://repository.uchastings.edu/hastings_business_law_journal/ [https://perma.cc/G2GP-AVXR].
42. Available at http://digitalcommons.law.ou.edu/olr/ [https://perma.cc/37G3-BRF8].
43. Available at http://digitalcommons.law.scu.edu/chtlj/ [https://perma.cc/7LTC-JPDC].
a profit, while student-edited law reviews have no such expectation and generally run at a loss. Because of law school control of the journals, limited expectation of financial gain, the journal’s retention of the distribution license, author interest in being read, and the general mission of, especially, public-funded law schools, the thumb weighs heavily on the open access side of the scale because “once that scholarship is generated . . . its investors get the most bang for their buck if it is disseminated, read, and cited as widely as possible.”

¶24 This differs from for-profit journal publication where “much of the world’s scholarly knowledge is owned and controlled by commercial enterprises that operate the journals that academic researchers publish in.” These journals generally require copyright transfer and often prohibit sharing or posting of the final published version of the author’s work, as the publishing houses seek the highest return on their publishing investment. Indeed, ”law is the exception to the rule that scholarship is published primarily in expensive, peer-reviewed commercial or academic society journals controlled by a handful of powerful publishers.” Law, as a discipline, also differs from other subjects because the percentage of journals published by law schools and not the large publishing houses is so high and because the prestige and status of the student-edited journals is generally higher than for the for-profit journals. For instance, looking at the Washington and Lee Law Journal Rankings shows only one non-student-edited journal, Supreme Court Review, ranked in the top 50. As Michael W. Carroll writes, “the editorial and economic structure of American legal scholarship is sufficiently different from


45. In public-funded law schools, the investment and production of legal scholarship is a “core mission, as important . . . as educating lawyers,” Litman, supra note 31, at 790.

46. Id.


48. Id.


50. One scholar commenting on scholarly publishing writes:

Scholarly publishing is a quite remarkable market indeed, where the suppliers of the basic product, the authors and editors, provide their content and services for free to commercial publishers, who are then able to extract monopoly rents from the same group of individuals who provided the content in the first place. There are many troubling social costs of this peculiar system: the public pays multiple times for the scholarly product, researchers from the developing world are incapable of accessing and contributing to scholarly knowledge, and student tuition is unfairly inflated in a fruitless effort to keep research programs and libraries afloat.

Hunter, supra note 28, at 615 (citations omitted).

51. Arewa, supra note 33, at 805–08.

52. See supra note 17.

53. As one academic law library director puts it:

The situation of purchasers of journals in the STM disciplines bears little resemblance to that of law libraries today. The most prestigious law journals are published, not by commercial publishers or scholarly societies, but by student editors heavily subsidized by law schools.

other disciplines that no group stands to gain from resisting open access other than commercial legal publishers, who lack direct leverage to sabotage the movement for open access law.\textsuperscript{54} The issue with law reviews is not about the prestige (or perceived lack thereof) of open access since the most prestigious journals are all open access already. The issue concerns ending print publication and going online only where print is a deciding factor for some scholars choosing among publication offers.\textsuperscript{55} This preference is generational, however; the lack of a print edition is less of an issue with younger faculty.\textsuperscript{56}

\textsection{25} The licensing and copyright of law review articles is another area where student-edited law reviews are generally different from the journals in other disciplines, which has helped fuel the increase in open access law journals. A decade ago, a standard practice was that the “student-edited legal periodicals frequently require[d] assignment of copyright in legal scholarship,”\textsuperscript{57} despite confusion about authors’ ability to appropriately assign copyright through author agreements in relation to copyright law’s work-for-hire doctrine.\textsuperscript{58} As Litman points out, “uncertainty over whether scholarly articles are subject to the copyright work made for hire doctrine . . . remains unresolved chiefly because so little turns on the answer”\textsuperscript{59} (i.e., economically). While copyright uncertainty aids the move to open access for law review content, it has the inverse effect for commercial legal scholarship. As Alissa Centivany points out, commercial “publishers are able to charge expensive fees and limit access largely as a result of their standard practice of conditioning publication on the scholar’s transfer of copyright.”\textsuperscript{60} (She also notes that many universities with open access mandates provide waivers in the case of a conflict with a publisher’s copyright transfer agreement.) This proves Dan Hunter’s point that “although it is commonly thought that the copyright incentive is aimed primarily at the author . . . the reality is that incentive operates mostly in favor of the commercial intermediaries who publish and distribute the work.”\textsuperscript{61}

\textsection{26} As other scholars note, practices for law reviews have changed so that “[r]ather than asking for a complete transfer of copyright, many journals now request a temporary exclusive license or even a nonexclusive license.”\textsuperscript{62} Law journals now retain a license to distribute content not just through the journal’s website and the law school institutional repository, but also through for-fee platforms such as Lexis, Westlaw, and HeinOnline.\textsuperscript{63}

\footnotesize{\textsuperscript{54} Michael W. Carroll, \textit{The Movement for Open Access Law}, 10 Lewis & Clark L. Rev. 741, 751 (2006).}


\footnotesize{\textsuperscript{56} Id. at 14.}

\footnotesize{\textsuperscript{57} Carroll, supra note 54, at 754.}

\footnotesize{\textsuperscript{58} Litman, supra note 31, at 790.}

\footnotesize{\textsuperscript{59} Id. at 791.}


\footnotesize{\textsuperscript{61} Dan Hunter, \textit{Open Access to Infinite Content (Or “In Praise of Law Reviews”),} 10 Lewis \\ \& Clark L. Rev. 761, 768 (2006).}


\footnotesize{\textsuperscript{63} Id. at 386, ¶ 7.}
§27 Between the copyright transfer for older volumes and the license to distribute of more recent author agreements, law reviews are able to post their content online and take advantage of open access availability for their journals. In addition to the open access journals and for-fee platforms, author agreements also generally permit authors to post articles on personal websites and working paper series sites, such as SSRN. Even with the competing access to the same work, there is little desire to funnel access to a particular avenue because, returning to Litman, so little money is at stake versus the importance of widely disseminating the author's work. Centivany agrees that since all of the incentives push scholars to publish in the most prestigious journals possible, then if the publishers require copyright transfers there is little reason for scholars to push back to retain their intellectual property rights. Indeed, Hunter agrees that the law reviews themselves are not interested in the economic copyright argument against open access, as “law reviews are not primarily interested in a return on investment but rather on furthering the mission of the law school, either by way of a branding exercise, education for students, or contributing generally to the production of knowledge.”

Growth of Institutional Repositories

§28 The rapid growth of institutional repositories at law schools and universities has also aided the rise of open access law reviews. In 2011, there were approximately 30 institutional repositories at academic law libraries. By 2016, at least 80 of the top 100 law schools had a law school institutional repository or participated in a university-wide repository. At the time of that survey, these 80 institutional repositories published 215 open access journals, of which 137 (64 percent) were current.

§29 In the 2018 survey of 555 currently published journals, 239 (43 percent) were current in the law school’s open access institutional repository, while 252 (45 percent) were current on the journal’s website. In terms of issues and articles, 43 percent of current-volume issues and 45 percent of current-volume articles were available in the institutional repository. For journal websites, the rates were 52 percent of current-volume issues and 53 percent of current-volume articles. In terms of total coverage, 43 percent of all of published volumes for the 555 journals were available in open access in institutional repositories, and 17 percent of volumes were available in open access on the journal websites.

§30 The institutional repository inclusion of open access law journals is a net gain in open access coverage to the content available on journal websites. Individual journals have published content in open access on their websites since the mid-1990s, but the rise of institutional repositories is more recent and has contributed

64. Id. ¶ 8.
65. See discussion infra pages 565–68.
66. Centivany, supra note 60, at 377–78.
67. Hunter, supra note 61, at 775.
70. Id. at 22.
to the expansion of both current and historical law journal content in open access. This transition of law school institutional repositories into the realm of electronic publication of current law review content aligns the repositories with one of law schools’ core missions, namely faculty research and scholarship, and no longer limits the scope of law school repositories to archiving historical content. This transition moves institutional repositories from a preservation supplement for scholarship to a disseminator and a part of the scholarly conversation. Institutional repositories also act as a more stable publishing environment that provides unique identifiers and less link rot than law journal websites with their annual change in governance and oversight.

Interoperability, Search, and Change in Research

Interoperability and Search

¶31 The rise of open access law reviews has come at a time of change in research, including legal research. Because so much information is now available so easily, researchers look for ways to cut through the discovery process, often relying on chance and serendipity. It can be harder for researchers to find their way to librarian-vetted resources that use controlled vocabularies. Research often starts with Google or Google Scholar, even for primary sources, or other sites housing academic papers, such as Sci-Hub. It increasingly relies on the interoperability of a search system (e.g., Google) and a separate metadata/text system (e.g., an institutional repository). As discussed elsewhere, the online environment deemphasizes the distribution of issues and increases the importance of the individual article available online. Search services now search full text in addition to metadata, and relevance guides results lists instead of reverse chronological order, as was the rule in the past. This interoperability of search and open access content systems now also provides a real alternative to closed legal research systems for the research of legal scholarship.

¶32 Aside from Google, search engines and portals now exist that focus exclusively on open access legal scholarship. The American Bar Association takes full advantage of interoperability with its Free Full-Text Online Law Review/Journal


74. Hersey et al., supra note 72, at 4.

75. Sci-Hub is a search engine for academic papers in the sciences that can be accessed by bypassing publisher paywalls. Sci-Hub has been sued for copyright infringement by Elsevier and has been forced to change domains to continue to provide access to pirated papers. See further discussion of Sci-Hub, infra page 565.

76. Defined by Merriam-Webster as the “ability of a system . . . to work with or use the parts or equipment of another system.” Interoperability, Merriam-Webster.com, http://www.merriam-webster.com/dictionary/interoperability [https://perma.cc/M6MD-46YJ].


78. Id.

79. See, e.g., Arewa, supra note 33.
Search engine\textsuperscript{80} (using Google technology) of more than 300 open access law reviews and journals, searching metadata and full text of articles on journal websites and institutional repositories. Law Review Commons\textsuperscript{81} and Law Commons\textsuperscript{82} are examples of well-trafficked portals that connect researchers to legal scholarship on law school or consortial repository and working paper sites; this interoperability among repositories contributes to national and international legal scholarship\textsuperscript{83} as a centralized access point with a controlled vocabulary. Law Review Commons is a portal to over 300 open access law reviews and journals\textsuperscript{84} from more than 100 law schools\textsuperscript{85} that use the bepress Digital Commons platform to publish and provide access to online journals. Law Review Commons includes over 220,000 law review articles.\textsuperscript{86} In 2015, more than 18.3 million downloads of Law Review Commons articles were made.\textsuperscript{87} Law Commons is a larger portal of legal scholarship from Digital Commons repositories that includes the journal-published content in addition to working papers, books, law school publications, government material and other materials. Most law school repositories include faculty scholarship sections providing open access to their faculty’s scholarship.\textsuperscript{88} The largest portion of the materials within faculty scholarship collections are law review and journal articles that include journal-published content, but also individual articles from titles not available as a journal publication (i.e., in volumes and issues) via open access. Due to the addition of these faculty scholarship collections to the journal-published content, open access to law review content in Law Commons is more extensive than on Law Review Commons. As of this writing, the over 460,000 works posted in Law Commons were downloaded over 178 million times.\textsuperscript{89} The statistics show that vast collections of scholarship are accessible from these two sites and that these works are highly used\textsuperscript{90} (306 times per work in Law Commons and 349 times per article in Law Review Commons).\textsuperscript{91}

\textsuperscript{\S}33 According to a 2015 study on the use of free journal content, including both open access and pirated material, usage is now more widespread via free platforms than usage via licensed publisher or aggregator platforms, with over 60 percent of

\begin{itemize}
\item \textsuperscript{82} LAW COMMONS, http://network.bepress.com/law/ [https://perma.cc/58GS-S9FC].
\item \textsuperscript{83} Mary Westall, Institutional Repositories: Proposed Indicators of Success, 24 L I B R. H I T C H E C T 211, 216 (2006).
\item \textsuperscript{84} As of Aug. 27, 2019, supra note 81.
\item \textsuperscript{85} Id.
\item \textsuperscript{86} Id.
\item \textsuperscript{87} Email from Kathleen Cowan, bepress Vice President for Sales, on file with author; 18,370,163 article downloads in 2015.
\item \textsuperscript{88} Brown, supra note 69, at 22 (81 percent of repositories at the top 100 law schools include faculty scholarship collections).
\item \textsuperscript{89} As of Aug. 27, 2019, per the counters at the top of the page, see supra note 82.
\item \textsuperscript{90} See infra note 108 and surrounding text on use of downloads as a metric.
\item \textsuperscript{91} Based on 75,502,055 total downloads in Law Review Commons as of Oct. 20, 2016, per Cowan email, supra note 87.
\end{itemize}
journal content delivery coming from free versions of articles.\textsuperscript{92} While social media sites are a major source of free articles in lower-income countries,\textsuperscript{93} the high use of free resources to access journal content is persistent even in the academic sector of high-income countries, where a large proportion of journal content is licensed for use by the library system:

\[ \text{Approximately 60\% of the time, readers in high income countries in the academic sector are accessing articles from a free resource. This means that they are 1.5 times as likely to be reading an article from a free resource. In lower income countries this rises to over 2 times as likely.}^{94} \]

The way Google indexes publisher platforms also pushes researchers toward the free incarnation of an article. Google does not automatically index the full text of scholarly articles behind a paywall, so these articles are more difficult to find for a Google user (but not a Google Scholar researcher; Google Scholar does index the full text of these same articles).\textsuperscript{95}

\textbf{Open Access Is Easier}

\[ \text{¶34 What matters in research is that people find what they need, and open access fits into this framework by easing access to scholarship. As Peter Suber states, this "barrier-free access . . . helps readers find and retrieve the research they need, and helps authors reach readers who can apply, cite and build on their work."}^{96} \]

To many researchers, open access scholarship would be an answer to the difficulty of using licensed library resources, a need that currently is met in many disciplines via piracy. Examples of barriers that are confusing roadblocks for many researchers include the myriad publisher content platforms, the requirement of an individual account for many platforms, the need to download additional software (e.g., Adobe Digital Editions) to use content, increases in distance learning so that more researchers are not on campus, inconsistency of indexing by search engines, and the inconstancy of coverage data.\textsuperscript{97} All of these barriers are eliminated or mitigated for open access articles and journals. For many library users, the difficulty in navigating library discovery systems to locate papers pushes researchers to alternate methods:

The high cost of journal access and the cumbersome and complex interfaces that libraries provide to their subscription holdings, has fed an underground movement to pirate academic literature. While news headlines about online piracy tend to focus on illegal downloading of music tracks or streaming of videos, the academic community is facing its own pirating crisis.\textsuperscript{98}

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{92} Gardner & Inger, \emph{supra} note 73, at 39.
\item \textsuperscript{93} \textit{Id.}
\item \textsuperscript{94} \textit{Id.}
\item \textsuperscript{95} \textit{Id.} at 29; see also Aaron Tay, \textit{8 Surprising Things I Learnt About Google Scholar}, Musings About Librarianship (June 11, 2014), http://musingsaboutlibrarianship.blogspot.com/2014/06/8-surprising-things-i-learnt-about.html [https://perma.cc/7X3X-T9NA].
\item Leetaru, \emph{supra} note 47.
\end{enumerate}
\end{footnotesize}
A researcher who performed an empirical study of Sci-Hub use found that some of the users downloading the highest number of pirated academic papers were at European and U.S. universities, where the researchers generally would have access to the papers through library-mediated licensed databases. This was echoed by a second study whose author concluded that the convenience of users was a driving force in Sci-Hub use. A study of Yale University doctoral students found that many actively avoided using library subscription databases as a first step, try to bypass library-provided options if they believe the resources are too complicated to use, and often turn to peers at other institutions for copies of particular works. A 2015 study of law review citations found that 2007 was the year when open access became sufficiently common to be a reliable, easy source for access to legal scholarship.

Expanded Access to Relevant Content

Open access scholarship provides expanded access vis-à-vis mediated electronic access. As indicated earlier, 84 percent of current-volume articles and 55 percent of all historical law review content are available via open access. This growth in open access counteracts the serials crisis by permitting “more efficient distribution of scholarly communication” outside the traditional publishing avenues that are represented by the “walled gardens” of licensed, publisher databases and journal portals. This expanded access to law review scholarship can be demonstrated by both use, via citation studies, and consumption, via download metrics. I touch on both types of measures briefly here.

Recent studies have measured the use and impact of scholarly journal content with the rise of accessibility and open access and have found increased usage of older articles and articles from non-elite publications. The older article study found that in 2013, 36 percent of citations to journal articles were to articles

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100. Bianca Kramer, Sci-Hub: Access or Convenience? A Utrecht Case Study (Part 2), I&M / I&O 2.0 (June 20, 2016), https://im2punt0.wordpress.com/2016/06/20/sci-hub-access-or-convenience-a-uitrecht-case-study-part-2/ [https://perma.cc/N8XP-P7RX].
101. Hersey et al., supra note 72, at 5.
102. Id. at 14.
104. See supra pages 55–56.
105. See discussion supra pages 556–57.
108. Some scholars argue that downloads, and even hits, are better metrics for scholarly impact than citations counts because those numbers look at consumption. See, e.g., Paul L. Caron, The Long Tail of Legal Scholarship, 116 YALE L.J. POCKET PART 38, 41 (2006). Other scholars argue that neither citation counts nor downloads are good metrics because they lack an analysis of quality, see, e.g., Jack M. Balkin, Online Legal Scholarship: The Medium and the Message, 116 YALE L.J. POCKET PART 23 (2006), or “pervert” the notion of scholarly value. Harrison & Mashburn, supra note 35, at 59–61.
110. Acharya et al., supra note 77.
more than 10 years old, a rise of 28 percent since 1990.\textsuperscript{111} This growing impact of older articles was also seen in the percentage increases for citations even older.\textsuperscript{112} The study also found the rate of citation to the older articles was rising more steadily in articles published in the second half of the study period (2002–2013) than in the articles published in the 1990–2001 portion of the study.\textsuperscript{113} The non-elite study found that the percentage of citations in non-elite journals rose from 27 percent in 1995 to 47 percent in 2013.\textsuperscript{114} Both studies found that with the increased saturation of electronic content, the rise of open access, the increased access to archived content, and the use of relevance rankings in search results, it is no more difficult to find these older or “non-elite” articles.\textsuperscript{115} This additional access and more reliable search functionality allows researchers to find and use higher-relevance, higher-quality content than that found using only the ranking status of publications. These aids to research will only continue as more repositories and individual journals work through backfile projects. The percentage of journal content currently available in open access will continue to rise and will allow for more discovery of relevant quality older and non-elite published articles. This increased usage of previously underutilized scholarship is part and parcel of open access, expanding the reach of scholarship and leading to a greater exchange of ideas.\textsuperscript{116}

Cass R. Sunstein defends law review scholarship, and specialized academic writing in general, even though it often takes time before it is used by the bar. He believes it adds to the overall store of knowledge and potentially turns into “common sense.”\textsuperscript{117} ¶38 Other citation studies have also found a greater impact in terms of citations for articles available via open access. As far back as 2001, a researcher found that the free availability of a computer science article increased an article’s average usage by almost three times (286 percent) when controlled for by publication.\textsuperscript{118} Other studies have shown citation increases between 40 and 80 percent, depending on discipline, for papers available in open access.\textsuperscript{119} The open access citation advantage has been found to extend to legal scholarship as well. A study of three law journals published by the University of Georgia found a 58 percent increase in citations to articles available in open access compared to articles in the same journals without open access availability.\textsuperscript{120} A later, more robust study of 30 flagship law reviews found the open access advantage across journals to be 53 percent\textsuperscript{121} and above 60 percent for contemporary works released in both print and open access.

\begin{itemize}
  \item \textsuperscript{111} Verstak, supra note 109, at 1.
  \item \textsuperscript{112} Id. Over the same period, citations to articles older than 15 years had grown 30 percent and for articles older than 20 years, 36 percent.
  \item \textsuperscript{113} Id.
  \item \textsuperscript{114} Acharya et al., supra note 77, at 3.
  \item \textsuperscript{115} Acharya, supra note 77, at 11; Verstak, supra note 109, at 1–2, 9.
  \item \textsuperscript{116} See discussion infra pages 568–69.
  \item \textsuperscript{118} Steve Lawrence, Free Online Availability Substantially Increases a Paper’s Impact, 411 Nature 521 (2001).
  \item \textsuperscript{120} Donovan & Watson, supra note 25, at 569, ¶ 46.
  \item \textsuperscript{121} Donovan et al., supra note 103, at 10.
\end{itemize}
formats simultaneously.\(^\text{122}\) This study also found a higher open access advantage for journals published by lower-tier law schools than for top law schools,\(^\text{123}\) suggesting that open access is allowing for more discovery of relevant, non-elite published legal scholarship similar to the results of Acharya’s multidiscipline study.\(^\text{124}\) That study also found that open access articles are not only more heavily cited in the years immediately after publication, but also are more cited than articles not available freely on the Internet for the entire life of the work.\(^\text{125}\) This same study found the open access citation advantage translates to citations by courts as well.\(^\text{126}\)

\[\text{¶39}\] Studies have proved the correctness of Hunter’s hypothesis\(^\text{127}\) that there is no substitution effect among the various for-fee and free online versions of an article. Donovan and Watson found no zero-sum correlation in downloads between SSRN and the school institutional repository, the two primary and most findable-by-search open access locations for legal scholarship.\(^\text{128}\) Another scholar echoed Donovan and Watson’s findings “that redundant posting dramatically increases net downloads.”\(^\text{129}\) Indeed, redundant electronic versions are not a negative, but a necessity:

\[\text{T}o\ \text{be\ a\ “well-placed”\ law\ review\ article\ means\ being\ available\ in\ multiple\ places\ at\ once:\\in\ the\ bound\ volume,\ on\ the\ law\ review\ website,\ on\ SSRN,\ and\ on\ the\ author’s\ own\ website\ or\ law\ school\ faculty\ page.\ \text{The\ need\ for\ wide,\ multiple-platform\ distribution\ takes\ on\ even\ more\ urgency\ in\ an\ ever-more-internationalizing\ legal\ environment.}\]

With so much scholarly communication happening in blogs and on Twitter, open access copies are also important as part of a larger scholarly conversation. They allow readers to access sources for additional information or to read the works being discussed and to make up their own minds about the analysis.\(^\text{131}\)

\[\text{¶40}\] The increased availability of legal scholarship has also increased the importance of content over placement, where the ease of research in open access scholarship allows researchers to find relevant, quality content regardless of its original place of publication. Open access articles in mid- and lower-tier law reviews have over a 50 percent 15-year citation advantage over closed access articles in those same journals.\(^\text{132}\) There are fewer open access citations to top-tier journals, but the open access advantage disproportionately benefits lower-level journals because of the increased discoverability of that content compared to the print world, where

\[^\text{122}\] Id. at 16.  
\[^\text{123}\] Id. at 11, 16.  
\[^\text{124}\] See Acharya et al., supra note 77.  
\[^\text{125}\] Donovan et al., supra note 103, at 8.  
\[^\text{126}\] Id. at 18.  
\[^\text{127}\] Hunter, supra note 28, at 632.  
\[^\text{131}\] For example, an article in the University of Michigan Law Scholarship Repository, Nicholas Bagley, Medicine as a Public Calling, 114 MICH. L. REV. 57 (2015), was cited in a blog post and was downloaded 1800 times in a month’s span. The University of Michigan Law Scholarship Repository showed that in October 2016 this article was downloaded 1806 times, over half of which were from the blog Marginal Revolution, https://marginalrevolution.com/ [https://perma.cc/PT2V-AJRD](https://perma.cc/PT2V-AJRD)(statistical report on file with author).  
\[^\text{132}\] Donovan et al., supra note 103, at 11.
elite journals had a large discoverability advantage because of their higher number of subscribers. That said, while diminishing, top-tier journals still maintain a citation advantage even with the increase to citation of lower-tier journal content. While article placement still matters for citations by other legal scholars, courts cite more evenly to articles from across the different law journal tiers. Some scholars argue that with the increased access to legal scholarship, article selection by law reviews is less important than in the past because quality articles will be discovered and relied upon regardless of their original journal of publication. At the journal level, open access increases the impact of the journal title by allowing more access and citation to its articles, thus raising the reputation of its affiliated school. Additionally, an open access law school journal increases the reputation and impact of the affiliated school’s faculty, as law school journals publish a higher proportion of articles by their own faculty than other schools’ journals.

**Greater Exchange of Ideas**

Open access legal scholarship allows for a greater exchange of ideas, both domestically and globally. Even in the United States, once you leave the realm of the large research university, access to major research databases is inconsistent even at many educational institutions and is even lower for international researchers and for U.S. practitioners. Open access legal scholarship widens the conversation to include additional voices outside of law professors, including nonlaw bloggers and journalists and foreign researchers. Greater availability of legal scholarship will extend law reviews’ development and their examination of new legal doctrine and schools of thought, as has happened in the past with law and economics, feminist legal theory, critical race theory, and expansions of tort

133. *Id.* at 16.
134. *Id.* at 11.
135. Harrison & Mashburn, *supra* note 35, at 76–77. Additionally, the rank of the law school from which the author graduated also correlated with higher citation counts. *Id.*
140. Over 60 percent of attorneys in the United States are solo practitioners or work in firms of five lawyers or fewer, where there is low willingness to spend overhead dollars on research databases. *Lawyer Demographics*, AM. BAR ASS’N (2013), https://www.americanbar.org/content/dam/aba/migrated/marketresearch/PublicDocuments/lawyer_demographics_2013.authcheckdam.pdf [https://perma.cc/6LKP-R8DE]; see also Carroll, *supra* note 54, at 756.
doctrine. After all, law reviews are “the primary repositories of legal scholarship . . . influencing how attorneys argue cases, how judges decide cases, what regulations administrative agencies adopt, and what laws legislatures enact.”

144 Thus, opening the work of the academy to the wider world releases valuable information and allows the public to access scholarship that, if acted upon, could affect their rights and governments. In an example of the extension of the reach of scholarship via open access, a study found that users from low- and low-middle-income countries, as defined by the World Bank, had more engagement with social justice materials on studied institutional repositories than did users in higher-income countries.

145 ¶42 Open access also increases the likelihood that thinkers will join together to build on and improve their ideas. In the 1850s, Charles Darwin relied on the penny post to communicate with a network of naturalists and breeders to gather evidence to support his theory of natural selection, as he was unable to build his case on his own. Today, open access scholarship increases researchers’ abilities to both create and expand the reach and impact of scholarship. In the case of legal scholarship, there is a strong justification for a greater exchange of ideas because of the law’s direct impact on individuals and larger society.

146 ¶43 Open access publication of scholarship can increase the exchange of ideas through reduced transaction costs, but online publication also offers the ability to expand scholarly discussion, especially when a journal is no longer tied to a print complement. The online environment allows for alternate article formats, volume organizations, easy access to cited and discussed material through hyperlinks, and supplementary data or files to support a scholar’s thesis or provide information on their method.

149 With electronic-only journals, longer or more articles, or an article and response format, would have no additional printing costs and would increase the speed of scholarship by eliminating the time needed for the printing process; many print law reviews already have online companions or additional electronic-only issues toward these ends.


144. Wise, supra note 6, at 3.

145. See, e.g., Algero, supra note 143, at 381; Canick, supra note 129, at 186; Carroll, supra note 54, at 756.


149. As of Nov. 29, 2016, there were 136 law reviews that were electronic only. Electronic-Only Law Journals from U.S. Law Schools, GALLAGHER L. LIBR. (Nov. 29, 2016), https://lib.law.washington.edu/cilp/ejournals.html [https://perma.cc/7HR4-K8NQ].

Moving Forward

¶44 It is clear that open access law review content will continue to grow as more titles become open access, more law schools upload archival journal content, and those titles that are currently open access publish into the future. Additionally, as law schools aim to contain journal budgets, the number of electronic-only law reviews and journals will continue to rise,\textsuperscript{151} making open access the only unlocked scholarship distribution method for those titles. That said, there may be a shakeup in how some open access law review content is offered. The acquisition of bepress by Elsevier\textsuperscript{152} has shocked some in the academic community and made others uneasy. With the news of the Elsevier acquisition, the University of Pennsylvania Libraries announced that it was commencing “Operation beprexit”\textsuperscript{153}—a project to migrate Penn’s institutional repository from the bepress Digital Commons platform because of Elsevier’s long “history of aggressive confidentiality agreements, steep price increases, and opaque data mining practices,”\textsuperscript{154} and its current “move toward the consolidation and monopolization of products and services impacting all areas of the research lifecycle.”\textsuperscript{155} The bepress purchase by Elsevier looms large in law open access because such a large proportion of law institutional repositories, housing the vast majority of open access backfile content,\textsuperscript{156} use the bepress Digital Commons platform.\textsuperscript{157} A possible future alternative to bepress Digital Commons could be LawArXiv,\textsuperscript{158} an open access legal scholarship repository overseen by the scholarly legal community on a nonproprietary platform. While LawArXiv does not currently have a journal title format, the ability to host journals on the platform is a developmental goal.\textsuperscript{159} With enough adoption from law schools, LawArXiv could be a viable search microcosm, similar to Law Commons.

¶45 A growing push to support open access scholarship is evident. The University of California, for example, is prioritizing open access to UC authors’ scholarship to constrain costs and increase the dissemination of research outcomes;\textsuperscript{160} and Science Europe is calling for research funded by public grants to be published on

\textsuperscript{151} See Gallagher L. Libr., supra note 149.
\textsuperscript{152} See Schonfeld, supra note 81.
\textsuperscript{154} Id.
\textsuperscript{155} Id.
\textsuperscript{156} Approximately 8500 volumes are hosted in institutional repositories compared to approximately 3400 on journal websites.
\textsuperscript{157} In early 2016, 74 percent of the top 100 law schools with institutional repositories used Digital Commons. See Brown, supra note 69, at 22. A possible benefit of the bepress purchase by Elsevier would be the integration of Digital Commons and SSRN. See bepress, bepress and SSRN Announce Integration Pilot with Columbia and University of Georgia Law Schools (Mar. 12, 2018), https://www.bepress.com/news/bepress-ssrn-announce-integration-pilot-columbia-university-georgia-law-schools/ [https://perma.cc/R9Q7-TJ95].
\textsuperscript{158} LawArXiv, http://lawarxiv.info/ [https://perma.cc/GU2Z-WUL5].
open access platforms by 2020.\textsuperscript{161} There is also growth in search tools such as unpaywall,\textsuperscript{162} Kopernio,\textsuperscript{163} and Open Access Button\textsuperscript{164} that can make open access scholarship more locatable and accessible. This push for open access, in combination with the lower costs for electronic-only publishing and the wider use of scholarship published in open access, will continue to advance the growth of open access law reviews going forward until nearly all law reviews will be openly available.

\textsuperscript{161} Science Europe, Our Priorities: Open Access, https://www.scienceeurope.org/our-priorities/open-access [https://perma.cc/PX3F-CJ22].
\textsuperscript{162} unpaywall, https://unpaywall.org/ [https://perma.cc/V7DK-M66Y].