

International Law Scholarship: An Empirical Study

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[This Article is a working draft. Both the text and the page numbers are subject to further revision.]

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INTRODUCTION

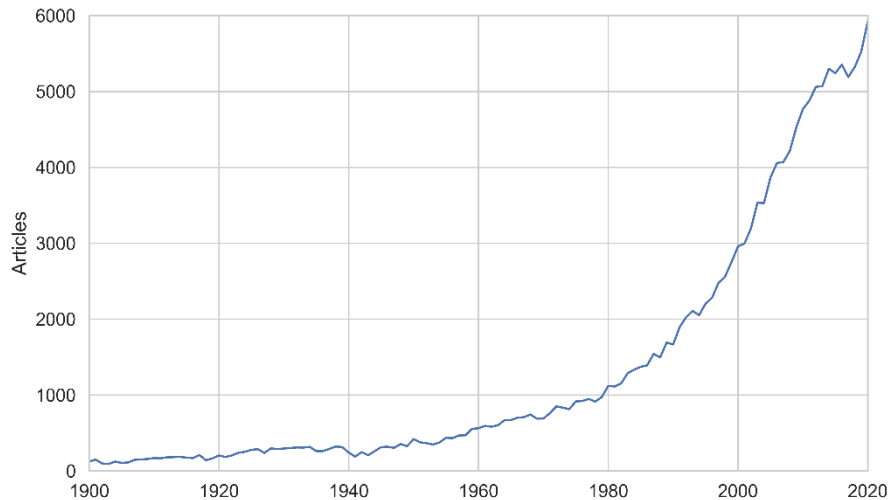
Where is international law scholarship published? In what kinds of journals is it published? What differences are there between foreign and domestic publications? What topics does international law scholarship cover? Which of this scholarship is most heavily cited? Which authors produce the scholarship that has the greatest impact? How has all of this changed over time?

These are simple questions to which, perhaps surprisingly, we have not had clear answers—until now. This Article seeks to provide a new understanding of international legal scholarship and how it has changed over more than a century. It does so by analyzing a dataset built from bulk metadata obtained from HeinOnline (Hein). That dataset includes 173,802 articles identified by Hein as addressing international law. This is, we believe, the largest existing database of international law scholarship.

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This is an opportune moment to step back and examine the state of international law scholarship. That scholarship has, after all, expanded significantly over time. Since 1900, international law scholarship has grown at an extraordinary rate. As Figure 1 shows, the rate of publication has gone from just over 100 articles per year in 1900 to nearly 6,000 in 2020.

FIGURE 1: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME



During this period, the diversity of publications, topics, and authors has grown dramatically. This has introduced daunting complexity into the field, leading some scholars to wonder where and how best to publish their work. Understanding the information that we glean from an analysis of this database can offer insights into which publications, for example, offer scholarly work the greatest likelihood of gaining traction. Indeed, a key finding of our analysis is that much of international law scholarship is cited very little. Of the 173,802 articles considered in our analysis, only 20,609 received more than 5 citations. The same is true of the journals themselves: of the 3,835 journals in our dataset, only 1,086 journals received 25 or more citations to all their international law articles *combined*.¹

We arrive at a number of additional striking findings: Even though peer-reviewed journals publish more articles, articles published in student-run journals (nearly all of which are based in the United States) are far more heavily cited. Globally, among the twenty-five most influential journals that publish international law scholarship, only one is published outside the United States, and twenty are student-run. Of these twenty, fifteen do not primarily focus on international law. When it comes to citations, it is a winner-take-all world: The top 10% of journals garner 87.9% of all citations. The bottom 50% of journals garner only 0.2% of all citations combined. Perhaps less surprising, the vast

1. For the methodology used to calculate citations, see *infra* note 10.

majority of heavily cited international law authors are male (91 of the top 100), and are based in the United States (91 of the top 100).

This Article aims to provide a bird's-eye view of international law scholarship over more than a century. It thus leaves much unaddressed. Other scholarship offers deeper insight into particular publications. The article in this symposium by Kathleen Claussen and Bianca Anderson, for example, provides much more detailed insights into four of the top international law publications, including the topics those journals have addressed and how that has changed over a fifteen-year period.² Niccolò Ridi and Thomas Schultz's article, meanwhile, offers more insight into not just what articles are cited but also how ideas travel through scholarship by exploring the connections between scholars.³ We see this Article, then, as providing a view of the landscape, but leaving much still to be explored in greater detail. Many of the findings in this Article raise more questions than they answer, suggesting that the project of understanding international law scholarship has just begun.

I. METHODOLOGY

The analyses in this Article draw on a new database we built from bulk metadata obtained from Hein of international law articles in Hein's collection. (For this purpose, we entered into a contract with Hein and paid a fee for the data.⁴) The sample consists of all articles assigned "International Law" as a Hein PathFinder subject.⁵ The relevant metadata for each article include Hein's topic tags (a list of all PathFinder subjects associated with an article), the article's year of publication, the name of the journal in which the article was published, the citation count for each article (as reported by Hein), the language in which the article was written, the article's country of publication, the author of the article, and the title of the article. The dataset we received from Hein included identifying information for 181,476 articles. After eliminating several case digests and other non-scholarship materials in Hein's database, our final dataset totaled 173,802 articles. The earliest article in the dataset was published in 1788; the latest was published in 2023.⁶

2. Kathleen Claussen & Bianca Anderson, *International Law in Print: Topical Trends among Journals, 2005-2020* (2023) (unpublished manuscript) (on file with authors)

3. Niccolò Ridi & Thomas Schultz, *Tracking the Footprints of International Law Ideas: A Scientometric Analysis* (2023) (unpublished manuscript) (on file with authors).

4. Our contract with Hein does not permit us to post the raw dataset, though the data is available for purchase by other scholars. The aggregated data used to generate many of the tables and statistics in this Article is posted on Dataverse. Oona Hathaway & John Bowers, *Replication Data for: International Law Scholarship: An Empirical Study*, Harvard Dataverse, <https://doi.org/10.7910/DVN/X07LR2> [<https://perma.cc/RH2N-L23P>].

5. PathFinder is Hein's tool for organizing over 1,500 topics according to a four-level hierarchy from general to specific. At the top of the hierarchy are five broad subjects: humanities, social sciences, natural and formal sciences, applied sciences, and other industries. Each of these subjects contains about 40 more specific subjects underneath that broad subject, and each of those in turn has several more specific topics, each of which also has a further set of even more specific topics. See *PathFinder*, HEINONLINE, <https://home.heinonline.org/tools/pathfinder> [<https://perma.cc/77F9-JLWG>]. International law is found at the following path: Humanities—Law—International Law.

6. While the full dataset includes 173,802 articles, most of the analysis in this Article focuses

This database is, as far as we are aware, the largest database of international law scholarship currently in existence. Nonetheless, it is neither complete nor perfect. If a publication is not in the Hein database, it is not represented in our data. Hence, we must offer this significant caveat: what this Article describes is what is contained in the Hein database. That database is the best for these purposes because it is the most complete database of its kind: Its coverage for every journal in its collection dates to that journal's inception,⁷ and it contains more full-text law review volumes than the next best database by far.⁸ Nonetheless, it is important to note that we cannot rule out that some of the features we describe are features of Hein's collection and metadata, rather than of the entirety of international law scholarship. Furthermore, Hein's database includes some content that might not always be called "articles," like book reviews, notes, and case comments published in law journals.⁹ Even acknowledging these caveats, the scale of the database gives us confidence that the key findings are true.

The data include over 4,000 separate publications. We categorized the 1,086 publications with 25 citations or more¹⁰ into five categories: student-run international law journal; peer-reviewed international law journal; student-run non-international law journal; peer-reviewed non-international law journal; and

on the approximately 100,000 of these articles published in the 1,086 journals for which we coded journal type (that is, all journals with 25 citations or more). We indicate which dataset we are using throughout. For more on the coding of journal type, see *infra* notes 10-11.

7. *From 25 to 2500: How the Growth of the Law Journal Library Represents the Evolution of HeinOnline*, HEINONLINE BLOG (Feb. 8, 2018), <https://home.heinonline.org/blog/2018/02/from-25-to-2500-how-the-growth-of-the-law-journal-library-represents-the-overall-growth-of-heinonline> [<https://perma.cc/YG7W-5GFQ>].

8. At the time of the last public comparison, it had close to twice as many journals in its database as its closest competitor, Westlaw. *Id.* All the relevant commercial databases, including Hein, prevent data scraping in their terms of service and many employ technical countermeasures to limit scraping. We explored whether SSRN could be used for these purposes, but its terms of service prohibit "automated queries of any sort." Hein is not only the most comprehensive database, but it also is generous in providing access to its metadata for a modest fee.

9. Based on our qualitative analysis of the dataset, materials of this sort make up only a modest proportion of the dataset. Because they are generally not easily distinguishable from traditional "articles," there is no viable way of filtering them out of our dataset. Moreover, many journals publish lengthy book reviews, case comments, and other materials that largely resemble traditional articles, some of which garner large citation counts.

10. Importantly, the citation counts used here are calculated by Hein, which tracks citations between articles included in the Hein database (of which our dataset of over 173,000 articles is a subset). It does so using variations on the *Bluebook* citation method (which encompasses related styles, such as that in the *Maroonbook*). Email from Adam J. Tramp, HeinOnline, to Oona Hathaway (Nov. 2, 2023) (on file with authors). For example, for the article published starting on page 2599 of volume 106 of the *Yale Law Journal*, Hein uses the following automated query to generate the citation count: "(('106 Yale L. J. 2599' OR '106 Yale L.J. 2599' OR '106 Yale LJ 2599' OR '106:8 Yale LJ 2599' OR '106 Yale Law J. 2599' OR '106 Yale Law Journal 2599' OR '106 Y.L.J. 2599') AND NOT id:hein.journals/ylr106.86) in Law Journal Library." Citations to articles in our dataset made in articles that are *not* in the Hein database are *not* included in the citation count. At the same time, citations by articles in the broader Hein database *are* part of the citation count even if the article containing the citation is not in our dataset. Because they are not comprehensive, Hein's citation counts represent a lower bound on an article's actual citation count. For example, since most of the materials in Hein's database are English-language materials, citations in materials published in other languages are less likely to be counted. Citations in formats very different from that in the *Bluebook* could also go uncounted.

other (generally political science journals).¹¹ Hein also provided the country of origin of the publication, which we used to identify U.S.-based and foreign publications.

As noted above, the dataset also includes the Hein PathFinder subject matter tags for each article. The articles in our dataset were assigned hundreds of unique tags. We used approximately 100 of the most common tags to assign articles to 13 “umbrella” categories: Private International Law, International Trade & Investment, International Courts & Dispute Resolution, Human Rights, Criminal Law, War and National Security, Theory of Law, Environmental Law & Law of the Sea, Comparative & Foreign Law, International Organizations, Family & Education, Treaties, and Law & Technology.¹² About 93% of articles in our coded dataset were assigned to at least one umbrella category.¹³

We have taken measures to resolve objective errors and discrepancies in the data where possible, but the scope of the dataset makes comprehensive data cleaning impossible. Most of the data is error-free, and the objective errors we found were typically minor misspellings. We do not believe that they have significantly impacted our figures or findings. We also reviewed a number of articles to ensure that Hein’s subject-matter tags were reasonably assigned. While subject-matter tagging is often an inherently subjective process, we almost always agreed with the tags that Hein assigned to articles. Even so, readers should consider the limitations described in this Section and its footnotes in interpreting our results.

II. WHERE INTERNATIONAL LAW SCHOLARSHIP IS PUBLISHED

A. Student-Run vs. Peer-Reviewed Journals¹⁴

Figure 2 shows all articles published, by type of journal. Perhaps the most striking fact about this figure is not the differences across the journals but the

11. One of the authors, Oona Hathaway, did this coding based on personal knowledge of the publications and research into publicly available information. A journal is categorized as “student-run” if there is a student board of editors, even if that student board consults with experts in the field in the process of selecting articles. A journal is categorized as “international law” if it primarily focuses on topics of international law. Specialty journals whose specialty significantly involves international law are categorized as “international law.” For example, journals focusing on environmental law or immigration law are categorized as “international law.” We also cut some publications that we judged fell outside the project (e.g., *International Legal Materials*, which has large numbers of sources and citations but primarily publishes primary sources rather than legal scholarship). See *International Legal Materials*, CAMBRIDGE UNIV. PRESS, <https://www.cambridge.org/core/journals/international-legal-materials> [<https://perma.cc/EN42-AGU5>] (“*International Legal Materials (ILM)* is a publication of the American Society of International Law that reproduces primary international legal documents reflecting the broad scope and evolution of international law.”).

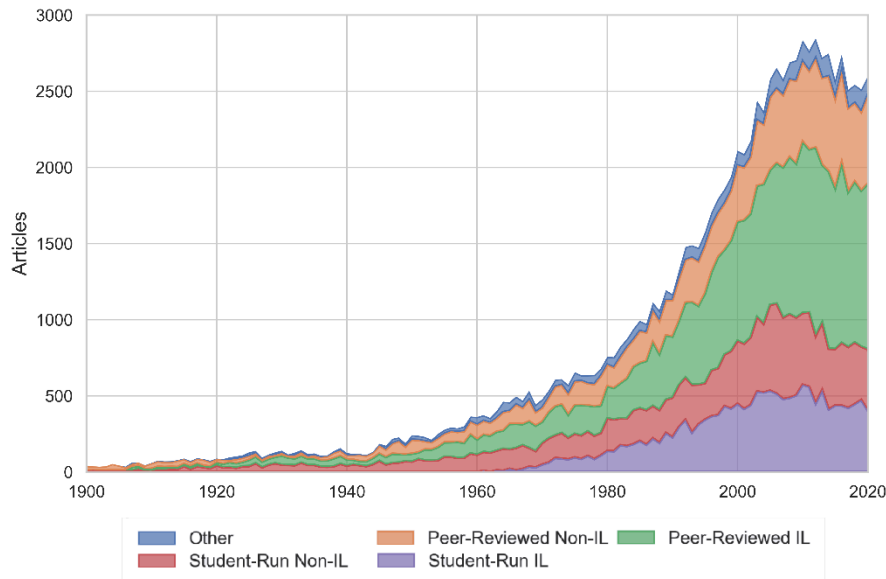
12. See Part IV for more on how these subject areas were identified.

13. By “coded dataset,” we mean the subset of the dataset published in journals coded for type of journal (those that received at least 25 total citations to all articles for the entire period in the dataset). Unless otherwise mentioned, all figures and statistics in this Article are based on this subset of the data.

14. The analysis in this Section, which makes comparisons across different types of journals, uses our coded dataset of over 100,000 articles. That dataset covers the 1,086 journals with 25 or more citations in our dataset. It therefore excludes thousands of journals with fewer than 25 total citations. The analysis in Section II.B uses our full dataset of more than 171,000 articles, which includes articles from both coded and uncoded publications.

overall growth in international law scholarship that it reveals: The number of articles tagged by Hein as “international law” has grown significantly over time. As Figure 2 shows, the growth has been particularly significant since 1980, though it has grown consistently since the end of World War II.¹⁵

FIGURE 2: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL



Figures 2 and 3 demonstrate the types of journals in which international law scholarship is found. The dominant mode of publication—and the one that has experienced the most significant growth—is peer-reviewed international law-focused journals. All other types of journals have increased their publication of international law, but none as much as peer-reviewed international law journals. Notably, student-run international law-focused journals have become significant sites for international law scholarship. The first student-run international law journal, the *Harvard International Law Journal* (initially called the *Bulletin of the Harvard International Law Club*) was founded in 1959.¹⁶ That is reflected in Figure 3, as student-run journals do not appear in the data before this date. They have grown in importance over time and in 2020 published 31% of the international law articles published that year globally.

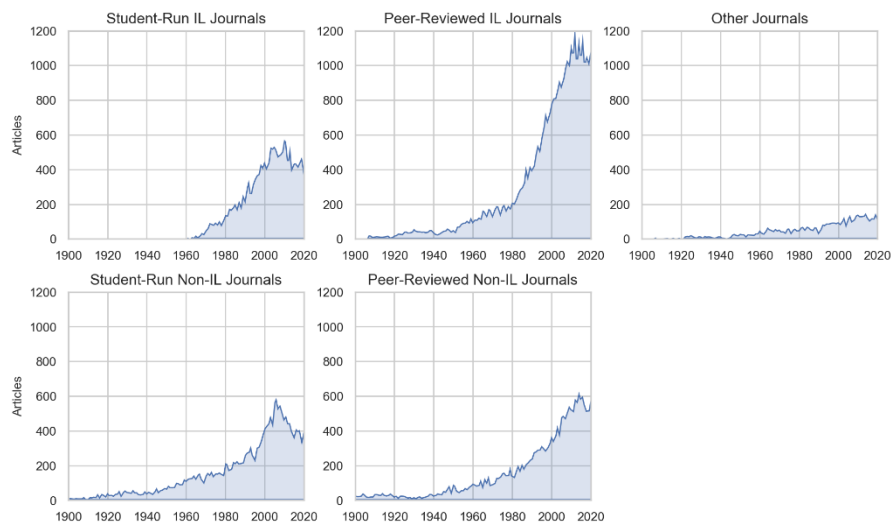
Student-run non-international law journals have increased their publication of international law scholarship but now lag behind international law-specific

15. The recent slowdown may be the product of a lag in the appearance of articles in the Hein database. However, Hein reports that its turnaround time is typically three weeks from when Hein receives the issue from the journal, which would suggest that the decline is not merely the result of such a lag. Hein reports that COVID-19 may have had an impact during the period at the end of this figure. Email from Adam J. Tramp, HeinOnline, to Oona Hathaway (Nov. 2, 2023) (on file with authors).

16. Harlan Grant Cohen, *A Short History of the Early History of American Student-Edited International Law Journals* (April 2023) (unpublished draft) (on file with author).

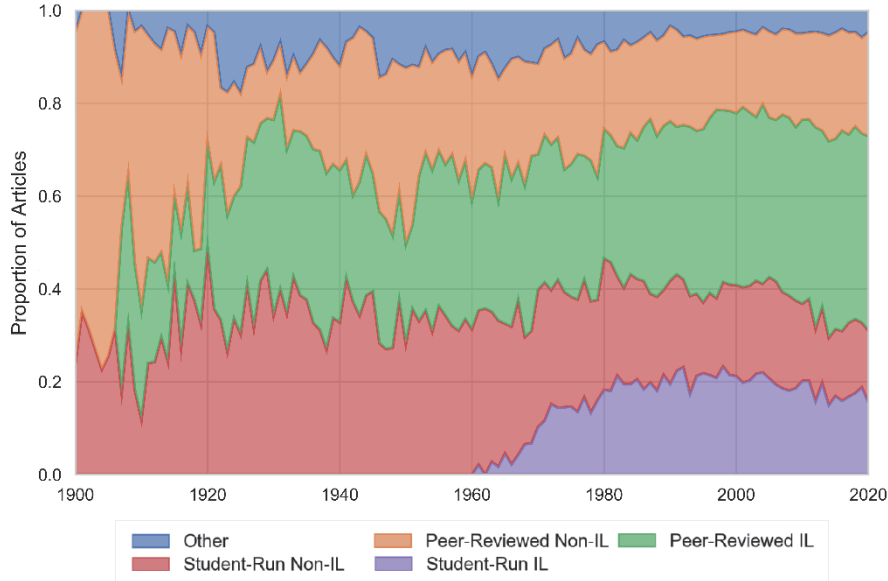
journals as a site for international law scholarship. Student-run non-international law journals peaked in their publication of international law scholarship in 2003, when they published 21% of all international law articles globally, and the proportion of such scholarship has been in decline in the years since. While it is difficult to know the reason for this, it is possible that the rise of national security-focused articles after the 9/11 attacks and wars in Afghanistan and Iraq might have displaced some international law-focused work in the student-run non-international law journals. This is, however, only speculation.

FIGURE 3: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL



If we consult Figure 4, which shows the total articles published by type of journal as a proportion of the total, the relative changes in makeup over time are clearer. Here, we can see that peer-reviewed international law journals have always been an important part of international law publishing, but they have become more important over time. Meanwhile, student-run non-international law journals have fallen as a proportion of international law publishing. Nearly all the decline has been made up for by student run international law journals.

FIGURE 4: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL, AS A PROPORTION OF THE TOTAL



The picture looks somewhat different if we focus on U.S.-based publications alone, as seen in Figures 5 to 7.¹⁷ In the United States, peer-reviewed publications of all kinds are much less a part of the international law publishing landscape. Rather, student-run journals dominate. Student-run international law journals, in particular, currently publish more international law scholarship than does any other type of publication. This reflects a continental divide in the form of international law scholarship. In Europe, where most non-U.S. publications in our dataset are based, there are few student-run scholarly publications. Rather, peer-reviewed publications dominate. In the United States, on the other hand, legal scholarship is predominantly published in student-run journals; international law scholarship is apparently no exception to this general rule. Between 2000 and 2020, about 66% of all international law articles published in the United States were published in student-run journals. Between 1940 and 1960, the period preceding the emergence of student-run international law journals, student-run journals published less than half (44%) of all international law articles published in U.S. journals.

17. The location is based on the location of the publication. Email from Adam J. Tramp, HeinOnline, to Oona A. Hathaway (July 5, 2023) (on file with authors).

FIGURE 5: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL (U.S. ONLY)

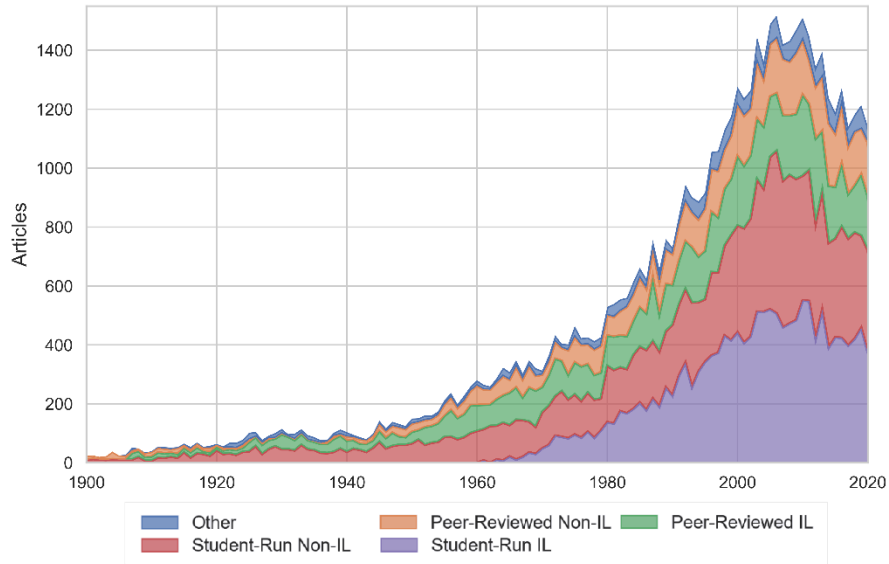


FIGURE 6: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL (U.S. ONLY)

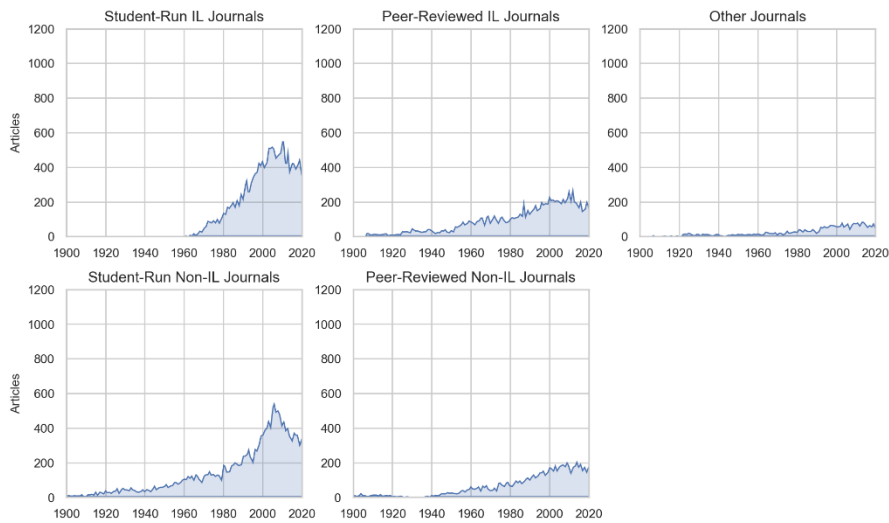
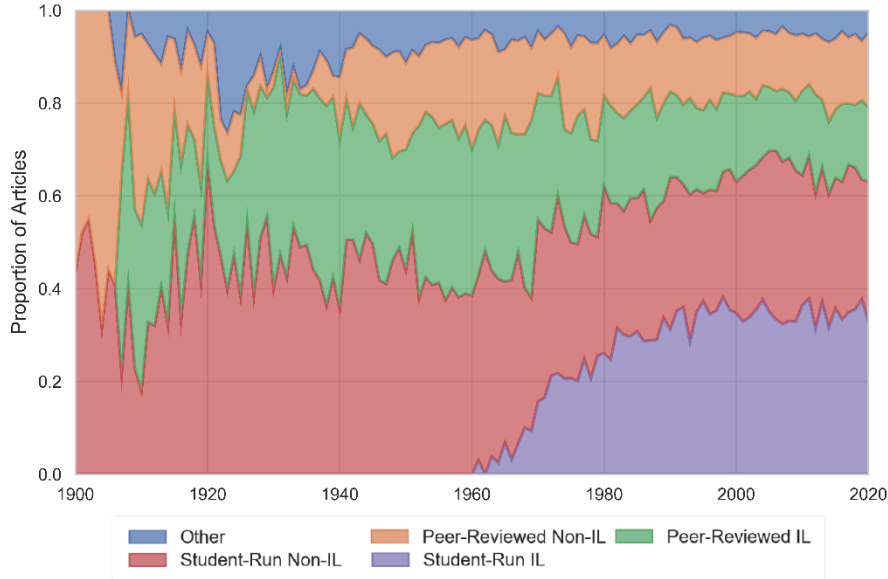


FIGURE 7: INTERNATIONAL LAW ARTICLES PUBLISHED OVER TIME, BY TYPE OF JOURNAL, AS A PROPORTION OF THE TOTAL (U.S. ONLY)

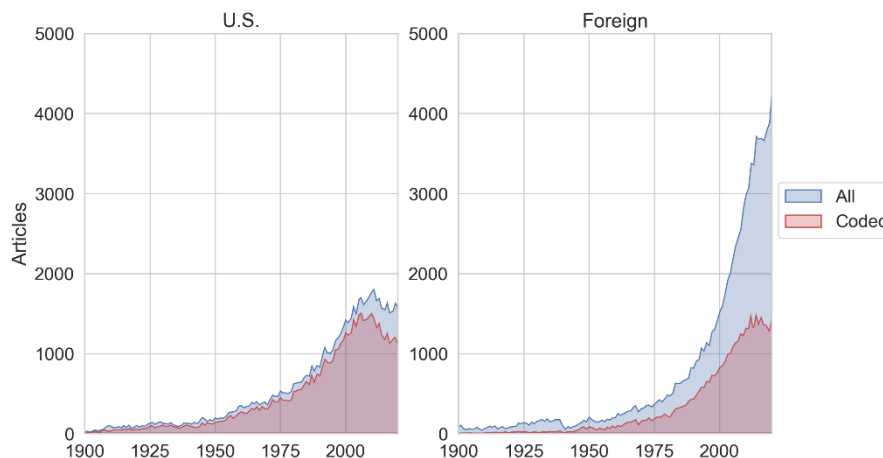


B. U.S. vs. Foreign Journals

Hein indicates the location of publication for virtually all of the journals included in the dataset. We relied on that variable to analyze variations in article volume and citation rate between U.S. and foreign journals. Note that, as always, our dataset is constrained to materials included in the Hein database, which is primarily targeted towards English-speaking users. While it appears that most major English-language non-U.S. international law publications are covered by our dataset, foreign publications may nonetheless be undercounted to some extent. Subject to these limitations, our analysis found that the volume of international law articles published in foreign journals has increased over time to match and even exceed that of U.S. journals, with particularly rapid growth after 1980.¹⁸

18. A small minority of the articles in our sample (fewer than 20,000) are not in English. These articles are virtually all published in journals that make up the “long tail” of our dataset. While we retain these articles in our analysis so as not to underrepresent non-English language scholarship in Hein’s database, we note that they are likely disproportionately affected by the methodological caveats described above. *See supra* Part I. Articles published in languages other than English are more likely to receive citations from sources that are not in the Hein database, or that use non-Bluebook citation formats. Moreover, it is possible that Hein generates other types of metadata for non-English sources differently than it generates them for English language sources (e.g., PathFinder tagging).

FIGURE 8: U.S.- AND FOREIGN-PUBLISHED INTERNATIONAL LAW ARTICLES OVER TIME¹⁹



As we will see, although the number of foreign-published international law articles far outweighs the number of U.S.-published international law articles, a significant portion of these articles are published in journals that receive few or no citations. The red-shaded area indicates the articles in the coded subset of the dataset. This tells us that a very large portion of the more than 80,000 international law articles published in journals whose articles are rarely cited are published outside the United States. We return to this topic in Section III.B below.²⁰

III. CITATIONS OF INTERNATIONAL LAW SCHOLARSHIP

This Part examines citations of international law scholarship in three ways. First, we examine the most-cited journals using the coded dataset of over 100,000 articles. That dataset covers the 1,086 journals with 25 or more citations in our dataset. Second, using the full dataset (unless otherwise specified), we consider how citations to scholarship differs, depending on whether it appears in publications based in the United States versus outside the United States. Third, again using the full dataset, we examine the distribution of citations across publications, finding that a very small number of publications dominate when it comes to citations.

19. This figure includes all the articles tagged as “International Law” by “HeinOnline,” rather than the coded subset.

20. There are many possible reasons for this. One possibility is that Hein does not include the journals that cite these articles. The other is that these articles in fact receive very modest attention from other scholars. Further research into this long tail of rarely cited journals and articles would be well worthwhile.

A. Most-Cited Journals

In Table 1, we list the top 25 publications in our dataset, ranked by h-index.²¹ The h-index is calculated by counting the number of articles for which a publication has been cited at least that same number of times. An h-index of 10 indicates that at least 10 separate international law articles published by that journal have been cited at least 10 times. An h-index of 20 indicates that at least 20 separate international law articles published by that journal have been cited at least 20 times. While the ordering produced by this measure largely mirrors the total number of citations, it is overall a better indicator than total citation count. Indeed, it is for many the preferred measure of author-level productivity and citation impact of an author's publications.²²

This list of top 25 publications includes 15 general student run law journals—60% of the total. Those journals, moreover, generally have higher numbers of citations per article than many of the other types of journals in the study.²³ Among the top 25, there are also four peer-reviewed journals—the *American Journal of International Law*,²⁴ *European Journal of International Law*, *International and Comparative Law Quarterly*, and *American Journal of Comparative Law*. Five student-run international law journals are in the top 25, and one “Other” (*International Organization*, a political science publication).

TABLE 1: TOP 25 INTERNATIONAL LAW PUBLICATIONS, BY H-INDEX

Publication	H-index	# of articles	Total cites	Cites per article	Articles since 2000 (cites)	Type of journal
American Journal of International Law	77	3351	33142	9.9	847 (8274)	Peer-reviewed IL
Harvard Law Review	63	446	20067	45.0	151 (3725)	Student-run non-IL
Yale Law Journal	62	423	15586	36.8	87 (4278)	Student-run non-IL

21. We provide a list of the top 100 publications by h-index on Dataverse. See Hathaway & Bowers, Replication Data for: International Law Scholarship: An Empirical Study, *supra* note 4.

22. We also provide the number of citations per article in Table 1, along with other figures. We elected not to rank by citations per article because that metric is particularly sensitive to outliers (in particular, landmark articles that receive thousands of citations). It also demotes those publications that may publish a large volume of shorter book reviews and other materials, as is the case for the *American Journal of International Law*. A high h-index unambiguously reflects the fact that a publication has published a large number of impactful international law articles.

23. Note that the citations represent all citations to “international law” tagged articles within the entire HeinOnline database. In other words, if an article is tagged “international law,” the number of citations to that article—and thus the number that is used in calculating the cites per article—is all the citations, whether in international law articles or articles on other topics.

24. The citations per article for the *American Journal of International Law* may be depressed by the fact that the journal publishes not only serious scholarly articles but also book reviews, summaries of international decisions and contemporary practice, and other shorter items. These appear as entries in HeinOnline, but they likely garner few citations, thus depressing the citations/article count.

Columbia Law Review	56	359	11315	31.5	77 (3542)	Student-run non-IL
European Journal of International Law	45	1124	9655	8.6	903 (6843)	Peer-reviewed IL
Virginia Journal of International Law	44	557	9314	16.7	190 (3407)	Student-run IL
Stanford Law Review	43	149	8210	55.1	57 (2596)	Student-run non-IL
Harvard International Law Journal	42	352	6636	18.9	149 (3397)	Student-run IL
Michigan Law Review	37	266	6261	23.5	65 (2170)	Student-run non-IL
Michigan Journal of International Law	37	328	5365	16.4	216 (3701)	Student-run IL
Yale Journal of International Law	37	242	4843	20.0	146 (2325)	Student-run IL
Texas Law Review	36	170	5230	30.8	74 (2179)	Student-run non-IL
Columbia Journal of Transnational Law	36	444	5202	11.7	196 (2183)	Student-run IL
International and Comparative Law Quarterly	35	1128	8094	7.2	509 (2668)	Peer-reviewed IL
California Law Review	35	197	5517	28.0	80 (3168)	Student-run non-IL
University of Pennsylvania Law Review	35	158	4979	31.5	58 (1968)	Student-run non-IL
Virginia Law Review	35	226	4822	21.3	45 (1565)	Student-run non-IL
American Journal of Comparative Law	35	463	4792	10.3	144 (1764)	Peer-reviewed IL
Georgetown Law Journal	35	246	4740	19.3	88 (2119)	Student-run non-IL
International Organization	32	565	6183	10.9	164 (1126)	Other
Minnesota Law Review	32	197	2988	15.2	68 (1480)	Student-run non-IL
University of Chicago Law Review	31	132	3894	29.5	58 (1399)	Student-run non-IL

Duke Law Journal	31	162	3881	24.0	64 (2084)	Student-run non-IL
Northwestern University Law Review	30	106	2765	26.1	49 (1312)	Student-run non-IL
Cornell Law Review	29	101	3094	30.6	57 (1448)	Student-run non-IL

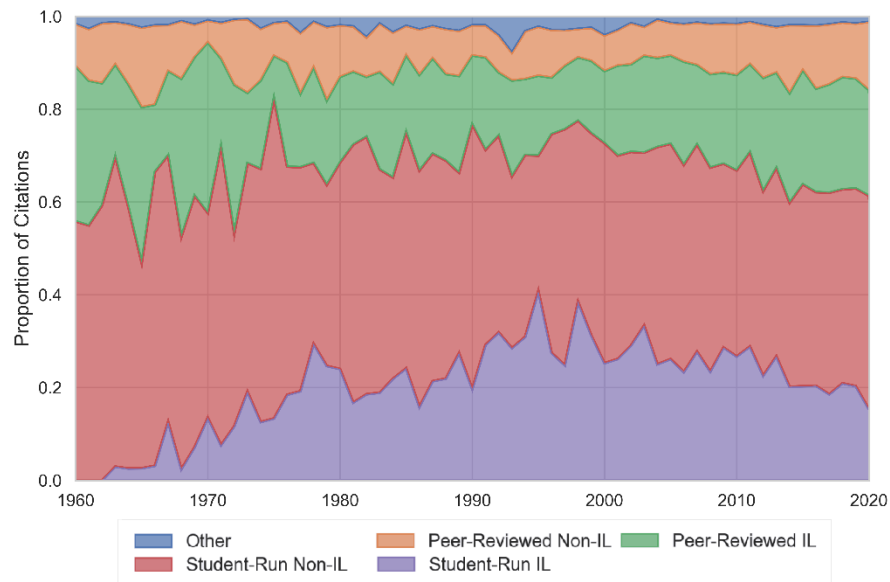
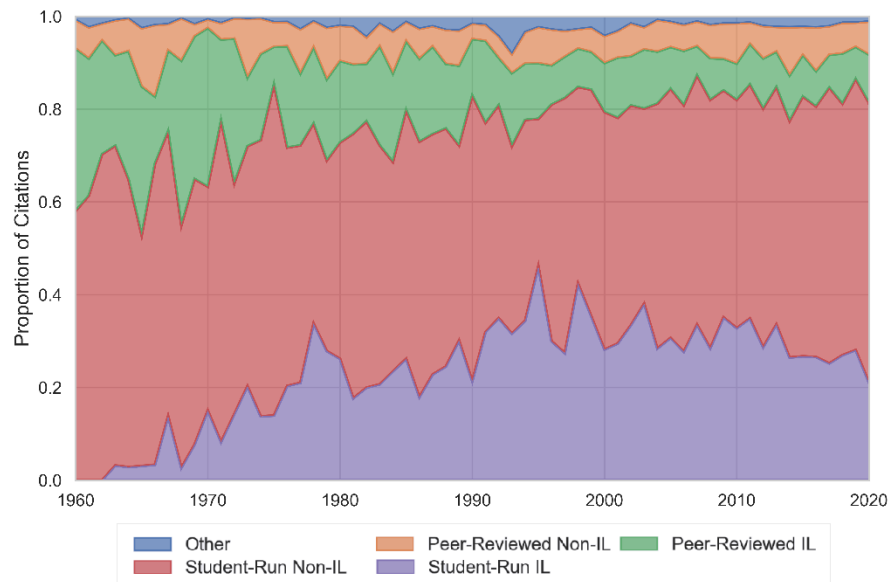
These dynamics can be seen in the broader database as well. Articles from student-run publications in the dataset received an average of 9.34 citations, whereas articles from peer-reviewed publications received an average of 2.52 citations. The number was slightly higher for U.S.-based peer-reviewed publications: an average of 4.36 citations per article. H-index numbers followed a similar pattern. The median student-run journal had an h-index of 10, while the median peer-reviewed journal had an h-index of 4 (or 5 for U.S. based peer-reviewed journals).

At the top end of the most influential journals, the student-run non-international law journals have the highest number of citations per article. That dynamic appears to apply to the broader dataset. Although student-run non-international journals make up 18% of all international law articles published in coded journals between 2000 and 2020, they make up 43% of all citations. Student-run international law journals have slightly more published articles but fewer citations, at 19% and 27% between 2000 and 2020, respectively.²⁵ Peer-reviewed publications, meanwhile, underperform in citations relative to their proportion of articles in the database, with peer-reviewed non-international law publications making up 20% of articles between 2000 and 2020, but 9% of citations and peer-reviewed international law publications making up 39% of articles but only 18% of citations in 2020.

Student-run journals are even more dominant when we look at the United States alone. Student-run non-international law journals account for 31% of articles and 50% of citations between 2000 and 2020, while student-run international law journals account for 35% of articles and 32% of citations. Peer-reviewed non-international law journals account for 13% of articles and 6% of citations, while peer-reviewed international law journals account for 16% of articles and 10% of citations. Put another way, 66% of all U.S.-published articles garnering 82% of all citations to U.S. articles are published in student-run journals.

Figures 9 and 10 show the proportion of citations by type of journal for all locations and the United States only, respectively. In both cases, peer-reviewed journals account for a smaller percentage of citations than the percentage of articles they publish.

25. These figures do not include “other” publications and therefore do not sum to 100%.

FIGURE 9: PROPORTION OF CITATIONS BY TYPE OF JOURNAL (ALL LOCATIONS)²⁶FIGURE 10: PROPORTION OF CITATIONS BY TYPE OF JOURNAL (U.S. ONLY)²⁷

26. A few notes on these data: First, as always, citation counts may include citations to these articles by articles outside of our dataset—we are just using the per-article citation counts from HeinOnline. Second, as with the figures above, the data used in this figure does not include articles published by journals that we did not code as belonging to one of the journal “types.” We present data beginning in 1960, rather than 1900, because data in earlier decades is noisier. This is also the period in which all four types of publications were in existence.

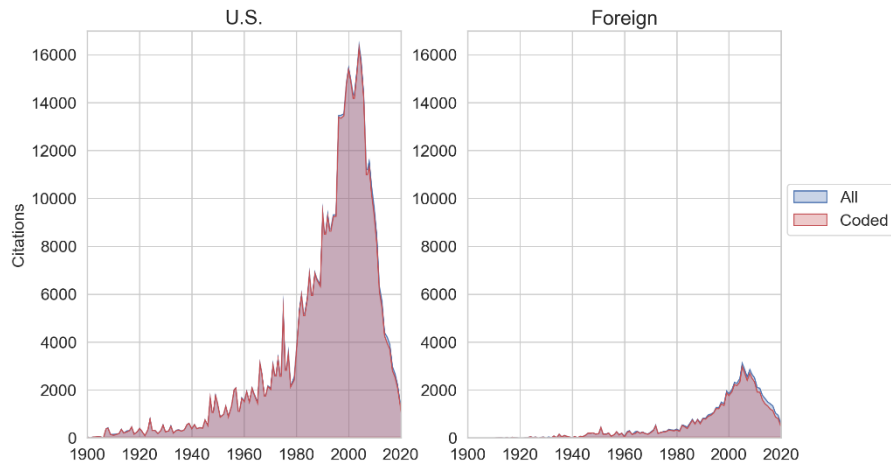
27. *See id.*

From this dataset, it is impossible to know with any certainty why student-run journals outperform peer-reviewed journals in citations. It is possible that student-run publications include more citations (they are, on the whole, longer and more heavily cited) and that articles published in student-run publications are more likely to cite other articles in student-run publications. But that is arguably just another way of stating the puzzle. Indeed, *ex ante*, one might have reasonably hypothesized the opposite—that peer-reviewed publications, which are selected not by students with little expertise in the field but by experts, would garner more citations than those published in student-run publications. And yet the evidence not only does not support this reasonable hypothesis but suggests quite the opposite.

B. U.S. vs. Foreign Journals

While foreign publications have produced an increasing volume of scholarship, U.S. journals remain dominant in our sample with respect to citation volume. While citations to foreign journals have increased in recent years, articles in U.S. journals generally garner far more citations. Unlike in Figure 8 above, the overlap between the coded and uncoded database is virtually complete, leaving almost no visible gap between the two. This is indicative of the fact that the tens of thousands of articles published in uncoded journals (which, again, are journals that overall receive fewer than 25 total citations) represent a very small slice of the overall citations.

FIGURE 11: CITATIONS TO U.S.- AND FOREIGN-PUBLISHED ARTICLES OVER TIME



It is important to note here, again, that there are several possible reasons for this gap. Foreign journals may cite less extensively than U.S. journals, and may use citation formats that Hein's citation technology cannot accurately parse. Indeed, Hein's reliance on the *Bluebook* citation method almost certainly means

that citations in foreign publications are significantly undercounted (though citations *to* foreign publications should be captured as long as they conform to the *Bluebook* method). These factors almost certainly result in substantial undercounting of citations between articles in foreign journals.

As much as anything, the data in Figure 11 are indicative of the insularity of U.S. domestic law scholarship. Given Hein's methodology, the figure may be most accurately read to reflect the scale of citations in U.S.-based legal publications. Put simply, U.S.-based international legal scholarship far more frequently cites other U.S.-based international legal scholarship. With a few key exceptions—the *European Journal of International Law* among them—U.S. scholarship very often turns a blind eye to work published abroad.

C. Winner-Take-All Citations

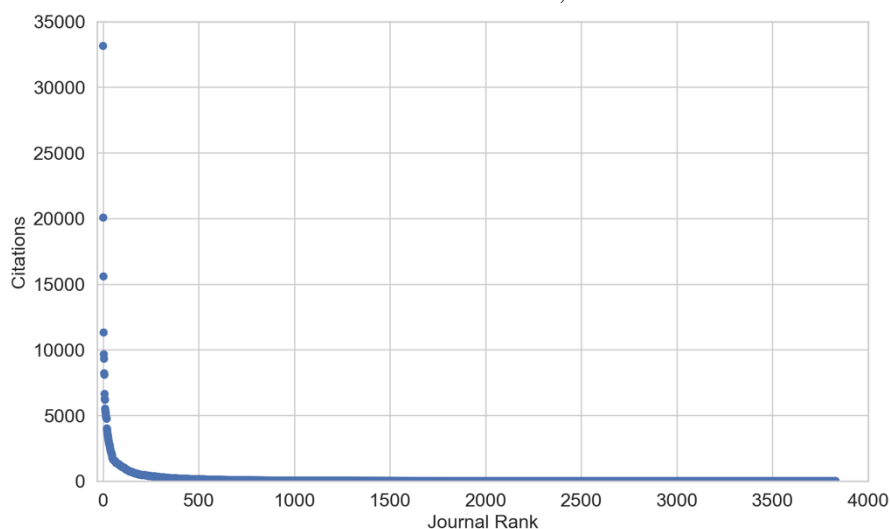
One of the more striking findings is the extent to which a very small number of publications dominate when it comes to citations. Figure 12 orders the 3,835 journals in our dataset by the number of citations.²⁸ The journals on the far left of the graph can be found in Table 1 above. For instance, the number one ranked journal—the *American Journal of International Law*—has 33,142 total citations. The second rank journal—the *Harvard Law Review*—has 20,067 citations. On the right end of the graph, there are 323 journals with just one citation, and the lowest 1,277 ranked journals have zero citations.

This figure demonstrates the rapid drop-off in citations counts as we move down the list of journals ranked by number of citations, with an extraordinarily long tail of journals with few or no citations. Many, though certainly not all, of the journals in that long tail are journals published outside the United States: 52% of journals with fewer than 25 citations are published outside the United States, as compared with 24% of journals with 25 or more citations. Again, this may be due in part to Hein's citation-counting methodology, which relies on the *Bluebook* citation form.²⁹ Nonetheless, the data likely do provide a reliable picture of the articles cited in U.S. legal scholarship. In the process, it demonstrates the winner-take-all model of international law publishing. A small number of journals garner the vast majority of citations.

28. This section draws on the full dataset, not the more limited coded dataset.

29. See *supra* note 10.

FIGURE 12: NUMBER OF CITATIONS TO JOURNALS, BY JOURNAL RANK



To further illustrate the distance between the most cited journals and the rest, the median h-index is 1. That means that the median journal has published at most one article that has received one citation (it may have published more articles, but then none earned more than one citation; they may also have published one article that earned more than one citation but any other articles published by that journal received no more than one citation). Only 40% of journals have an h-index of 2 or greater. Only 7% of journals have an h-index of 10 or greater. The median number of citations per article for journals in the dataset is 0.3—meaning that the median journal can expect less than one citation per every three articles published.

Table 2 shows the cumulative citations for the top 1%, top 10%, top 25%, and top 50% of journals. Again, this demonstrates that the journals at the top garner the vast majority of citations. The top 10% of journals garner 87.9% of all citations. That means the bottom 90% garner only 12.1% of all citations. The bottom 50% of journals garner only 0.2% of all citations combined.

TABLE 2: INTERNATIONAL LAW JOURNALS BY CITATIONS

Cumulative Journals	Cumulative Citations
Top 1%	45.3%
Top 10%	87.9%
Top 25%	97.4%
Top 50%	99.8%

In short, international law publishing is a story of winner-take-all citations, with articles published in the top journals winning the vast majority of attention from other scholars. A significant amount of international law scholarship is

apparently almost entirely ignored. And not only are individual articles ignored, but entire journals apparently receive little to no attention from other publications in the Hein database.

IV. SUBJECTS OF INTERNATIONAL LAW SCHOLARSHIP

Under “international law,” Hein lists twenty sub-topics. These topics do not include some obvious areas, such as “human rights.” Those appear in the dataset, but under other topics. We therefore did not rely on these tags but instead constructed our own set of twelve umbrella topics.³⁰ In mapping between Hein’s subject matter tags and our umbrella categories, we took care to exclude potentially overinclusive tags wherever possible. For example, we omitted the “Judges” and “Remedies” tags from the “International Courts and Dispute Resolution” category because those tags could be assigned to articles dealing exclusively with domestic courts. If an article had one or more of the subject matter tags associated with an umbrella topic, we assigned it to that umbrella topic. Therefore, a given article can have more than one umbrella topic.

Table 3 shows these twelve areas and the total number of articles that fall within them across the Hein dataset. Strikingly, a large proportion of international law scholarship focuses on private international law and international economic law topics. When we compared the frequency of topics between the more-cited coded sample and the less-cited full sample, the order of topics was exactly the same.

30. Part IV uses our full dataset of more than 171,000 articles unless otherwise specified. The full list of tags used to construct these umbrella categories is available in Dataverse. See Hathaway & Bowers, Replication Data for: International Law Scholarship: An Empirical Study, *supra* note 4.

TABLE 3: UMBRELLA TOPICS, BY NUMBER OF ARTICLES

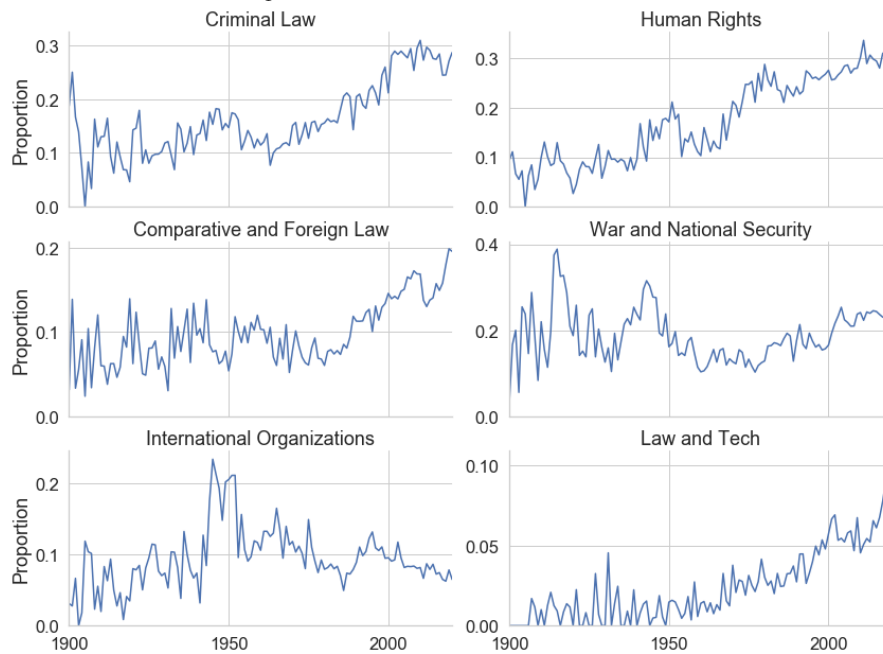
Topic	Total articles (all years)	Percent of all articles
Private International Law	59112	34%
International Courts & Dispute Resolution	54284	31%
Human Rights	47605	27%
Criminal Law	39511	23%
War and National Security	30285	17%
Theory of Law	29008	17%
Environmental Law & Law of the Sea	21385	12%
International Organizations	19557	11%
International Trade & Investment	18286	11%
Comparative & Foreign Law	16372	9%
Intellectual Property & Technology	9186	5%
Treaties	8694	5%
Customary Law	1175	1%
No Umbrella Topic	11452	7%

Figure 13 displays the variation in frequency over time for six topics; most other topics showed little to no variation during the period between 1900 and 2020.³¹ Perhaps most notable is the Human Rights topic, which covered about 10% of all international law articles published in the 1910s, about 20% of articles published in the 1950s, and just over 30% of articles published in the 2010s. Articles on War and National Security saw massive spikes during and after each of the World Wars, but saw only a lesser spike in the early 2000s.³² This was contrary to some expectations that the topic would see increasing attention in the post-9/11 period (it did experience a bump, but a small one). Perhaps it is no surprise that Law and Technology saw gradual increases over time, with a spike from around 5% in 2010 to around 10% in 2020. And International Criminal Law saw significant attention in the period immediately before and after World War II, then saw a decline for over a decade, and then experienced a continual increase since then, with a jump around the time of the creation of the International Criminal Tribunal for the Former Yugoslavia (1993) and the International Criminal Tribunal for Rwanda (1994), which revived attention to international criminal law mechanisms.

31. Note that the y-axis is not the same for all of the subject areas. We made this choice to make it easier to see variation within categories over time.

32. The spike in the early 2000s is slightly larger when looking at the U.S. publications alone, but still not nearly as large as the spikes that accompanied the World Wars.

FIGURE 13: TOPIC FREQUENCY OVER TIME



V. INTERNATIONAL LAW AUTHORS

A relatively small number of authors account for many of the most-cited law review articles in our dataset.³³ Table 4 presents the top 25 authors by total citations, but it comes with a few caveats. First, author names were among the most error-afflicted variables in our dataset, owing in large part to subtle differences in how journals render author names. Although we have attempted to aggregate “aliases” for each author to the greatest possible extent, the figures below likely nonetheless undercount actual citations.³⁴ Second, since our dataset is made up of all articles Hein tagged as pertaining to “international law,” some authors’ citation counts may be inflated by a small number of articles that are not primarily about international law. To limit this effect, we have required that each listed author have at least five articles in the dataset (that is, five articles that Hein classifies as relating to international law).

33. Part V uses our full dataset of more than 171,000 articles.

34. This is particularly the case due to the limitations on Hein’s citation-counting method. See *supra* note 10.

TABLE 4: TOP 25 INTERNATIONAL LAW AUTHORS

Author	Total Citations	Articles	Cites Per Article	Year of Birth
Cass R. Sunstein	3499	26	135	1954
Curtis A. Bradley	3477	48	72	1964
Harold Hongju Koh	3427	53	65	1954
Duncan Kennedy	2987	6	498	1942
Jack L. Goldsmith,	2802	33	85	1962
Anne-Marie Slaughter [Burley]	2341	32	73	1958
Louis Henkin	1906	22	87	1917
Eric A. Posner	1834	36	51	1965
Jordan J. Paust	1774	82	22	1943
John C. Yoo	1576	33	48	1967
Myres S. McDougal	1575	35	45	1906
Oona A. Hathaway	1569	25	63	1972
M. Cherif Bassiouni	1396	55	25	1937
W. Michael Reisman	1317	57	23	1939
Thomas M. Franck	1258	47	27	1931
Carlos Manuel Vazquez	1167	23	51	1958
Vicki C. Jackson	1146	15	76	1959
Richard A. Falk	1138	57	20	1930
Michael N. Schmitt	1135	49	23	1956
Edwin M. Borchard	1084	20	54	1884
Louis B. Sohn	993	27	37	1914
Symeon C. Symeonides	983	45	22	1949
Andrew T. Guzman	974	15	65	1967
George P. Fletcher	947	15	63	1939
Derek Jinks	892	11	81	-

Examination of the top 100 authors in our dataset yielded several strong demographic trends.³⁵ Based on our data, 22 of the top 25 authors, and 91 of the top 100, are men. Of the top 25, all pursued their careers in the United States, and of the top 100, 91 pursued their careers in the United States, with the other nine based in Europe, Australia, or Israel. While this distribution surely reflects the composition of the Hein sample, it also points to the comparative dominance of American authors in international law scholarship—at least with respect to citation counts.

35. The full list of 100 is available on Dataverse. See Hathaway & Bowers, Replication Data for: International Law Scholarship: An Empirical Study, *supra* note 4.

Perhaps surprisingly, modern scholars dominate the ranking, even though all articles in the dataset—the earliest of which dates to 1788—were used in the analysis. This can likely be explained by the massive growth in citations over time.³⁶ At the time some of these scholars were most active, citation rates were lower, generating fewer citations for their work than in modern scholarship. It is also indicative that scholarship by scholars no longer active in the field does not seem to have significant ongoing influence, with important exceptions—Louis Henkin, Myers McDougal, and Thomas Franck chief among them.

CONCLUSION

This Article offers new insight into international law scholarship, but it raises as many questions as it answers. We hope and expect that this Article will be the beginning, not the end, of a conversation. Why is it that, as a general matter, peer-reviewed journals fare so poorly when it comes to citations? Why do such a large percentage of articles receive so little attention from other scholars? Given this tendency, why does such scholarship continue to proliferate? One might imagine that journals that publish articles that are virtually ignored would have difficulty attracting submissions and thus continuing to publish. If that is not the case, what is driving the continued production of this work? And why is it that non-English language work fares so poorly, at least when it comes to citations as measured by Hein? Is this a true reflection of the impact of the work? And why do student-run publications based in the United States so dominate citations? Last, given the homogeneity of the international law authors whose work is most heavily cited, is there a way to bring greater attention to the scholarship of those who do not fit the usual mold? These are questions those of us who work in the field of international law should seek to answer.

36. The *Bluebook* was first published in the 1920s, but it largely codified the citation method that was then in use. Fred R. Shapiro & Julie Graves Krishnaswami, *The Secret History of the Bluebook*, 100 MINN. L. REV. 1563, 1575 (2016).