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Acknowledgments as a Window into Legal Academia

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ACKNOWLEDGMENTS AS A WINDOW INTO LEGAL ACADEMIA

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ABSTRACT

Legal scholarship in the United States is an oddity—an institution built on student editorship, a lack of peer review, and a dramatically high proportion of solo authorship. It is often argued that this makes legal scholarship fundamentally different from scholarship in other fields, which is largely peer-reviewed by academics. We use acknowledgments in biographical footnotes from law-review articles to probe the nature of legal knowledge co-production and de facto peer review in legal literature. Using a survey of authors and editors and a textual analysis of approximately thirty thousand law-review articles from 2008 to 2017, we examined the nature of knowledge co-production and peer review in U.S. legal academia. Our results are consistent with the idea that substantial peer-review-like vetting occurs in the field. We also found evidence that both authors and editors use the information in acknowledgment footnotes as a factor in article submission and selection. Further, the characteristics of acknowledgment footnotes in articles in high-ranking law reviews differ dramatically from those in low-ranking law reviews in ways that are not simply due to differences in article quality. Finally, there are problematic gender differences in who is being acknowledged. We propose some modest

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changes to current practices that would help maximize transparency and minimize bias in legal scholarly networks and law-review article selection.

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INTRODUCTION

U.S. legal scholarship is weird.¹ It is weird in many ways: articles are very long, footnotes are innumerable, and the article selection process is unlike any other. But there are two oddities that especially make legal scholarship stand out from scholarly work in most other fields. First, and most surprising to scholars outside the U.S. legal academy, there is no peer review. Second, and not quite as odd but still unusual, the vast majority of articles are written by solo authors rather than coauthors. Thus, the paradigmatic single author writes an article, which is reviewed by students

1. It is known. Cf. GEORGE R.R. MARTIN, *A GAME OF THRONES* 197 (2011).

alone and then (hopefully) published. These phenomena are widely acknowledged as traits of U.S. legal scholarship.² Critics have cast them as pathologies, though a few have rendered defenses. Nevertheless, they seem to be accepted features of the landscape.

Reality is more complicated. Legal scholarship typically involves many more minds than a sole author and coterie of student editors. The process of writing a law-review article is often a complex act of knowledge co-production involving the input of mentors, assistants, workshop participants, and other experts in the legal subfield of the paper. And this co-production itself serves as a form of peer review, sometimes referred to colloquially as “vetting” a piece of scholarship before publication. The classic picture of legal scholarship leaves a lot out.

We are not the first to have noted these points, at least at some level. Most of our colleagues, we are sure, would readily acknowledge that while the task of authoring legal scholarship can sometimes feel solitary, many people help articles along the way. Indeed, we need not speculate; law-review articles typically begin with a biographical footnote that credits just such aid in the knowledge production process.³ And Arthur Austin acknowledged (and critiqued) the role that vetting by colleagues can play as a substitute for peer review in a 1989 essay.⁴

Our aim here is to explore these complications, using novel data to examine the contours of knowledge co-production and peer review in legal scholarship.⁵ Our data come principally from the footnotes just mentioned, variously known as “star,” “dagger,” “asterisk,” “acknowledgement,” “biographical,” “author,” or “vanity” footnotes. There, among other things, authors typically thank those involved in the process of developing the article, including colleagues who read the draft, research assistants and librarians who supported the research, and workshops where earlier stages of the work were presented and critiqued. We coded the acknowledgements footnotes of nearly 30,000 articles published over a decade in generalist,

2. For the rest of this Essay, for the sake of convenience, we’ll refer to this as just “legal scholarship,” but we are aware that norms and patterns are different outside the United States.

3. For a description of these footnotes and how they have changed over time, see Charles A. Sullivan, *Aside, The Under-Theorized Asterisk Footnote*, 93 GEO. L.J. 1093 (2005).

4. Arthur D. Austin, *The “Custom of Vetting” as a Substitute for Peer Review*, 32 ARIZ. L. REV. 1 (1989).

5. Please note that we do *not* seek to provide a broad critique of legal scholarship or law reviews. There are plenty of those. In 2018 alone we have Barry Friedman, *Fixing Law Reviews*, 67 DUKE L.J. 1297, 1300 (2018) (canvassing historical critiques); *id.* at 1305–25 (enumerating critiques); Eric J. Segall, *The Law Review Follies*, 50 LOY. U. CHI. L.J. 385 (2018) (offering general critiques); and Anthony Michael Kreis, *Picking Spinach*, 50 LOY. U. CHI. L.J. 395 (2018) (describing selection process critiques). *But see* Carissa Byrne Hessick, *In Defense of Law Review Articles*, PRAWFSBLAWG (Apr. 9, 2018, 1:19 PM), <https://prawfsblawg.blogs.com/prawfsblawg/2018/04/in-defense-of-law-review-article.shtml> [<https://perma.cc/2H4J-YWJY>] (responding to some criticisms).

student-edited, U.S. law reviews.⁶

Acknowledgements footnotes provide a cloudy window into networks of knowledge co-production within the legal academy. They provide a direct indication of who gets thanked by whom, and an indirect, noisy signal of who contributes to the production of which works of scholarship.⁷

Our data also give insight into how much the “vetting” process *actually* functions like peer review. Vetting could have no connection with article success (defined here, problematically but inevitably, as placement in a prestigious journal). It could correlate with success because vetting makes the article better; that is certainly the hope. Finally, vetting could correlate with success because law-review editors and authors use acknowledgement footnotes as a signal of vetting, and that signal as a proxy for peer review.⁸ Our data show a link between vetting and article success. While it is difficult to disentangle the latter two possibilities, we gathered supplementary evidence, via a survey of professors and law-review editors, suggesting that acknowledgements are at least sometimes involved in the article selection process.⁹ We also observe that papers that receive non-placement recognition (receipt of prizes, placement on “best-of” lists, or inclusion in collections) have more robust acknowledgements, suggesting at least some link to quality improvement as well.

Beyond shedding light on the workings of legal scholarship, our results suggest a few possibilities for change to increase inclusivity in the legal academy. First, the gendered disparity in acknowledgements, like that previously identified in citations, counsels that scholars be conscious about whom they ask for feedback and whom they acknowledge (recognizing that the two may not be identical). Second, both authors and editors should be aware of the role that acknowledgements can play in the selection process. Our survey shows a wide range of opinions and practices. But if at least some authors and editors use acknowledgements in this way, then authors who don’t know about this practice are comparatively disadvantaged. Third

6. By “generalist,” we mean journals like the *Michigan Law Review* that are not dedicated to particular areas of focus—such as the *Michigan Technology Law Review* and the *Michigan Journal of Race & Law*. Some call these generalist journals “flagship” law reviews, a nomenclature unnecessarily elitist for our purposes.

7. Not everyone who helps gets thanked; indeed, we have some evidence of systematic choices and biases in that regard. See *infra* Part II.C.

8. It’s also possible that vetting could *decrease* article success, but that would reflect a substantial problem with the knowledge co-production process. In any case, we do not observe this outcome.

9. We also recognize that other explanations are possible; particularly prestigious or particularly excellent scholars (and the two might be related) might be both more likely to place articles well and to be invited to present at workshops that lead to acknowledgements. We suspect many factors are at work here; our data let us explore only a few.

and finally, acknowledgements footnotes should be more transparent. If acknowledgements reflect knowledge co-production and vetting, they should tell readers more about what each individual is being thanked for, similar to “author contribution” statements in scientific disciplines. Such changes would increase the accuracy of credit, facilitate the quasi-peer-review process, and allow future work to better examine knowledge co-production networks.

* * *

This Essay, as such Essays tend to do, proceeds in three Parts. In Part I, we explore the longstanding ideas that law-review articles are principally the product of lone authors and generally not peer-reviewed. Both are commonly asserted in discourse about legal scholarship. In Part II, we bring a more nuanced take to these ideas through survey accounts and an analysis of a decade’s worth of law-review biographical footnotes. In Part III, we consider the implications of our findings and provide recommendations.

I. ODDITIES OF LEGAL SCHOLARSHIP

In this Part, we explore two prominent ideas about the process of legal scholarship. In Section I.A, we discuss the solitary author—the idea that legal scholarship is largely attributable to individuals. In Section I.B, we discuss the absence of peer review—the idea that legal scholarship lacks the peer-review function common in most other sectors of academic publishing. In Section I.C, we present the basic case that the reality of legal scholarship is more complex.

A. *The Solitary Author*

Law-review articles are typically the product of a solitary author laboring for months to analyze a particular issue—or so goes the story.¹⁰ Though this story is so common as to be conventional wisdom, only a few commentators have examined it, mostly in the small body of literature on coauthorship in legal scholarship.¹¹ Tom Ginsburg and Thomas J. Miles write of the

10. Michael I. Meyerson, *Law School Culture and the Lost Art of Collaboration: Why Don't Law Professors Play Well with Others?*, 93 NEB. L. REV. 547, 553–74 (2015) (describing solo authorship, especially in Part III.B, “The Solitary Legal Scholar”).

11. See *id.*; Tom Ginsburg & Thomas J. Miles, *Empiricism and the Rising Incidence of Coauthorship in Law*, 2011 U. ILL. L. REV. 1785; Paul H. Edelman & Tracey E. George, *Six Degrees of Cass Sunstein: Collaboration Networks in Legal Scholarship*, 11 GREEN BAG 2D 19 (2007).

“traditional [law] faculty member who labors in isolation,”¹² and Michael Meyerson states without much ado that “[f]or most, though certainly not all, law professors, both teaching and scholarship are seen as solitary activities.”¹³ Benjamin Edwards notes that “a well-placed, single-author law review article is the gold coin of the realm.”¹⁴

Empirical studies support this story. The few studies of coauthorship in legal scholarship have found rates at or below 20%,¹⁵ with the notable exception of works concerning law and economics, for which rates are substantially higher.¹⁶

At least one incentive for solo authorship seems to be the diminished credit received in terms of tenure (or other promotion or prestige evaluations) for coauthored work.¹⁷ Junior scholars are thus explicitly advised not to coauthor for various reasons.¹⁸

Some critique the preference of the legal academy for sole authorship, arguing for increased collaboration and, as a result, increased

12. Ginsburg & Miles, *supra* note 11, at 1788.

13. Meyerson, *supra* note 10, at 563.

14. Benjamin P. Edwards, *Co-Authoring & Essays in the Legal Academy*, PRAWFSBLAWG.COM (Aug. 15, 2016, 3:04 PM), <https://prawfsblawg.blogs.com/prawfsblawg/2016/08/co-authoring-essays-in-the-legal-academy.html> [<https://perma.cc/EM4R-G4RH>].

15. See Tracey E. George & Chris Guthrie, *Joining Forces: The Role of Collaboration in the Development of Legal Thought*, 52 J. LEGAL EDUC. 559, 562 (2002) (finding an “annual average rate” of 15% coauthorship in eleven law reviews from 1970 to 1999); Ginsburg & Miles, *supra* note 11, at 1800–02 (finding 20% coauthorship in 2,785 “major” articles [i.e., articles, rather than notes, comments, book reviews, or symposium pieces] from the top 15 law reviews from 2000 to 2010); Meyerson, *supra* note 10, at 567–68 (finding 10%, 10.7%, and 19% coauthorship in articles from top-50 law reviews [as ranked by Washington & Lee] from 1988 to 1992, 1998 to 2002, and 2008 to 2012, respectively). Our data showed 13% coauthorship in articles between 2007 and 2017. See *infra* note 28 and accompanying text.

16. See Ginsburg & Miles, *supra* note 11, at 1809 (finding that empirical “major” articles were 26% more likely to be coauthored than non-empirical articles in the top fifteen law reviews from 2000 to 2010); *id.* at 1813 (finding that nearly half of “major” articles in the faculty-edited *Journal of Legal Studies* or the *Journal of Law, Economics, and Organizations* between 1989 and 2010 were coauthored); Meyerson, *supra* note 10, at 568 (finding 35.7% coauthorship in law and economics specialty journals between 2018 and 2012).

17. See, e.g., Edwards, *supra* note 14 (“If an article is worth 10 points, is . . . a co-authored article . . . worth 4 points?”); William Baude, Comment on Edwards, *supra* note 14 (Aug. 16, 2016, 5:26:33 PM) (noting that, at the University of Chicago Law School, “[s]o far as [he] can tell [the] norm is something like: ‘prove you are capable of good solo work by writing 1-2 good pieces, then co-author to whatever extent it actually improves your work’”); Ginsburg & Miles, *supra* note 11, at 1824 (“Another challenge associated with coauthorship is the assignment of credit among authors. This is a difficult issue for tenure committees, academic administrators, and other consumers of academic research.”).

18. See, e.g., Robert H. Abrams, *Sing Muse: Legal Scholarship for New Law Teachers*, 37 J. LEGAL EDUC. 1, 6 (1987) (“I do not recommend collaboration at the outset of a law school career [I]n the tenure-review process, coauthored articles never count as much as do solo efforts.”). WNP’s personal experience backs this up, as he was recommended not to coauthor with leading figures in the field so as not to disqualify potential tenure letter writers.

coauthorship.¹⁹ But there is little dispute that the modal form of legal scholarship is sole-authored.

B. *The Absence of Peer Review*

The vast majority of U.S. legal scholarship is not peer-reviewed. This, too, is conventional wisdom.²⁰ The submission process to U.S. student-edited law reviews typically does not involve peer review.²¹ This absence has been repeatedly lamented; Richard Posner decries the fact that law-review articles “are edited without peer review,”²² and Michael Madison argues that “pretty much everyone in the academy knows that what law professors do can’t really be called ‘scholarship’ because *there are no quality standards*, and (aside from a few quirky journals) *there is no peer review*.”²³ Though a few have defended the lack of peer review,²⁴ peer review has been repeatedly suggested as an unlikely but desirable way to improve legal scholarship.²⁵

Indeed, a few top journals have moved to using some form of peer review in the article selection process, but it differs substantially from that in other fields: turnarounds are quick, authors don’t see the reviews or have the opportunity to respond, and positive reviews apparently have much less

19. See, e.g., Meyerson, *supra* note 10, at 575–78 (extolling the benefits of collaboration); *id.* at 580–83 (offering suggestions to increase collaboration).

Notably, the intellectual and terminological jump between “collaboration” and “coauthorship” is remarkably easy; pieces of legal scholarship addressing either concept tend to slip readily between the concepts. See, e.g., Ginsburg & Miles, *supra* note 11, at 1788 (“The question of what drives scholarly *collaboration* is not new. The literature has identified four leading factors that influence the decision to *coauthor*.”) (emphasis added); Meyerson, *supra* note 10, at 548 (citing his writing inspiration as the question of whether his “intuitive sense of these different attitudes towards *collaboration* was reflected empirically by a differing amount of *coauthorship*” between mathematics and law) (emphasis added); Edelman & George, *supra* note 11 (using coauthorship to measure collaboration). We will return to this elision later.

20. For a selection of pithy quotations on the issue, see Richard A. Wise et al., *Do Law Reviews Need Reform? A Survey of Law Professors, Student Editors, Attorneys, and Judges*, 59 LOYOLA L. REV. 1, 8 n.24 (2013).

21. We do not speak to practices in other jurisdictions, or to faculty-edited journals, including journals on legal writing or clinical law, where peer review is much more common.

22. Richard A. Posner, *Against the Law Reviews*, LEGAL AFFAIRS (Nov./Dec. 2004), <http://www.legalaffairs.org/issues/November-December-2004/reviewposnernovdec04.msp> [<https://perma.cc/8CGK-SD4M>].

23. Michael J. Madison, *The Idea of the Law Review: Scholarship, Prestige and Open Access*, 10 LEWIS & CLARK L. REV. 901, 909 (2006) (emphasis in original).

24. See, e.g., Steven Lubet, *Law Review vs. Peer Review: A Qualified Defense of Student Editors*, 2017 U. ILL. L. REV. ONLINE 1; Kreis, *supra* note 5, at 397–98.

25. Richard A. Posner, *The Future of the Student-Edited Law Review*, 47 STAN. L. REV. 1131, 1136–37 (1995) (suggesting peer review); Friedman, *supra* note 5, at 1356–60 (making the same suggestion); Wise, *supra* note 20, at 57–58 (presenting survey results that demonstrate that law professors, student editors, judges, and attorneys all favor shifting to peer review).

weight with editors than they would in other fields.²⁶ In a separate effort, the Peer Reviewed Scholarship Marketplace was founded in 2009 to meld peer review with the submission processes of multiple journals, but it now appears to be defunct.²⁷

But largely, formal peer review is missing from legal scholarship—at least in the article selection process at student-edited journals.

C. *Rethinking Some Supposed Truths*

These two ideas—the solitary author and the lack of peer review—are quite common, but reality is more complicated.

Take the solitary-author myth. It is true that most law-review articles are single-author (in our dataset, only about thirteen percent are not²⁸). This contrasts markedly with many other disciplines: chemistry, for instance, averages seven to eight authors per paper, and the life sciences average twelve to fourteen.²⁹ But does this mean that legal articles are really more the result of individual thinkers than scientific articles are? Does the difference in authorship stem from differences in the nature of knowledge co-production between fields? Or simply from formalistic differences in the threshold of authorship inclusion? After all, coauthorship is routine in some fields, like the sciences, for roles that would merit only acknowledgments in law.

For instance, consider a hypothetical biochemistry paper. A postdoc in a tenured research professor's large lab obtains her own funding, designs a research project, and supervises three undergraduate research assistants who grow cell cultures and run biochemical assays on them. The postdoc is largely autonomous, although she checks in with the professor periodically to discuss ideas and potential journals to submit to, and her experiments use the professor's lab and instrumentation. The undergraduates largely follow established experimental protocols, but they find that some improvisation and tinkering is needed to adapt the protocols to these specific cells. The

26. See Brian D. Galle, *Peer Review at Student-Edited Journals: Best Practices?*, PRAWFSBLAWG (Aug. 11, 2011, 2:25 PM), <https://prawfsblawg.blogs.com/prawfsblawg/2011/08/peer-review-at-student-edited-journals-best-practices.html> [https://perma.cc/2CT9-6265].

27. See Alanna B. Herman, *Advancing Legal Scholarship via Peer Review* (Jan. 12, 2013), <https://taxprof.typepad.com/files/prsm.pdf> [https://perma.cc/5UDW-PEWU]. As of June 26, 2019, the Marketplace's webpage, www.legalpeerreview.org, was defunct, and we have been unable to find any recent activity.

28. See *infra* Section II.B.1 for a description of the dataset.

29. Smriti Mallapaty, *Paper Authorship Goes Hyper*, NATURE INDEX (Jan. 30, 2018), <https://www.natureindex.com/news-blog/paper-authorship-goes-hyper> [https://perma.cc/7XYS-8SU9]. Readers unfamiliar with the sciences may be intrigued to learn that several-thousand-author papers are, indeed, a thing. See *id.*

postdoc and her assistants submit many samples for analysis to the in-house genome-sequencing facility, and the facility's head technician prepares the resulting data for the postdoc. The journal article that results lists five authors: the postdoc, her three undergraduate research assistants, and the tenured professor. The technician and the source of grant funding are listed in the article's acknowledgments.

Compare this with a hypothetical law-review article. A professor has a hunch about a trend in court decisions on a particular issue over the last hundred years. He discusses the issue at length with a mentor—a tenured member of the same faculty—who suggests how best to do the analysis. He enlists three law students as research assistants to download, summarize, and categorize cases. One of them develops a helpful rubric for doing so; another discovers an interesting observation that the professor includes in his eventual analysis. They all make frequent use of a law librarian, who helps them find on-point case law and finds a number of rare, unindexed cases for them. The resulting law-review article lists one author: the professor. His research assistants, the librarian, and the mentor are mentioned in the acknowledgments.

These stories are not so different, and we suspect that a key difference is one in norms and terms.³⁰ Most legal scholars would recognize that while only one name typically appears under the title of an article, its production benefited from the help of many. In other fields, some of those many would be named as authors,³¹ in law, they are merely acknowledged.³²

* * *

Take also the no-peer-review myth. It is true that most legal journals do not formally conduct peer review in the way that scientific journals do. But informal aspects of legal publishing might still arrive at the same result. After all, circulating papers at conferences is popular, as is posting preprints on sites like SSRN.

Consider again our hypothetical biochemistry paper. Each couple of

30. We do not mean to suggest that norms and terms are the *only* difference, nor that science is the only relevant comparator. There are forms of legal analysis without close analogs in science. And norms in history, for instance, may be closer. But both of us were trained in the sciences, and we find the difference in attribution norms particularly striking.

31. Gregory Patience and coworkers recently surveyed authors across a range of disciplines and noted categorical differences in what contributions merit authorship—differences that did not necessarily reflect published authorship norms in each field. Gregory S. Patience et al., *Intellectual Contributions Meriting Authorship: Survey Results from the Top Cited Authors Across All Science Categories*, 14 PLoS ONE e0198117 (2019).

32. See Austin, *supra* note 4, at 7 (“In effect, the vetters’ list is a means of indirect recognition of co-authorship or ‘collaboration.’”).

months, one of the researchers presents the paper at the supervising professor's lab group meeting, in which all the lab members critique it and suggest how to fix holes in the data or resolve research challenges. The postdoc presents the preliminary work at two conferences—a national meeting of the American Chemical Society, and a smaller regional conference for researchers in her particular specialty. At each, audience members make suggestions regarding data interpretation or future experimentation. Finally, the postdoc decides that the paper is ready to submit. It ends up on the desk of an editor at a well-respected national journal. The editor reads the article and is intrigued; he judges it to be within the journal's scope and potentially impactful. He sends the article to three professors in the field for comments. Several weeks later, they return their comments (well—probably their students' comments, in large part). Two of the reviewers are pleased with the paper, although one thinks that one of the paper's claims should be toned down. The third points out an essential control experiment that was overlooked. The postdoc revises the paper accordingly, and it gets published.

Compare this with our hypothetical law-review article. The professor circulates an early draft to some colleagues he knows from his research fellowship a few years ago. They make some suggestions, which he (mostly) incorporates. He then takes the paper to a few conferences—one for young professors, another for members of his specialty discipline, still another an invited-paper workshop at a prestigious school—and receives feedback on it (some favorable, some not) from a variety of academics. At this point, he posts the paper on SSRN as a preprint; law-review submission season is a few months out. Through SSRN and Twitter, he gets a few more suggestions; someone points out that a few of the cases were accidentally mischaracterized, which he fixes quickly. Come February, the paper is submitted to law reviews, one of which accepts the paper and publishes it later that year.

Nonetheless, while the conventional wisdom holds that peer review is absent from legal scholarship, some have noted that this informal “vetting” process serves a similar role.³³ Three decades ago, Austin described the evolution of presubmission comments as “a new form of peer review,”³⁴ though his description of the process has more than a bit of sarcastic bite³⁵

33. See, e.g., C. Steven Bradford, *As I Lay Writing: How to Write Law Review Articles for Fun and Profit*, 44 J. LEGAL EDUC. 13, 26 (1994); Sullivan, *supra* note 3, at 1102–05 (discussing the modern practice of acknowledging vetters).

34. Austin, *supra* note 4, at 5.

35. *Id.* (“[O]ne can convey the eclecticism of a writer intimate with the field by including a few nontenured unknowns.”); *id.* at 6 (“Listing a presentation does not tell us whether the audience read the

and he critiqued the process quite seriously,³⁶ ultimately concluding that it is “*not* a reasonable imitation of conventional peer review.”³⁷ Much more recently, Friedman presented a more sanguine view: “People worry about the lack of peer review of scholarly work in the legal academy, but it turns out there is review aplenty.”³⁸ He continued to describe presubmission review as that activity acknowledged in the “vanity” footnote, vetting while articles are posted to sites like SSRN, and vetting after publication via published responses, citations, and evaluative letters.³⁹ Charles Sullivan hypothesized in 2005 that pedigreed acknowledgements could help placement.⁴⁰ Leah Christensen and Julie Oseid conducted a survey of student editors in 2007 and found that about 22% reported using acknowledgement footnotes—but among top-25 law reviews, approximately 55% reported doing so.⁴¹

* * *

So the conventional wisdom is, perhaps unsurprisingly, overly simplistic. Legal scholarship involves contributions from many, and there is at least some form of peer review. We turn next to data to complicate this picture further. In particular, we turn to biographical footnotes, the unassuming and short informational blurbs appearing at the beginning of nearly every article. These footnotes identify each author, but they also provide a window into the author’s scholarly network—often featuring a list of acknowledgments, they can be termed “acknowledgment footnotes” just as easily. We figured that, in the aggregate, they could provide a window into legal scholarship more generally.

paper, went to the discussion for a free lunch and to sop sherry, or went for serious and probing criticism. Nevertheless, it is an effective way to let people know that one is available for a visit.”).

36. *Id.* at 6–7 (listing flaws including “self-serving . . . manipulation,” potential misleading of editors, hampering scholarly development, and the mercenary exchange of “recognition as a vetter for fealty,” and concluding that “[o]ther than as a blatant form of academic gamesmanship, the fad of listing vetters cannot be justified.”).

37. *Id.* at 7 (emphasis added).

38. Friedman, *supra* note 5, at 1330.

39. *Id.* at 1330–31.

40. See Sullivan, *supra* note 3, at 1112–14 (describing the hypothesis that acknowledgements could aid placement).

41. Leah M. Christensen & Julie A. Oseid, *Navigating the Law Review Article Selection Process: An Empirical Study of Those with All the Power—Student Editors*, 59 S.C. L. REV. 175, 200 (2007). It is worth noting that their sample size was small; they had eleven respondents from top-25 journals and fifty respondents from non-top-25 journals. *Id.*

II. BIOGRAPHICAL FOOTNOTES AS A WINDOW INTO LEGAL SCHOLARSHIP

In this Part, we explore the peer-review and solitary-knowledge-production ideas using biographical footnotes. In Section II.A, we briefly discuss the nature of the law-review biographical footnote and our reasoning for using it as a lens. In Section II.B, we describe compiling a biographical-footnote database from a decade's worth of law reviews, our analysis of that database, and a qualitative survey we sent to law-review authors and editors. We describe our results generally in Section II.C. In Section II.D, we describe how biographical footnotes signify the presence of a de facto peer-review system. In Section II.E, we describe how biographical footnotes illustrate patterns of knowledge co-production.

A. *The Nature of the Biographical Footnote*

The biographical footnote is the least interesting and substantively least informative part of an article. Naturally, we saw it as a trove of information.

The footnote does three things. First, it identifies the author: their title, institutional affiliation, background, and the like. Second, it identifies the author's network: acknowledgments of people the author believes helped with the paper or wants to thank for some reason. And third, it provides a space for any upfront notes or caveats about the paper or its ideas.

In terms of substance—at least, if one believes in a pure meritocracy in which the ideas of a paper exist on their own, independent from context—the biographical footnote is probably the least important part of a paper. But it's revealing nonetheless. In other disciplines, acknowledgments have been used accordingly to probe patterns in scholarship.

In the hard sciences, acknowledgment data are included in publication records in the Web of Science database. Jue Wang & Philip Shapira used this to explore the relationship between research funding (to the extent that it was disclosed in the acknowledgments section of the articles examined) and subsequent results in nanotechnology.⁴² Adèle Paul-Hus and coworkers also exploited the Web of Science database, examining approximately one million papers published in 2015 using “advanced linguistic methods as well as Correspondence Analysis.”⁴³ The authors posited that “acknowledgments help to reveal the—otherwise invisible—infrastructure

42. Jue Wang & Philip Shapira, *Funding Acknowledgment Analysis: An Enhanced Tool to Investigate Research Sponsorship Impacts: The Case of Nanotechnology*, 87 *SCIENTOMETRICS* 563 (2011).

43. Adèle Paul-Hus et al., *Beyond Funding: Acknowledgement Patterns in Biomedical, Natural and Social Sciences*, 12 *PLOS ONE* e0185578, 10 (2017).

that supports research.”⁴⁴ The analysis, which employed natural language processing, examined noun phrases to determine what kinds of contributions were being acknowledged.⁴⁵ Field-based differences were revealed.⁴⁶ In a follow-up study, Paul-Hus & Descrochers qualitatively coded the above noun phrases within each article, finding that these largely fell into three distinct categories: “the contributions, the disclaimers, and the authorial voice.”⁴⁷

C. Lee Giles & Isaac G. Council described “automated methods for acknowledgement extraction and analysis” and showed that “combining acknowledgement analysis with citation indexing yields a measurable impact of the efficacy of various individuals as well as government, corporate, and university sponsors of scientific work.”⁴⁸ The authors identified six categories of acknowledgment (moral support, financial support, editorial support, presentational support, instrumental/technical support, and, importantly for “identifying intellectual debt,” conceptual support, or peer interactive communication (PIC)).⁴⁹

Other similar approaches have been described.⁵⁰

Although *citation* patterns and networks have been studied in contexts

44. *Id.* at 2.

45. *Id.* at 3–6.

46. *Id.* at 6–11. The authors found:

[T]echnical support is more frequently acknowledged by scholars in Chemistry, Physics and Engineering. Earth and Space, Professional Fields, and Social Sciences are more likely to acknowledge contributions from colleagues, editors, and reviewers, while Biology acknowledgments put more emphasis on logistics and fieldwork-related tasks. Conflicts of interest disclosures (or lack of [sic] thereof) are more frequently found in acknowledgments from Clinical Medicine, Health and, to a lesser extent, Psychology.

Id. at 1.

47. Adèle Paul-Hus & Nadine Desrochers, *Acknowledgements Are Not Just Thank You Notes: A Qualitative Analysis of Acknowledgements Content in Scientific Articles and Reviews Published in 2015*, 14 PLOS ONE e0226727, 1 (2019).

48. C. Lee Giles & Isaac G. Council, *Who Gets Acknowledged: Measuring Scientific Contributions Through Automatic Acknowledgement Indexing*, 101 PNAS 17599, 17599 (2004).

49. *Id.* The authors employed “autonomous citation indexing” (ACI), which entails “parsing algorithms that automatically create citation indices.” *Id.* The authors then presented “an information extraction algorithm to automatically extract acknowledgements from research publications.” *Id.* This work was centered on the CiteSeer digital library—containing over 425,000 computer-science research papers—as a prototype data source, looking at data from 1990–2004. *Id.* at 17599–600.

50. See, e.g., Katherine W. McCain, *Beyond Garfield’s Citation Index: An Assessment of Some Issues in Building a Personal Name Acknowledgments Index*, 114 SCIENTOMETRICS 605 (2018); Adrián A. Diaz-Faes & María Bordons, *Acknowledgments in Scientific Publications: Presence in Spanish Science and Text Patterns Across Disciplines*, 65 J. ASS’N INFO. SCI. & TECH. 1834 (2014); Rodrigo Costas & Thed. N. van Leeuwen, *Approaching the ‘Reward Triangle’: General Analysis of the Presence of Funding Acknowledgments and ‘Peer Interactive Communication’ in Scientific Publications*, 63 J. ASS’N INFO. SCI. & TECH. 1647 (2012); Brian Beaton et al., *Exploring the Use of ‘Acknowledgement Analysis’ to Map Intellectual Diversity and Cross-Disciplinary Activity Within the iSchools*, in ICONFERENCE 2014 PROC. 700 (2014).

such as case law,⁵¹ legal scholarly writing,⁵² and patents,⁵³ it does not appear that acknowledgment patterns in legal scholarly writing have been studied.

We reasoned that looking at patterns in biographical footnotes in generalist law reviews would thus give a window into knowledge co-production and peer review.

B. Summary of Methods

We gathered data in two ways: a textual analysis of law-review footnotes and a qualitative survey of law-review writers and editors. A more complete description of these methods is in the Appendix, but we summarize them below.

1. Footnote Database and Analysis

We assembled a database of biographical footnotes from 29,024 articles published from 2008 to 2017 in 183 law reviews in the United States—that is, most articles from most generalist law reviews over a decade. We began by downloading all published pieces from each of these law reviews from Lexis, then used a Python script to extract the biographical footnotes, citation, author, and title of each article. The raw database needed some attention to correct apparent typos, extract journal names, and the like. For around two thousand articles, the footnote was not included, and so it had to be fetched manually from Lexis, Westlaw, or HeinOnline. We filtered out, where possible, non-articles⁵⁴ (we were interested in the main unit of scholarship in mainstream legal academia) and online supplements.

To assign rankings to schools and law reviews, we used Bryce Clayton Newell's list, which ranks law reviews by combining the scores of five

51. E.g., Joseph Scott Miller, *Law's Semantic Self-Portrait: Discerning Doctrine with Co-Citation Networks and Keywords*, 81 U. PITT. L. REV. 1 (2019); Joseph Scott Miller, *Which Supreme Court Cases Influenced Recent Supreme Court IP Decisions? A Case Study*, 21 UCLA J.L. & TECH. 1 (2017); Brian J. Broughman & Deborah A. Widiss, *After the Override: An Empirical Analysis of Shadow Precedent*, 46 J. LEGAL STUD. 51 (2017); Kevin Bennardo & Alexa Z. Chew, *Citation Stickiness*, 20 J. APP. PRAC. & PROCESS 61 (2019).

52. E.g., Oren Perez et al., *The Network of Law Reviews: Citation Cartels, Scientific Communities, and Journal Rankings*, 82 MODERN L. REV. 240 (2019); Thomas A. Smith, *The Web of Law*, 44 SAN DIEGO L. REV. 309 (2007); Ryan Whalen, *Legal Networks: The Promises and Challenges of Legal Network Analysis*, 2016 MICH. ST. L. REV. 539 (2016); Niels Petersen & Emanuel V. Towfigh, *Network Analysis and Legal Scholarship*, 18 GERMAN L.J. 695 (2017).

53. E.g., Katherine J. Strandburg et al., *Law and the Science of Networks: An Overview and an Application to the "Patent Explosion,"* 21 BERKELEY TECH. L.J. 1293 (2006).

54. That is, notes, essays, comments, book reviews, symposium pieces, introductions, responses, and the like.

distinct rankings.⁵⁵ These include the canonical U.S. News Peer Reputation score ranking, the overall U.S. News school ranking, the Washington & Lee Law Journal ranking, the Washington & Lee Law Journal Impact Factor ranking, and the Google Scholar Metrics ranking.⁵⁶ We used this aggregated rank—the so-called MetaRank—throughout data analysis. This allowed for a ranking that combined classical markers of institutional prestige with indicators of scholarly activity, like citation metrics.

We used Microsoft Excel to analyze footnotes (for the easy stuff, like presence of key words in a footnote or length of a footnote)—supplemented with Python, particularly using the spaCy natural language processing library⁵⁷ (for the trickier stuff, like named-entity recognition or part-of-speech tagging).

We also needed a list of law professors. Luckily, the Association of American Law Schools (AALS) compiles such a list in both print and electronic form.⁵⁸ Unluckily, there's no readily available method to quickly and efficiently query that information.⁵⁹ Thus, we transposed scanned versions of the 2011 and 2017 editions of the AALS Directory of Law Teachers into a spreadsheet and processed the information from there (removing duplicate names, fixing typos where possible, etc.). This yielded 10,101 unique names from the 2011 database, and 12,711 unique names from the 2017 database.

We wanted to look at gender parity, but because it wasn't feasible to determine each person's gender identity individually, we used a statistical approach. That is, in the law-professor database and the footnote database, first names were assigned a gender likelihood score resulting from our analysis of the Social Security baby names database.⁶⁰ Most names, it turns out, are overwhelmingly male or overwhelmingly female, so this was good enough for our purposes.⁶¹

55. Bryce Clayton Newell, *Law Journal Ranking, Summer 2018* (Aug. 7, 2018), <https://blogs.uoragon.edu/bcnewell/law-journal-rankings-2018/> [<https://perma.cc/GV9J-C29T>].

56. *Id.*

57. SPACY, <https://spacy.io/> [<https://perma.cc/2KJF-DSS6>].

58. *E.g.*, ASS'N AM. LAW SCH., *THE AALS DIRECTORY OF LAW TEACHERS* (2015–2016 ed. 2015).

59. There *is* a database, which law faculty can access. But try scraping data from it—it's not conducive to the task, to say the least.

60. For example, the database has 1,228,719 male examples of “Mark” and 3,984 female examples. The gender likelihood score reflects that 99.68% of Marks are listed as male. The name “Pat,” though, has 11,998 male entries and 8,455 that are female—so the score would reflect that this name is 58.66% likely to be male. For more details on that, see the Appendix.

61. We readily acknowledge that this corresponds to sex assigned at birth, which represents another limitation of our data set.

2. Survey

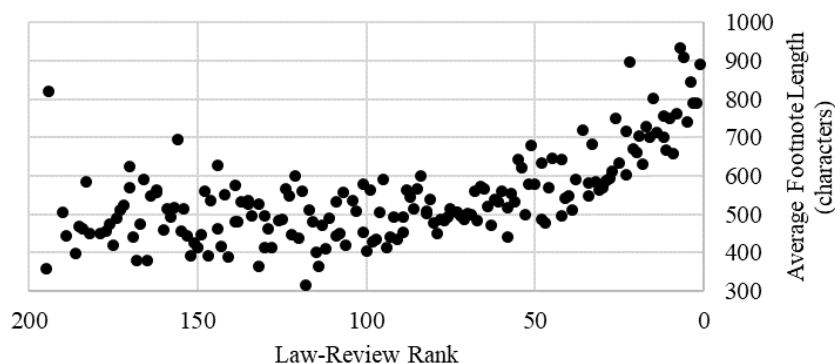
We asked legal scholars and law-review editors (current and former) about their approaches to the biographical footnote.⁶²

We assembled an anonymous survey in Qualtrics. We asked respondents first whether they were non-student writers of law-review articles, law-review editors with a role in article selection, or both. Respondents were then shown, accordingly, a set of writer questions or editor questions. Most questions were in free-response form. Writers were asked about their demographics, seniority, process and standards for biographical-footnote writing, expectations for others' footnotes, and use of footnotes with journal editors in mind. Editors were asked about their role in article selection, the extent of their journal's selection author-blindness, the perceived usefulness of footnotes in selection, their journal's ranking, and their journal's category.

We distributed the survey—indisputably a convenience sample—by emailing colleagues, friends, and intellectual-property professors and posting on Twitter and WNP's Facebook page. We received 124 responses: 58 as writers only, 19 as editors only, and 46 in both roles.

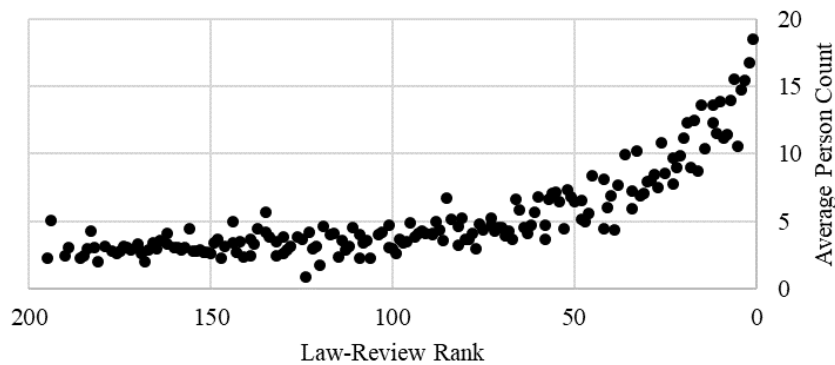
C. Results Generally

The length and complexity of biographical footnotes increases with law-review rank—but only for top-50 law reviews. Length ranges from an average of 500 or so characters (all law reviews ranked below 50) to around 900 (for the very top-ranked law reviews).

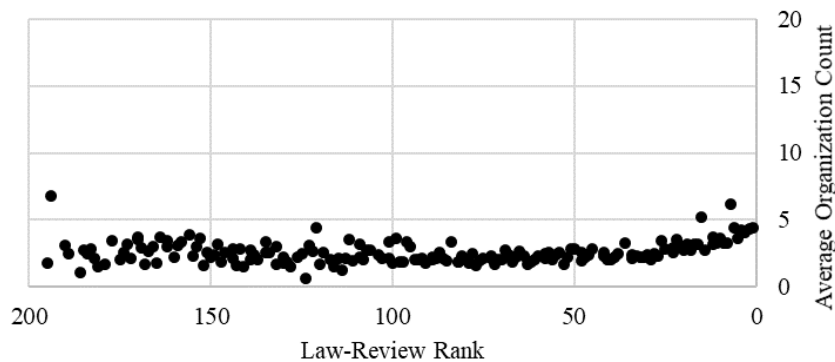


62. This study, University of Michigan study HUM00159071, was determined to be exempt from institutional-review-board review through the University of Michigan's automated self-determination procedure under 45 C.F.R. § 46.104(d)(2)(i)–(ii).

What does this reflect? Largely, it's an increase in the number of entities—people and institutions—acknowledged. Specifically, it's people: higher-placed articles simply contain longer lists of people in their biographical footnotes. It's a dramatic jump, too, from 3 or 4 for most of everything ranked below 50 to around 15 for the top handful of journals.

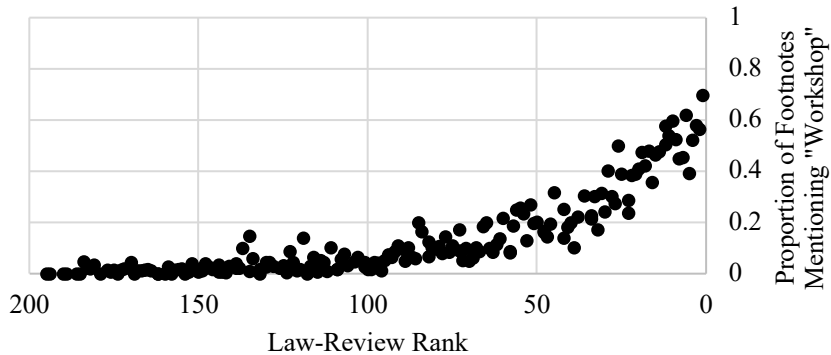


But it's not just that longer footnotes should include more people on average because they include more *everything*. We don't see the same sharp trend with acknowledged organizations, for instance. (There is one, but it's more modest.) The real difference is in the people.

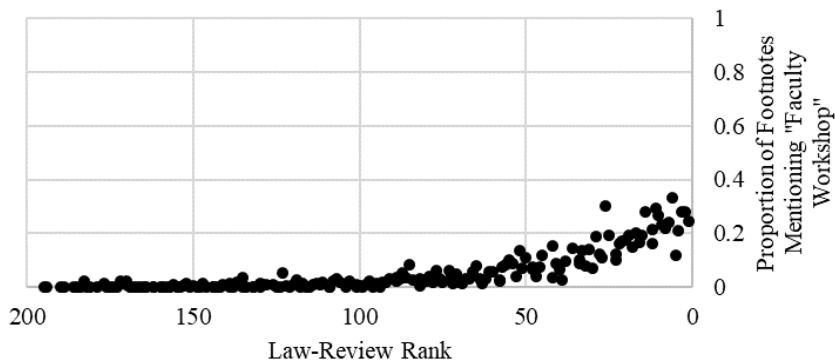


Notably, some words appear in biographical footnotes in a rank-dependent manner, while others are not rank-dependent at all. Inasmuch as these words suggest characteristics of the article or of the author, this suggests the characteristics matter for legal journal placement.

Articles in higher-ranked law reviews are much more likely to acknowledge workshops—indeed, in the top 15 or so law reviews, *most* articles acknowledge a workshop in the biographical footnote, while in the bottom 100 law reviews, nearly none do.

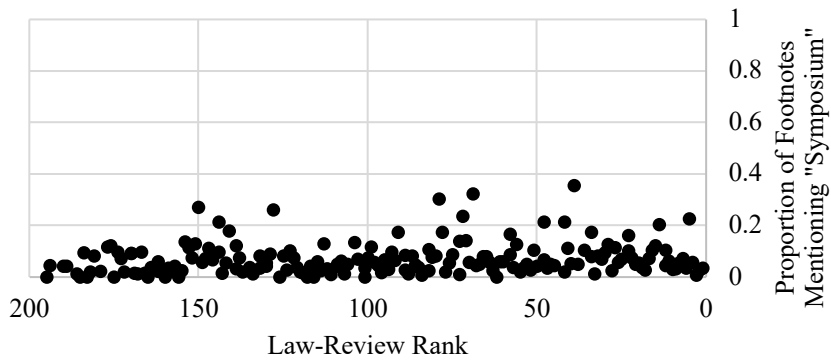
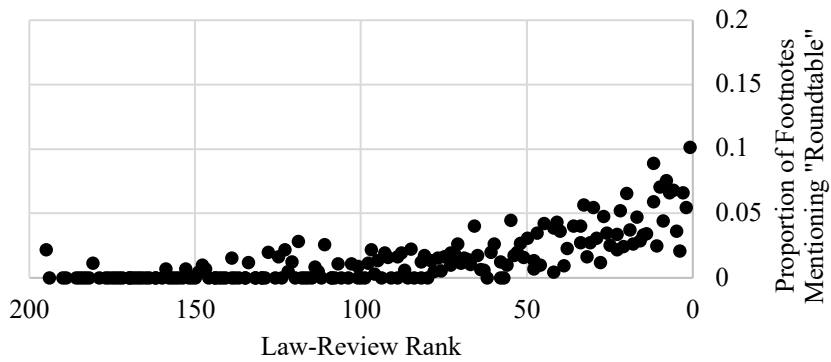
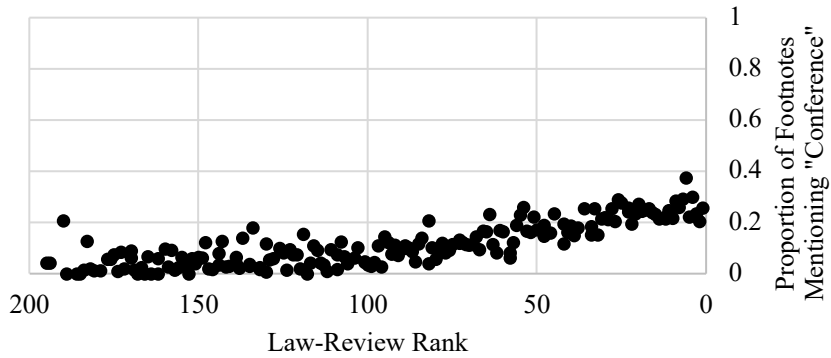


Although it's less common for the term “faculty workshop” to appear, this is even more weighted toward the top, with few mentions in journals ranked below the top 50:

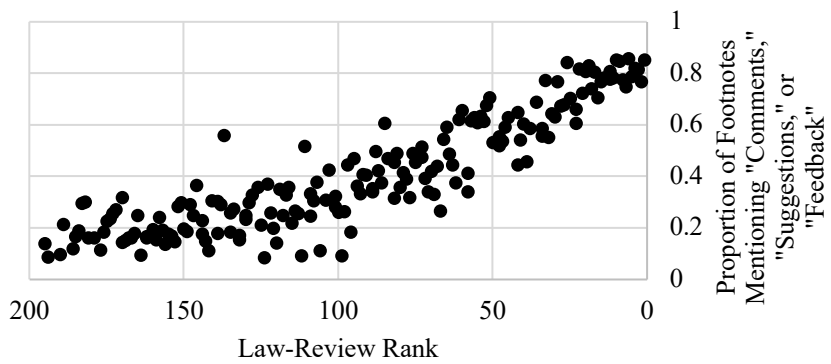
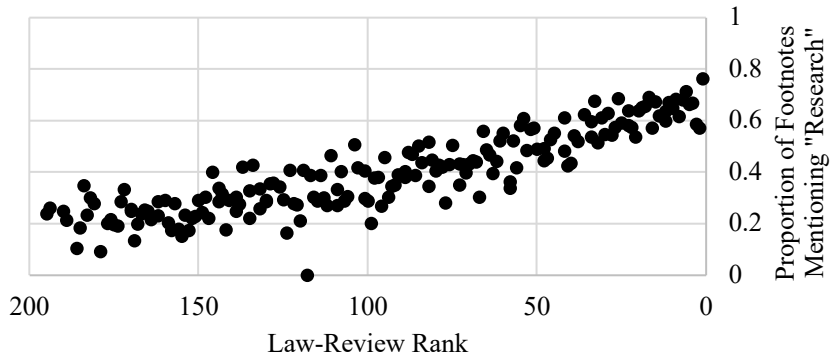


We should note that the timing of acknowledgments is also uncertain. We cannot tell, for instance, whether the acknowledgement of a faculty workshop reflects a workshop that took place before submission, thus potentially improving the article and its placement, or after submission, perhaps even with the invitation resulting from a prestigious placement.

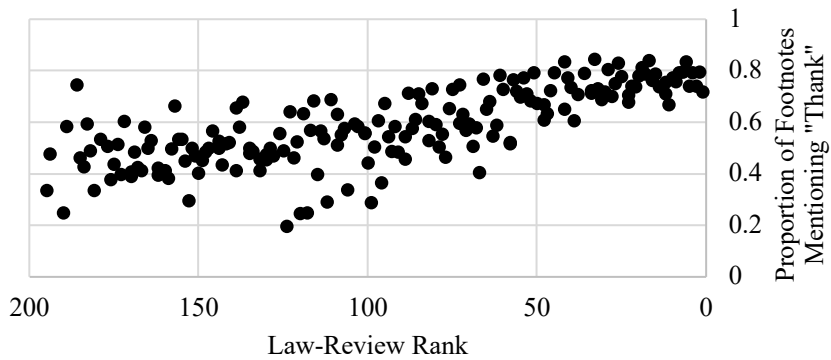
There is a much less pronounced trend for “conference” or “roundtable” mentions, but they also increase with rank. Yet mentions of “symposium” were flat across ranks (and rare).

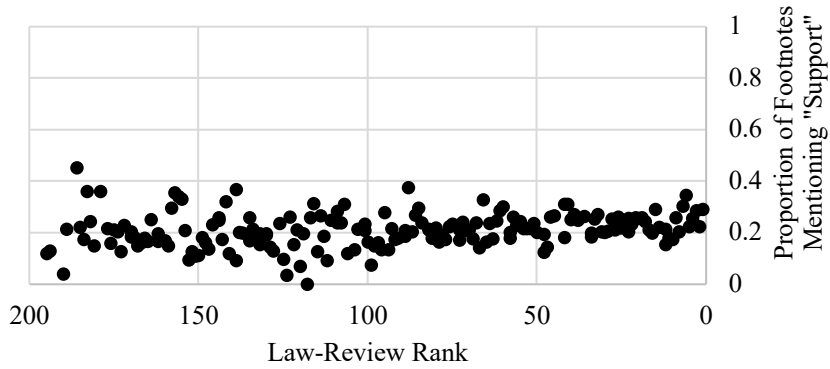


Mentions of “research”—usually in the context of thanking research assistants—rise steadily across law-review ranks in a linear fashion. Likewise, mentions of either “comments,” “feedback,” or “suggestions” increase with rank.

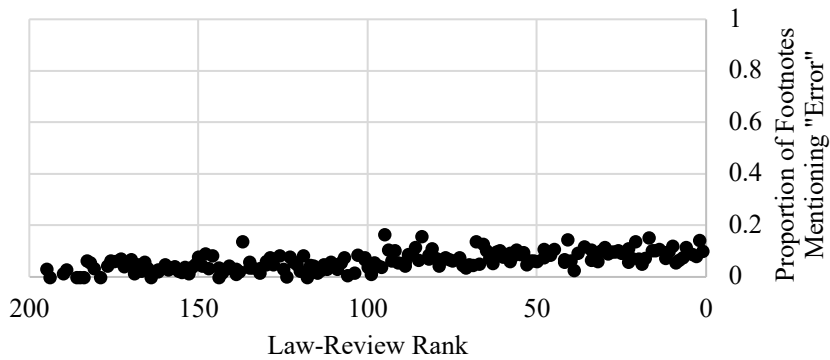


In contrast, mentions of words containing “thank” (e.g., “the author wishes to thank . . .”; “thanks to *X* . . .”; etc.) increase slightly but are generally prevalent at all ranks. Mentions of “support” were flat, if not rare.



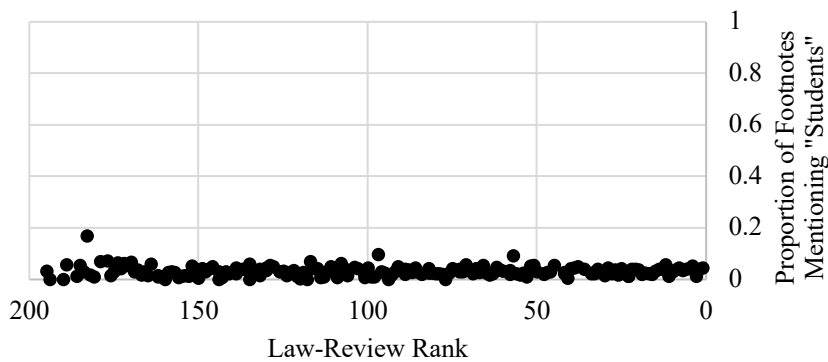
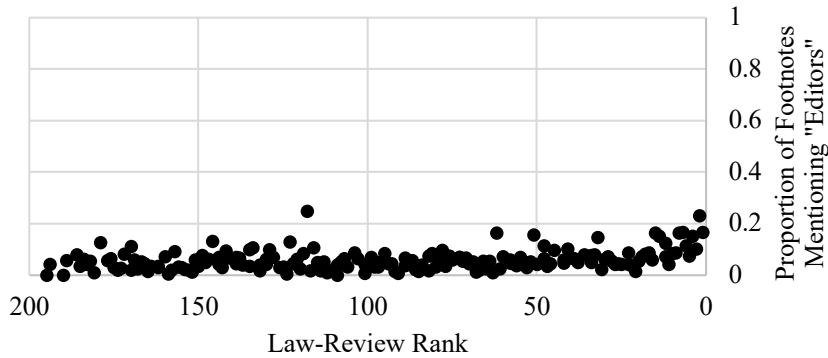


Mentions of “error”—usually in the context of “all errors are my own,” or the like—are relatively flat.



Finally, “editors” are infrequently mentioned,⁶³ with a slight uptick at the top end of the rankings, but mentions of “students” are both rare and flat.

63. 😞



* * *

In short, there are three kinds of trends in word appearances. Some terms are flatly distributed: they appear at about the same rate at every rank—like the words “errors” or “support.” Most terms are this way, which makes sense; there are a lot of terms that should appear in everything (like “thank”) or at random (like “grandma”). These terms don’t tend to reflect anything significant about the article’s content or context.

Other terms, like “research” (again, usually in the context of thanking research assistants) or “comments” (usually in the context of thanking colleagues for comments) have a linear correlation with rank and are more likely to show up in higher-placed publications. For terms related to article quality, this also probably makes sense—an article that benefited from research support or colleague feedback is, all else being equal, probably better than it would be without that support.

The striking thing is the third category: terms that show a hockey-stick

distribution: relatively flat at lower ranks but with an inflection point and a dramatic increase in the very upper ranks.⁶⁴ Take “workshop,” for instance. Incredibly rare in the bottom 100 law reviews; present more than half the time in the top ones. Why should that be? One possibility is that a workshop very dramatically increases the quality of an article in a way that is apparent to editors selecting articles. Perhaps so. But another possibility is that the papers selected for workshops are written by authors who have the benefit of being within a particular social and academic network—a network that positively affects article selection through one mechanism or another.⁶⁵

D. Knowledge Co-Production

What do biographical footnotes, then, say about knowledge co-production in legal scholarship?

First, co-production is apparently common. As noted above, *most* law-review articles—especially those placed highly—acknowledge people. Most of these acknowledgments are for some sort of contribution to the substance of the paper, be it feedback or research assistance. For some papers, these lists are quite long.⁶⁶

Law-review editors seem to understand this; most reported understanding that a mention of a name in the footnote meant a connection to the piece. Editors differed in their understandings of how substantial the connection was—baseline assumptions, for instance, included that the acknowledged person read the piece,⁶⁷ commented on the piece,⁶⁸ or approved of the piece.⁶⁹ Some editors reported that acknowledgments were too nebulous to draw much information from.⁷⁰ Others reported that certain

64. In addition to the words listed above, “participants” and “discussions” show hockey-stick effects, albeit less pronounced effects than those for “workshop.”

65. Editors could also use workshop acknowledgement as a proxy for difficult-to-observe quality, as described below. *See infra* notes 99–103 and accompanying text. And as noted above, it is also difficult to disentangle timing, which means that at least some acknowledged workshops result *from* fancy law-review placements, not *in* such placements.

66. The longest example we could find, however, did not list peer contributions but rather families that the author’s family admired. Our analysis tagged 116 names in the footnote. *See* William Lynch Schaller, *Scottie Pippen’s Airball: On the Role of Fiduciary Duty Law in Illinois Professional Liability Cases*, 48 J. MARSHALL L. REV. 777, 777 n.* (2015).

67. One editor reported: “I took it to mean that that person had read the paper.”

68. Another editor reported: “The other scholar had read the article and offered substantive feedback on it.”

69. Still another editor reported: “They had read and commented on the article and didn’t think it was horrible.”

70. One editor, for instance, characterized thus the meaning of an acknowledged name: “Primarily a signal of academic network and those with whom the author is in scholarly dialogue as a peer. Most authors do not rank others’ names by their contributions, so there is incomplete information about the extent or quality of the person’s involvement or comments.”

kinds of uncommon acknowledgments—those of staff, for instance—showed professionalism.⁷¹

As mentioned above, research assistants are frequently mentioned—more so in higher-placed articles.⁷² So are other indicia of third-party contributions to the scholarship, such as “workshops,” “roundtables,” “comments,” “suggestions,” “feedback,” and the like.

The completeness of the co-production picture, though, is limited by the wide variability in standards of inclusion. Some writers report being very detailed and formulaic in their approaches, filling in the footnote early and updating it as they go;⁷³ others write the footnote last-minute, during the proofing process.⁷⁴ Some include people who have read the piece;⁷⁵ others include those who have read and commented.⁷⁶ Still others include audience members, who may have attended a talk about the piece but not read it.⁷⁷ Others are thanked for comments or conversations about the subject matter,⁷⁸ or for asking a question about the paper.⁷⁹

Despite this variability, there seemed to be a common thread: in general, acknowledged people had some connection to the specific piece (rather than, say, just providing inspiration or support in general⁸⁰). Yet there is rarely a description of what *kind* of co-production any particular acknowledged person provided. (This contrasts with scientific papers, which often detail exact contributions, even of authors.⁸¹)

71. For example, one editor noticed: “Thanking the librarian who was inevitably involved. It shows respect for those professionals.”

72. The existence of research assistants likely correlates with other relevant factors, such as the author being a doctrinal professor rather than, say, a student or a practitioner—and this role may also bias toward higher placement for various reasons.

73. For example: “For most articles, I start by copying my ‘standard’ note and then add in anyone who needs a special mention.”; and “I write the initial version just before I circulate the paper for comments, submit it for publication, deliver it at a workshop or post it online. I revise it to include a thank you to people who make comments on the paper as I receive those comments.”

74. For example: “It’s the last thing I write before it goes into page proofs. Until then I leave it blank.”

75. For instance, one writer reported that they “[t]ry to include anyone who read a draft.”

76. Another writer reported: “I thank people who read a draft and gave specific comments, and any conferences at which I presented the paper.”

77. One writer, for example, reported: “I try to credit audiences anywhere that I presented the paper . . .”

78. For instance, one writer thanks: “[People w]ho give[] me helpful comments, even if just based on a conversation.”

79. For example, another writer thanks: “Everyone who reads the paper, asks me a question about it at a conference, or I have a useful conversation with about it. I am pretty generous with the thanks. Also any conference or workshop where I present it.”

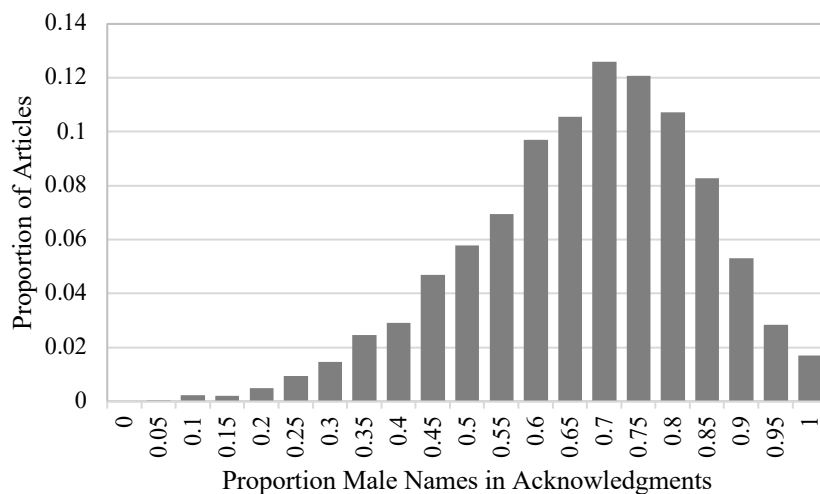
80. That being said, personal acknowledgments pop up too: “I thank readers, workshops, and the like - anyone who provided feedback to improve the piece - as well as my family.”

81. A representative example, from one author’s experience. The following initials all belong to authors:

* * *

Second, footnotes speak to gender parity and scholarly insularity. It's possible to probe, for instance, whether male authors—either individually or in aggregate—tend to thank their female colleagues at an unusually high or low rate, or whether an author's acknowledged community is particularly insular or lacks diversity. Law-review editors notice.⁸²

Indeed, it turns out (unsurprisingly) that women are under-thanked. On an article-by-article basis, acknowledgments lean heavily male.⁸³



Also, women are more inclined than men to acknowledge women. Consider this: the names in women's biographical footnotes were female 43% of the time; in men's footnotes, only 31% of the names belonged to women. In comparison, women authored 34% of the articles in our data set and constituted, quite similarly, 36% of acknowledgments.

There is a correlation, too, between law-review rank and gender bias. But this is only true in the top 50 or so journals, which tend to contain

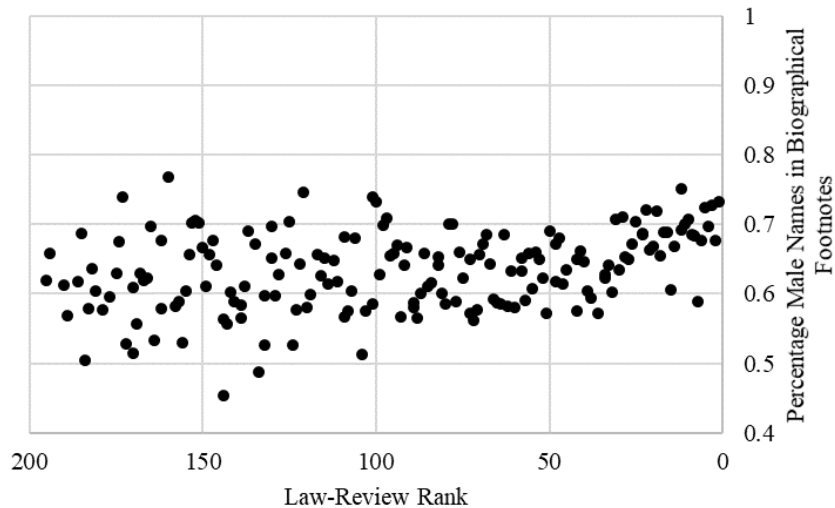
J.I.T. and C.J.S. contributed equally to this work. Experiments were designed by J.I.T., C.J.S. and D.A.M. and were performed by J.I.T., C.J.S., T.M., P.M.B., H.-C.T. and U.I.Z. J.I.T., P.S.P. and C.J.S. wrote the code. The manuscript was written by J.I.T., C.J.S., and D.A.M.

Jonathan I. Tietz et al., *A New Genome-Mining Tool Redefines the Lasso Peptide Biosynthetic Landscape*, 13 NATURE CHEMICAL BIOLOGY 470 (2017).

82. One editor reported: "I remember getting annoyed when it was just dudes thanked in the footnote though. . . . If someone thanks all dudes, I judge them." Another noted: "When every name listed is a white man, it has revealed the insularity of the author's perspective."

83. The indicated graph draws from articles with at least ten names in their acknowledgments.

biographical footnotes replete with a higher percentage of male names.



* * *

Third, footnotes may reveal the institutional diversity or robustness—or even “fanciness”⁸⁴—of an author’s scholarly network in general.

Indeed, some authors do seem to use the biographical footnote to signal their scholarly network.⁸⁵ Many respondents reported at least suspecting that law-review editors take this into account, for better or for worse, desiring fanciness.⁸⁶ Some writers seem to consider the signaling effects of fanciness even when deciding whom to ask to review the paper.⁸⁷ Others

84. Here, a tongue-in-cheek descriptor of high-ranked institutions.

85. One writer’s criteria for whom to include in the footnote: “[H]ow aggressively I want to signal the community that I’m a part of.”

Another wrote: “Sometimes I mention people who are well-known in the field when submitting because it might give the editors a sign that I have spoken with informed scholars on the issues that I am writing on.”

86. One writer suggested that editors look to footnotes for this: “Probably to get an at-a-glance impression of who the author is and who he or she knows.”

Another wrote: “In journals that don’t value anonymous review, they may view it as a signal of where the author fits in the academic pecking order in deciding whether to give it further consideration for publication. Outside of that, I don’t actually see how law review editors would find it useful.”

Still another wrote that editors look to the footnote “[p]robably to see how connected the author is to the academic community.”

87. One writer noted: “I do consider the ‘fame’ of a colleague in deciding whether to send them the draft for feedback, based on a belief that having famous names in the star footnote is helpful with editors.”

express surprise that editors would look at footnotes at all.⁸⁸

The scholarly network can serve as de facto credibility signaling beyond the specific issues written about in the paper; some authors report thinking that footnotes serve this role with respect to law-review selection.⁸⁹ And some editors agree.⁹⁰ For authors of interdisciplinary articles, acknowledging a particularly appropriate scholarly community might give comfort as to credibility in that field.⁹¹

Surely, then, wouldn't a long list of thanks make strategic sense? That may be—some editors, at least, even explicitly think so.⁹² But others seem to view long lists of thanks as distasteful game-playing.⁹³

* * *

A brief coda: It is generally accepted in legal scholarship that coauthored articles are less valuable to the author—less prestigious—than single-author contributions. Even so, there is generally little correlation, negative or positive, between multi-authorship and law-review prestige; maybe a modest uptick at the higher ranks. That said, there is a substantial increase in coauthorship frequency among a subset of articles that were considered

88. With respect to whether they thought editors looked to biographical footnotes in review, various writers said: “No clue. I hope nothing.”; “Hopefully nothing, since they are insignificant.”; “No. I’d be shocked if they read it.”; “Nothing. It would be extremely odd if they looked.”; and “I don’t know that they do. I didn’t when I was an editor.”

89. For instance: “I think they use it to gauge credibility, and most often when someone references a big contributor in the field. It shows an ‘in crowd.’ I am somewhat suspicious of using this along with home school and alma-mater, but it is used.”; and “If they use them for anything, I believe they use them to assess the author’s position in the field. For that reason, including professors from high-ranked schools or who have well-developed reputations could be important.”

90. For example: “If there were many or important members of the field it seemed to enhance credibility.”; and “It’s useful to determine the article’s credibility in the field if the star footnote indicates that a leader in the field or a cited author has provided feedback.”

91. See, e.g., Sam F. Halabi, *The Drug Repurposing Ecosystem: Intellectual Property Incentives, Market Exclusivity, and the Future of “New” Medicines*, 20 YALE J.L. & TECH. 1, 1 n.1 (2018) (acknowledging Aaron Kesselheim in a paper about finding new uses for existing drugs). As a quick Google search by an editor would reveal, Kesselheim holds an MD, JD, MPH, and is a Professor of Medicine at Harvard Medical School and a faculty member in the Division of Pharmacoepidemiology and Pharmacoeconomics in the Department of Medicine at Brigham and Women’s Hospital. *Aaron Seth Kesselheim, M.D.*, CTR. FOR BIOETHICS, <https://bioethics.hms.harvard.edu/faculty-staff/aaron-seth-kesselheim> [<https://perma.cc/5CXM-GYUG>].

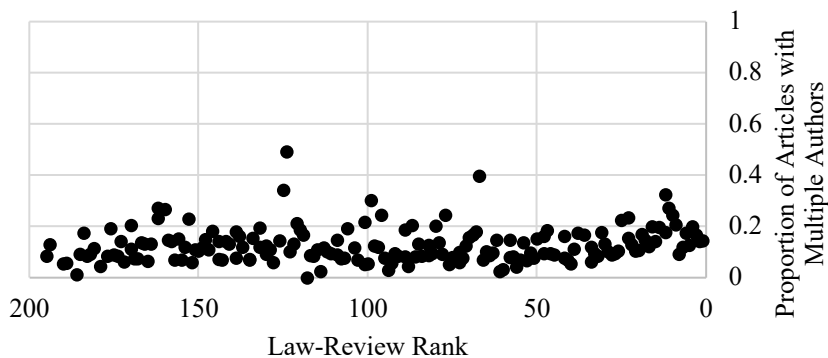
92. An editor wrote: “A single name [did not mean] much. But a host of really significant players said something generally positive about the article.”

93. One former editor wrote: “Once as an editor I remember a ridiculously long list of thanks that came off to me as someone trying to show how well-connected they were.”

Others wrote: “Overly populated notes suggested a desperate attempt at influence.”; and “I occasionally looked to see if anyone notable was thanked but that never mattered. You can often tell when authors inflate the bionote by just including anyone who ever received an email about the piece.”

Of course, this creates an unfortunate situation for those who get sincere comments from a long list of people and feel some pressure to cut names just to avoid looking like a game-player.

by the community to be prestigious, either having appeared in particular compendia or having achieved any of several prizes.⁹⁴ Of these, we saw that 25% were coauthored, compared with 13% of articles generally. Tenure committees might do well to rethink practices of disregarding or downplaying multi-author contributions.



E. Peer Review

What do biographical footnotes reveal about peer review in legal scholarship?

First, it was not uncommon for law-review editors to report using footnotes as a proxy for article quality, although this seems to be a minor consideration. It also wasn't uncommon for writers to suspect that this was going on, and some fully embraced strategic footnotecraft, while others avowed never to stoop to such means.

Editors reported a variety of ways in which the biographical-footnote information was useful to them during review. For instance, some editors found the acknowledgment of known experts to be comforting if the editors

94. In particular, we identified 168 articles in our dataset that had won the Sutherland Prize, the William Nelson Cromwell Foundation Article Prize, the Privacy Law Scholars' Conference Junior Scholars Award (recently redubbed the Privacy Law Scholars' Conference Reidenberg-Kerr Award), the International Association of Privacy Professionals Paper Award, the Richard A. Nagareda Award, the ABA Section of Administrative Law & Regulatory Practice Award; were selected in the annual Corporate Practice Commentator Annual Poll's list of the top ten corporate and securities law papers; or were selected to be reprinted in the *Entertainment, Publishing, and the Arts Handbook* or the *First Amendment Law Handbook*. We recognize this is a highly incomplete and contestable list of identifiers for prestige.

were unfamiliar with the doctrine, as with interdisciplinary papers.⁹⁵ Others found the acknowledgement of more senior academics to be comforting if the author was inexperienced.⁹⁶ Still others looked to names in the footnote to get a rough estimate of how citable the paper would be,⁹⁷ or as starting points for preemption checks.⁹⁸

Editors also seem to look to quantity and quality⁹⁹ of names as a sign of the degree to which the ideas in the paper have been vetted. Indeed, the idea of using names in the footnote as a proxy for the extent of article vetting was surprisingly common—though it was rarely identified as a major factor, at least consciously, in decisionmaking.¹⁰⁰ Names were sometimes significant for conveying that specific people had vetted the piece,¹⁰¹ and many editors responded that they believed that inclusion of a name meant that the person had reviewed and commented on a draft.¹⁰² Names sometimes simply signaled that the piece had undergone any review at all, regardless of *by whom*; one editor wrote, for instance, that “[t]he more people and workshops acknowledged in the footnote, the more it signals the author’s effort in revising, incorporating edits, and addressing concerns that editors may have.” A complete absence of relevant acknowledgments was at times a red flag before substantive review.¹⁰³

The disproportionate frequency with which articles that mention workshops appear in top law reviews underscores this informal peer-review process. Workshops are opportunities for papers and their authors to receive

95. Said one editor: “One time we were unsure of an article’s contribution and we saw it had been workshoped with people we know who were involved in the field, so we felt more confident with our own sense of how the article mattered.”

96. Another editor said: “[F]or authors that have had very few publications, it can be helpful to note if this paper has been reviewed by more experienced academics, been taken to workshops, or used at conferences.”

Yet another wrote: “[I]t is sometimes helpful to see well-known names mentioned in the star footnote if the article is by a newer author without much of a prior track record.”

97. Noted one respondent: “As an editor, we relied on CVs and did not pay much attention to the footnote, unless the footnote indicated a major name was likely to cite the piece.”

98. For example: “I vaguely recall focusing preemption checks on people listed in star footnotes on at least one occasion.”

99. Reader beware—tongue once again in cheek. “Quality” here means “reputation” or “fanciness” or “fame” or any similar thing.

100. An editor recalled: “It has never swayed a selection outcome, but could perhaps be used by an Articles Editor to let a paper survive the initial review and make it to our group review round.”

101. For example: “It shows some degree of peer review and exposure.”

102. Some examples, among many: inclusion of a name meant that “[t]he other scholar had read the article and offered substantive feedback on it”; “the person had actually reviewed/commented on a draft of the piece”; “the named person read/commented on the article or attended a workshop at which the article was presented”; etc.

103. For instance: “It was a credibility proxy to get through the door. After that, it was about the article. But good biographical information helped to cull submissions.”; and “An on the fence article that had *zero* acknowledgements was passed over, essentially for that reason. Another article that seemed to have won multiple prizes in the field was advanced almost solely on that basis.”

substantial feedback from students (seminar-style workshops), faculty (faculty workshops), or both. To an editor then, the inclusion of a workshop in an acknowledgments footnote might signal a degree of formal review. It might also be that students taking specific workshops and thus exposed to specific papers are more likely to accept those papers for publication, but that seems mathematically unlikely as an explanation for the overall trend. (Alternatively, the authors who present at workshops could take the students' feedback primarily as a read on what the *kind* of students who will be selecting their articles think.) Of course, we cannot rule out other latent variables, such as well-known authors both getting invited to workshops and having a leg up in the submissions process.

Some editors took workshop or conference mentions as symbols of refinement.¹⁰⁴ Others interpreted inclusion in a workshop as a symbol that the topic was interesting enough to a legal academic to merit an invitation in the first place.¹⁰⁵ On the other hand, some editors admitted not knowing the significance of any particular workshop and thus did not use that information.¹⁰⁶ Some viewed inclusion in workshops and conferences as a potential strike, believing that this reflected a lack of novelty or a possibility of prior publication.¹⁰⁷ Some felt that acknowledged individuals were far more important than acknowledged workshops.¹⁰⁸

Of course, some law reviews *do* conduct formal peer review. For them, the biographical footnote still seems to be useful; for instance, it could

104. Some examples, among many: "This indicated that the piece was likely more polished, helpful for late submissions."; "When I was an editor, I liked to see 2–3 workshops or conferences as reassurance that others in the field had seen/vouched for the topic and its execution in some way."; and "This generally wouldn't shift selection opinions much, but prior workshopping might at least suggest that the author put significant work into the article."

105. Said one editor: "It is a potential signal of quality insofar as the author's peers had selected the topic as one worthy of inclusion in the conference, workshop, or symposium."

106. For example: "I did not know how to evaluate the 'prestige' of different workshops or how people got invited to them, so it didn't affect my decisions."

107. For instance: "It generally was a good sign, although it also raised concerns about prior publication of portions of the piece."

108. For example, one editor wrote: "I paid much more attention to individual reviewers than conferences, workshops, etc."

identify potential reviewers¹⁰⁹ (or those to avoid¹¹⁰). Indeed, feedback received from people thanked in footnotes has influenced selection outcomes.¹¹¹ Still other law reviews have used the identity of students thanked as research assistants to avoid conflicts of interest in their own decisionmaking.¹¹²

Some editors deny having considered footnote information at all, purportedly evaluating each article purely on its merits.¹¹³ Wrote one editor, “I prefer to actually read the article rather than use the star footnote as a proxy.” Others used the footnote to consider the potential effect that selection would have on an author’s career,¹¹⁴ or even the likely ease of working with the professor throughout the editorial process.¹¹⁵

* * *

As a formal matter, peer review entails an editor sending a paper after submission to a few peers of the author (often blind to the author’s identity, but sometimes not) and relying on those peers’ recommendations as to

109. One editor wrote that names in acknowledgments are useful for “identifying a list of people who might be able to offer additional comments on the piece on short notice.”

Another wrote: “If the star footnote includes thanking other professors for comments, then we would use the star footnote for potential professors to reach out to about the article. In other words, we would reach out to one or more professors thanked in the star footnote to ask questions about the content and strength of the article.”

Another explained further: “If we don’t have the time necessary to solicit an anonymous peer review or need some additional verification of claims made, we often turn to the other professors mentioned in the star. We have found such individuals to be rather credible (some have raised additional concerns about pieces we hadn’t thought of). An author’s biographical information can be helpful but it is usually redundant with the cover letter and resume they submit. We often try to pick articles authored by an author who actually has written consistently in that field so, in so far as background of prior publications is provided, it can be helpful.”

110. Another editor wrote that names in acknowledgments “[t]ell[] us who not to ask for faculty reviews.”

111. For example: “A professor[’s] feedback after reaching out to them about the article has influenced a selection outcome.”

112. One editor wrote that acknowledgments had “[l]ittle significance except to see which, if any, of our school’s students might have been RAs on the paper (and to ensure they did not participate in selections concerning the piece).”

113. For instance: “Name-dropping in the biographical footnote never made a difference to our assessment of the piece.”

114. For example: “We observed if someone’s title indicated they might not yet be tenure-track – this was never a determinative factor in selection, but we may have considered it a soft proxy for willingness to engage in edits or the excitement of knowing that a TLR placement would particularly benefit a younger professor’s career.”

115. For instance: “There was one article that we strongly considered publishing, but most of the committee thought there were some significant edits that would need to be made. At least some members of the selection committee expressed concern when we learned, through the footnote, that the individual (not a law professor) would be holding a job during the publication process that we felt would greatly limit their ability to dedicate time to editing the article. I don’t know to what extent that played a role in any individual’s decision, but the article was narrowly rejected (we require a supermajority).”

whether to accept the paper, require its revision and resubmission, or reject it. As a functional matter, though, peer review simply entails circulation of the paper pre-publication to peers and revision of the paper in view of comments. The point of peer review is that a manuscript should be vetted by the relevant scholarly community before final publication—and before it bears the imprimatur of a particular journal. Even in a formal peer-review setting, though, most substantive review is not done by the journal’s editors. The editor will reject papers that are out of scope or that too blatantly fail a sniff test for quality, but the substantive review is done by academic community members.

Consider the results previously mentioned. Most law-review articles acknowledge multiple people—especially as the rank of the law review increases. Acknowledgments are nearly always tied to some paper-specific contributions, whether research assistance by students or comments or suggestions by peers. And these acknowledgments are usually members of the relevant scholarly communities. Granted, in a formal peer-review system, the editor will usually choose the reviewers, not the author. But such systems usually allow the author to suggest reviewers, and subfields are often small enough that the author and reviewer end up knowing each other anyway. Thus, for a sizeable portion of legal articles, the article will have been distributed by the author to peers and revised according to their feedback before publication: functional peer review. And to the extent that editors consider this information in footnotes, that peer review is integrated into the publication process.

Many authors suspected that some editors, at least, use acknowledgment information as a peer-review proxy. Many seem to find this practice discouraging and refuse to consider the reaction of student editors when drafting their biographical footnotes.¹¹⁶ But some, at least, write biographical footnotes strategically with editors in mind.¹¹⁷ Others express

116. For instance, one author explained, when asked whether footnotes were written with student editors in mind: “Never. I’m afraid it never occurred to me. I figure that the star footnote is indisputably my territory, and no student editor has ever called me on it. I assume that that means that I don’t write anything unusual. I would probably view it as a breach of academic ethics to craft a star footnote designed to persuade law review editors to accept my paper for publication, so I wouldn’t consider doing that. I don’t know how common it is for other authors, though.”

Said another: “No. It feels sleazy.”

117. Some examples, among many: “I want to ensure the students think . . . that I have undergone some level of internal peer review before coming to them.”; “I include conferences attended to show student editors that the paper has been workshopped and that people are interested.”; “Sometimes I mention people who are well-known in the field when submitting because it might give the editors a sign that I have spoken with informed scholars on the issues that I am writing on.”; “I consciously included some well-known figures with whom I had had conversations, but who hadn’t contributed all that significantly. But I wanted to make clear that I was in conversation with the field.”; “My impression

surprise, unaware that this could be a consideration.¹¹⁸

* * *

As noted above, we further examined a collection of articles that had been deemed particularly worthy, as indicated by compendium appearance or prize receipt.¹¹⁹ Prestigious articles had fuller acknowledgment footnotes: 816 characters, in contrast with an average article's 531. Likewise, they acknowledged workshops more often: 58% of them did, in contrast with a baseline rate of 15%. More specifically, 15% of them acknowledged a "faculty workshop," in contrast to 6% of general articles. Finally, their law-review ranking was higher: 63, compared with an average rank of 97 in the data set.

III. TAKEAWAYS

In this Part, we consider the implications of our results for legal scholarship, including those we find problematic, and present some recommendations.

A. Implications

Our results suggest that reported vetting by other scholars functions as something of a proxy for peer review and makes some difference in the article selection process. Acknowledgements appear to matter for article placement. And because article placement matters at least to some degree for the careers of legal scholars, and for the impact of scholarly work—for better or for worse—acknowledgements matter for those more important outcomes as well.

We cannot readily distinguish between alternative mechanisms that could yield this result, though we identify two that we find most plausible.¹²⁰ First, and ideally, the input of other scholars into an article should improve

is that students view the names in the footnote as people who have vetted the Article. I try to get names that will impress them.”; and “I make a deliberate effort to acknowledge--as prominently as possible--the most well-known professors and most prestigious law schools' workshops/conferences that contributed to the piece.”

118. On whether they write footnotes with editors in mind, one author replied: “No - should I?” Wrote another: “I need to learn more about how to do this or what to keep in mind about student editors--so, no[] I don't keep this in mind (but I should, once I learn the game better).”

119. See *supra* note 94.

120. Other possibilities exist. For instance, author traits such as prestige or brilliance could be linked both with prestigious publication and with procedural signal—such as seeking more opportunities for informal review or being invited to more workshops—even setting aside any possibility of scholarly improvement or proxy signaling.

the article; articles with more vetting should place better because editors accurately assess the quality of submitted articles (the “quality-improvement mechanism”).¹²¹ Second, authors and editors could use acknowledgements as a signal that vetting had happened; that is, they could rely on the acknowledgement footnote as a proxy for a (presumably) quality-improving step that happened in the drafting process, whether or not quality actually improved (the “proxy mechanism”). Our data suggest that each explanation may bear some weight, but cannot disentangle them.

Two analyses are consistent with the quality-improvement mechanism. First, articles that appeared in field-specific top-article lists or received prizes are presumably high-quality articles. These articles acknowledged workshops and faculty workshops more frequently than the rest of our sample and had longer acknowledgement footnotes generally, suggesting that more vetting does result in higher-quality articles. Presumably, selection for these honors by field-specific peers does not rely on the proxy of acknowledgement footnotes.¹²² (Hopefully. There’s a caveat here, though, to the extent that background non-article-merit factors, such as prestige and pedigree, are intertwined with scholars’ interpretation of the importance of a work.)

Similarly, a glance back at the figures in Part II will show that articles published in the *Yale Law Journal* and the *Harvard Law Review*, the first- and second-ranked general law reviews, are with their highly-ranked peers when it comes to acknowledgement metrics—even though those two journals use anonymized submissions and request that acknowledgements be confined to a separate cover page. These results are only suggestive, but they do imply that at least some quality-improvement results from vetting.

On the other hand, survey self-reports also are consistent with the proxy mechanism. In the survey results presented above, at least some authors report using acknowledgement footnotes strategically as a proxy for vetting (and thus quality). What’s more, at least some editors report using acknowledgement footnotes as a proxy for scholarly merit or authorial qualification, particularly as a first cut or for otherwise-unknown authors. Thus, at least some of the time, the acknowledgement footnotes *themselves* seem to matter.

121. Again, we recognize this relies on the assumption that better articles place in more prestigious journals—a flawed assumption, but one on which much of the legal academy seems to rely.

122. Of course, a greater number of acknowledged scholars does increase the odds that prize-selecting scholars are acknowledged in and therefore at least aware of an article.

B. Concerns

Our results do not suggest fundamental flaws in the process of legal scholarship and article placement. Peer review happens to some extent through vetting, and that peer review seems to make a difference in article placement through one mechanism or another. This does not seem to be a substantial problem; since vetting really can improve articles, using it as a quasi-peer-review may well be justified, though we lack the data to firmly come down one way or the other. However, our dive into the nuances of this process reveals some concerns.

The role of acknowledgments as a peer-review proxy leads to perhaps the most troubling of our findings: substantial variation in practices and knowledge among authors and journal editors with regard to the proxy mechanism. We did not aim to gather a representative sample in our survey responses and do not pretend that we ended up with one. Nevertheless, in our sample of convenience we saw a wide range in thoughts about biographical footnotes. Some authors were self-consciously strategic in the way they drafted these footnotes, making sure to list high-profile scholars prominently. Others had (or at least professed to have) no idea that biographical footnotes were at all significant in the article selection process. But at least some—though not all—editors acknowledged using those footnotes deliberately when selecting articles for publication.

We posit that this lack of knowledge may contribute to problems of bias and unfairness in the legal academy. When editors use acknowledgement footnotes to help select articles, whether in early triage stages or later on, scholars ignorant of this practice are disadvantaged.¹²³ In contrast, scholars who come from a relatively privileged place in the academy—who studied at schools known for producing future professors, undertook legal fellowships, or otherwise took a slightly-less-rocky path into legal scholarship—may understand that acknowledgements have instrumental value and therefore have another (small) leg-up in the placement-and-publication process that is essential for scholarly success.¹²⁴

Far more hypothetically, ignorance of the signaling value of acknowledgement footnotes may be linked to the absence of other procedural knowledge about the scholarly community. Those who do not know about the instrumental value of acknowledgements footnotes may

123. Ignorance is not the only reason to avoid including a fulsome acknowledgement footnote at the time of submission, of course. Some authors may view the process as otherwise problematic. See *supra* note 116 and accompanying text.

124. One of us, for instance, was given the advice while in law school to include not only the names but also the institutional affiliations of those who had given comments, presumably to impress editors with an avalanche of fancy school names.

also not be as familiar with, or as comfortable with, the networks of knowledge co-production that underly those footnotes in the first place. They may not have a broad network of scholars with whom to share work or feel comfortable sharing work before publication. To the extent that such co-production increases the quality of articles, such that the quality proxy of acknowledgements is accurate, those scholars also lose out on the opportunity to improve their work in the first place, suffering repercussions in placement through both mechanisms.

From the standpoint of law-review editors, murkiness in acknowledgment practices is troublesome. As mentioned, it is not irrational for editors to glean information from the acknowledgments—indeed, it can be useful to editors for contextualizing a piece, determining its place within a scholarly community, and the like. But if author practices vary, editors are left with more noise than signal, as the mere inclusion of a name in a footnote can mean anything from a brief comment given in the hallway to a thorough set of comments written on a draft.

We might ask, of course: Why should editors use the footnote at all? Why not simply let papers stand on their own merit? For those who believe in pure meritocracies (and perhaps also the Tooth Fairy), that's a fair goal,¹²⁵ but it's not one that's compatible with our model of publishing, in which authors shotgun-submit to a broad swath of law reviews twice a year,¹²⁶ and in which submissions are evaluated by students with less than two full years of rudimentary legal education under their belts. Each law review must comb through thousands of submissions, sometimes in a matter of days. Is it possible to read them all and weigh their comparative merits? No. Heuristics are inevitable.

Imagine yourself an overburdened articles editor, inundated with submissions. You want good articles—interesting articles, impactful articles, articles that are analytically sound. But you've also got a queue of papers to get through quickly, only a dozen or so of which will be selected. Further, you're in a race with all the other law reviews to find the best papers. Being too slow means the good ones will be snapped up fast. But being too fast might mean hastily extending an offer to an article that seems interesting but doesn't hold up on a closer read. If you were gaming out such a system, you'd want to be quickly selecting from a pool of papers that had

125. Notably, some content that appears in the footnote may be quite important to authors for other reasons, such as statements that the views presented represent only the author's opinions and not those of their employer—which may be essential for practitioners or government employees.

126. There have been calls for reforms to this model: exclusive submissions, science-like peer review, and the like. *E.g.*, Friedman, *supra* note 5, at 1352, 1356 (suggesting limiting simultaneous submission and implementing peer review, respectively); William C. Whitford, *The Need for an Exclusive Submission Policy for Law Review Articles*, 1994 WIS. L. REV. 231, 232 (1994).

the best chances of being high-quality scholarship. What would you expect that to look like? From our understanding of scholarly networks, you'd expect just what we found at higher-ranked law reviews: papers that had been shared and commented on at conferences and by well-regarded experts in the field. As a heuristic, that's not bad—assuming, of course, that the information in the footnote is reliable.

We also note that acknowledgement footnotes can reveal troubling biases in the scholarly networks of authors (at least, as reflected in acknowledgement footnotes), or of a subfield of legal scholarship. More men are acknowledged than women—but the disparity is smaller than that in authorship, suggesting that women are doing more than their fair share of the knowledge co-production work in the legal academy.¹²⁷ Such a conclusion squares, dishearteningly, with literature that indicates women in academia perform a disproportionately large share of service work.¹²⁸ Given the evidence that women are undercredited for work that they perform in other contexts,¹²⁹ we might expect that their actual over-contribution to knowledge co-production is even greater than shown in acknowledgement footnotes.

C. Recommendations

We offer a few recommendations to improve the way acknowledgement footnotes, in particular, are used in the process of legal scholarship. These may merely nibble around the edges, but seem worthwhile nonetheless.

To combat the inequality arising from differences in knowledge about the role of acknowledgements, our recommendation is straightforward.

127. There is something of a catch-22 here: an author aspiring to acknowledge a certain number of women is necessarily asking more women to undertake the underlying intellectual labor. This dynamic is merely one example of a larger pattern for underrepresented groups. See, e.g., Sharon Bird et al., *Creating Status of Women Reports: Institutional Housekeeping as "Women's Work,"* 16 NWSA J. 194, 199 (2004) ("Women and people of color, insofar as they are more involved in support activities, especially institutional housekeeping, have less time to pursue higher status, higher paying core activities."); Joan C. Williams & Marina Multhaup, *For Women and Minorities to Get Ahead, Managers Must Assign Work Fairly*, HARV. BUS. REV. (Mar. 5, 2018), <https://hbr.org/2018/03/for-women-and-minorities-to-get-ahead-managers-must-assign-work-fairly> ("[W]omen and people of color do more office housework and have less access to glamour work than white men do.").

128. See Cassandra M. Guarino & Victor M. H. Borden, *Faculty Service Loads and Gender: Are Women Taking Care of the Academic Family?*, 58 RES. HIGHER EDUC. 672, 690 (2017) (finding "little doubt as to the existence of a gender imbalance in faculty service loads"); Joya Misra et al., *The Ivory Ceiling of Service Work*, 97 ACADEME 22, 24 (2011) ("[W]omen associate professors taught an hour more each week than men, mentored an additional two hours a week, and spent nearly five hours more a week on service.").

129. E.g., Sandrine Devillard et al., *Still Looking for Room at the Top: Ten Years of Research on Women in the Workplace*, MCKINSEY Q., March 2018, at 7–8 ("Women also tend to receive less credit than men for success and more criticism for failure.").

Scholars: your acknowledgement footnotes matter in the article selection process.¹³⁰ Include them in your submissions, and be detailed.

Inasmuch as acknowledgements are reflections of knowledge co-production, and are used as such, the process would benefit from greater transparency. Some acknowledgements reflect extensive written comments on a draft, but others reflect nothing more than a trenchant tweet that inspired some nuance of the argument. Editors and readers alike would benefit from authors disclosing more about what acknowledgements mean. Transparency would make the quasi-peer-review process work better, would more accurately share credit, and would enable future efforts to probe knowledge co-production in the legal academy.

To this end, law-review editors can reform their own practices, too. It's not irrational to use the information in acknowledgment footnotes. But it should be done thoughtfully and equitably. For instance, if a paper comes in *without* all the fanciness—say, with a short acknowledgment list, or missing the names of famous scholars—is that a lack of vetting? Or does that reflect an author who lacks the access or privilege of someone with an elite academic pedigree? Alternatively, a submission from an author at an elite institution without much in the way of acknowledgments might truly reflect an unvetted piece. One potential solution would be to treat acknowledgements as a one-way signal: their presence might bolster a submission in the process, but their absence should not hinder it. But, of course, in a time-pressured sorting environment, this approach would present a false dichotomy—the absence of a boost has the same effect as the presence of a fault when submissions are graded on a curve.

A different solution would prompt law-review editors to be more explicit about what constitutes an acknowledgeable contribution, or at least what their default assumptions in reading them are. For instance, editors could state that acknowledgements are taken as an indication of substantive feedback based on reading a draft, and anything less than that should not be included at the submission stage. Enforcement would, of course, be problematic,¹³¹ and such changes might escape the notice of most authors, given the shotgun-style mass parallel submission mechanism of ExpressO and Scholastica.¹³² *The Green Bag*, in contrast, *does* give guidelines on who

130. At least, they do for now. Perhaps this Essay will change the game.

131. Though, as it happens, some medical journals require authors to demonstrate *permission* from those they acknowledge, in recognition that acknowledgement might shade into implications of imprimatur—even after the formal process of peer review has been completed.

132. It is probably naïve to suppose that most authors actually read the submission guidelines for each journal they submit to.

should be acknowledged.¹³³

Finally, just as acknowledgement footnotes give us a window into knowledge co-production, they should give some authors a wake-up call. If one's own acknowledgement footnotes are almost exclusively filled with men, or with the author's own colleagues, or with some other pattern reflecting a non-inclusive scholarly network, that suggests a problem. Diversity within scholarly networks is important, not only because it promotes inclusivity within the legal academy but also because diverse inputs make scholarship better.

CONCLUSION

The process of legal scholarship matters. How articles are written and selected affects whose voices are heard and how loudly, who receives credit for ideas or contributions, and whose ideas are brought to the fore. In this Essay, we argue that the biographical footnote provides a useful empirical window into that process, with a few significant conclusions. Most clearly, contrary to folk wisdom, legal scholarship is at some level a team sport—rather than a solitary endeavor—and it involves at least some form of peer review. That these realities are obscured in biographical footnotes rather than in bylines and formal journal processes represents an idiosyncrasy of process rather than a sharp difference in academic practice. Less clearly but more problematically, the practices of biographical footnotes themselves reveal questionable aspects of the legal academy, including gender disparities in credit and potential entrenchment of existing academic privilege through the opacity of acknowledgement practices. So in the end, how much can we learn from the easy-to-overlook biographical footnote? We look forward to finding out.

133. For instance, the front matter provides: “Gratitude to RAs is nice. Colleagues who make major contributions should share the byline. Recognize those who help in small ways with something printed by Hallmark, not the *Bag*.” Front Matter, 22 GREEN BAG 2D (2019), http://greenbag.org/v22n3/v22n3_front_matter.pdf [<https://perma.cc/QP7W-VX34>].

APPENDIX

A note to readers: maybe you don't care about data-analysis methods. That's fine. If so, feel free to skip this section. For those are interested, here is what we did:

*A. Footnote Analysis**1. Obtaining a Biographical-Footer Database*

We compiled a database of biographical footnotes from most articles published between 2008 and 2017 in around 183 generalist¹³⁴ law reviews from the United States.

A list of general law reviews was generated using Bryce Clayton Newell's compiled list, which ranks law reviews by combining the scores of five distinct rankings.¹³⁵ These rankings include the canonical U.S. News Peer Reputation score, the overall U.S. News school ranking, the Washington & Lee Law Journal ranking, the Washington & Lee Law Journal Impact Factor ranking, and the Google Scholar Metrics ranking.¹³⁶ The aggregated rank—the so-called MetaRank—was used throughout data analysis. This allowed for a ranking that combined classical markers of institutional prestige with indicators of scholarly activity, like citation metrics.

Articles were downloaded from LexisAdvance¹³⁷ and supplemented by Westlaw¹³⁸ or HeinOnline¹³⁹ where necessary. Disappointingly, no legal database includes the option to export the biographical footnote natively. Westlaw exports it just like any other footnote. Lexis typically (but not always) includes it in a dedicated section of the main text, apart from other footnotes. Lexis was therefore most amenable to semi-automated extraction, but it was not perfect, and the biographical footnotes often had to be manually extracted from Westlaw or HeinOnline when they were missing from Lexis.

Using the LexisAdvance database, all content from each of these selected law reviews (if available) was downloaded manually. Downloaded content spanned January 1, 2008 to December 31, 2017. Files were downloaded to

134. *See supra* note 6.

135. Newell, *supra* note 55.

136. *Id.*

137. LEXISADVANCE, <https://advance.lexis.com/>.

138. WESTLAW NEXT, <https://1.next.westlaw.com/>.

139. HEINONLINE, <https://home.heinonline.org/>.

DOCX format. A Python script using a regular expression modeled on the typical layout of each Lexis download was used to extract the biographical footnote from each DOCX into a CSV spreadsheet, and the resulting spreadsheets were aggregated. Where a biographical footnote was not successfully extracted (ca. 2000 papers), the paper was retrieved manually from Lexis, Westlaw, or Hein, and the footnote contents were copied and pasted.

Only documents designated by Lexis as “articles” were retained, to avoid skewing the analysis by inclusion of student notes or comments (which outnumber articles) and other forms of papers like essays, book reviews, forewords, speeches, or tributes (which tend to be selected differently than articles). Article misdesignation was corrected if we saw it. Online supplements to law reviews were discarded.

This yielded a spreadsheet containing 29,094 articles from 183 journals.¹⁴⁰ (We did not read them all. Sorry.)

2. *Obtaining a List of Law Professors*

The AALS maintains a print and electronic directory of law professors that we used as a database. (The list has some inaccuracies and surprising omissions, but it was the best data source we could readily find.) Because AALS would not provide the data underlying its Directory of Law Teachers, we used scanned versions of its paper books. HeinOnline has the 2011–2012 edition in a format with largely accurate optical character recognition (OCR); this was used as an initial test. A library scan of the 2017 edition was also used.

The contents of each OCRed page were transposed and filtered to yield a spreadsheet containing academic subject, name and affiliation, seminar-teaching status, multiple-institution status, minority status, LGBT status, and seniority.

This yielded 10,101 unique names from the 2011 database and 12,711 unique names from the 2017 database.

140. Due to lack of availability on Lexis, the following periodicals were on the ranking list but were not downloaded: *Florida Law Review* (#36); *Connecticut Law Review* (#42); *Mitchell Hamline Law Review* (#104); *Arizona Summit [Phoenix] Law Review* (#178); *John Marshall Law Journal* (#180); *University of Massachusetts Law Review* (#186); *University of the District of Columbia Law Review* (#186); *Liberty University Law Review* (#191); *Faulkner Law Review* (#192); and *Florida A&M University Law Review* (#193).

3. *Extracting Named Entities and Noun Phrases from Footnotes*

The text of each footnote was analyzed using Python¹⁴¹ by way of the spaCy¹⁴² natural language processing (NLP) library and its named entity recognition (NER) feature. NLP methodology was initially optimized using a small set of articles from the *Michigan Law Review* and *Yale Law Journal*.

For each footnote, a list was retrieved consisting of each entity, its classification (person, institution, place, organization), and the article.

This yielded 278,086 entities.

We also used the above methodology to extract from each footnote all noun phrases, which let us initially determine the most common noun phrases appearing in footnotes. To obtain graphs of noun usage frequency, we used basic string search functions in Excel.

4. *Gender Analysis*

Obtaining the actual gender identity of each author or individual mentioned in a biographical footnote was beyond the feasibility of this effort. Thus, a statistical-likelihood approach was used.

The Social Security Administration provides tables of baby names with more than five occurrences on birth certificates for each year, along with the sex specified on the birth certificate.¹⁴³ Tables were downloaded spanning 1950 to 2000, inclusive.

From the aggregated tables, a list was compiled comprising all 64,023 unique names. Then, for each name, the number of female or male occurrences were found. A *gender excess* (G) was calculated for each name:

$$G = \frac{M-F}{M+F},$$

in which M is the number of male occurrences and F is the number of female occurrences. Accordingly, a male-only name would be $G = 1.0$, a female-only name would be $G = -1.0$, and an evenly split name would be $G = 0.0$. Likewise, a 3:1 male/female ratio would yield a $G = 0.5$.

The idea behind G is to estimate the gender skew of a population. A 1:1 population has no skew ($G = 0.0$). In a 3:1 population, 50% of the population is skewed ($G = 0.5$).

Each author's name was then assigned a G from the above list.

From each biographical footnote, a list of people was extracted using Python via the spaCy natural language processing (NLP) library, using

141. PYTHON, <https://www.python.org/>.

142. SPACY, <https://spacy.io/>.

143. *Popular Baby Names*, SOCIAL SECURITY ADMIN., <https://www.ssa.gov/oact/babynames/limits.html> [<https://perma.cc/25FG-8LBV>].

named-entity recognition (NER). Each person was then assigned a G from the gender excess table. For each article, an *overall gender skew* (S) was calculated:

$$S = \frac{\sum_1^n G_n}{n},$$

in which n is the number of names in the footnote having a defined G value, and G_n is the G value for a given name within the footnote.

The principle behind the overall gender skew S is the same as the gender excess G . A footnote with $S = 0.0$ achieves gender parity. A footnote with $S = 1.0$ is male-dominated. A footnote with $S = 0.5$ has a 50% bias (i.e., 3:1 ratio).

B. Survey

We asked legal scholars and law-review editors (both current and former) about their approaches to the biographical footnote.

We assembled an anonymous survey in Qualtrics. We asked respondents first whether they were non-student writers of law-review articles, law-review editors with a role in article selection, or both. Respondents were then shown, accordingly, a set of writer questions or editor questions. Most questions were in free-response form.

Writers were asked about their demographics,¹⁴⁴ seniority,¹⁴⁵ process and standards for biographical-footnote writing,¹⁴⁶ expectations for others' footnotes,¹⁴⁷ and use of footnotes with journal editors in mind.¹⁴⁸

Editors were asked about their role in article selection,¹⁴⁹ the extent of their journal's selection author-blindness, the perceived usefulness of footnotes in selection,¹⁵⁰ their journal's ranking, and their journal's category.

144. We asked about gender and ethnicity.

145. We asked respondents to self-sort into categories comprising professors (grouped into 0–5 years, 6–10 years, or more than 10 years of experience), researchers/fellows, and others.

146. We asked both “How and when do you write your biographical footnote (or, ‘star’ footnote)?” and “What determines what, and who, goes into your biographical footnote?”

147. We asked “When, if ever, do you expect to appear in another author's biographical footnote?”

148. We asked both “Do you write your biographical footnote with student editors in mind? (If so, how?)” and “What do you think law-review editors use biographical footnotes for, if anything?”

149. We asked respondents to self-sort into editorial board members, non-editorial board members, or advisory/nonvoting roles.

150. We asked (1) “What was the significance or usefulness to you, if any, of the author's biographical footnote (or, ‘star’ footnote)?”; (2) “When in the review process, if at all, did you look at an author's biographical footnote?”; (3) “What did it mean to you if a conference, workshop, or symposium was named in an author's biographical footnote?”; (4) “What did you take it to mean if a particular person's name appeared in an author's biographical footnote?”; and (5) “Has anything from any particular biographical footnote stood out, made an impression on you, or influenced a selection outcome?”

The survey was posted on Twitter by both authors and was posted on WNP's personal Facebook page. It was also emailed by WNP to the IPProf's email listserv, by a colleague of JIT to a current law-review editor listserv, and to roughly three dozen law professors directly. The resulting sample was indisputably a sample of convenience.

We received 124 responses: 58 as writers only, 19 as editors only, and 46 in both roles.