

Winter 2012

A Jester's Promenade: Citations to Wikipedia in Law Reviews, 2002-2008

Daniel J. Baker

A Jester's Promenade: Citations to Wikipedia in Law Reviews, 2002- 2008*

BY DANIEL J. BAKER**

Abstract:

Due to its perceived omniscience and ease-of-use, reliance on the online encyclopedia Wikipedia as a source for information has become pervasive. As a result, scholars and commentators have begun turning their attentions toward this resource and its uses. The main focus of previous writers, however, has been on the use of Wikipedia in the judicial process, whether by litigants relying on Wikipedia in their pleadings or judges relying on it in their decisions. No one, until now, has examined the use of Wikipedia in the legal scholarship context. This article intends to shine a light on the citation aspect of the Wikipedia-as-authority phenomenon by providing detailed statistics on the scope of its use and critiquing or building on the arguments of other commentators.

Part II provides an overview of the debate regarding the citation of Wikipedia, beginning with a general discussion on the purposes of citation. In this Part, this article examines why some authors choose to cite to

* © Daniel J. Baker 2010. This is a revised version of the winning entry in the New Member Division of the 2010 American Association of Law Libraries/LexisNexis® Call for Papers Competition.

** Law Reference/Research Librarian, O'Quinn Law Library, University of Houston Law Center. B.A., The Ohio State University; J.D., University of Cincinnati College of Law; M.L.I.S., Wayne State University. The author would like to thank David DeKorte for his help in fine-tuning the methodology; Spencer Simons, Lauren Schroeder, and Emily Lawson for their editorial insights on earlier drafts; and Mon Yin Lung, Helen Boyce, Chris Dykes, Suzanne Gordon-Martin, and Saskia Mehlhorn for their support during the writing of this article.

Wikipedia and explains why such citation is nonetheless problematic despite its perceived advantages. A citation analysis performed on works published by nearly 500 American law reviews between 2002 and 2008 is the focus of Part III, from a description of the methodology to an examination of the results of the analysis and any trends that may be discerned from the statistics. Finally, Part IV examines the propriety of citing to Wikipedia, culminating in a call for tighter editorial standards in law reviews.

*In all that I endure, of one thing I am sure
Knowledge and Reason change like the Season
A Jester's Promenade¹*

I. INTRODUCTION

On January 15, 2001, the world changed: Wikipedia was launched.² Since its inception, this online encyclopedia³ has had a profound effect on the accessibility and availability of a wide range of information. But it is not without its detractors. Concerns about the reliability and dependability of the information it provides have thrust it to the fore of many information debates. Some argue that its weaknesses, such as its susceptibility to vandalism or fraud, render it an untrustworthy resource for anything other than a starting point for research (if even that).⁴ Others argue that its strengths, especially its ability to react to new developments in the supply and demand of information, outweigh any occasional defects in individual encyclopedic entries.⁵ Regardless, Wikipedia has become ubiquitous,

¹ KANSAS, *The Pinnacle*, on MASQUE (CBS Records 1975).

² See Andrew Lih, *The Wikipedia Revolution* 64 (2009).

³ Much has been written on Wikipedia's history and functionality, which I will not duplicate here. For additional information. See, e.g., PHOEBE AYERS, CHARLES MATTHEWS & BEN YATES, *HOW WIKIPEDIA WORKS: AND HOW YOU CAN BE A PART OF IT* (2008); JOHN BROUGHTON, *WIKIPEDIA: THE MISSING MANUAL* (2008); LIH, *supra* note 2.

⁴ See, e.g., MARK Y. HERRING, *FOOL'S GOLD: WHY THE INTERNET IS NO SUBSTITUTE FOR A LIBRARY* 28–29 (2007); Bryan C. Berman, Note and Comment, *You Can't Trademark That! Wikipedia Said So*, 30 WHITTIER L. REV. 825, 842 (2009); Amber Lynn Wagner, Comment, *Wikipedia Made Law? The Federal Judicial Citation of Wikipedia*, 26 J. MARSHALL J. COMPUTER & INFO. L. 229, 231 (2008); G.E. Gorman, *A Tale of Information Ethics and Encyclopædias; or, Is Wikipedia Just Another Internet Scam?*, 31 ONLINE INFO. REV. 273, 274 (2007), www.emeraldinsight.com/10.1108/14684520710773050.

and, despite dire predictions (or hopes) to the contrary,⁶ it does not appear to be going away any time soon.

Due to its perceived omniscience and ease-of-use, Wikipedia has succeeded as an enterprise, and reliance on it for information has become pervasive. Since 2004, even state and federal courts have cited to it.⁷ As a result, scholars and commentators are beginning to take notice of this resource and its uses. For example, several authors have recently examined the use of Wikipedia by courts and litigants.⁸ This article intends to add to this quickly-growing scholarship by examining the citation to Wikipedia in law reviews.⁹

Part II provides an overview of the debate regarding the citation of Wikipedia. After discussing the purposes of citation generally, this article examines why authors choose to cite to Wikipedia and explains why such citation is nonetheless problematic, despite its perceived advantages. Part III then discusses a citation analysis performed on works published by nearly 500 American law reviews between 2002 and 2008. First, the methodology for the analysis is described, from

⁵ See, e.g., Don Fallis, *Toward an Epistemology of Wikipedia*, 59 *J. Am. Soc'y for Info. Sci. & Tech.* 1662, 1669 (2008), <http://dx.doi.org/10.1002/asi.20870>; Roy Rosenzweig, *Can History Be Open Source? Wikipedia and the Future of the Past*, 93 *J. Am. Hist.* 117, 136 (2006).

⁶ See, e.g., Eric Goldman, *The Future of Internet Content and Services: Wikipedia's Labor Squeeze and Its Consequences*, 8 *J. ON TELECOMM. & HIGH TECH. L.* 157, 158–59 (2010); *Death of Wikipedia Predicted*—Film at Eleven, *BART'S BLOG*, <http://fob.po8.org/node/377> (Oct. 31, 2007, 00:39 MST).

⁷ The first state court to cite to a Wikipedia article in a published decision was the Supreme Court of Michigan. See *Bryant v. Oakpointe Villa Nursing Ctr., Inc.*, 684 N.W.2d 864, 867 n.2 (Mich. 2004). The distinction of being the first federal court to publish an opinion that cites to a Wikipedia article is shared by the 11th Circuit Court of Appeals and the Eastern District of Virginia. See *Bourgeois v. Peters*, 387 F.3d 1303, 1312 (11th Cir. 2004); *Demmon v. Loudoun County Pub. Schs.*, 342 F. Supp. 2d 474, 493 n.6 (E.D. Va. 2004).

⁸ See Jason C. Miller & Hannah B. Murray, *Wikipedia in Court: When and How Citing Wikipedia and Other Consensus Websites Is Appropriate*, 84 *ST. JOHN'S L. REV.* 633 (2010); Lee F. Peoples, *The Citation of Wikipedia in Judicial Opinions*, 12 *YALE J.L. & TECH.* 1 (2009), <http://www.yjolt.org/files/peoples-12-YJOLT-1.pdf>; Wagner, *supra* note 4; Noam Cohen, *Courts Turn to Wikipedia, but Selectively*, *N.Y. TIMES*, Jan. 29, 2007, at C3, available at <http://www.nytimes.com/2007/01/29/technology/29wikipedia.html>; R. Jason Richards, *Courting Wikipedia*, *TRIAL*, Apr. 2008, at 62.

⁹ Legal periodicals come in many forms: current awareness newsletters, practical publications, and scholarly works. This article focuses on scholarly periodicals published by, or in collaboration with, law schools, regardless of whether the periodical is a review, journal, quarterly, or annual. This article generally refers to all such publications as “law reviews” regardless of their actual titles.

how the law reviews were selected to how the individual citations were organized and classified. Then, the results of the analysis are announced along with any trends that may be discerned from the statistics. Finally, Part IV delves into the question of the propriety of citing to Wikipedia, culminating in a call for tighter editorial standards for student-edited law reviews.

II. THE DEBATE OVER CITATIONS TO WIKIPEDIA

A. THE PURPOSES OF CITATION IN GENERAL

Generally speaking, all citations serve two main functions.¹⁰ First, citation identifies the resources that the author examined in developing and writing his work; this is the documentary function of citation.¹¹ Usually, these resources will offer support for the author's statements, either because the author's work builds on, or was inspired by, the item being cited or because the author cites another's writing as proof that his own statement is true, valid, or plausible.¹² The author may even cite to a piece that disagrees with his statement, but even these citations are meant to lend credibility to the author's work for the same reasons.

The second purpose of citation is to help the reader locate (and access) the same resources the author used by providing the necessary bibliographic information (i.e., the bibliographic function of

¹⁰ See, e.g., HELENE S. SHAPO, MARILYN R. WALTER & ELIZABETH FAJANS, *WRITING AND ANALYSIS IN THE LAW* 472 (rev. 4th ed. 2003); Paul Axel-Lute, *Legal Citation Form: Theory and Practice*, 75 *LAW LIBR. J.* 148, 148 (1982). Many authors list more than two purposes for citation, but in this author's opinion, the additional purposes they suggest are duplicative of the two purposes discussed here. See, e.g., ASS'N OF LEGAL WRITING DIRS. & DARBY DICKERSON, *ALWD CITATION MANUAL: A PROFESSIONAL SYSTEM OF CITATION* 3 (4th ed. 2010) [hereinafter *ALWD CITATION MANUAL*]; CHARLES LIPSON, *CITE RIGHT: A QUICK GUIDE TO CITATION STYLES—MLA, APA, CHICAGO, THE SCIENCES, PROFESSIONS, AND MORE* 3–4 (2006); MARY-CLAIRE VAN LEUNEN, *A HANDBOOK FOR SCHOLARS* 9–10 (rev. ed. 1992).

¹¹ VAN LEUNEN, *supra* note 10, at 9. See also Carolyn O. Frost, *The Use of Citations in Literary Research: A Preliminary Classification of Citation Functions*, 49 *LIBR. Q.* 399, 400 (1979) (discussing the “documentary dimension of the citation”); Jack L. Landau, *Footnote Folly: A History of Citation Creep in the Law*, *OR. ST. B. BULL.*, Nov. 2006, at 19, 21, available at <http://www.osbar.org/publications/bulletin/06nov/footnote.html> (mentioning “documentary functions for footnotes”).

¹² See *THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION* R. B1, at 3 (Columbia Law Review Ass'n et al. eds., 18th ed. 2005).

citation).¹³ Theoretically, this information is provided so the reader can verify the information on her own, rather than just taking the author's word for it, but, in practice, the citation is provided so the reader can locate additional information on that issue if she is so inclined.¹⁴

Although all scholarly work requires citation (if for no other reason than to stave off charges of plagiarism),¹⁵ appropriate citation is especially important for legal writing, scholarly or otherwise.¹⁶ Whether in a law review article, a brief filed with a court, or a judicial opinion, appropriate legal citation serves a third function by establishing the authority of the sources upon which the writer relied.¹⁷ This concept of "authority" places a heightened significance on the creator or publisher of the resource being cited, regardless of the content.¹⁸ Accordingly, "legal researchers have traditionally looked for information that is more than just informative; they have looked for information that is unquestionably authoritative."¹⁹ Although

¹³ Cf. Mary I. Coombs, *Lowering One's Cites: A (Sort of) Review of the University of Chicago Manual of Legal Citation*, 76 VA. L. REV. 1099, 1106 (1990) (book review). Prof. Coombs describes the "bibliographic function" of citations as either "to lead its reader to the work cited" or "to give credit for borrowed material [and] to provide the reader with access to research materials." *Id.* at 1105-06 (alteration in original) (footnotes omitted). Clearly, her first option succinctly describes the bibliographic function as this author is using that phrase. Her second option is simply a conflation of the two separate functions.

¹⁴ See EUGENE VOLOKH, *ACADEMIC LEGAL WRITING* 257 (4th ed. 2010) (stating that "most readers don't have the time to . . . check the original sources cited by the articles they read" to verify the article's accuracy).

¹⁵ See, e.g., SHAPO ET AL., *supra* note 10, at 27.

¹⁶ Cf. William R. Wilkerson, *The Emergence of Internet Citations in U.S. Supreme Court Opinions*, 27 JUST. SYS. J. 323, 333 (2006) ("Citations in all disciplines are critical to the work of scholarship. . . . These issues are especially important in legal scholarship, where law reviews and judicial opinions are known for their exhaustive use of citations.").

¹⁷ See, e.g., SHAPO ET AL., *supra* note 10, at 26; Frederick Schauer, *Authority and Authorities*, 94 VA. L. REV. 1931, 1934 (2008). See also Frederick Schauer & Virginia J. Wise, *Nonlegal Information and the Delegalization of Law*, 29 J. LEGAL STUD. 495, 497-98 (2000) ("The language of authority is in important respects the language of the law . . ."). But see William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 251 (1976) ("The normal function of the scholarly citation is not to adduce authority for a proposition . . .").

¹⁸ See Schauer, *supra* note 17, at 1935.

¹⁹ Coleen M. Barger, *On the Internet, Nobody Knows You're a Judge: Appellate Courts' Use of Internet Materials*, 4 J. APP. PRAC. & PROCESS 417, 419 (2002).

scientists might risk their credibility by citing to the works of Immanuel Velikovsky,²⁰ Anatoly Fomenko,²¹ or Gene Ray,²² “the role of authority . . . looms far larger in law than in science . . .”²³ In the sciences, readers are most persuaded by objectively verifiable facts, regardless of the source. Legal discourse, on the other hand, is grounded in opinion and interpretation; some sources of particular opinions and interpretations carry more weight and are, therefore, more authoritative than other sources. Indeed, “[c]itation to proper authority . . . constitutes a crucial connection between legal argument and the grounding upon which it rests.”²⁴

Thus, the documentary function of citation requires an author who relies on information found in a Wikipedia entry without going any further to cite to Wikipedia. Of course, if the author merely uses Wikipedia to help locate the resources upon which the author ultimately relies,²⁵ a citation to Wikipedia should be avoided because it is unnecessary. Nevertheless, as long as enough information is provided to allow the reader to locate the exact same information in Wikipedia, the bibliographic function is satisfied.²⁶ Accordingly, citing to Wikipedia can still satisfy the purposes of citation in general, but does Wikipedia satisfy the demands of authority?

B. WHY AUTHORS CITE WIKIPEDIA

Authors, judges and scholars alike, have suggested many justifications (with or without qualification) for citing to Wikipedia. A very common one is that Wikipedia is at least comparable to other

²⁰ *E.g.*, IMMANUEL VELIKOVSKY, *WORLDS IN COLLISION* (1950).

²¹ *E.g.*, ANATOLY T. FOMENKO, *1 HISTORY: FICTION OR SCIENCE?* (2004).

²² *E.g.*, Time Cube, <http://www.timecube.com/> (last visited Nov. 12, 2010).

²³ Schauer, *supra* note 17, at 1934, n.11. *See also* Kris Franklin, *The Rhetorics of Legal Authority Constructing Authoritativeness, the “Ellen Effect,” and the Example of Sodomy Law*, 33 RUTGERS L.J. 49, 50 (2001) (“[L]egal writing expects sources to do a certain kind of work that other disciplines do not necessarily require.”).

²⁴ Kris Franklin, “. . . See Erie.”: *Critical Study of Legal Authority*, 31 U. ARK. LITTLE ROCK L. REV. 109, 111 (2008).

²⁵ *See* VOLOKH, *supra* note 14, at 152–53.

²⁶ *But see infra* Part II.C.2.

resources and, therefore, worthy of reliance.²⁷ Because so many people have viewed the particular Wikipedia entry and surely would have corrected any errors, so the argument goes, Wikipedia is “as reliable as a single authored source.”²⁸ In support of this argument, many authors²⁹ point to a disputed 2005 study by the journal *Nature* and its finding that Wikipedia entries on scientific topics were almost as accurate as similar entries from the online version of *Encyclopædia Britannica*.³⁰ However, such an argument naively replaces all tests for the authoritativeness of a resource with a “lowest common denominator” analysis.³¹

Professor Bertrand Meyer convincingly argues that we should not be trying to compare Wikipedia with more reputable print sources, but with other Internet resources.³² After all, Wikipedia, like anything available through the Internet, is generally more accessible than print resources.³³ Meyer concedes that Wikipedia’s weaknesses, as pointed

²⁷ See, e.g., Beth Simone Noveck, *Wikipedia and the Future of Legal Education*, 57 J. LEG. EDUC. 3, 6 (2007).

²⁸ *Id.* See also Miller & Murray, *supra* note 8, at 644-45; Rosenzweig, *supra* note 5, at 136.

²⁹ See, e.g., Diane Murley, *In Defense of Wikipedia*, 100 LAW LIBR. J. 593, 597 (2008); Noveck, *supra* note 27, at 6.

³⁰ Jim Giles, *Internet Encyclopaedias Go Head to Head*, NATURE, Dec. 15, 2005, at 900, available at <http://www.nature.com/nature/journal/v438/n7070/pdf/438900a.pdf>. But see ENCYCLOPAEDIA BRITANNICA, INC., FATALLY FLAWED: REFUTING THE RECENT STUDY ON ENCYCLOPEDIA ACCURACY BY THE JOURNAL NATURE (Mar. 2006), http://corporate.britannica.com/britannica_nature_response.pdf. See also Jeffrey Knapp, *Google and Wikipedia: Friends or Foes?*, in TEACHING GENERATION M 157, 166-67 (Vibiana Bowman Cvetkovic & Robert J. Lackie eds., 2009).

³¹ Berman, *supra* note 4, at 840. “Moreover, studies like [the one conducted by *Nature*] only consider *Wikipedia* entries at particular times. This ignores the important fact that *Wikipedia* entries change over time.” P.D. Magnus, *On Trusting Wikipedia*, 6 EPISTEME 74, 76 (2009), <http://www.eupublishing.com/doi/abs/10.3366/E1742360008000555>. Indeed, “a static estimate of the truth ratio of claims in *Wikipedia* does not tell the whole story. The dynamic entries of *Wikipedia* will regularly have errors introduced to them and errors removed. When you consult a *Wikipedia* entry at a particular time, you might capture it at a well-tended or fib-ridden moment.” *Id.* at 77.

³² Bertrand Meyer, *Defense and Illustration of Wikipedia*, EIFFELWORLD, Jan. 6-7, 2006, at 4, <http://se.ethz.ch/~meyer/publications/wikipedia/wikipedia.pdf>. See also Fallis, *supra* note 5, at 1667.

³³ See Fallis, *supra* note 5, at 1667; Meyer, *supra* note 32, at 4.

out by other commentators, “are undeniable,”³⁴ but argues that “a comparison to professional encyclopedias . . . is . . . the wrong one” because Wikipedia’s “competition is not certified, refereed sources,” but “non-Wikipedia Web pages.”³⁵ Nonetheless, he also argues that Wikipedia’s “breadth,” “internationalism,” and “universal editability” give it “some advantages . . . over traditional encyclopedias.”³⁶ Logically, the argument continues, if Wikipedia “is comparable to . . . traditional encyclopedias, then . . . Wikipedia presumably compares even more favorably to . . . randomly chosen Web sites.”³⁷

This argument, however, still ignores the fact that, just as some print sources are more authoritative than others, not all websites are created equal.³⁸ And with regard to authority for use in legal writing, where one would hope that writers are not relying solely on “randomly chosen Web sites,”³⁹ this flaw is fatal. Average citizens can now access libraries’ worth of information on governmental websites. Newspapers, educational and scientific institutions, and traditional print publishers now have web presences that provide access to a whole array of articles, papers, reports, and even professionally written, edited, and maintained encyclopedias. Why should we, the readers of law reviews (and judicial opinions, for that matter), be satisfied with population demographics gleaned from a Wikipedia entry when the information on which the entry is based can be found at the U.S. Census Bureau website?⁴⁰ Or information on the geography of a small Pacific nation when the CIA’s *World Factbook* is readily available?⁴¹ Dozens of articles examined in the course of this study cited to Wikipedia entries for other websites (such as Google, MySpace, Second Life, or Napster), all of which are still active as of

³⁴ Meyer, *supra* note 32, at 3.

³⁵ *Id.* at 4.

³⁶ *Id.* at 6.

³⁷ Fallis, *supra* note 5, at 1667.

³⁸ See Barger, *supra* note 19, at 425 (“Despite the abundance of materials available online, however, no one should deem them each of equal worth and value . . .”).

³⁹ Fallis, *supra* note 5, at 1667.

⁴⁰ Census Bureau Home Page, <http://www.census.gov/> (last visited Nov. 12, 2010).

⁴¹ CIA – The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/> (last visited Nov. 12, 2010).

this writing. Are we to believe that citing to the Wikipedia entry on a website would be more appropriate than citing to the website itself?⁴² If an author must cite to a website for information, more authoritative (and, therefore, more appropriate) websites than Wikipedia are just as available.

Some argue that Wikipedia is “a good source for definitions of new slang terms, for popular culture references, and for jargon and lingo including computer and technology terms.”⁴³ However, others argue that “Wikipedia is an inappropriate source when there are insufficient numbers of reader-editors with the capability to submit or modify information on a subject.”⁴⁴ In light of Wikipedia’s No Original Research policy, which mandates that “all concepts and theories in Wikipedia articles should be based on *previously published* accounts and ideas,”⁴⁵ one of two possibilities then exists. Either individual instances of slang terms, pop culture references, or jargon are too new or too specialized to satisfy the conditions of the latter position for reliance on Wikipedia and should not be relied upon, or they have been around long enough to have appeared in some other resource, most likely one available through the Internet,⁴⁶ in which case the author should cite to that other resource.

Another common argument for the acceptability of Wikipedia as a resource relates to its collaborative design.⁴⁷ Anyone can access and

⁴² Interestingly, a few authors even cited to the Wikipedia entry on Wikipedia rather than to an appropriate Wikipedia proprietary page.

⁴³ Peoples, *supra* note 8, at 31. *See also* Rachel Anderson, Marc-Tizoc González, & Stephen Lee, *Toward a New Student Insurgency: A Critical Epistolary*, 94 CALIF. L. REV. 1879, 1901 n.92 (2006) (“While Wikipedia is not usually used in academic works, its articles can provide excellent introductions to specialized knowledge or encyclopedic overviews of obscure events.”); Jessica Knouse, *From Identity Politics to Ideology Politics*, 2009 UTAH L. REV. 749, 751 n.3 (“I cite Wikipedia because it is a primary conveyer of mainstream culture.”).

⁴⁴ Miller & Murray, *supra* note 8, at 649 (footnote omitted).

⁴⁵ AYERS ET AL., *supra* note 3, at 14 (emphasis added).

⁴⁶ Considering that Wikipedia dates back only to 2001, if a particular term is truly “new,” chances are it can be found somewhere on the Internet.

⁴⁷ *See, e.g.*, Anderson et al., *supra* note 43, at 1901 n.92 (“Wikipedia manifests an exciting new kind of knowledge because it is a collaborative online project that is free. . . .”); Dana Remus Irwin, *Freedom of Thought: The First Amendment and the Scientific Method*, 2005 WIS. L. REV. 1479, 1487 n.53 (“Its open approach, which bears a striking resemblance to the marketplace theory of the First Amendment, allows factual errors, misleading statements or generally unaccepted information to be removed or corrected relatively promptly by

edit Wikipedia and, therefore, it is argued, the “wisdom of the crowd”⁴⁸ ensures the reliability of (at least some of) the entries because “the judgment of many is better than the judgment of few and . . . the quality of information will improve with more contributors.”⁴⁹ For example, “[w]here the colloquial meaning of a word or phrase, or how a party understood it, is at issue—in essence, the consensus understanding of the crowd—Wikipedia can be a great source.”⁵⁰

Ignoring for the moment the question of why we are citing to a website that holds itself out as an encyclopedia rather than citing to a dictionary in these instances,⁵¹ who exactly is this “crowd” upon whose wisdom we are supposed to be relying? Is this “crowd” really representative of “the average consumer”?⁵² Are we to accept that this “crowd” is in tune with “the perception of the public or community standards”⁵³ or capable of explicating the “common usage or ordinary

readers.”); Miller & Murray, *supra* note 8, at 644 (“Wikipedia’s greatest weakness—anybody can edit an article—is also its greatest strength.” (citation omitted)); Neil L. Waters, *Why You Can’t Cite Wikipedia in My Class*, COMM. ACM, Sept. 2007, at 15, <http://doi.acm.org/10.1145/1284621.1284635> (“[O]pen sourcing is democracy in action, and Wikipedia is its most ubiquitous and accessible creation.”).

⁴⁸ Fallis, *supra* note 5, at 1670; Miller & Murray, *supra* note 8, at 646. *See also* Peter Denning, Jim Horning, David Parnas, and Laura Weinstein, *Wikipedia Risks*, COMM. ACM, Dec. 2005, at 152, <http://doi.acm.org/10.1145/1101779.1101804> (“It has been hailed as the quintessence of the ‘wisdom of crowds,’ as a model of democratized information . . .”).

⁴⁹ Noveck, *supra* note 27, at 4.

⁵⁰ Miller & Murray, *supra* note 8 at 646-47. *See also* Timnetra Burruss, BMS Entertainment/Heat Music LLC v. Bridges: *How the Court Got It Wrong ... Just Like That*, 16 DEPAUL-LCA J. ART & ENT. L. 311, 320 n.60 (2006) (“[T]he use of Wikipedia is appropriate here because the subject matter is urban culture and urban culture is constantly evolving from contributions from the public. Therefore, the information found on Wikipedia is appropriate because that information is elicited directly from the people that comprise urban culture.”).

⁵¹ Wikipedia has a sister project, called Wiktionary, that holds itself out as an online dictionary based upon the same principles as Wikipedia. *See* BROUGHTON, *supra* note 3, at 428. *See also* AYERS ET AL., *supra* note 3, at 22 (“Wikipedia is not . . . a dictionary.”). The criticisms leveled against citing to Wikipedia would also apply to Wiktionary. However, searches performed on LexisNexis and Westlaw on August 1, 2010 found only eleven law reviews in the study population that have published articles citing to Wiktionary (thirteen total citations), and seven of those were published after the study period of 2002-2008. The earliest citation was in 2006.

⁵² Miller & Murray, *supra* note 8, at 647.

⁵³ Peoples, *supra* note 8, at 32.

and plain meaning of a contract term”⁵⁴ to our satisfaction better than a more authoritative resource? In reality, Wikipedia’s contributors “do not come from a cross-section of the world’s population. They are more likely to be English-speaking, males, and denizens of the Internet.”⁵⁵ Moreover, “the examples of the wisdom of crowds typically involve a large number of *diverse* individuals who bring different perspectives and knowledge to the problem; however, it . . . is especially unclear how diverse the contributors to any specific [Wikipedia] entry are”⁵⁶ Consequently, it is not accurate to state that “Wikipedia reflects the consensus wisdom of all its editors.”⁵⁷ At best, a particular Wikipedia entry reflects the consensus view of the relatively small collection of relatively similar people who edited that entry.⁵⁸ Democracy in theory is not the same as democracy in practice.

Although there is no empirical evidence, anecdotal evidence exists to suggest that authors are driven by purely personal reasons to cite to Wikipedia.⁵⁹ In some instances, the authors try “to embellish the text

⁵⁴ Id.

⁵⁵ Rosenzweig, *supra* note 5, at 127. See also AYERS ET AL., *supra* note 3, at 355 (“[N]otions of notability and breadth of article coverage both reflect the community of editors and their demographic Wikipedia’s coverage is skewed toward subjects relating to Anglophone countries.”). *But see id.* at 354 (“[N]ative English speakers do not necessarily predominate.”). By “denizens of the Internet,” Prof. Rosenzweig implies that Wikipedia editors are more likely to be experts “on obscure characters in science fiction/fantasy and very specialised issues in computer science, physics and math” than on “vast areas of art, history, literature, film, [or] geography.” Rosenzweig, *supra* note 5, at 127 (citation omitted).

⁵⁶ Fallis, *supra* note 5, at 1670 (emphasis in original).

⁵⁷ Miller & Murray, *supra* note 8, at 649.

⁵⁸ See Andrew George, *Avoiding Tragedy in the Wiki-Commons*, 12 VA. J.L. & TECH. 8, ¶ 8 (2007), http://www.vjolt.net/vol12/issue4/v12i4_a2-George.pdf (“[A] core group of about 2 percent of 40,000 total volunteers does the vast majority of the work”); Magnus, *supra* note 31, at 74 (“When we read *Wikipedia* entries, we read the uncredited, collective work of individuals whose only qualifications for contributing were an internet connection and an interest in doing so.”). Cf. David Hoffman & Salil Mehra, *Wikitruth Through Wikiorder*, 59 EMORY L.J. 151, 165 (2009) (quoting Larry Sanger) (“Any loud minority, even a persistent minority of one person, can remove the appearance of consensus.”); Stacy Schiff, *Know It All: Can Wikipedia Conquer Expertise?*, NEW YORKER, July 31, 2006, at 36, 41 (“It can still seem as though the user who spends the most time on the site—or who yells the loudest—wins.”).

⁵⁹ *But cf.* Landes & Posner, *supra* note 17, at 259 (“We . . . question the premise that citation practice is largely a matter of personal preference”).

with sources that add flair, pique interest, and convey the impression that the author's scholarship has gone beyond the mundane."⁶⁰ In others, a possible "explanation for these kinds of citations, although an unsatisfactory one, is that the . . . author has chosen his own convenience over the needs of later readers . . ." ⁶¹ Some authors are kind enough to openly admit to citing to Wikipedia for personal reasons,⁶² but most are not. In many instances, the authors may have included citations to Wikipedia merely as placeholders;⁶³ they were signifying that a citation was needed and included the Wikipedia citation because they knew (or hoped) it had enough information to lead the student editors to a more appropriate resource.

Regardless of the details, lax editorial standards are largely to blame for most of the Wikipedia citations. As evidence for this supposition, one need only look to the dozens of articles published after Wikipedia changed its URL to Wikipedia.org (in August 2002)⁶⁴ that cite Wikipedia.com instead. If the editors had pushed back to seek an appropriate citation, accepted that no citation was necessary, or, as is more common than one might realize, just replaced the improper citation with one to a more authoritative source, the vast majority of citations to Wikipedia would have disappeared.

⁶⁰ Arthur Austin, *Footnote Skulduggery and Other Bad Habits*, 44 U. MIAMI L. REV. 1009, 1018-19 (1990).

⁶¹ Barger, *supra* note 19, at 444.

⁶² See, e.g., Anderson et al., *supra* note 43, at 1901 n.92 ("[U]sing Wikipedia accords with one of our epistolary's goals - to represent and increase access to forms of subjugated knowledge."); Cleveland Ferguson III, *Of Politics and Policy: Can the U.S. Maintain Its Credibility Abroad While Ignoring the Needs of Its Children at Home?—Revisiting the U.N. Convention on the Rights of the Child as a Transnational Framework for Local Governing*, 14 TULSA J. COMP. & INT'L L. 191, 192 n.2 (2007) ("Citing to Wikipedia is maligned by some scholars, but it is interesting to note that it is often the first entry to any Google search of terms . . . In this article, Wikipedia citations are used for their descriptive enunciations of the words or phrases cited and not for substantive points.").

⁶³ There are other similar alternatives. For example, because "citation norms have evolved to demand citations for undisputed facts that would require hours of trudging through reference materials for an unnecessary citation," an author, "[i]n response to a student editor's insistence on a citation for something [the author] considered common knowledge, . . . stubbornly sent back a citation to [W]ikipedia." Christine Hurt, Response to Daniel P. Solove, *When Is It Appropriate to Cite to Wikipedia?*, CONCURRING OPINIONS (Feb. 5, 2007, 3:28 PM), http://www.concurringopinions.com/archives/2007/02/when_is_it_appr.html.

⁶⁴ See Ken S. Myers, *Wikimmunity: Fitting the Communications Decency Act to Wikipedia*, 20 HARV. J.L. & TECH. 163, 167.

C. PROBLEMS WITH CITING TO WIKIPEDIA

While most arguments proffered in support of Wikipedia speak to its utility as a part of the research process,⁶⁵ none of them adequately support the suggestion that Wikipedia is a valid resource for *citation*. Although some writing experts endorse citing to resources used in locating the primary sources upon which the author ultimately relies,⁶⁶ this should be limited to resources that readers may not discover on their own, but that may be of particular use to them. Obviously, Wikipedia's presence is pervasive enough that it is highly unlikely, at this time, that a reader would not think to use Wikipedia to find additional information on a term or concept with which they may be unfamiliar and would, therefore, miss out on particularly useful information. Indeed, if an author cited to every item read in writing his work, there would be so many footnotes or bibliographic entries that each issue of a law review would contain but a single article.

There are two main problems with relying on Wikipedia as a resource worthy of citation in a scholarly work or legal document, and both individually explain why Wikipedia, as it currently exists, cannot be accepted as an authoritative source: probity and permanence.⁶⁷ Although these problems are somewhat connected with each other, each will be addressed separately.

⁶⁵ Most commentators agree that Wikipedia can be an excellent resource for *beginning* research on a topic. See, e.g., VOLOKH, *supra* note 14, at 152 (“Nonetheless, while Wikipedia may sometimes be a good place to look, don’t stop looking there.”); Peoples, *supra* note 8, at 33 (“Another permissible use of Wikipedia involves using Wikipedia as a jumping off point to lead to more reliable sources.”); Rosenzweig, *supra* note 5, at 137 (“Teachers have little more to fear from students’ *starting* with *Wikipedia* than from their starting with most other basic reference sources. They have a lot to fear if students *stop* there.” (emphasis in original)); Richards, *supra* note 8, at 63 (“To be sure, Wikipedia is a useful tool from which legal professionals may *begin* their research.” (emphasis in original)); Sean Smith, *The Case for Using, But Not Citing, Wikipedia*, THE PROSECUTOR, Oct./Nov./Dec. 2008, at 31, 47 (“There is no disputing that Wikipedia can be a very valuable research tool and is often an excellent starting point for any research project.”).

⁶⁶ See, e.g., VOLOKH, *supra* note 14, at 143 (“You should generally also cite the intermediate source that pointed you to the original, to credit it for helping you.”).

⁶⁷ Cf. Wagner, *supra* note 4, at 253 (“Wikipedia is not a reliable source for information because there is no guarantee of accuracy and Wikipedia articles change over time.”).

1. PROBITY

Many commentators and critics have expressed concerns regarding Wikipedia's "accuracy,"⁶⁸ "credibility,"⁶⁹ "quality,"⁷⁰ "reliability,"⁷¹ "trustworthiness,"⁷² "veracity,"⁷³ etc.⁷⁴ All of these concepts are similar and generally speak to "dimensions of information quality,"⁷⁵ but they are nonetheless different, even if they are often used interchangeably. Yet all of these terms point to an overarching quality one expects from any reference resource: probity. The *Webster's Third New International Dictionary* defines "probity" as "uncompromising adherence to the highest principles and ideals"

⁶⁸ See, e.g., HERRING, *supra* note 4, at 28-30; Denning et al., *supra* note 48, at 152; Lucy Holman Rector, *Comparison of Wikipedia and Other Encyclopedias for Accuracy, Breadth, and Depth in Historical Articles*, 36 REFERENCE SERVS. REV. 7 (2008), <http://dx.doi.org/10.1108/00907320810851998>.

⁶⁹ See, e.g., Brendan Luyt & Daniel Tan, *Improving Wikipedia's Credibility: References and Citations in a Sample of History Articles*, 61 J. AM. SOC'Y FOR INFO. SCI. & TECH. 715 (2010), <http://dx.doi.org/10.1002/asi.21304>; Clint Boulton, *Wales Denies Censoring Wikipedia over Journalist Rohde's Kidnapping*, EWEEK.COM, Jun. 30, 2009, <http://www.eweek.com/c/a/Messaging-and-Collaboration/Wales-Denies-Censoring-Wikipedia-Over-Journalist-Rohdes-Kidnapping-497337/>.

⁷⁰ See, e.g., HERRING, *supra* note 4, at 28-29; Rachel Fisher, *Research Right Using Books and Bytes*, TENN. B.J., May 2009, at 25, 27.

⁷¹ See, e.g., Robert McHenry, *The Faith-Based Encyclopedia*, TCS DAILY, Nov. 15, 2004, <http://www.tcsdaily.com/article.aspx?id=111504A>; Marcel Berlins, *Wikipedia Is Unreliable in Its Current Form. So Why Do Its Users Resist Even Modest Changes?*, THE GUARDIAN (London), Jan. 28, 2009, at 5, available at <http://www.guardian.co.uk/commentisfree/2009/jan/28/marcel-berlins-wikipedia-comment>.

⁷² See, e.g., Berman, *supra* note 4, at 842; Berlins, *supra* note 71, at 5.

⁷³ See, e.g., Eric Hellweg, *The Wikipedia War*, TECH. REV., Dec. 16, 2005, available at <http://www.technologyreview.com/web/16057/?a=f>.

⁷⁴ But see Noveck, *supra* note 27, at 6 ("Wikipedia can easily and quickly be updated and changed. Despite common misconceptions, this variability does not pose a challenge to the authenticity and legitimacy of legal knowledge."). Unfortunately, Prof. Noveck does not spell out these "common misconceptions," even though she concedes that "[t]here are persistent problems with inaccuracies on Wikipedia." *Id.* at 7.

⁷⁵ Fallis, *supra* note 5, at 1664.

or “unimpeachable integrity.”⁷⁶ It should be clear that a resource that is “inherently unreliable”⁷⁷ is, by definition, incapable of maintaining any level of integrity or adhering to anything but the basest principles and ideals.

In response to expressed concerns regarding Wikipedia’s probity, some Wikipedia supporters point out that even print encyclopedias have errors, then emphasize that, while Wikipedia’s processes allow its mistakes to be corrected instantaneously, an error appearing in a print encyclopedia will not be corrected until the next edition is published (if then), which could take several years to accomplish.⁷⁸ As one Wikipedia apologist explains, “If, say, *Fortune* magazine prints an error, that error is out there on newsstands for two full weeks before a new edition . . . comes along. Wikipedia’s users don’t have to wait two weeks to clean up someone else’s mess; they can do it in two minutes,

⁷⁶ WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY 1807 (Philip Babcock Gove, ed., 1986).

⁷⁷ *Glanville v. Dupar, Inc.*, Civ. Action No. H-08-2537, 2009 U.S. Dist. LEXIS 88408, at *14 n.2, 2009 WL 3255292, at *5 n.2 (S.D. Tex. Sept. 25, 2009); *Palisades Collection, L.L.C. v. Graubard*, No. A-1338-07T3, 2009 N.J. Super. Unpub. LEXIS 1025, at *7, 2009 WL 1025176, at *3 (N.J. Super. Ct. App. Div. Apr. 17, 2009) (per curiam); Richards, *supra* note 8, at 62. *See also* *In re IP Carrier Consulting Group*, 84 U.S.P.Q.2D (BNA) 1028, 1032 (T.T.A.B. 2007) (“There are inherent problems regarding the reliability of Wikipedia entries because Wikipedia is a collaborative website that permits anyone to edit the entries.”); Berman, *supra* note 4, at 842 (“Wikipedia’s susceptibility to tampering and vandalism make it an inherently unstable source in terms of credibility and reliability.”); Kenneth H. Ryesky, Letter to the Editor, *Downside of Citing to Wikipedia*, N.Y.L.J., Jan. 18, 2007, at 2 (“Wikipedia’s concept of editing by the public renders it inherently unstable as a textual source of information.”); Berlins, *supra* note 71, at 5 (“The brutal fact is that a work of reference which depends mainly on volunteer amateurs, whose good faith, ability and expertise are unknown, and whose contributions are largely unchecked, cannot be other than unreliable.”); P.D. Magnus, *Epistemology and the Wikipedia* 3 (Aug. 2006) (presented at the North American Computing and Philosophy Conference in Troy, New York), at <http://hdl.handle.net/1951/42589> (“The mechanism underlying the Wikipedia, in and of itself, has no intrinsic reliability.”). *But see* *Alfa Corp. v. OAO Alfa Bank*, 475 F. Supp. 2d 357, 362 (S.D.N.Y. 2007) (“[T]he frequent citation of *Wikipedia* at least suggests that many courts do not consider it to be inherently unreliable. . . . Thus, despite reasonable concerns about the ability of anonymous users to alter *Wikipedia* entries, the information provided there is not so inherently unreliable as to render inadmissible any opinion that references it.” (footnote omitted)).

⁷⁸ *See, e.g.*, Meyer, *supra* note 32, at 3. *See also* Schiff, *supra* note 58, at 38 (“When confronted with evidence of errors or bias, Wikipedians invoke a favorite excuse: look how often the mainstream media, and the traditional encyclopedia are wrong! As defenses go, this is the epistemological equivalent of ‘But Johnny jumped off the bridge first.’”).

once they spot it.”⁷⁹ However, there are three problems with this assessment.

The first problem is the last qualifier: “once they spot it.” The amount of time between the insertion of erroneous information into a Wikipedia entry and its correction can be anywhere between a matter of seconds to four months⁸⁰ (or greater). Of course, there is no way to know how long “critical omissions”⁸¹ remain. The second problem is that it ignores Wikipedia’s own verifiability processes, which require that all information be properly cited to some other, more authoritative, resource, including publications such as *Fortune* magazine.⁸² In other words, an error published in a magazine could easily make its way into a Wikipedia entry, and if the entry contains a proper citation, the information will seem that much more authoritative, thus guaranteeing a longer than usual shelf life for that particular error.⁸³

The third problem with the argument that Wikipedia is somehow better than print resources because of the speed at which errors can be corrected gets to the core of the matter: the concept of probity. If *Fortune* magazine, or any reputable print publication, publishes an error, it will generally publish a correction. Wikipedia-philes will trumpet that Wikipedia corrects much more quickly, but that is not entirely accurate: Wikipedians do not correct; they edit.⁸⁴ While the

⁷⁹ Bryan Keefer, *Behind the News: In Defense of Wikipedia*, COLUM. JOURNALISM REV., Dec. 16, 2005, at http://www.cjr.org/behind_the_news/in_defense_of_wikipedia.php.

⁸⁰ See, e.g., LIH, *supra* note 2, at 191 (discussing the now infamous “Seigenthaler Incident”); P.D. Magnus, *Early Response to False Claims in Wikipedia*, FIRST MONDAY, Sept. 1, 2008, <http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2115/2027> (discussing experiment where approximately one third to one half of fictitious claims purposefully entered into Wikipedia entries were corrected within 48 hours).

⁸¹ See Lara Devgan, Neil Powe, Brittony Blakey & Martin Makary, *Wiki-Surgery? Internal Validity of Wikipedia as a Medical and Surgical Reference*, J. AM. C. SURGEONS, Sept. 2007, at S76.

⁸² See Simson L. Garfinkel, *Wikipedia and the Meaning of Truth*, TECH. REV., Nov./Dec. 2008, at 84.

⁸³ This problem is exacerbated by the large number of websites and media outlets that parrot information gleaned from Wikipedia articles but never or rarely update that information as it appears on their web pages. See Magnus, *supra* note 77, at 5.

⁸⁴ See AYERS ET AL., *supra* note 3, at 105 (“You can’t actually change anything in Wikipedia . . . you can only add to it. An article you read today is simply the current draft . . .”).

print publication, whose existence is irrevocably tied to its reputation, will usually bring corrections to the attentions of its readers, Wikipedia merely edits the errors out of existence (at least temporarily), hiding them in the numerous edits stored in the entry's history page. Publications such as *Fortune* will make mistakes, but when they do, they take responsibility for them and attempt to alert their readers. When a contributor to Wikipedia makes a mistake, someone else silently corrects it (if we are lucky), with the hope that, if anyone read the erroneous information, they will stop by to examine the entry again and somehow notice the change before acting on the old information.

Of course, not every print source brings specific corrections to the attentions of its readers, and, unfortunately, the erroneous copies remain in circulation.⁸⁵ When the *Encyclopedia Britannica* publishes a new edition, it does not specifically identify all the changes made from the previous edition, but that does not mean that the readers are not put on notice that something has changed. The fact that a new or updated edition is published should serve as a warning that the information in the previous edition has potentially changed. Some, and probably most, of the information in the previous edition will still be accurate, reliable, credible, etc., but the publication of a new edition decreases (but does not eliminate) the authoritative quality of the previous edition. On the other hand, every iteration of a Wikipedia entry is suspect because we do not know if the one we are currently reading is an improved version from what came before, nor can we know whether the next version (or indeed any future version) will be any better. Accordingly, Wikipedia's editability means that it lacks "the kind of editorial oversight and review that [establish] a work's authoritativeness and credibility"⁸⁶

Although Wikipedia's instability makes it inherently unreliable, the essence of probity is ultimately not about reliability; it's about accountability. A source is authoritative not merely because of who produced it, but because that entity, whether an individual or an institution, has taken responsibility for it.⁸⁷ "[N]o reference work is

⁸⁵ See Meyer, *supra* note 32, at 3.

⁸⁶ Barger, *supra* note 19, at 440.

⁸⁷ See Denning et al., *supra* note 48, at 152 ("[N]o one stands officially behind the authenticity and accuracy of any information in [Wikipedia]."); Gorman, *supra* note 4, at 274 ("Unlike other encyclopaedias, *Wikipedia* has no editors or authors who accept responsibility for the accuracy and quality of their articles."). See also Waters, *supra* note 47, at 15 ("[S]cholarship requires accountability").

infallible.”⁸⁸ Indeed, all works written by man are bound to be imperfect; fallibility is part and parcel of our lot. But what makes a reference work authoritative is its “reputation . . . for strong scholarship, sound judgment, and disciplined editorial review.”⁸⁹ Wikipedia lacks all three traits.

If a Wikipedia entry on Dmitri Mendeleev contains incorrect information, the worst thing that could happen is a student who relies on it gets a failing grade. But if an entry on a legal topic (or a medical topic, for that matter), has inaccurate information or an important omission, and someone is foolish enough to rely on it, the results could be catastrophic. The prudent researcher will know better than to rely solely on the information found in Wikipedia, but who amongst us seriously believes that the bulk of Wikipedia’s users are “prudent researchers?” For the Wikipedians to shrug their shoulders and claim that they are blameless is disingenuous at best and indicative of Wikipedia’s probative inadequacies.

2. PERMANENCE

For future scholars or advocates to critique, refute, or build upon the work of others, they must be able to access the resources the initial authors relied upon as identified by their citations.⁹⁰ Moreover, “[w]ithin the world of legal authority, the commandment is to provide . . . evidence that can and should be *duplicable* in another piece of writing”⁹¹ However, citations to Wikipedia, like all Internet citations, lack permanence, and “[t]his lack of permanence undermines one of the goals of a citation, to provide ‘the information necessary to find and read the cited material.’”⁹²

In her discussion of website permanence, law librarian Mary Rumsey identifies three concerns with Internet citations generally: “whether a Web page with the cited URL exists when a reader looks for it,” whether the cited “Web page is accessible without

⁸⁸ Schiff, *supra* note 58, at 42.

⁸⁹ *Id.* (quoting ENCYCLOPAEDIA BRITANNICA, INC., *supra* note 30, at 2).

⁹⁰ See Mary Rumsey, *Runaway Train: Problems of Permanence, Accessibility, and Stability in the Use of Web Sources in Law Review Citations*, 94 LAW LIBR. J. 27, 28 (2002).

⁹¹ Franklin, *supra* note 24, at 52 (emphasis added).

⁹² Wilkerson, *supra* note 16, at 333 (quoting Axel-Lute, *supra* note 10, at 148).

subscription,” and “whether the [cited] Web page has the same content when the reader examines it as it had when the author cited it.”⁹³ Although the first two concerns are potentially significant, the primary concern with Wikipedia at this time is clearly the last one. The content of a Wikipedia entry can change multiple times in one day.⁹⁴ Any Wikipedia entries an author may cite will quite possibly (if not most likely) have been changed at least once by the time the author’s work is published. As Rumsey succinctly explains, “Nothing about a URL citation guarantees that the page it identifies has remained unchanged.”⁹⁵ Obviously, this is especially so for Wikipedia entries.

“But anyone can check the entry’s history to see what changes have been made, and they can check the discussion pages to get a sense of why some of those changes were made. That’s what makes Wikipedia great.”⁹⁶ That is what we are told. Unfortunately, not every change remains visible to the average reader,⁹⁷ and even if all edits were

⁹³ Rumsey, *supra* note 90, at 29. Rumsey described these concerns as “three distinct problems” and identified them as “permanence,” “accessibility,” and “content stability,” respectively. However, her study of citations to Internet resources in law review articles ultimately focused on whether the link was still active at the time of her study. *Id.* at 31. She explicitly categorized resources that required subscriptions (but not registrations) as “nonworking” links, *id.* at 32, and conceded that her study did not specifically examine “whether the contents still supported the proposition[s] for which the authors cited them.” *Id.* at 37. This author uses the umbrella term “permanence” to include all three concerns. *Cf.* Barger, *supra* note 19, at 438–44 (identifying four possible reasons for the “impermanence” or “instability” of an Internet citation as “evolving content,” “migrating content,” “vanished content,” and “restricted access”).

⁹⁴ See CASS R. SUNSTEIN, *INFOTOPIA: HOW MANY MINDS PRODUCE KNOWLEDGE* 152 (“Wikipedia is revised hundreds of times every hour.”); Peoples, *supra* note 8, at 41 (“It is not uncommon for a Wikipedia entry to change several times during one day.”).

⁹⁵ Rumsey, *supra* note 90, at 36.

⁹⁶ *Cf.* Fallis, *supra* note 5, at 1668 (“Readers of Wikipedia have easy access to the entire editing history of every entry. Readers also have access to the *talk pages* that contributors use to discuss how entries should be changed. . . .” (emphasis in original)); Noveck, *supra* note 27, at 6 (“Every change to a [Wikipedia] page is recorded as a version . . . that is always preserved. The reader is free to check how the pages have changed over time, and . . . Wikipedia even has a discussion page attached to each entry to encourage . . . debate . . . about those changes.”).

⁹⁷ See BROUGHTON, *supra* note 3, at 164 (explaining that Wikipedia administrators “can remove history pages from the view of normal editors” and that history pages can even “be blocked from the view of all editors, including administrators”); SUNSTEIN, *supra* note 94, at 155–56 (2006) (“As Wikipedia is constructed, only an administrator can permanently delete pages.”); Meyer, *supra* note 32, at 8 (discussing how a Wikipedia entry on the

accessible, it still would not matter: some entries have received thousands of edits. Wikipedia entries are merged with other entries or split into smaller, more specific entries,⁹⁸ with unknown consequences to the history pages. Moreover, with nothing to link specific language in the current entry to corresponding edits, discovering when a particular phrase or word was added or altered could require a Herculean effort. Who has the time for that? As one commentator pointed out, “When quickly consulting Wikipedia, one typically just views the current entry—if the current entry is misleading, then one is misled.”⁹⁹

Yet, even if the article history pages satisfy one’s sense of permanence, far more ominous possibilities exist: a world without free access to Wikipedia or without Wikipedia at all. Despite all the acclaim and praise for Wikipedia, it remains subject to the same economic reality facing every enterprise, whether for-profit or not-for-profit, which currently maintains a web presence. At the very least, storing information on servers (and maintaining backups) costs money, and Wikipedia is “funded almost entirely with private donations.”¹⁰⁰ Considering that, as of 2008, Wikipedia had “no endowment fund or investment to sustain the project long-term,”¹⁰¹ how can we expect that it will continue to exist in its current state into the foreseeable future? If (or when) Wikipedia becomes a subscription service, the restrictions on access will frustrate researchers even more than references to unreported decisions with only LexisNexis or Westlaw citations. Worse still, should Wikipedia disappear, all references to it in print sources will become essentially meaningless.

In light of the problems Wikipedia faces regarding its probity and permanence, authors should think twice before citing to one of its entries. Professor Coleen Barger suggests that, before citing to any website, including Wikipedia, authors

author reported his death but that “a Wikipede removed the spurious version from the version history, so that there is no trace of it on the site”); Schiff, *supra* note 58, at 42 (“[S]ome admins . . . can purge text from the system, so that even the history page bears no record of its ever having been there.”). *See also*, AYERS ET AL., *supra* note 3, at 218 (“[H]undreds or thousands of articles are deleted from Wikipedia every day.”).

⁹⁸ *See* AYERS ET AL., *supra* note 3, at 240.

⁹⁹ Magnus, *supra* note 77, at 5.

¹⁰⁰ AYERS ET AL., *supra* note 3, at 451.

¹⁰¹ LIH, *supra* note 2, at 214.

should apply the same evaluation criteria . . . as they would apply to more traditional media. They should satisfy themselves that (1) the material has been written or published by an authoritative entity or person; (2) the material has been subjected to some form of peer review or editorial oversight to ensure its accuracy and currency; and (3) the material is stable and likely to remain accessible using the citation the author employed in visiting the site.¹⁰²

This author would take it a step further and suggest that authors should do more than “satisfy themselves,” but they should keep their audiences in mind. Before citing to Wikipedia, authors should evaluate whether the readers of their work will believe that the source satisfies Prof. Barger’s criteria.¹⁰³

III. CITATION ANALYSIS OF 486 AMERICAN LAW REVIEWS: 2002–2008

A. METHODOLOGY

1. CHOOSING THE LAW REVIEWS

Utilizing the functionality of the Law Journals: Submissions and Ranking database maintained by the Washington & Lee University School of Law,¹⁰⁴ initial selection was limited to American, English-language, student-edited (but not refereed)¹⁰⁵ law reviews. From the

¹⁰² Barger, *supra* note 19, at 446 (internal footnotes omitted).

¹⁰³ See also Franklin, *supra* note 24, at 120 (“While an authority might be appropriate to the issue at hand, it does not automatically follow that [it] is persuasive or that it does not strain credibility.”).

¹⁰⁴ Washington & Lee University School of Law, Law Journals: Submissions and Ranking, <http://lawlib.wlu.edu/LJ/index.aspx> (last visited Nov. 12, 2010).

¹⁰⁵ Originally, this author had hoped to include all law reviews that are edited by students. However, selecting the checkbox marked “Student-edited” on the Law Journals: Submissions and Ranking database limits the results to only student-run publications that do not engage in an external peer review process. Washington & Lee University School of Law, Law Journals: Submissions and Ranking - Explanation, <http://lawlib.wlu.edu/LJ/method.asp> (last visited Nov. 12, 2010). Selecting the checkbox marked “Refereed” retrieves non-student-edited as well as student-edited journals that engage in a peer review process. Accordingly, all refereed publications, even those edited

initial results list of 635 law reviews,¹⁰⁶ online companions to established law reviews were removed as well as all law reviews that first began publishing after 1999.¹⁰⁷ This reduced the population to 486 law reviews.

2. ORGANIZING THE CITATIONS

Each law review was examined individually to locate any citations to Wikipedia, including “*supra*,” “*infra*,” and “*id.*” citations that were clear and unambiguous, in works published through 2008.¹⁰⁸ All but eight titles were examined by searching the publications through LexisNexis and/or Westlaw,¹⁰⁹ although recent issues that were

by students, are excluded, with one exception. When the list was first compiled early in 2009, the *Pace Environmental Law Review* was included. However, this title, as of Aug. 1, 2009, is now a refereed law review and no longer appears on the list retrieved using the process described. See *Pace Environmental Law Review Shifts to Peer Review*, http://www.pace.edu/page.cfm?doc_id=34471 (last updated Feb. 16, 2010). Since this change occurred after the issues within the study period were published, this title has been retained within the study population.

¹⁰⁶ As of Aug. 1, 2010.

¹⁰⁷ This is an arbitrary cut-off date chosen to limit the population of the study and to ensure that the law reviews had established editorial practices that preceded the launch of Wikipedia.

¹⁰⁸ For this study, every work published by a law review within the study population was examined, regardless of whether it was an article, a note, a book review, a transcript, etc. This author generally refers to all such works as “articles” regardless of the designations given by the individual law reviews.

¹⁰⁹ Law reviews available through LexisNexis were searched using the following terms and connectors query: *wikipedia!*. The exclamation point is an expander that picks up any variations with additional characters. Law reviews available through Westlaw were searched using the following terms and connectors query: *wikipedia! (en.wikipedia!) (www.wikipedia!)*. In Westlaw’s search syntax, spaces are equivalent to an OR Boolean connector. (The parentheses in the query are not necessary but included to make the separate terms clearer.) In addition, unlike the search engine utilized by LexisNexis, which treats all punctuation (other than root expanders and universal characters) as spaces, the Westlaw search engine recognizes punctuation that is immediately preceded and immediately followed by letters or numbers. Accordingly, searching for “wikipedia” alone (with or without a root expander) in Westlaw will not retrieve instances where the term appears only in an accurately referenced URL. Law reviews available through both services were searched in both to cut down on missed articles due to formatting errors (either on the part of the law review or the service). However, the author concedes the possibility that a small number of articles were missed in these searches due to typographical or formatting errors.

available in print but had not yet been loaded to either service were also examined. The remaining law reviews were examined through HeinOnline or the law review's official website, or the title's print issues were examined.

Every citation to Wikipedia was recorded in a spreadsheet classified by year. The year of the item containing the citation was usually determined by the issue date. However, when an ambiguous date was encountered, the copyright date was used, unless it was also ambiguous, in which case the first year listed was used. For example, if an article appeared in an issue dated 2005-2006, any citations in that article would be classified as 2005 unless the copyright date for the article was explicitly listed as 2006.

Each notation in the spreadsheet included the work's citation, the number (or other identifier) of the note containing the reference to Wikipedia, the name of the Wikipedia entry or web page being cited, and the classification of the author. Authors were classified as Faculty,¹¹⁰ Student,¹¹¹ Practitioner,¹¹² or Non-Law Author¹¹³ based on their self-identification in the text of the work or the author's note; where a classification could not be made due to a lack of information, other resources were used to determine the author's presumed status at the time of writing. If more than one author was listed, the citation was classified according to the first author listed unless the text of the work clearly identified the author of the portion containing the Wikipedia reference (e.g., a transcript of a symposium panel).

Finally, the context of each citation to Wikipedia was examined to determine why Wikipedia was cited. Based on this examination of its use, the citation was coded according to one of five classifications, which run the spectrum of propriety:

Category 1: This category includes citations to Wikipedia itself or one of its corporate web pages, as well as citations to Wikipedia entries for propositions

¹¹⁰ The Faculty class includes all professors (including adjunct professors), as well as deans, directors, and lecturers.

¹¹¹ The Student class includes all authors self-identifying as a law student of any type at the time they wrote their article, including LLM students, unless they also self-identified as Faculty.

¹¹² The Practitioner class includes all authors with a law degree unless they also self-identified as a Faculty or Student.

¹¹³ The Non-Law Author class includes all authors that do not fit in any of the other classes.

regarding the existence of the entries rather than any information they may contain. Most if not all readers generally will accept Category 1 citations as usually appropriate.¹¹⁴

Category 2: This category contains citations to Wikipedia that are superfluous. Citations were labeled superfluous if they were immediately preceded by another supporting resource in the same footnote. If a more appropriate resource was cited in a previous footnote, but not immediately preceding the Wikipedia citation in the footnote at issue, the Wikipedia citation was not labeled superfluous. Similarly, the Wikipedia citation was not labeled superfluous when a more appropriate resource immediately followed the Wikipedia citation, even if in the same footnote. Classifying a citation as superfluous was merely a product of placement rather than purpose; a citation could have ended up in any of the other classifications but for its superfluity.

Category 3: This category is for those Wikipedia citations that are not of a legal or primary governmental nature, but cannot be placed in Categories 1 or 2. This category consists largely of definitional, technology, and pop culture references.

Category 4: This category is for citations to Wikipedia for general legal concepts that should have been to secondary legal resources or primary legal resources (although the specific primary source is not prescribed by the context).¹¹⁵ Citations to information that should

¹¹⁴ There are occasions where citations to Wikipedia pages are inappropriate; for example, when the information is available in a print resource, or when the Wikipedia page is one that anyone can edit and the same information is also available in another Wikipedia page that cannot be edited by just anyone. *See infra* Part IV.A. However, for purposes of this study, any citation to a Wikipedia page that has editing restrictions is classified as a Category 1 (or Category 2) citation, even if the information is available in a print resource. Wikipedia pages that allow for open editing are treated as Wikipedia articles and usually count as Category 3 citations.

¹¹⁵ For example, a citation to a Wikipedia article for a general explanation of the legal concept of “fair use” would fall into this category. Reference to a specific case or statute or

have been obtained from easily-identifiable primary governmental resources, such as US Census data or geographical information, are also included in this category.

Category 5: This category contains citations to Wikipedia entries that should have been references to primary legal sources explicitly identified in the surrounding text; these citations are clearly the most egregious.

To demonstrate the differences between the categories, let us examine the possibilities involving a hypothetical Wikipedia entry on the late comedian George Carlin.¹¹⁶ An article could cite to the entry as a demonstration of Mr. Carlin's fame or influence: "He's so famous he even has a Wikipedia entry." This would be the least objectionable use (Category 1). The next least objectionable would be the superfluous citation (Category 2); regardless of what proposition the citation is supporting, such a citation would be objectionable insofar as it is completely unnecessary.¹¹⁷ A more objectionable use of this Wikipedia citation would be to support biographical information about Mr. Carlin or as proof of some pop culture reference relating to him (Category 3), but many may not be bothered by such use. However, many will (or at least should) object to citing to a Wikipedia entry on Mr. Carlin for the definition or contours of the term "obscenity" (Category 4), and everyone should object to citing to Wikipedia for the U.S. Supreme Court's holding in *FCC v. Pacifica Foundation*¹¹⁸ (Category 5).

to a treatise on copyright law would have been more appropriate, but the lack of such a reference is not as egregious as, for example, citing to a Wikipedia entry in support of a statement regarding the provisions of the Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541.

¹¹⁶ See generally JAMES SULLIVAN, SEVEN DIRTY WORDS: THE LIFE AND CRIMES OF GEORGE CARLIN (2010); Mel Watkins & Bruce Weber, *George Carlin, Comic Who Chafed at Society and Its Constraints, Dies at 71*, N.Y. TIMES, June 24, 2008, at C12.

¹¹⁷ Cf. Miller & Murray, *supra* note 8, at 648 ("Wikipedia articles are . . . appropriate to include as secondary support after the citation of a more traditional source.").

¹¹⁸ *FCC v. Pacific Foundation*, 438 U.S. 726 (1978).

B. STATISTICS/FINDINGS

Examining the 486 law reviews revealed over 1540 articles citing to Wikipedia, containing over 4800 individual citations. On average, each law review published 3.18 articles citing to Wikipedia during the period examined, each of which, on average, contained 3.11 citations to Wikipedia, or an average of 9.90 citations per law review. Although such statistics suggest a virtual epidemic, they are also somewhat misleading.

1. LAW REVIEWS

Ninety-four of the law reviews examined, or approximately one-fifth of the study population, published no articles that cited to Wikipedia during the period covered by this study (although at least sixteen of these have published an article citing to Wikipedia since 2008). Another ninety-four law reviews published only one article apiece containing Wikipedia citations, with fifty-six of those articles containing only a single citation to Wikipedia. An additional twenty-five law reviews published multiple articles with such citations, but only during one year. Accordingly, at least 44% of the law reviews examined have used Wikipedia citations sparingly, if at all.

On the other hand, forty-six law reviews published eight or more articles containing Wikipedia citations during the study period, for a grand total of 551 articles containing 2090 citations. In other words, less than 10% of the law reviews examined were responsible for more than one-third of all articles and more than two-fifths of all citations. Five law reviews published twenty or more articles, with the *Berkeley Technology Law Journal* and the *Fordham Intellectual Property, Media & Entertainment Law Journal* leading the charge with thirty-two apiece during the study period. In addition, the *Fordham Intellectual Property, Media & Entertainment Law Journal* and the *Indiana International & Comparative Law Review* share the longest streak of consecutive years publishing articles that cite to Wikipedia, with both law reviews publishing their first such article in 2003 and publishing at least one article each year since (including 2009).

Contrary to what one might suspect, citing to Wikipedia is not a practice restricted to the “lower-tier” law reviews. Of the top thirty law reviews (as ranked by the Washington & Lee University School of Law’s Law Journals: Submissions and Ranking website),¹¹⁹ only one,

¹¹⁹ Washington & Lee University School of Law, Law Journals: Submissions and Ranking, <http://lawlib.wlu.edu/LJ/index.aspx> (last visited Nov. 12, 2010).

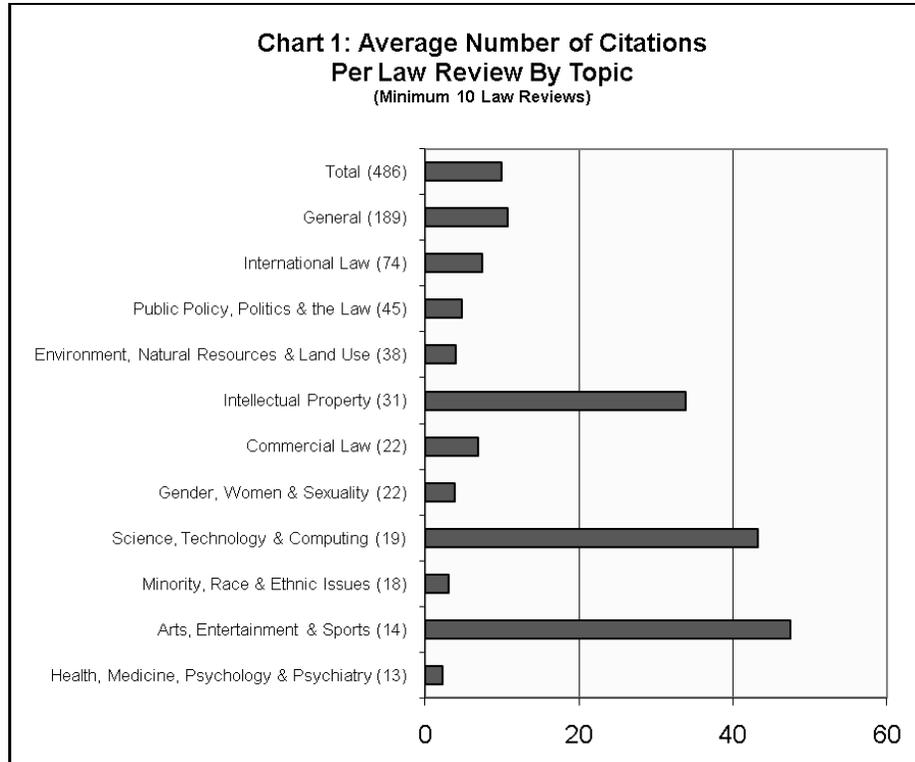
the *University of Pennsylvania Law Review*, has not published an article citing to Wikipedia. The remaining twenty-nine law reviews (or approximately 6% of the total population) accounted for slightly more than 10% of the articles (155) and slightly less than 10% of the citations (449).

Similarly, since one would expect the flagship law reviews for each institution to attract the best, both in terms of articles and editors, one might suspect that citations to Wikipedia would be more prevalent in specialized law reviews. Here we have mixed results. The 189 law reviews classified as General on Washington & Lee's website (approximately 39% of the study population) accounted for 46.5% of all articles (719) and 42.4% of all citations (2040). However, the thirty-one law reviews classified as Intellectual Property (6.4% of the total, or one-sixth the number of General law reviews) published 251 articles containing 1049 citations. This class of specialized law reviews was responsible for 16.2% of articles and 21.8% of citations. Where the General law reviews, as a group, averaged 3.8 articles per publication and 2.84 citations per article (or 10.79 citations per law review), the Intellectual Property group averaged 8.1 articles and 4.18 citations per article (or a whopping 33.84 citations per law review).

For purposes of comparison, let us examine the average number of citations per law review for a few other classifications. Seventy-four law reviews (or 15.2% of the total) were classified as International Law, making up the second largest group of publications behind the General group. This group accounted for 7.41 citations per law review. The Public Policy, Politics and the Law classification contained forty-five law reviews (9.3%), with 4.78 citations per law review. The Environmental Law group, consisting of thirty-eight law reviews (7.8%), was responsible for 3.97 citations per law review.

This study suggests that law reviews devoted to more "popular" subject matter, such as Intellectual Property (33.84 citations/law review), Science, Technology and Computing (43.21 c/lr), or Arts, Entertainment and Sports (47.43 c/lr), tend to be much more open to citing to Wikipedia than other law reviews. Similarly, General law reviews (10.79 c/lr) tend to have many more Wikipedia citations than the other specialized law reviews.¹²⁰

¹²⁰ Other representative classifications with a minimum of ten law reviews in the population include: Commercial Law (6.86 c/lr); Gender, Women and Sexuality (3.86 c/lr); Minority, Race and Ethnic Issues (3.06 c/lr); and Health, Medicine, Psychology and Psychiatry (2.23 c/lr). See Chart 1 for a visual comparison.



Whether the “pop culture” topics include more Wikipedia citations because of the nature of the subject¹²¹ or because of the natures of the

¹²¹ See Magnus, *supra* note 77, at 3 (“Wikipedia . . . has more information about popular culture and current events than a traditional encyclopedia.”); Greg Lastowka, *What Wikipedia Is (and Isn’t)*, CONCURRING OPINIONS (Dec. 16, 2005, 10:42 AM), http://www.concurringopinions.com/archives/2005/12/what_wikipedia.html (“I would never cite to Wikipedia as an authority in my field . . . [b]ut for certain purposes, e.g., providing a basic introduction to celebrities, I think it is okay.”); Ubertrout, Response to Daniel P. Solove, *When Is It Appropriate to Cite to Wikipedia?*, CONCURRING OPINIONS (Feb. 5, 2007, 3:45 PM), http://www.concurringopinions.com/archives/2007/02/when_is_it_appr.html (“Wikipedia is excellent for information about technological/social developments that are moving far faster than the academic literature.”). *But see* Miller & Murray, *supra* note 8, 649-50 (stating that “Wikipedia is an inappropriate source when there are insufficient numbers of reader-editors with the capability to submit or modify information on a subject[,]” such as articles containing “technical information that would only be correct if the editor had specialized knowledge” or “[a]rticles on individual persons”) (footnote omitted).

authors and editors involved¹²² requires further research. Additional research is also required to determine why General law reviews contain more citations to Wikipedia than average. For example, it could simply be that the General law reviews are more open to citing to Wikipedia. Or, it could be that they publish articles that could have appeared in the pop culture law reviews and, hence, cite to Wikipedia more often. Alternatively, perhaps the increased numbers are merely a result of publishing more or longer individual articles.¹²³

2. ARTICLES

Although references to Wikipedia did not appear in case law until 2004,¹²⁴ the first law review articles citing to Wikipedia appeared in 2002. The number of articles then grew each year until 2007, jumping dramatically in 2006 with 467 articles. 2007 experienced a slight decrease (435 articles) and 2008 saw a greater decline (338).¹²⁵ The raw number of citations follows a similar path, although the drop-off between 2006 (1708) and 2007 (1200) is quite steep and the decrease from 2007 to 2008 (1154) is negligible.¹²⁶ As a result, the average number of citations per article rises in a similar manner to a peak in 2006 (3.66), then falls in 2007 (2.76) but rebounds strongly in 2008 (3.41).¹²⁷

¹²² Cf. Cohen, *supra* note 8, at C3 (“Many citations by judges . . . appear intended to show how hip and contemporary the judge is, reflecting Professor [Cass R.] Sunstein’s suspicion, ‘that law clerks are using Wikipedia a great deal.’”).

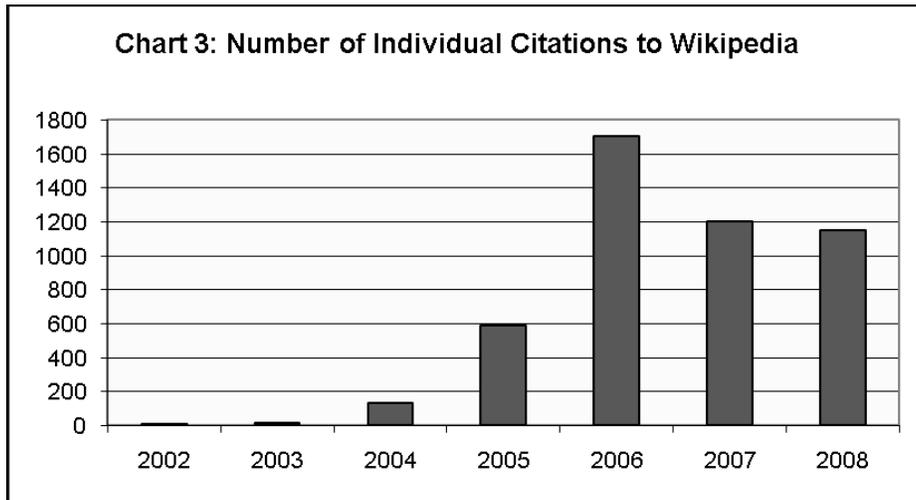
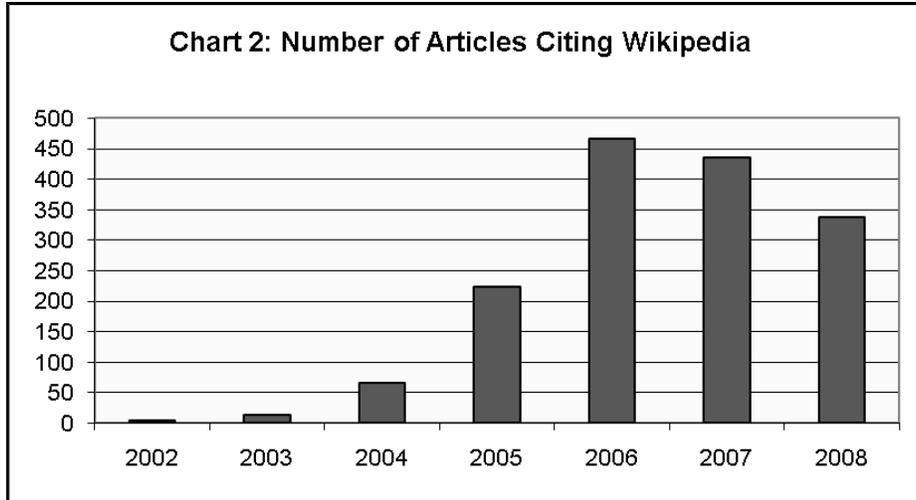
¹²³ In light of this possible explanation, some might question a comparison based on the average number of citations per law review in each topic area. This comparison was chosen to emphasize the patterns identified. However, if we were to compare the average citations per article or the average articles per law review instead, the categories identified as “popular” would still consistently exceed the averages for the entire population. See the Appendix for additional information.

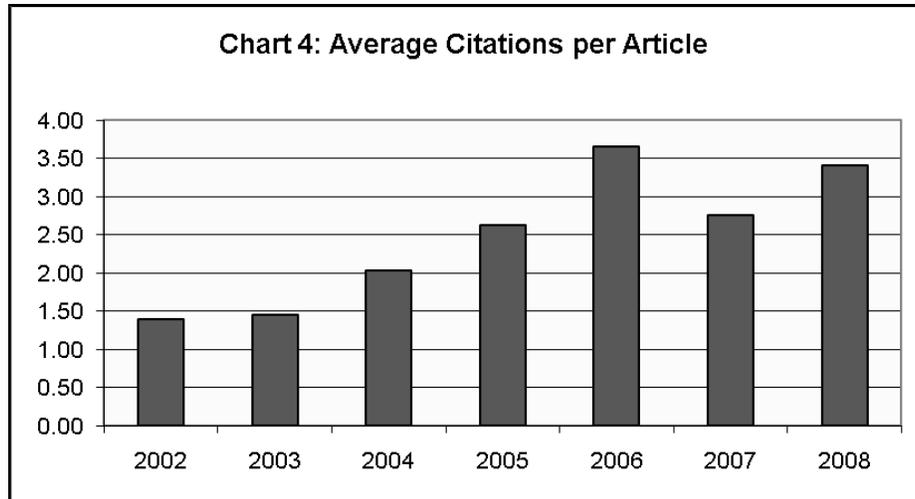
¹²⁴ See cases cited *supra* note 7. See also Peoples, *supra* note 8, at 3.

¹²⁵ See Chart 2.

¹²⁶ See Chart 3.

¹²⁷ See Chart 4.





Additional research is required to determine why the citation of Wikipedia crested in 2006, but it is easy to speculate that it could have been a delayed reaction to the much-publicized “Seigenthaler Incident,” which came to light late in 2005.¹²⁸ Another major hit to Wikipedia, the “Essay Controversy,” broke in early 2007.¹²⁹ This could explain the continued drop in the number of articles citing to Wikipedia from 2007 to 2008, but additional research is required.

During the period studied, a slim majority (53.4%) of articles citing to Wikipedia contained only a single citation. However, if we limit ourselves to the last three years examined, that majority shrinks to 51.7%; in 2006 alone, it was a virtual dead heat. The first article in this study with double-digit citations to Wikipedia appeared in 2004 (and contained eighteen citations), and a total of eighty-three articles published during the study period have included at least ten citations to Wikipedia. Four articles cited to Wikipedia at least sixty times each: two in 2006 (75 and 117 citations, respectively) and two in 2008 (60 and 61 citations).¹³⁰

¹²⁸ See John Seigenthaler, Op-Ed., *A False Wikipedia "Biography"*, USA TODAY, Nov. 30, 2005, at 11A, available at http://www.usatoday.com/news/opinion/editorials/2005-11-29-wikipedia-edit_x.htm. See also LIH, *supra* note 2, at 191–94.

¹²⁹ See LIH, *supra* note 2, at 194–200.

¹³⁰ With that many citations, one would expect the articles to be about Wikipedia itself; hence, the need for so many citations to it. However, of those four articles, only one was about Wikipedia. See Wagner, *supra* note 4.

3. CITATIONS

When examining the use classifications of the Wikipedia citations, as determined by the propriety scale described above,¹³¹ no clear pattern can be discerned if the statistics from 2002 and 2003 are included in the analysis. The size of those samples are too small, and the practice too new, to produce meaningful results. Accordingly, the following observations do not include the statistics from those first two years of the Wikipedia-as-resource phenomenon.

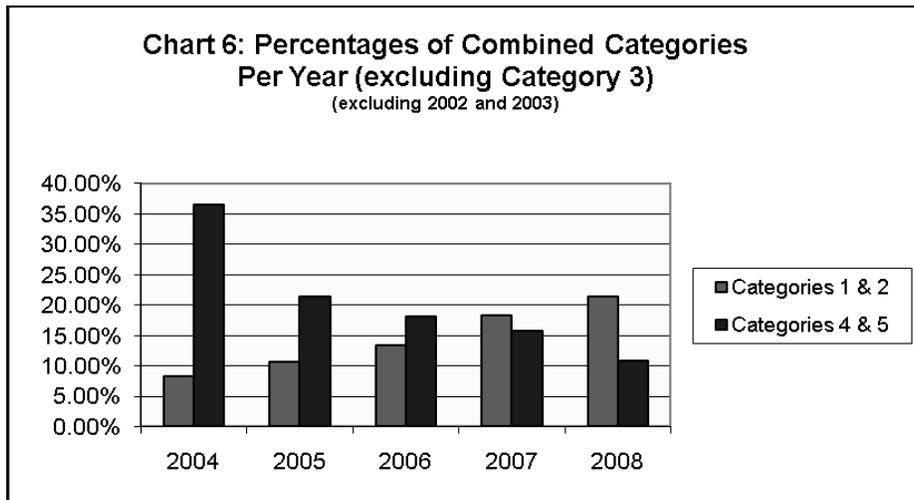
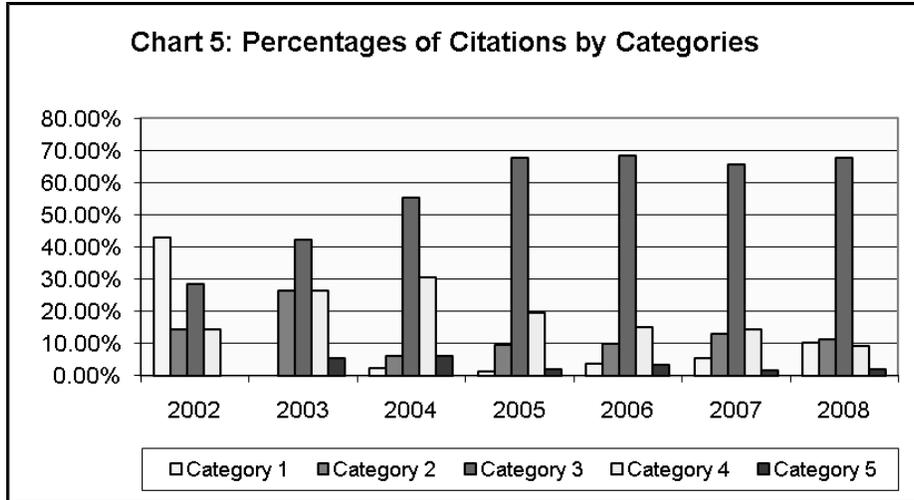
The percentage of citations to Wikipedia that were classified as Category 3 exceeded 55% of the total number of Wikipedia references for each year. Indeed, if we remove 2004 from the analysis as well, the percentage of Category 3 citations has remained consistently above 65%. The vast majority of these citations were for definitions of terms or references to technology, pop culture, or current events.

From 2004, when they constituted a shockingly high 30.6% of citations, the percentage of Category 4 citations has decreased every year. The percentage of Category 5 citations was also at its highest (6%) in 2004, and since then, it has not exceeded 3.2%.¹³² Conversely, although some minor fluctuations appear in the percentages of Category 1 and Category 2 citations when examined separately, the combined percentages of Category 1 and Category 2 citations increased at least 2.5% each year.¹³³

¹³¹ See *supra* Part III.A.2.

¹³² See Chart 5.

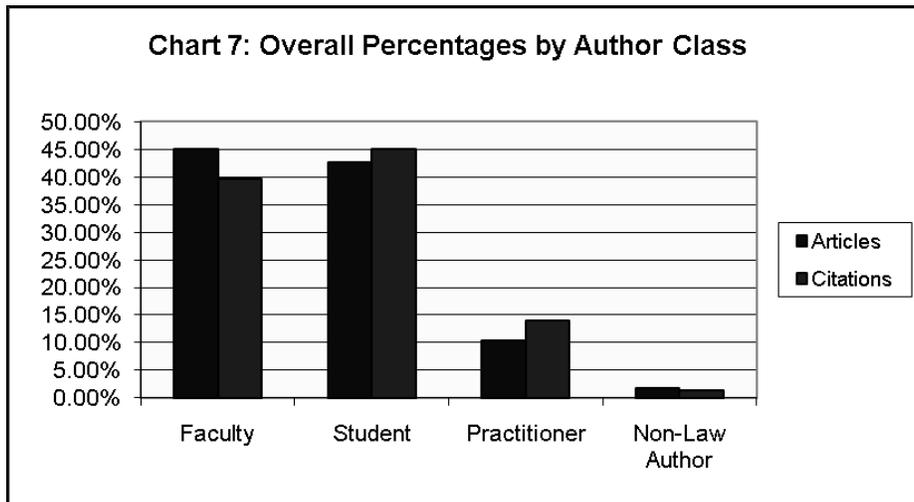
¹³³ See Chart 6.



4. AUTHORS

Faculty and students were listed as the sole or lead author on the vast majority of articles examined. Overall, 45.1% of articles that cited to Wikipedia were charged to Faculty, while Student authors were responsible for 42.7%. In comparison, Practitioners wrote only 10.4% of the articles and a paltry 1.8% came from Non-Law Authors. The fact

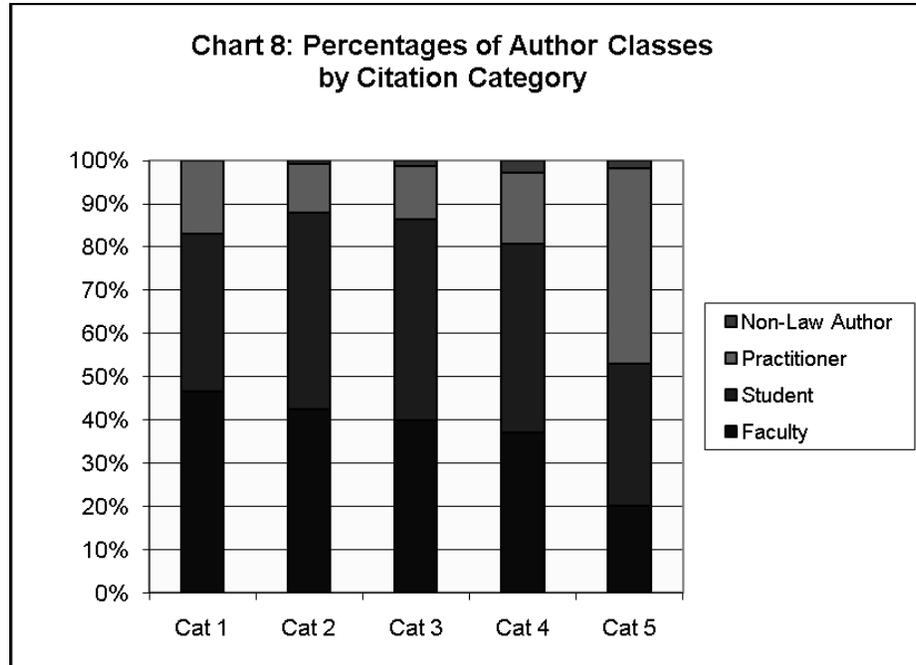
that most articles were written by faculty or students and the fewest were written by authors without legal training is likely similar to the overall distribution of authorships of law review articles in general. The overall number of citations by author class follows a somewhat similar distribution, although the Students (45.1% of all citations to Wikipedia) surpass the Faculty (39.6%). The percentage of citations by Practitioners also saw an increase over their percentage of articles (to 14.0%), while Non-Law Authors saw a slight decrease (to 1.3%).¹³⁴



Student articles were responsible for at least one-third of the citations for each citation category, and nearly half of all Category 2 (45.4%) and Category 3 (46.5%) citations. Faculty articles were responsible for nearly half of all Category 1 (46.7%) citations, and decreased across the remaining categories, with a low of 20% of Category 5 citations. The percentages of each category relied on by Practitioners varied from 11.3% to 16.9%, with the notable exception of Category 5, which shot up to 45.2%. Non-Law Authors, as one might expect considering the small number of articles from this class in the study, were responsible for no more than 2.74% of any one category.¹³⁵

¹³⁴ See Chart 7.

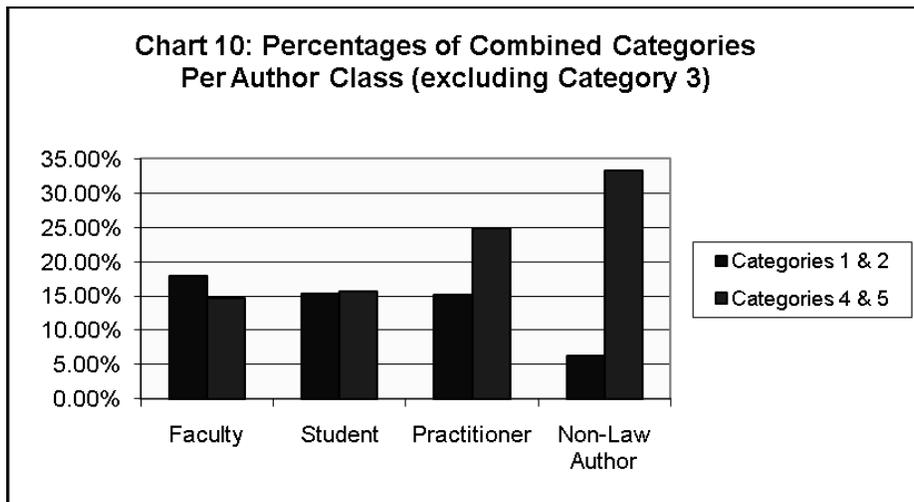
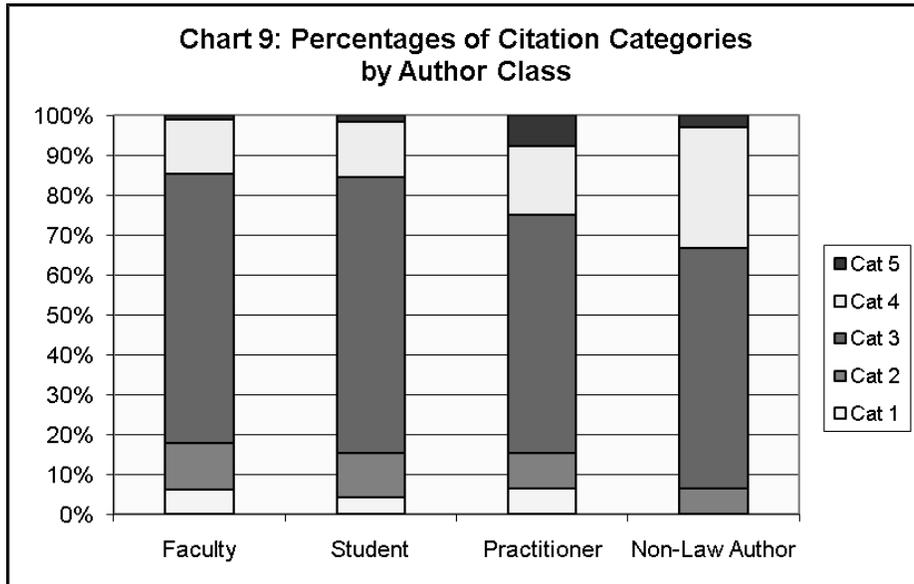
¹³⁵ See Chart 8.



At least 60% of all citations to Wikipedia by all classes of authors were Category 3 citations; whether this finding should be interpreted as a good thing or bad will depend on the views of the interpreter regarding the propriety of citing to Wikipedia for non-legal information in scholarly legal publications. Nonetheless, there are some encouraging, albeit not surprising, statistics when we examine how the author classes worked with the other category types. Category 2 citations, for example, were utilized by Faculty authors more frequently than the other author classes, and the percentages decreased across the classes. Conversely, and not surprisingly, Faculty were the least likely to use Category 4 and Category 5 citations, while Non-Law Authors were much more likely to use Category 4 citations; one-third of all Non-Law Author citations were Category 4 or Category 5.¹³⁶ Indeed, when we remove Category 3 citations and examine the combined percentages of the remaining categories (Categories 1 & 2 and Categories 4 & 5) across the author classes, an inverse pattern appears. As one might expect, Faculty were most likely to cite to Wikipedia for Categories 1 & 2 (the arguably more appropriate uses)

¹³⁶ See Chart 9.

and least likely to rely on it for clearly inappropriate purposes, while Non-Law Authors exhibited an inverse tendency.¹³⁷



¹³⁷ See Chart 10.

IV. IMPROVING EDITORIAL STANDARDS IN LAW REVIEWS

Although these statistics suggest that writers and editors do not appear to be riding a “tsunami” of citations to Wikipedia,¹³⁸ the fact remains that, as long as Wikipedia continues to exist, people will continue to cite to it—for better or worse. That does not mean, however, that the legal community should just roll over and accept things as they currently are. Indeed, due to the nature of the law (including the scholarly examination of that nature and its consequences), it is imperative that we control the future use of Wikipedia as a resource by improving editorial standards regarding the propriety and form of such citations in legal documents of all types.

A. WHEN CITATIONS TO WIKIPEDIA MAY BE APPROPRIATE

There are instances when citing to Wikipedia may be appropriate. The proprietary web pages of Wikipedia, which, unlike the encyclopedic articles, usually cannot be edited by just anyone, may be cited for the statements they contain, provided such information is not available in a traditional printed resource.¹³⁹ Although they suffer from the same infirmities that plague all websites,¹⁴⁰ it is permissible to refer to these pages when discussing Wikipedia as an entity or its policies, procedures, or history. However, there is a difference between citing to Wikipedia’s proprietary pages and citing to Wikipedia’s *articles* about Wikipedia, which can be edited by anyone and, therefore, lack even the modest amount of authority possessed by the proprietary pages.

As a rule, however, Wikipedia articles should never be cited in a scholarly work or in documents to be submitted to a judicial or administrative body, except when the existence of an article, or the existence of an article’s content, is the object of the discussion.¹⁴¹ As

¹³⁸ Richards, *supra* note 8, at 63.

¹³⁹ See THE BLUEBOOK, *supra* note 12, R. 18.2.3, at 156.

¹⁴⁰ See generally Barger, *supra* note 19; Rumsey, *supra* note 90.

¹⁴¹ But see Miller & Murray, *supra* note 8, at 644 (“[I]t is appropriate to cite Wikipedia when it is suitable to cite the wisdom of the crowd.”).

discussed above, Wikipedia articles lack the probity and permanence (both in terms of content and location) to be relied on for scholarly, advocatory, or jurisprudential purposes.

Generally speaking, there are two types of Wikipedia articles: those that contain proper references to direct the reader to the appropriate sources for the information contained in the article, and those that do not. Neither should be cited for their content. The former should not be cited because the researcher should go to the original source materials; the latter because the necessary references are missing, thereby undermining its value to the researcher, whether that researcher is the author or a subsequent reader trying to build on or critique the author's work.

Unfortunately, the issue goes beyond the mere citation to Wikipedia, but also includes the related problem "that citation norms have evolved to demand citations for undisputed facts that would require hours of trudging through reference materials for an unnecessary citation."¹⁴² In this age of easy access to online information, the legal community should not be afraid to adopt, as an editorial standard for scholarly work, a rule such as that proposed by Brett Maxfield (dubbed "the Wikipedia Rule"), which states that if a Wikipedia article exists for the subject you are mentioning, "then it qualifies as common knowledge . . . and is unworthy of reference in a footnote."¹⁴³ Such a rule would have alleviated the perceived need to cite to Wikipedia in most of the instances examined in this study. It would also allow authors and editors to devote more of their time to more important matters.

B. HOW TO CITE TO WIKIPEDIA

One of the most pressing concerns with citations to Wikipedia is the lack of a consistent citation format. One hesitates to discuss how to cite to Wikipedia for fear of appearing to endorse such citation, but it is a topic that is garnering greater attention.¹⁴⁴

¹⁴² Hurt, *supra* note 63.

¹⁴³ Brett Deforest Maxfield, *Ethics, Politics and Securities Law: How Unethical People Are Using Politics to Undermine the Integrity of Our Courts and Financial Markets*, 35 OHIO N.U. L. REV. 243, 293 (2009). See also Landau, *supra* note 11, at 24 ("If a writing makes reference to the law of gravity, it does not require a citation to Newton's *Principia*.").

¹⁴⁴ See Miller & Murray, *supra* note 8, at 642-43; Peoples, *supra* note 8, at 37. See also Murley, *supra* note 29, at 597; Wagner, *supra* note 4, at 235.

One law review, the *Harvard Journal of Law & Technology* (JOLT), adopted a standard of its own in 2006, which has apparently been endorsed by Wikipedia itself.¹⁴⁵ This citation format is definitely a step in the right direction, but there is a fundamental flaw to it: the JOLT format requires the author/editor to include a generic Wikipedia URL that terminates with the name of the entry.¹⁴⁶ Such a URL is designed to take the reader to the current version of the entry;¹⁴⁷ however, if one wants to see the entry as the author viewed it, one would need to then use the date and time information provided in the citation to dig through the entry's history to find the appropriate version. The JOLT format, therefore, presumes that "the name of the entry has [not] changed [and] it has [not] been merged with another entry"¹⁴⁸ or split into multiple entries.

Professor Lee Peoples recently suggested an alternative format for Wikipedia citations that is similar to the JOLT format.¹⁴⁹ There are four differences between the two formats. The first, and most important, distinction is the type of URL to be provided. While the JOLT format settles for a generic entry-name URL, the format proposed by Peoples requires a permanent link to the entry. On every Wikipedia page, a "toolbox" is displayed in the left sidebar,¹⁵⁰ and this toolbox includes a link labeled "Permanent Link."¹⁵¹ "When you click Permanent Link, you are taken to a time-stamped snapshot of the article as it currently appears. The text at this URL will never change, so you can . . . cite it with confidence."¹⁵² Because "every version of every page has a unique ID number,"¹⁵³ which is part of the permanent

¹⁴⁵ See Murley, *supra* note 29, at 597 & n.30. See also Miller & Murray, *supra* note 8, at 642.

¹⁴⁶ See Miller & Murray, *supra* note 8, at 642; Murley, *supra* note 29, at 597; Wagner, *supra* note 4, at 235.

¹⁴⁷ See Peoples, *supra* note 8, at 40–41.

¹⁴⁸ *Id.* at 37.

¹⁴⁹ *Id.* at 41.

¹⁵⁰ See *id.* See also AYERS ET AL., *supra* note 3, at 78; BROUGHTON, *supra* note 3, at 417, 419–20.

¹⁵¹ AYERS ET AL., *supra* note 3, at 78; BROUGHTON, *supra* note 3, at 420.

¹⁵² AYERS ET AL., *supra* note 3, at 78. *But see* discussion *supra* Part II.C.2.

¹⁵³ AYERS ET AL., *supra* note 3, at 78.

link URL, there is, theoretically, no need for the reader to take additional steps to retrieve the entry as relied on by the author. Another improvement on the JOLT format that Peoples suggests is to place optional parentheticals after, rather than before, the date parenthetical,¹⁵⁴ which is the appropriate placement suggested by *The Bluebook*.¹⁵⁵

For the two remaining differences, the JOLT format appears to be more appropriate than the format proposed by Peoples. First, the Peoples format does not actually include the title “Wikipedia” outside of the URL. However, as mentioned above,¹⁵⁶ Westlaw’s current search syntax does not recognize instances where the search term appears only in an accurately rendered URL. Accordingly, a researcher searching for citations to Wikipedia using Westlaw¹⁵⁷ would not find instances where the term Wikipedia is included only in URLs provided in conformity with the Peoples format.

Also, the Peoples format calls for providing “the date and time the page was visited.”¹⁵⁸ The JOLT format suggests providing an “as of” date and time, which is clearly displayed on the “permanent link” version of the entry. *Bluebook* Rule 18.2.4, which Peoples specifically identifies as providing the best guidance for citing to wikis,¹⁵⁹ calls for the date and time-stamp of the particular item being cited.¹⁶⁰ Similarly, Rule 18.2.3(e) suggests that a “last visited” date should only be used when the cited “material is otherwise undated.”¹⁶¹ Accordingly, the date and time as provided by Wikipedia for the permanent link version of the entry should be provided, rather than the date and time the author visited the page.

¹⁵⁴ Peoples, *supra* note 8, at 41.

¹⁵⁵ THE BLUEBOOK, *supra* note 12, R. 18.2.2(c), at 155.

¹⁵⁶ See discussion *supra* note 109.

¹⁵⁷ See, e.g., Miller & Murray, *supra* note 8, at 634 nn.16-17; Peoples, *supra* note 8, at 6 n.29; Wagner, *supra* note 4, at 231 n.14. See also Peoples, *supra* note 8, at 37 (“When Westlaw adds the text . . . to its database, URLs . . . are not always exact copies of the URLs as they appear in . . . print . . .”).

¹⁵⁸ Peoples, *supra* note 8, at 41.

¹⁵⁹ *Id.*

¹⁶⁰ THE BLUEBOOK, *supra* note 12, R. 18.2.4, at 158.

¹⁶¹ *Id.* R. 18.2.3(e), at 157–58.

Combining the best attributes of the JOLT format with those of the Peoples format produces the following model citation format for Wikipedia:

[*Signal*] Wikipedia, [*Article*], [Permanent Link URL]
(as of [date], [time] [UTC or GMT])¹⁶² [(optional other
parenthetical(s))]

This should be the basis for the standard adopted by the editors of *The Bluebook* when they inevitably get around to including wikis within their citation rules, and it should be the common practice for those authors and editors who feel it necessary to cite to Wikipedia.

V. CONCLUSION

The statistics identified by this citation analysis suggest that, although citing to Wikipedia may not be the best practice, writers and editors do not appear to be abusing it. While some may feel that *any* citation to Wikipedia is to be frowned upon, this examination has found that the law review article that cites to more than a couple of Wikipedia entries appears to be the exception, not the rule. Indeed, considering the marked decrease in Category 4 and Category 5 citations (the most objectionable citations to Wikipedia) during the study period and the concomitant increase of Category 1 and Category 2 citations (the least objectionable ones), it appears authors are learning to properly incorporate Wikipedia into their references, although greater vigilance by editors is still required. Depending on one's view of the propriety of citing to Wikipedia for background or contextual information, the consistently high incidence of Category 3 citations can be interpreted as a cause for alarm or as a sign that most authors are citing responsibly. In light of the accepted standards that generally require citation to print sources when available,¹⁶³ this author cannot support the latter view.

¹⁶² Wikipedia displays the time in Coordinated Universal Time (UTC). BROUGHTON, *supra* note 3, at 391. However, the JOLT format suggests using Greenwich Mean Time (GMT). *See, e.g.*, Murley, *supra* note 29, at 597. Since UTC is never more than a second off from GMT, the difference for citation purposes is essentially meaningless. *See* ENCYCLOPEDIA OF TIME 157 (Samuel L. Macey ed., 1994).

¹⁶³ *See* THE BLUEBOOK, *supra* note 12, R. 18.2.3, at 156. *See also* ALWD CITATION MANUAL, *supra* note 10, R. 38.1(a)(1), at 291.

The legal community as a whole should discourage most citations to Wikipedia. Any inappropriate or unnecessary reference suggests a trust in or support for reliance on Wikipedia,¹⁶⁴ and in the world of legal writing, such trust and support is misplaced.¹⁶⁵ Professors, practitioners, editors, and even librarians should encourage responsible research by refraining from citing to Wikipedia unless absolutely necessary. Editors and librarians should work with authors and researchers to identify and locate more appropriate resources. Faculty advisors of law reviews should empower student editors faced with Wikipedia citations to question the need for a citation at all and request more appropriate sources if a citation is required. And in those few instances when citing to Wikipedia is necessary, the citation format described above¹⁶⁶ should be utilized to ensure the satisfaction of both the documentary and bibliographic functions of citation.

¹⁶⁴ See Schauer, *supra* note 17, at 1957 (“A citation to a particular source is not only a statement by the citer that this is a good source but also a statement that sources of this type are legitimate.”).

¹⁶⁵ See Peoples, *supra* note 8, at 48 (“If Wikipedia becomes a legitimate source it could bring instability and uncertainty to the law.”).

¹⁶⁶ See *supra* Part IV.B.

APPENDIX

*Averages By Topic Categories*¹⁶⁷

Topic Categories (# of Law Reviews)	Citations / Article ¹⁶⁸	Articles / Law Review ¹⁶⁹	Citations / Law Review
Total (486)	3.11	3.18	9.90
General (189)	2.84	3.80	10.79
International Law (74)	3.28	2.26	7.41
Public Policy, Politics and the Law (45)	2.26	2.11	4.78
Environment, Natural Resources & Land Use (38)	2.25	1.76	3.97
Intellectual Property (31)	4.18	8.10	33.84
Commercial Law (22)	3.21	2.14	6.86
Gender, Women and Sexuality (22)	2.24	1.73	3.86
Science, Technology and Computing (19)	5.01	8.63	43.21
Minority, Race and Ethnic Issues (18)	1.83	1.67	3.06
Arts, Entertainment and Sports (14)	4.64	10.21	47.43
Health, Medicine, Psychology and Psychiatry (13)	2.42	0.92	2.23
Civil Rights (8)	1.56	3.13	4.88
Criminal Law and Procedure (8)	6.50	1.25	8.13
Civil Litigation and Dispute Resolution (7)	1.85	3.71	6.86

¹⁶⁷ Topic categories correspond to the broad subject areas used by Washington & Lee University School of Law, *Law Journals: Submissions and Ranking*, at <http://lawlib.wlu.edu/LJ/index.aspx> (last visited Nov. 12, 2010). Law reviews can appear in multiple topic categories.

¹⁶⁸ Citations per Article means the average number of citations to Wikipedia appearing in all articles containing at least one such citation in all law reviews for that category.

¹⁶⁹ Articles per Law Review means the average number of articles containing at least one citation to Wikipedia appearing in all law reviews for that category.

Averages By Topic Categories

Topic Categories (# of Law Reviews)	Citations / Article	Articles / Law Review	Citations / Law Review
Corporations and Associations (7)	1.77	1.86	3.29
Family Law (7)	2.20	1.43	3.14
Human Rights (7)	1.00	0.43	0.43
Communications Law, Media and Journalism (6)	4.24	6.17	26.17
Constitutional Law (6)	1.65	3.33	5.50
Administrative Law (5)	1.50	0.80	1.20
International Trade (5)	3.36	2.80	9.40
Taxation (5)	2.20	1.00	2.20
Banking and Finance (4)	1.86	3.50	6.50
Bankruptcy (4)	1.20	1.25	1.50
Education Law (4)	2.33	0.75	1.75
Legal Profession and Legal Education (4)	1.20	1.25	1.50
Maritime Law (4)	1.00	0.75	0.75
Economics (3)	2.78	3.00	8.33
Employment (3)	1.33	1.00	1.33
Ethics (3)	1.25	1.33	1.67
Agriculture (2)	4.25	2.00	8.50
Air and Space (2)	2.91	5.50	16.00
Asian Law (2)	1.00	0.50	0.50
Elder Law (2)	1.00	0.50	0.50
Legislation (2)	3.25	2.00	6.50
Religion (2)	1.75	2.00	3.50
Animals (1)	1.00	1.00	1.00
Energy Law (1)	2.20	5.00	11.00
Estates and Trusts (1)	0.00	0.00	0.00
European Law (1)	2.67	3.00	8.00
Transportation (1)	2.64	11.00	29.00