The Citation of Wikipedia in Judicial Opinions

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THE CITATION OF WIKIPEDIA IN JUDICIAL OPINIONS

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12 YALE J.L. & TECH. 1 (2009)

ABSTRACT

Wikipedia has been cited in over four hundred American judicial opinions. Courts have taken judicial notice of Wikipedia content, based their reasoning on Wikipedia entries, and decided dispositive motions on the basis of Wikipedia content. The impermanent nature of Wikipedia entries and their questionable quality raises a number of unique concerns. To date, no law review article has comprehensively examined the citation of Wikipedia in judicial opinions or considered its long-range implications for American law.

This article reports the results of an exhaustive study examining every American judicial opinion that cites a Wikipedia entry. The article begins with a discussion of cases that cite Wikipedia for a significant aspect of the case before the court. The impact of these citations on litigants’ constitutional and procedural rights, the law of evidence, judicial ethics, and the judicial role in the common law adversarial system are explored. Part II discusses collateral references to Wikipedia entries. Part III proposes a set of best practices for when and how Wikipedia should be cited. Detailed statistics on the quality of Wikipedia entries cited in judicial opinions and the completeness and accuracy of citations to Wikipedia entries are provided. The article concludes with a discussion of the impact of Wikipedia citations in judicial opinions on the future of the law.
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INTRODUCTION

Citations to Wikipedia in judicial opinions first appeared in 2004 and have increased steadily ever since. Wikipedia is not just being cited for trivial matters. Courts have taken judicial notice of Wikipedia content, based their reasoning on Wikipedia entries, and decided dispositive motions on the basis of Wikipedia content. Wikipedia is not like other non-legal factual sources that have been appearing in judicial opinions for many years.\(^1\) The impermanence of Wikipedia content, which can be edited by anyone at any time, and the dubious quality of the information found on Wikipedia raises a number of unique concerns.

What happens when a future researcher, lawyer, or judge wants to retrace a court’s argument but can’t locate the Wikipedia entry cited in a judicial opinion? How can a future researcher be certain that the Wikipedia entry she is viewing is the same one the court looked at when deciding the case? Should the public respect and rely upon a judicial decision based on a Wikipedia entry that subsequently becomes unavailable or changes significantly? Is it ever appropriate for courts to cite Wikipedia entries in judicial opinions, and if so how should they be cited? Should judges and lawyers evaluate Wikipedia entries before citing them and if so what criteria should they use? Finally, are we witnessing “the first wave in what has become a tsunami of ‘Wikipedia jurisprudence,’”\(^2\) and what are the long term consequences for American law?

Wiki comes from the Hawaiian word for quick. A wiki is a web page created through collaboration.\(^3\) The content of some wikis, like Wikipedia for example, may be created or edited by anyone. Other wikis are more selective, allowing only certain users to update or edit their content. Cornell’s legal wiki Wex is an example of a more selective wiki. Only “qualified experts” are permitted to edit content appearing on Wex.\(^4\)

Wikipedia began in 2001 as open source offshoot of Nupedia, an online peer reviewed encyclopedia.\(^5\) Wikipedia contained over ten million articles in over 260 languages as of

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1. Frederick Schauer & Virginia J. Wise, Nonlegal Information and the Delegalization of Law, 29 J. LEGAL STUD. 495 (2000).
5. Richards, supra note 2, at 62.
December 2009 with just over three million in English.\textsuperscript{6} Anyone can edit most existing Wikipedia articles by clicking the “edit this page” tab that appears at the top of every page.\textsuperscript{7} By design Wikipedia's content is constantly malleable, always subject to change.

Wikipedia is owned by the Wikimedia Foundation but the foundation is “largely uninvolved in writing and daily operations.”\textsuperscript{8} A self-organized community of editors and administrators watch over Wikipedia and “ensure that behaviour conforms to Wikipedia guidelines and policies.”\textsuperscript{9} These editors and administrators are assisted by sophisticated software systems and robots who edit Wikipedia.\textsuperscript{10} Editorial disputes are handled by a three member arbitration committee whose members are elected to their positions.\textsuperscript{11}

Wikipedia intends to have content that is “factual, notable, verifiable with cited external sources, and neutrally presented.”\textsuperscript{12} The site contains a number of disclaimers which are understandable given its nature as an open source project. Wikipedia expressly makes no guarantee of the validity of the information it contains. The About page expressly warns users that not all articles are “encyclopedic quality from the start” and “may contain false or debatable information.”\textsuperscript{13} A study comparing the accuracy of Wikipedia articles with the online version of the Encyclopedia Britannica found that on average Wikipedia articles contained four errors while Encyclopedia Britannica articles contained three errors.\textsuperscript{14} Wikipedia editors rank articles into different tiers and categories indicating their quality or shortcomings.\textsuperscript{15}

Wikipedia articles have been subject to vandalism. Most notably in 2005 an article about the journalist John Seigenthaler was vandalized by someone playing a joke on a co-worker. The article about Seigenthaler, who had worked for Robert Kennedy and was a pallbearer at his funeral, was edited to state that Seigenthaler had been involved in the assassination of John and

\textsuperscript{8} Id.
\textsuperscript{9} Id.
\textsuperscript{10} Id.
\textsuperscript{11} Id.
\textsuperscript{12} Id.
\textsuperscript{13} Id.
\textsuperscript{14} Id.
\textsuperscript{15} Jim Giles, Internet Encyclopaedias Go Head to Head, 438 NATURE 900 (2005).

This system is explained in more detail infra Section III.B.
Robert Kennedy. The vandalism went undetected for several months and the misinformation was picked up as factual by several other websites. The Wikipedia entries for Senators Ted Kennedy and Robert Byrd fell prey to vandals who edited the entries to state that both Senators had died after the inauguration lunch for President Obama. Wikipedia recently announced that any changes made to entries about living people will first be approved by an “experienced volunteer editor” before going live. The new system called “flagged revisions” is intended to curtail hoaxes and improve the quality of information found in Wikipedia entries. A Wikipedia article linked from the “About Wikipedia” page warns students that “citation of Wikipedia in research papers may not be considered acceptable, because Wikipedia is not considered a creditable source.” Wikipedia’s founder Jimmy Wales warned college students not to cite Wikipedia, quipping “For God sake, you’re in college; don’t cite the encyclopedia.” The Middlebury College history department has formally banned students from citing Wikipedia in papers or on exams, and the University of Pennsylvania, Tufts, and UCLA have considered similar actions.

In contrast to the robust discussion of the use of Wikipedia on college campuses, there has been relatively little discussion of the use of Wikipedia in judicial opinions. The practice has been discussed in a New York Times article, in the blogosphere, in a practitioner’s newsletter, and in a handful of law review articles.

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16 Murley, supra note 7, at 598-99.
17 Id.
20 Id.
23 Richards, supra note 2, at 63.
26 Richards, supra note 2, at 62.
To date no law review article has comprehensively examined the practice of judges citing Wikipedia in their opinions. This Article reports the results of my comprehensive research into the citation of Wikipedia in American judicial opinions. To discover cases that included references to Wikipedia I searched the Westlaw database ALLCASES for the terms “wiki OR wikipedia.” The ALLCASES database includes all United States federal and state cases available on Westlaw from the year 1658 to present. This returned 407 cases with some reference to a wiki or Wikipedia article. Four hundred and one cases referenced a Wikipedia article and six cases referenced a wiki other than Wikipedia. Interestingly, Wikipedia contains two pages listing judicial opinions citing Wikipedia entries. One page lists thirteen opinions citing a Wikipedia entry and another lists ninety-eight United States judicial opinions citing a Wikipedia entry.

I examined each case and organized the results into cases citing Wikipedia and cases citing other wikis. I further separated the results into cases where the reference was significant to the case and references that were merely collateral references. Part I of this Article explores references to Wikipedia that were significant to the case before the court. Examples of significant references include taking judicial notice of Wikipedia content, discussing a Wikipedia entry when evaluating the arguments of the parties or in support of the court’s reasoning or logic, accepting expert testimony based on a Wikipedia entry, and granting or denying a motion for summary judgment based in part on a Wikipedia entry. Collateral references to Wikipedia entries are examined in Part II of this Article. Collateral references typically involve the citation

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28 Wikipedia has been cited in a number of foreign judicial opinions. A possible follow-up article examining the citation of Wikipedia in judicial opinions from various countries is discussed in the Conclusion.

29 This figure is current as of November 28, 2008. To recreate these search results, use the following query: “wiki or wikipedia & da(bef 11/28/08).”


of Wikipedia in the context of dicta, for a rhetorical flourish, or to define a non-essential term.

Presently, there is not a clear consensus among courts about when it is and is not appropriate to cite a Wikipedia entry. When courts include a Wikipedia entry in their opinions, they do not cite it in a uniform way. Part III of this Article proposes best practices for when Wikipedia should and should not be cited and how it should be cited. Detailed statistics on the quality of Wikipedia entries cited in judicial opinions and the completeness and accuracy of the citations to Wikipedia entries are provided. This Article concludes by exploring the impact of Wikipedia citations in judicial opinions on the future of the law.

I. SIGNIFICANT REFERENCES TO WIKIPEDIA


Wikipedia has been used by courts in evaluating the arguments of the parties, to support the court’s reasoning, or to define “legislative facts.” Legislative facts do not “concern the immediate parties, but are general facts which help the tribunal decide questions of law and policy and discretion.” When Wikipedia is used to define a legislative fact, the court does not take formal judicial notice of Wikipedia content, and the requirements of Federal Rule of Evidence 201 do not apply to legislative facts.

Although information obtained from Wikipedia does not have to meet the requirements of Rule 201 in this context, Wikipedia may not be the best source. Using a Wikipedia entry to support the court’s analysis or reasoning lends authority to Wikipedia as a legitimate and credible source. Judges who might not have been inclined to use Wikipedia in their opinions may be less skeptical of Wikipedia when they discover previous judicial opinions citing a Wikipedia entry to support the opinion’s analysis or reasoning.

The Court of Appeals for the Seventh Circuit used a Wikipedia entry in the case of Rickher v. Home Depot, Inc. to refute a claim made by the appellant. The appellant brought a class

33 Id. Rule 201 permits a court to take judicial notice of a fact “not subject to reasonable dispute in that it is either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.” FED. R. EVID. 201. Examples of courts taking judicial notice of Wikipedia content are discussed infra Section I.B.
34 535 F.3d 661 (7th Cir. 2008).
action suit alleging that Home Depot’s damage waiver for tool rentals violated the Illinois Consumer Fraud and Deceptive Business Practices Act. Customers who paid extra for the damage waiver would not be liable for damage to the rented tool, with some minor exceptions. Appellant argued that the damage waiver was essentially worthless because the basic rental agreement protects customers from liability for “wear and tear” which “encompasses all ‘damage’ resulting from proper use.” Appellant argued that “wear and tear” included “any and all damage that might occur during a tool’s proper use.” Appellant cited Webster’s II New College Dictionary’s definition of “wear and tear” in support of his contention that wear and tear was synonymous with damage. The court cited Wikipedia to refute the appellant’s argument:

Although it is true that dictionary definitions of “wear and tear” often employ the word “damage,” that does not mean that damage and “wear and tear” are synonymous. Wear and tear is a more specific phrase that connotes the expected, often gradual, depreciation of an item. See Wear and Tear, http://en.wikipedia.org/wiki/Wear_and_tear, last visited May 30, 2008.

. . . We see no reason for constructing a new definition of wear and tear (per Rickher’s suggestion) that encompasses all damage resulting from proper use, where the contract uses “damage” and “wear and tear” differently, and where such an interpretation would render meaningless other provisions in the contract.

The Seventh Circuit’s reliance on Wikipedia drew the attention of law professor and prominent legal blogger Eugene Volokh who found the judges’ citation of “Wikipedia as the lead authority supporting their conclusion, and as the source for their important and controversial definition . . . troubling.” Volokh was bothered by the potential for manipulation of the Wikipedia entry, although he examined the entry for evidence of manipulation and did not find reason to suspect that it had been manipulated. Volokh was also disturbed by the court’s reliance on Wikipedia as a “substantial authority.” He elaborated that until the accuracy of Wikipedia is demonstrated courts should “rest their decisions about

35 Id. at 666.
36 Id. at 666-67.
37 Volokh, supra note 25.
important and controversial matters on sources—such as dictionaries, technical dictionaries, or encyclopedia entries—that at least have some more indicia of likely expertise.”

The Seventh Circuit is not alone in relying on a Wikipedia entry to evaluate arguments made by the parties or otherwise support the court’s reasoning. The Wikipedia entry on the Homeland Security Advisory System was used by the Eleventh Circuit in Bourgeois v. Peters. In this case, the appellants challenged the city of Columbus’s policy of conducting mass searches of the persons and belongings of protestors. The City defended its policy on the grounds that the Department of Homeland Security’s threat advisory levels justified the searches. The court flatly rejected this argument. “Given that we have been on ‘yellow alert’ for over two and a half years now, we cannot consider this a particularly exceptional condition that warrants curtailment of constitutional rights.”

In support of this position, the court cited the Wikipedia entry on the Homeland Security Advisory System. “Although the threat level was ‘elevated’ at the time of the protest, ‘to date, the threat level has stood at yellow (elevated) for the majority of its time in existence. It has been raised to orange (high) six times.’”

In Royster v. Rochdale Village Co-op, the court dismissed plaintiff’s section 1983 civil rights claims because the plaintiff failed to prove that defendants were state actors. In support of this conclusion, the court cited the Wikipedia entry on Rochdale Village stating that “Rochdale Village is a private housing cooperative.” Similarly, in Hillensbeck v. United States, the court relied on a Wikipedia entry to refute the government’s argument that an individual was not a part of an agency. The government posited that because a paramedic student wore a different uniform than a practicing paramedic, the student was not part of an agency. The court rejected this argument and cited a Wikipedia entry for support, noting that “[t]he fact that ‘Candystripers’ wear pink and white striped uniforms does not diminish the fact that these individuals are volunteers who are ‘officially recognized’ by hospital medical and support staff by

38 Id.
39 387 F.3d 1303 (11th Cir. 2004).
40 Id. at 1312.
42 No. 08-CV-1367 (CBA), 2008 WL 1787681 (E.D.N.Y. Apr. 17, 2008).
43 Id. at *2.
whom they are supervised and ‘designated functionally’ to perform specific services.”

A final illustrative example of a court basing its logic or reasoning on a Wikipedia entry is *VDP Patent, LLC v. Welch Allyn Holdings, Inc.* The plaintiff claimed that defendants’ ear wax removal device infringed their patented ear wax removal device. In a motion, the defendants attempted to invalidate plaintiff’s patent on the grounds that its description of a “‘cylindrical shape in cross-section’ in the ‘711 patent defies construction and is indefinite.” The court’s role in construing the terms of a claim in this context is to give them “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.”

The court turned to the definition of a cross-section on Wikipedia to refute the defendants’ claims.

The court’s use of Wikipedia in this context is interesting. Two years prior to *VDP Patent*, the U.S. Patent and Trademark Office removed Wikipedia from their list of accepted sources of information. Patent Commissioner John Doll complained, “[T]he problem with Wikipedia is that it’s constantly changing.” The USPTO’s decision was applauded by one agency critic who quipped, “[F]rom a legal point of view, a Wiki citation is toilet paper.” The court deciding *VDP Patent* backed up their position in the case by citing the Oxford English Dictionary, in addition to Wikipedia, for the meaning of the term. Given the USPTO’s rejection of Wikipedia, courts construing patents in the future should avoid referencing content on Wikipedia.

Some courts are inconsistent when dealing with Wikipedia. For example, one court began a paragraph with a scathing critique of a party for citing Wikipedia. But a few sentences later, the court cited Wikipedia to support its own analysis or reasoning. In *Platinum Links Entertainment v. Atlantic City Surf Professional Baseball Club, Inc.*, the plaintiff alleged that defendant’s cancellation of a rap concert violated their civil rights. The plaintiff argued that the defendant was motivated by “racial animus” in

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47 Id. at 427.
48 Id. at 421 (internal quotation marks omitted).
49 Id. at 427.
50 Richards, supra note 2, at 63.
51 Id.
53 623 F. Supp. 2d at 427, 429 n.15.
55 Id. at *16.
cancelling the concert because it was a rap concert and the defendant perceived the potential for gang-related violence at the concert. The plaintiff cited the Wikipedia definition of rap music in support of this argument, and the court noted that it “does not necessarily consider Wikipedia an authoritative source.”\footnote{Id. at *16 n.6.} In the next sentence the court confessed, “Plaintiff’s citation led this Court to look up, \textit{sua sponte}, the term ‘gangsta rap’ on the same website, and this Court notes that the description does not make mention of race.”\footnote{Id.} Based on the Wikipedia definition and other factual evidence from the record, the court denied plaintiff’s civil rights claim.

Other courts have taken a less favorable view of Wikipedia entries.\footnote{The use of Wikipedia by parties and lower courts is criticized in the following cases not discussed in this Article: Stancik v. CNBC, 420 F. Supp. 2d 800, 805 (N.D. Ohio 2006); Nordwall v. Sec’y of Health & Human Servs., No. 05-123V, 2008 WL 857661, at *7 (Fed. Cl. Feb. 19, 2008); Gagliardi v. Comm’r, No. 23912-05, 2008 WL 199722, at *10 (T.C. Jan. 24, 2008); People v. Moreno, No. E040696, 2007 WL 2998986, at *2 (Cal. Ct. App. Oct. 16, 2007); Otto v. Otto, No. FA074007084S, 2007 WL 4571293, at *2 (Conn. Super. Ct. Nov. 27, 2007); Ind. Patient’s Comp. Fund v. Brewer, No. 10A01-0610-CV-425, 2007 WL 3273586, at *1 (Ind. Ct. App. Nov. 7, 2007); State v. Webb, No. COA08-186, 2008 WL 4916014, at *2-3 (N.C. Ct. App. Nov. 18, 2008).} The leading case rejecting a Wikipedia entry as a reliable source is \textit{Badasa v. Mukasey}.\footnote{540 F.3d 909 (8th Cir. 2008).} The case began before an immigration judge. The petitioner, an asylum seeker, submitted a \textit{laissez-passar} document to establish her identity. In response, the Department of Homeland Security pointed to the Wikipedia entry for \textit{laissez-passar} and argued that it could not be used to establish identity. The immigration judge agreed and denied the request for asylum. The Board of Immigration Appeals affirmed this decision, “stat[ing] that it did ‘not condone or encourage the use of resources such as Wikipedia.com in reaching pivotal decisions in immigration proceedings,’ and commented that the IJ’s decision ‘may have appeared more solid had Wikipedia.com not been referenced.’”\footnote{Id. at 910.} The Eighth Circuit remanded the case, finding that the BIA had failed to explain its conclusions. The Eighth Circuit’s opinion included several paragraphs critiquing the reliability of Wikipedia generally. The court noted “the BIA presumably was concerned that Wikipedia is not a sufficiently reliable source on which to rest the determination that an alien alleging a risk of future persecution is not entitled to asylum.”\footnote{Id.}
The Eighth Circuit failed to pick up on the fact that the Wikipedia entry at issue was a “stub” not citing any references or sources. A stub is an “article containing only a few sentences of text which is too short to provide encyclopedic coverage of a subject.”

Many Wikipedia entries start out as stubs and are later developed into more complete entries. As one commentator put it, the incompetence of the DHS lawyer and immigration judge in citing Wikipedia “would almost be humorous if it weren’t for the dire consequences of rejecting a valid asylum application and returning a refugee to a country in which they face torture and possibly death.”

The value of Wikipedia as a source was critiqued in English Mountain Spring Water Co. v. Chumley. The case explored the question of whether bottled water was defined as a beverage for the purposes of a tax statute. The court questioned the defendant’s use of Wikipedia to define the term beverage. “Given the fact that this source is open to virtually anonymous editing by the general public, the expertise of its editors is always in question, and its reliability is indeterminable. Accordingly, we do not find that it constitutes persuasive authority.”

B. Taking Judicial Notice of Wikipedia Content

Courts have been asked on several occasions to take judicial notice of information obtained from Wikipedia entries. Federal Rule of Evidence 201 permits a court to take judicial notice of a fact “not subject to reasonable dispute in that it is either (1) generally known within the territorial jurisdiction of the trial court or (2) capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.”

Although not usually explicitly defined, judicial notice “‘means a court’s on-the-record declaration of the existence of a fact normally decided by the trier of fact, without requiring proof of that fact.’” The effect of a court taking judicial notice in a civil case is that the fact is deemed to be true for purposes of the proceeding.

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64 196 S.W.3d 144 (Tenn. Ct. App. 2005).

65 Id. at 149.

66 FED. R. EVID. 201(b).

67 WRIGHT & MILLER, supra note 32, § 5103 (quoting ALASKA R. EVID. § 201(a)).
case is that the “court shall instruct the jury to accept as conclusive any fact judicially noticed.”

Most courts have wisely refused to take judicial notice of Wikipedia content. In Steele v. McMahon the court denied plaintiff’s request to take judicial notice of the Wikipedia entry “In the Shadows of the War on Terror” and agreed with defendant’s objections that it was “not the appropriate subject for judicial notice, hearsay, and not authenticated.” The Texas Court of Appeals refused to take judicial notice of Wikipedia content on the grounds that “[a]nyone can edit [a Wikipedia] article, anonymously, hit and run.” Another court denied a party’s request to take judicial notice of Wikipedia content because “Wikipedia may not be a reliable source of information.”

A minority of courts have taken judicial notice of Wikipedia content. In Helen of Troy, L.P. v. Zotos Corp., the court took judicial notice at the plaintiff’s request in a ruling on a summary judgment motion that “urea is an acid having a very low pH.” In support of its request the plaintiff supplied the court with the Wikipedia entry on urea. The plaintiff asked the court to take judicial notice to support its strict liability cause of action against the defendants who sold them plastic bottles that were “unreasonably dangerous.” The plaintiff argued that defendants should be held strictly liable because they knew the bottles had a design defect and were not safe vessels for plaintiff’s product, which contained urea.

The defendant, Spentech, replied that Wikipedia was “not proper summary judgment evidence” but did “not contest the substance of the assertion that urea is an acid having a very low pH.” In its opinion the court did not elaborate on Spentech’s objection to Wikipedia as improper evidence but instead concluded

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68 Fed. R. Evid. 201(g).
70 Id. at *8.
76 Id.
77 Helen of Troy, 235 F.R.D. at 639.
78 Id. at 640.
that the fact that urea is an acid with a very low pH is “not subject to reasonable dispute in that it is . . . capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.” 79 The court concluded that plaintiff had “presented sufficient evidence to survive summary judgment” on its strict liability claims. 80 The plaintiff eventually prevailed in the case, but its strict liability claim was barred by the economic loss rule. 81

Another example of a court taking judicial notice of information obtained from Wikipedia is found in Aquila v. Nationwide Mutual Insurance Co. 82 In this case the court took judicial notice “of the fact that the South Philadelphia Sports Complex houses the city’s professional sports teams, and incorporates the currently-named Wachovia Center, Wachovia Spectrum, Lincoln Financial Field, and Citizens Bank Park.” 83 The court cited a Wikipedia entry 84 in support of this conclusion but did not indicate the date or time the Wikipedia page was accessed. It is not apparent from the text of the opinion if the court was requested by one of the parties to take judicial notice or if the court took judicial notice on its own accord. The South Philadelphia Sports Complex was the plaintiff’s workplace, but was irrelevant to the case before the court, which involved an automobile insurance policy.

Taking judicial notice of information obtained from Wikipedia did not appear to impact the outcome of the Helen of Troy and Aquila cases. However, it is important to discuss why information obtained from Wikipedia should not be judicially noticed in the future. Otherwise these cases might be used as precedents in support of a future court’s decision to take judicial notice of Wikipedia content.

Wikipedia entries are not proper subjects for judicial notice under Federal Rule of Evidence 201(b) because they are not

79 Id.
80 Id. at 641.
83 Aquila, 2008 WL 4899359, at *1 n.4.
indisputable. Rule 201(b) requires that a “judicially noticed fact must be one not subject to reasonable dispute.” The requirement of indisputability “has been called ‘the central prerequisite’ and ‘the key’ to proper application of the Rule.” A high degree of indisputability is required because of the Sixth and Seventh Amendment jury trial rights that are at stake when a court takes judicial notice.

Wikipedia openly acknowledges that disputes arise between contributors over the neutrality and accuracy of entries. Disputed entries contain an editorial note indicating that some aspect of the article is in dispute. Wikipedia has an entire entry devoted to explaining its dispute resolution policy. Wikipedia encourages the resolution of disputes through informal negotiations and through its own more formal mediation and arbitration committees. Courts should not take judicial notice of Wikipedia content because it is often subject to reasonable dispute.

When courts do not provide a complete citation to the Wikipedia entry cited in their opinion or omit the date and time Wikipedia was visited, they do not meet the Rule 201(b) judicial notice standard. Judges should only notice facts “when certain that a reviewing court . . . will be able to see from the record that source consulted could not be reasonably disputed.” As one commentator put it when discussing courts taking judicial notice of website content, “the standard enunciated in rule 201 is not being met when the source cited in support of the judicially noticed fact can no longer be accessed or found.”

The practice of most courts when citing Wikipedia entries is to not include the date or time they accessed the information. Only forty-three percent of cases citing Wikipedia included a date reference indicating when the Wikipedia entry was viewed. Only one out of the 401 cases citing a Wikipedia entry included the time the entry was viewed. Without this critical information, future

85 Fed. R. Evid. 201(b).
86 Wright & Miller, supra note 32, § 5104 (quoting 7 Adams & Weeg, Iowa Practice: Evidence 92 (2002); and Lawson, The Kentucky Evidence Law Handbook 5 (3d ed. 1993)).
87 Id.
89 Wright & Miller, supra note 32, § 5104.
91 172 out of the 401 cases.
lawyers and courts have no way of knowing exactly what information the court was looking at when it took judicial notice. Every Wikipedia entry cited in a judicial opinion examined in this study has changed since it was examined by the court. Some changes are minor and serve to improve the entry. In other cases, the Wikipedia entry has changed so much that researchers would be unable to verify specific information from the entry cited in a judicial opinion. It is particularly illustrative that the most vivid example of change in a Wikipedia entry came from the Helen of Troy opinion discussed above in the context of taking judicial notice of Wikipedia content.\(^93\)

In Helen of Troy the court took judicial notice at the plaintiff’s request that “urea is an acid having a very low pH.”\(^94\) In support of their request, the plaintiff supplied the court with the Wikipedia entry on urea.\(^95\) The court included the URL of the Wikipedia entry in its opinion but did not indicate the date or time it was accessed. A researcher examining the Helen of Troy opinion who accessed the Wikipedia entry for urea in February of 2009 would not find the statement “urea is an acid having a very low pH.” Instead, a researcher would discover that “urea is neither acidic nor basic, so it is a perfect vehicle for getting rid of nitrogen waste.”\(^96\) This description of urea seems to contradict the version the court relied upon and would suggest the court erred in taking judicial notice of information obtained from Wikipedia. If the researcher dug a bit deeper and accessed the history tab for the Wikipedia entry on urea, she would discover that it had been changed over five hundred times since the Helen of Troy case was published on April 3, 2006. The Wikipedia entry cited in Helen of Troy clearly does not meet the Rule 201(b) indisputability requirement.

Wikipedia entries fail to meet the additional requirement of Rule 201 because Wikipedia is not a source “whose accuracy cannot be reasonably questioned.”\(^97\) To meet this requirement the proponent of judicial notice must point to some “extrinsic characteristic” that is “independent of the source itself.”\(^98\) It is possible that this requirement could be met if the information contained in the Wikipedia entry could be verified with a parallel citation to a trustworthy print source. For example, a parallel citation to an entry in a traditional print encyclopedia might suffice. Print encyclopedias have been accepted as sources whose

\(^93\) See supra notes 73-81 and accompanying text.
\(^95\) Wikipedia: Urea, supra note 74.
\(^96\) Id.
\(^97\) FED. R. EVID. 201(c).
\(^98\) WRIGHT & MILLER, supra note 32, § 5106.2.
accuracy cannot be reasonably questioned. But if Wikipedia entries must be verified with more reliable sources before meeting the requirements of Rule 201, what is the use of citing the Wikipedia entry? It would be more efficient to simply cite a reliable source instead of a Wikipedia entry.

The accuracy of the information contained in Wikipedia entries can easily be questioned and courts should not take judicial notice of Wikipedia content. The ability of anonymous contributors to create and edit Wikipedia entries should give courts pause before taking judicial notice of Wikipedia content. Wikipedia’s volunteer editors provide some indication of entries with questionable reliability. Editors mark entries with various notes including “missing footnotes,” “doesn’t cite any sources,” “requires authentication by an expert,” and “neutrality disputed.” Courts should not take judicial notice of Wikipedia entries because they are frequently subject to dispute and their accuracy is often questionable.

In the cases discussed above, the requirements of Rule 201 were clearly applicable to a court taking judicial notice of Wikipedia content. In other cases the requirements of Rule 201 are applicable even though the court does not expressly say it is taking judicial notice of Wikipedia content. When a court declares the existence of an adjudicative fact without requiring proof of that fact, the court is essentially taking judicial notice, even though the court may not expressly use the term “judicial notice.” Adjudicative facts are “the historical acts that create the controversy . . . who did what, when, where, how and why.” Rule 201 expressly applies to “judicial notice of adjudicative facts.” Courts should not declare the existence of an adjudicative fact without first subjecting that fact to the requirements of Rule 201.

In *Pharmacy Records v. Nassar*, the plaintiff brought a copyright infringement case against the defendant for allegedly stealing plaintiff’s copyright protected rap beat. The plaintiff claimed that its protected beat was very similar to a beat entitled “Shot Down” released by rapper DMX and that defendant was involved in the production of “Shot Down.” The defendant prevailed on summary judgment and the court dismissed the plaintiff’s causes of action after finding that plaintiff and its attorneys manipulated and destroyed evidence. The plaintiff sought

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100 Wikipedia: About, supra note 6.
101 WRIGHT & MILLER, supra note 32, § 5103.3 (quoting 11 PETER N. THOMPSON, MINNESOTA PRACTICE: EVIDENCE 73 (3d ed. 2001)).
102 FED. R. EVID. 201(a).
relief from the court’s final judgment on numerous grounds including newly discovered evidence. The plaintiff argued that a newly discovered zip disk contained the stolen beat in files named DMX that were created between 1998 and 2002. Based on this evidence the plaintiff asked the court to reconsider its judgment dismissing plaintiff’s case.

The court was not persuaded by this evidence and refuted it in the following passage of the opinion:

But the file name has the sequence “DMX” in it, even though it was allegedly created between 1998 and 2002. DMX did not release *Grand Champ*, the album containing “Shot Down,” until September 16, 2003. See http://en.wikipedia.org/wiki/Grand_Champ (last visited Aug. 11, 2008). Rivers never claimed that he created the beat for DMX, but that DMX obtained it through theft perpetrated by Salaam Nassar. And this is the first time an “Ess Beats” file name has contained a reference to DMX. The only explanation for this fatal inconsistency is not congruent with a theory that the evidence is genuine. Perhaps the beat was reloaded onto the zip disk with a new file name. In any event, this “evidence” only reinforces the Court’s decision.\(^\text{104}\)

In this case the court was relying on Wikipedia to establish an adjudicative fact, the date that rapper DMX released “Shot Down.” Rule 201 applies when a court declares the existence of an adjudicative fact without requiring proof. It is important to subject adjudicative facts to the requirements of Rule 201 because of the Sixth and Seventh Amendment jury trial rights that are at stake when a court accepts an adjudicative fact at face value.\(^\text{105}\) Before incorporating information obtained from Wikipedia into its argument, the court should have evaluated the information to determine if it met the requirements of Rule 201. Specifically, the court should have verified that the information was “not subject to reasonable dispute” and “capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned.”\(^\text{106}\)

The failure of the court in *Pharmacy Records v. Nassar* to subject the Wikipedia entry to Rule 201 analysis is probably not a basis for reversal on appeal. Courts have discretion regarding

\(^\text{104}\) Id. at 879.
\(^\text{105}\) *Wright & Miller*, supra note 32, § 5104.
\(^\text{106}\) *Fed. R. Evid.* 201(b).
judicial notice. Rule 201(c) provides that “a court may take judicial notice, whether requested or not.”\textsuperscript{107} Judicial notice is only mandatory, according to Rule 201(d), when a party requests it and supplies the court with the necessary information.\textsuperscript{108} Trial courts are given wide latitude in their decisions on judicial notice. “Taking or refusing to take judicial notice is reviewed under the ‘abuse of discretion’ standard.”\textsuperscript{109}

Despite the fact that the court in \textit{Pharmacy Records v. Nassar} did not violate the letter of Rule 201, future courts should be cautious when relying on information obtained from Wikipedia to establish adjudicative facts.

\textbf{C. Sua Sponte and Ex Parte Judicial Research Using Wikipedia}

The use of Wikipedia in the context of judicial notice or to support the court’s reasoning or analysis gives rise to additional concerns. When a court conducts sua sponte and ex parte research into the facts of a case, the court runs afoul of the litigant’s due process rights, the law of evidence, the canons of judicial ethics, and traditions of the American legal system. When judges engage in sua sponte and ex parte factual research the parties are not given adequate notice or an opportunity to be heard and their due process rights are jeopardized.\textsuperscript{110} When judges are influenced by their own factual research, the parties typically do not have a chance to discover if the information the judge looked at met the various requirements of the rules of evidence, including the hearsay rule and provisions on taking judicial notice. The Wright and Miller treatise nicely summarizes how this practice is an affront to the common law tradition. “Under our adversary system, the trial judge cannot behave like a French magistrate and embark on a personal factfinding expedition, however deficient the efforts of counsel may appear.”\textsuperscript{111}

The recently amended ABA Model Code of Judicial Conduct Rule 2.9 provides that “[a] judge shall not investigate facts in a matter independently, and shall consider only the evidence presented and any facts that may properly be judicially noticed.”\textsuperscript{112} Previous language in a commentary to Canon 3B(7) of the 1990 Model Code read that “a judge must not . . . investigate

\textsuperscript{107} \textit{Id.} 201(c) (emphasis added).
\textsuperscript{108} \textit{Id.} 201(d).
\textsuperscript{109} \textit{WRIGHT & MILLER, supra note 32, § 5110.1.}
\textsuperscript{111} \textit{WRIGHT & MILLER, supra note 32, § 5102.1.}
\textsuperscript{112} \textit{MODEL CODE OF JUDICIAL CONDUCT R. 2.9(C) (2007).}
The Reporter’s Explanation explained that the language was moved to Rule 2.9 because “former Commentary prohibiting a judge from undertaking independent factual investigation was largely unsupported by the Rule itself.”¹¹³ Must was changed to shall in the 2007 amendments “to make clear that compliance with the proscription is absolute.”¹¹⁴ When the rule was revised in 2007 a new comment was added to the rule. Comment 6 provides that “[t]he prohibition against a judge investigating the facts in a matter extends to information available in all mediums, including electronic.”¹¹⁶ The Reporter’s Explanation of the comments to Rule 2.9(C) states that “[g]iven the ease with which factual investigation can now be accomplished via electronic databases and the Internet, the risk that a judge or the judge’s staff could inadvertently violate Rules 2.9(B) and (C) has heightened considerably. The need for vigilance on the part of judges has increased accordingly.”¹¹⁷ Judges freely admit to conducting their own factual research in several of the opinions examined in this study. For example, in United States v. Carmel¹¹⁸ the court admits to indulging in some “quick and dirty research” on Wikipedia to refute a “lie” made by the defendant that certain weapons were not machine guns.¹¹⁹ The court included the Wikipedia descriptions of the weapons in question as machine guns in its opinion. In a footnote as if to deflect the court’s own Wikipedia reference, the court points out that the defendant also submitted the results of Wikipedia research in a filing with the court. Judges also turned to Wikipedia to define terms not defined by the parties. Courts have conducted sua sponte and ex parte research on Wikipedia to define “ice damming,”¹²⁰ “IP address,”¹²¹ “Roma,”¹²² and the meaning of certain tattoos.¹²³ Appellate courts have not reached a consensus on the propriety of independent judicial research into “legislative” facts.

¹¹⁵ Id.
¹¹⁶ Model Code of Judicial Conduct R. 2.9(C) cmt. 6 (2007).
¹¹⁷ Reporter’s Explanation, supra note 114, at 23.
¹¹⁹ Id. at *4.
The “case law taken as a whole is neither informative nor consistent.”124 At least one trial court has been found in error for conducting independent research on Wikipedia and in other sources.125 Courts should avoid conducting this type of research on Wikipedia without giving the parties notice and an opportunity to comment.

The citation of Wikipedia entries in judicial opinions also raises interesting ethical implications for lawyers. Lawyers have an ethical obligation to provide competent representation to their clients.126 Scholars have argued that lawyers must search the Internet to satisfy ethical obligations of competence and due diligence.127 New York State has issued an ethics opinion requiring attorneys who rely on information obtained from the Internet to “take care to assure that the information obtained is reliable.”128 Clearly, lawyers should be aware of any information on Wikipedia that impacts their clients and evaluate the quality and reliability of that information.

D. Expert Witnesses and Wikipedia

Independent factual research by a judge may be permissible in the limited context of expert witness testimony. Federal Rule of Evidence 702 requires expert testimony to be “the product of reliable principles and methods.”129 Under the Daubert decision, “expert opinions based on unreliable scientific methodology should be excluded from evidence.”130 Daubert “tasked federal judges as all-important gatekeepers who are obligated to ensure that only ‘good’ science reaches the jury.”131 Commentators disagree over whether judges should be able to conduct

124 Thornburg, supra note 110, at 165.
125 D.M. v. Dep’t of Children & Family Servs., 979 So. 2d 1007, 1010 (Fla. Dist. Ct. App. 2008). The appellate court ultimately found that the trial court’s independent research using Wikipedia and other sources was error, but not reversible error. The use of the Internet by judges engaged in sua sponte and ex parte factual research is discussed in Barger, supra note 90. See Thornburg, supra note 110, at 165-66, for a discussion of appellate decisions approving and rejecting independent judicial research into “legislative” facts.
129 FED R. EVID. 702.
130 Richards, supra note 2, at 62.
independent research when assessing the qualifications of an expert witness or the substance of an expert’s testimony. In several of the opinions examined in this study, judges examined Wikipedia entries relied upon by expert witnesses.

In Campbell v. Secretary of Health & Human Services, the special master rejected reports filed by petitioner’s expert and refuted the expert’s report by introducing into the record articles culled from the Internet and an exhibit containing information drawn from Wikipedia. The Court of Federal Claims vacated and remanded the special master’s rejection of the expert reports to give the expert “an opportunity . . . to corroborate or refute the information contained in the articles.” The court rejected the special master’s Internet articles because they did not remotely meet the reliability requirement for scientific evidence imposed by Daubert. The court included the text of “pervasive and, for our purposes, disturbing series of disclaimers” from the Wikipedia website in its decision.

Less than one year later in Alfa Corp. v. OAO Alfa Bank, the defendants objected to the testimony of an expert witness because it was based in part on references to Wikipedia. The defendants argued that the expert’s testimony should be excluded because Wikipedia was an inherently unreliable source and cited Campbell in support of this assertion. The court refused to exclude the expert’s testimony and referenced several cases that have cited Wikipedia as examples that Wikipedia is not considered inherently unreliable. Other factors that contributed to the court’s acceptance of the expert’s opinion included the inability of the defendants to point to any actual errors in the Wikipedia entry cited by the expert, and the expert’s reliance on other sources in addition to Wikipedia for the basis of his opinion, unlike the special master in Campbell.

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132 Id. (arguing that judges should be able to conduct independent factual research when confronted with Daubert-type issues). But see Adam J. Siegel, Setting Limits on Judicial Scientific, Technical, and Other Specialized Fact-Finding in the New Millennium, 86 CORNELL L. REV. 167, 213 (2000) (positing that judges should be prohibited from engaging in sua sponte, ex parte communications, and be forced to base their admissibility determinations solely upon the evidence presented by the parties).


134 Id. at 781.

135 Id.

136 475 F. Supp. 2d 357 (S.D.N.Y. 2007). But see In re Cessna 208 Series Aircraft Prods. Liab. Litig., No. 05-md-1721-KHV, 2009 U.S. Dist. LEXIS 81932, at *28-29 (D. Kan. Sept. 9, 2009), where the court excluded the testimony of an expert witness who relied upon Wikipedia along with other sources. This case was not discovered in my initial research but was brought to my attention by Miller & Murray, supra note 27 (manuscript at 2).
The Daubert decision empowers judges to conduct independent factual research into the basis of an expert’s testimony. If this type of research takes judges to Wikipedia they should carefully evaluate the information contained in the entry and cite the entry according to the best practices discussed below in Part III.

E. Motions for Summary Judgment and Wikipedia

Motions for summary judgment are frequently used to obtain relief on all or part of a claim when there is “no genuine issue as to any material fact and . . . the movant is entitled to judgment as a matter of law.”137 The parties and the court are afforded “great flexibility with regard to the evidence that may be used” in a summary judgment proceeding.138 Any material that would be admissible or useable at trial may be considered.139

Several cases have explored whether information obtained from Wikipedia may be used to demonstrate that there is or is not a genuine issue of material fact in the context of a motion for summary judgment. In C & R Forestry, Inc. v. Consolidated Human Resource, AZ, Inc.,140 the plaintiff moved for summary judgment arguing that there was no issue of material fact over who was to receive notice of cancellation under the terms of an insurance policy. On the information page of the policy, the plaintiff’s name was listed but the address was listed as “C/O” of the defendant. The plaintiff argued that because their name was listed on the policy they were entitled to receive notice. The plaintiff did not address the meaning of the term “C/O” in their motion for summary judgment.

The court denied the plaintiff’s motion for summary judgment on the grounds that there was ambiguity over who was entitled to receive notice under the provisions of the insurance policy. In support of this conclusion, the court cited language from the insurance policy and turned to Wiktionary to define the term “C/O.” The court included part of the Wiktionary definition in its opinion and the link to the definition.141

Wiktionary is “a collaborative project to produce a free-content multilingual dictionary” and was “designed as the lexical

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137 FED. R. CIV. P. 56(c)(2).
138 10A WRIGHT & MILLER, supra note 32, § 2721.
139 Id.
In reviewing the summary judgment motions and briefs in the case, it appears that neither party brought the Wiktionary definition to the court’s attention, but that the court discovered the definition through its own sua sponte research. Interestingly, the court does not reference the definition of “C/O” contained in Black’s Law Dictionary, the definition found in Bieber’s Dictionary of Legal Abbreviations, or in any other source.

The court’s reliance on the Wiktionary definition raises some interesting questions about the use of wikis to demonstrate the presence or absence of an issue of material fact in a motion for summary judgment. If doubts exist about the credibility of evidence offered in support of a motion for summary judgment it would not be appropriate to grant the motion. As described above, Wikipedia entries can be less than credible for any number of reasons. Courts should not base the finding of an absence of an issue of material fact solely on information obtained from a wiki.

Judges should be particularly suspicious when deciding motions for summary judgment supported with information obtained from Wikipedia. The collaborative editing feature of Wikipedia allows anyone to change the content of a Wikipedia entry at any time. This feature makes information on Wikipedia susceptible to what Professor Cass Sunstein called “opportunistic editing.” R. Jason Richards provided an example in his article Courting Wikipedia:

[I]f Wikipedia were regarded as an authoritative source, an unscrupulous lawyer (or client) could edit the Web site entry to frame the facts in a light favorable to the client’s cause. Likewise, an opposing lawyer critical of the Wikipedia reference could edit the entry, re-framing the facts and creating the appearance that the first lawyer was misrepresenting or falsifying the source’s content.

It is easy to imagine how opportunistic editing could be used in support of or opposition to a motion for summary judgment. A party wishing to demonstrate the presence or absence

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143 BLACK’S LAW DICTIONARY 273 (8th ed. 2006).
144 BIEBER’S DICTIONARY OF LEGAL ABBREVIATIONS 134 (2001).
145 10A WRIGHT & MILLER, supra note 32, § 2726.
146 Cohen, supra note 24.
147 Richards, supra note 2, at 63.
of a genuine issue of material fact could create a new Wikipedia entry or edit an existing one that supported their version of the facts. Lawyers who knowingly cited a Wikipedia entry that has been opportunistically edited to include false information would be in violation of Rule 3.3 of the Model Rules of Professional Conduct and possibly other state or federal laws. Lawyers who altered or assisted in the alteration of a Wikipedia entry with potential evidentiary value could be found in violation of Rule 3.4.

Wikipedia’s history function has the potential to obviate some concerns over opportunistic editing. The history tab is available for every article on Wikipedia. It lists the time and date of all changes to an article, provides links to all previous versions, and lists the user name or IP address of the person who edited the article. A database called WikiScanner allows a researcher to dig deeper into the revision of a Wikipedia article. WikiScanner “cross-references the IP addresses of anonymous Wikipedia editors with information about the companies or organizations that own the addresses.” If lawyers and judges were aware of the history tab and WikiScanner, they could be used in combination to uncover who was behind any suspected opportunistic editing.

The court’s reliance on the Wiktionary definition in the C & R Forestry case was probably not reversible error. In a motion for summary judgment the burden of establishing there is no genuine issue of material fact is on the movant. The court is to construe evidence in favor of the opposing party. In C & R Forestry, the court’s reliance on the definition from Wiktionary favors the opposing party and not the party bearing the burden of proof. Additionally, the court did not rely entirely on the

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148 Rule 3.3 prohibits lawyers from knowingly making false statements of fact or law to a tribunal and from offering evidence that is known to be false. MODEL RULES OF PROF’L CONDUCT R. 3.3.
149 Rule 3.4(a) provides that a lawyer shall not “unlawfully obstruct another party’s access to evidence or unlawfully alter, destroy or conceal a document or other material having potential evidentiary value.” MODEL RULES OF PROF’L CONDUCT R. 3.4(a). I am grateful to Yale Journal of Law & Technology Executive Editor Bret Hembd for this observation.
150 See Murley, supra note 7, at 596.
152 See Murley, supra note 7, at 596. But see Posting of Ted Frank, VOLOKH CONSPIRACY (July 30, 2008, 3:16 PM), http://volokh.com/2008/07/30/questionable-use-of-wikipedia-by-the-seventh-circuit/#comment-427393 (commenting on Volokh, supra note 25) (“The Wikiscanner is only useful if someone tries a purely anonymous edit; if someone uses a pseudonymous edit with a username that is untraceable because it has no relationship to them, no one will notice.”).
153 10A WRIGHT & MILLER, supra note 32, § 2727.
Wiktionary definition but also found additional support for denying the motion from the language of the insurance policy.

In other cases parties have successfully demonstrated that genuine issues of material fact existed by relying on information obtained from Wikipedia in combination with other sources of information. In *Randy Desselkoen Properties, LLC v. Charter Township of Cascade*,\(^{154}\) the court found that genuine issues of material fact existed and refused to grant a motion for summary judgment. The defendants successfully demonstrated the existence of issues of material fact by providing the court with a number of documents including documents obtained from Wikipedia. The court questioned the credibility of information obtained from Wikipedia:

[T]his Court is skeptical of relying on the anonymous and voluntarily edited website for anything more than general background information. . . . Although this court has NO DOUBT that Defendant did nothing improper, this Court notes the ease with which Wikipedia entries can be altered and further notes that others have edited entries for improper reasons.\(^{155}\)

Similarly, in *General Conference Corp. of Seventh-Day Adventists v. McGill*\(^{156}\) the court found there was a “material issue of fact as to whether the registered mark ‘Adventist’\(^{157}\) was generic. In making this determination, the court relied upon definitions of the word “adventism” taken from *Webster’s Ninth New Collegiate Dictionary* and Wikipedia. A Wikipedia entry was accepted to establish an issue of material fact where the parties agreed that Wikipedia was an acceptable source. In *Murdick v. Catalina Marketing Corp.*,\(^{158}\) both parties cited Wikipedia’s description of Buddhism in their summary judgment briefs. The court found that an issue of material fact existed based on the parties’ own statements and the information they submitted from Wikipedia.

Courts have so far rejected attempts to demonstrate the presence or absence of an issue of fact in the context of a motion for summary judgment based solely on information obtained from Wikipedia.

\(^{155}\) Id. at *4 n.12.
\(^{156}\) 624 F. Supp. 2d 883 (W.D. Tenn. 2008)
\(^{157}\) Id. at 896.
\(^{158}\) 496 F.Supp.2d 1337, 1350 -51 (M.D. Fla. 2007).
Wikipedia.\textsuperscript{159} In \textit{Davage v. City of Eugene},\textsuperscript{160} the court chided a party for citing a Wikipedia entry for the definition of a term and called it “inadmissible [sic] and again a nonsensical attempt to create issues of fact.”\textsuperscript{161} Rejecting a Wikipedia entry as the sole basis for demonstrating an issue of material fact is wise given the susceptibility of Wikipedia entries to opportunistic editing and other concerns over the accuracy and quality of information found on Wikipedia.

\textbf{II. COLLATERAL REFERENCES TO WIKIPEDIA}

The majority of citations to Wikipedia entries in cases were not significant to the case but were merely collateral references. A collateral reference is a reference that appears in dicta, is used as a rhetorical flourish, or is cited to define a nonessential term. Wikipedia entries were cited in twenty separate cases for rhetorical flourishes. These references added nothing to the substance of the opinion and were frequently popular culture or humor references. Illustrative examples include a citation to Wikipedia in the context of a quote from the well-known Seinfeld episode regarding the taking and holding of a rental car reservation,\textsuperscript{162} for information about the proverb “may you live in interesting times,”\textsuperscript{163} and for an explanation of the 1980s era Wendy’s “where’s the beef” advertisements.\textsuperscript{164}

Fourteen cases included references to Wikipedia entries as sources for irrelevant information found in dicta. For example, a Wikipedia entry was cited when discussing the phenomenon of lightning striking twice,\textsuperscript{165} as a source of information about the faro card game,\textsuperscript{166} and for historical examples of close elections.\textsuperscript{167}

The majority of cases that made a collateral reference to a Wikipedia entry did so to define a term that was not essential to the case before the court. For example, a Wikipedia entry was cited to define the term “jungle juice,”\textsuperscript{168} the slang term “shake,”\textsuperscript{169} and the

\textsuperscript{160} No. 04-6321-HO, 2007 WL 2007979 (D. Or. July 6, 2007).
\textsuperscript{161} \textit{Id.} at *7.
\textsuperscript{163} \textit{In re} Kogler, 368 B.R. 785, 786 n.1 (Bankr. W.D. Wis. 2007).
\textsuperscript{164} \textit{In re} Cairns & Assocs., No. 05-10220 (BRL), 2006 WL 3332990, at *4 n.5 (Bankr. S.D.N.Y. Nov. 14, 2006).
\textsuperscript{166} Watson v. State, 204 S.W.3d 404, 424 n.17 (Tex. Crim. App. 2006).
\textsuperscript{167} Crawford v. Marion County Election Bd., 484 F.3d 436, 438 (7th Cir. 2007).
\textsuperscript{168} State v. Leckington, 713 N.W.2d 208, 211 n.1 (Iowa 2006).
\textsuperscript{169} United States v. Krueger, 415 F.3d 766, 769 (7th Cir. 2005).
forestry term “understory.”

A total of 217 cases cited Wikipedia entries to define terms that were not essential to the court’s holding, reasoning, or analysis.

Selectively using Wikipedia for these minor points in an opinion is an economical use of judges’ and law clerks’ time. Discussing the use of Wikipedia in this context, Judge Richard Posner called it “a terrific resource, [P]artly because it is so convenient, it often has been updated recently and is very accurate” but “[i]t wouldn’t be right to use it in a critical issue.” Judge Posner recently cited the Wikipedia entry for boxer Andrew Golota for a tangential fact not at issue in the case before him. Posner’s use of Wikipedia is interesting given “his own experience with Wikipedia, which included an erroneous mention of Ann Coulter, a conservative lightning rod, as being a former clerk of his.”

III. BEST PRACTICES FOR CITING WIKIPEDIA

Citations to Wikipedia entries in judicial opinions have been steadily increasing since the first citation appeared in 2004. It is incumbent upon the American legal system to accept the fact that Wikipedia will continue to be cited in judicial opinions and to develop a set of best practices for the citation of Wikipedia. The best practices should address the questions of when it is appropriate for courts to cite a Wikipedia entry and how the entry should be cited.

A. When Wikipedia Should Not Be Cited

A synthesis of the cases discussed above provides several bright line rules for when a Wikipedia entry should not be cited in a judicial opinion. Courts should not take judicial notice of Wikipedia content. Wikipedia entries do not meet the requirements of Federal Rule of Evidence 201 because the information they contain is disputable and its accuracy can be reasonably questioned. Courts should also be careful to apply the requirements of Rule 201 whenever they accept an adjudicative

171 Cohen, supra note 24.
172 United States v. Radomski, 473 F.3d 728, 731 (7th Cir. 2007).
173 Cohen, supra note 24.
174 Wikis or Wikipedia were cited in 4 cases in 2004, 18 cases in 2005, 80 cases in 2006, 136 cases in 2007, and 169 cases in 2008. The methodology used to locate these cases is described in the Introduction.
175 See Section I.B supra.
fact without requiring proof as the court in *Pharmacy Records v. Nassar*\textsuperscript{176} did.

A Wikipedia entry should not be relied upon as the only basis for a court’s holding, reasoning, or logic. The rejection of Wikipedia as a legitimate basis for a court’s holding, reasoning, or logic by *Badasa v. Mukasey*\textsuperscript{177} and other cases is clearly correct given the numerous shortcomings of Wikipedia discussed in this article.

Courts should be careful when turning to Wikipedia to conduct sua sponte and ex parte research into the facts of cases before them. Judges who conduct this type of research run the risk of violating the litigants’ due process rights, the law of evidence, the canons of judicial ethics, and the traditions of the American legal system. Several judges and commentators have suggested that judges should be allowed to engage in this type of research with certain limitations that include giving the parties notice and an opportunity to challenge the results of the judge’s research.\textsuperscript{178} The recently amended Model Code of Judicial Conduct Rule 2.9 clearly prohibits judges from engaging in independent factual research related to cases before them.

Courts should not accept citations of Wikipedia entries to demonstrate the existence or nonexistence of a material fact in the context of a motion for summary judgment. Anyone can edit a Wikipedia entry to suit their version of the facts at issue in a particular case. Wikipedia entries should not be accepted in support of or in opposition to motions for summary judgment because of the danger of “opportunistic editing.”\textsuperscript{180}

Wikipedia should not be cited when a more authoritative source exists for the information. Courts frequently cite a Wikipedia entry instead of a more authoritative source. Some relevant examples include the choice of Wikipedia to define the term “C/O” instead of a definition in *Black’s Law Dictionary*,\textsuperscript{181} for the adjudicative fact of when an album was released instead of the Billboard Charts,\textsuperscript{182} for the fact that a party could not be served because they were deceased instead of a death certificate,\textsuperscript{183} and

\textsuperscript{177} 540 F.3d 909, 910 (8th Cir. 2008).
\textsuperscript{178} Siegel, *supra* note 132, at 198-202; Thornburg, *supra* note 110, at 191.
\textsuperscript{179} MODEL CODE OF JUDICIAL CONDUCT R. 2.9(C) (2007).
\textsuperscript{180} Cohen, *supra* note 24, at 3.
for the fact that an individual had filed a large number of lawsuits instead of the court’s own docket.¹⁸⁴

When Wikipedia is preferred over a more authoritative source for a collateral fact or reference the consequences are less severe. But Wikipedia should not be cited in place of a more authoritative source for facts or references that are significant to the court’s opinion. Choosing a more authoritative source avoids concerns over the quality and permanence of the information on Wikipedia. Judges may think they are making their opinion more transparent and accessible by choosing to cite a Wikipedia entry instead of a more authoritative print source. Ironically, citing a Wikipedia entry instead of a print source may make the source less accessible because of the impermanent nature of Wikipedia content.¹⁸⁵

Selecting an authoritative print source over a Wikipedia entry is in line with Bluebook Rule 18.2 which generally discourages the citation of Internet sources. “When information is available in a traditional printed source or on a widely available commercial database, it should be cited to that source rather than to the Internet.”¹⁸⁶ In cases where the court could locate information in a print source, The Bluebook requires the citation of the print source instead of a Wikipedia entry.

B. When Citing Wikipedia May be Appropriate

There are some limited instances where it is appropriate for a Wikipedia citation to appear in a judicial opinion. Several cases have cited to Wikipedia or to particular Wikipedia entries because they were directly at issue in the case before the court.¹⁸⁷ Similarly, if a party cites a Wikipedia entry the court should investigate the entry and discuss it in the opinion if appropriate.


If a slang term can be located in a traditional dictionary or slang dictionary,\footnote{E.g., JOHN AYTO & J.A. SIMPSON, THE OXFORD DICTIONARY OF MODERN SLANG (1992).} the court should cite the dictionary definition instead of the Wikipedia entry. However, in some instances, courts have been unable to locate appropriate definitions in print dictionaries and have turned to Wikipedia instead. In \textit{Bragg v. Linden Research, Inc.}\footnote{487 F. Supp. 2d 593 (E.D. Pa. 2007).} the court mentions the etymological origins of the word “avatar” as discussed in \textit{Webster’s II New Riverside University Dictionary} but refers to the Wikipedia definition of the word as “an Internet user’s virtual representation of herself in a computer game, in an Internet chat room, or in other Internet fora.”\footnote{Id. at 595.}

In a case involving an Internet-based roommate finding service, Judge Alex Kozinski of the Ninth Circuit criticizes the dissenting judges’ reliance on a print dictionary to define the term “development”:

While content to pluck the “plain meaning” of the statute from a dictionary definition that predates the Internet by decades, compare \textit{Webster’s Third New International Dictionary} 618 (1963) with \textit{Webster’s Third New International Dictionary} 618 (2002) (both containing “gradual advance or growth through progressive changes”), the dissent overlooks the far more relevant definition of “[web] content development” in Wikipedia: “the process of
researching, writing, gathering, organizing and editing information for publication on websites.” Wikipedia, Content Development (Web), http://en.wikipedia.org/w/index.php?title=Content_development_web&oldid=188219503 (last visited Mar. 19, 2008). Our interpretation of “development” is entirely in line with the context-appropriate meaning of the term, and easily fits the activities Roommate engages in.195

The collaborative process used to create Wikipedia entries makes them potentially useful to courts in specific situations. In several cases courts attempting to interpret insurance contracts have turned to Wikipedia entries for evidence of the common usage or ordinary and plain meaning of a contract term. This method of interpretation “has long been recognized, and has been applied in the context of various types of insurance.”196 Wikipedia has been used in this context to define the terms “recreational vehicle”197 and “car accident.”198

The collaborative and democratic nature of Wikipedia entries makes them potentially attractive sources for courts to consider when called upon to determine the perception of the public or community standards. Public perception is a “principal issue” that must be established to prevail with a claim for either trademark infringement or trademark dilution.199 Courts are tasked with applying contemporary community standards in the context of prosecutions for obscene material.200 Proof of public perception and community standards are typically established through expert testimony or surveys.201 No court has yet relied on a Wikipedia entry to determine the perception of the public or community standards. Courts presented with a Wikipedia entry as evidence of public perception or community standards should be cautious,

195 Fair Housing Council v. Roommates.com, LLC, 521 F.3d 1157, 1168-69 (9th Cir. 2008).
201 Id.; Cooper, supra note 199.
Given the susceptibility of Wikipedia entries to “opportunistic editing.”

Using Wikipedia to assess the substance of expert witness testimony may be permissible. Another permissible use of Wikipedia involves using Wikipedia as a jumping off point to lead to more reliable sources. For example, the Seventh Circuit referenced the Wikipedia entry on shell corporations and noted that the Wikipedia entry was quoting from *Barron’s Finance & Investment Handbook*. Finally, citing a Wikipedia entry for a collateral matter that is not central to the case before the court is usually permissible.

Before a Wikipedia entry is cited in a judicial opinion the court should evaluate the entry to ensure it meets basic standards of quality. Wikipedia editors rank articles into different tiers and categories indicating their quality or shortcomings. About twenty-five hundred Wikipedia articles have attained “featured article” status, the best ranking available. These articles have been evaluated for “accuracy, neutrality, completeness, and style” and are emblazoned with a small star in the upper right hand corner. Just below the featured articles are “good” articles. Good articles are “well written, factually accurate and verifiable, broad in coverage, neutral in point of view, stable, and illustrated.” Articles that need improvement are marked accordingly. “Stubs” are articles “containing only a few sentences of text which is too short to provide encyclopedic coverage of a subject, but not so short as to provide no useful information.” Other editorial notes include “missing footnotes,” “doesn’t cite any sources,” “requires authentication by an expert,” and “neutrality disputed.” The generic category “requires cleanup” is used for articles in need of improvement.

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202 Richards, supra note 2, at 3.
203 Cf. Cheng, supra note 131, at 1265 (arguing that judges should be able to conduct independent factual research when confronted with Daubert-type issues). *But see* Siegel, supra note 132, at 213 (positing that judges should be prohibited from engaging in sua sponte, ex parte communications, and be forced to base their admissibility determinations solely upon the evidence presented by the parties).
205 Nautilus Ins. Co. v. Reuter, 537 F.3d 733, 737 (7th Cir. 2008).
208 Wikipedia: Stub, supra note 62.
improvement due to “grammar, spelling, formatting, order, copyright issues, confusion, etc.”.\textsuperscript{209}

The judicial opinions examined in this study cited Wikipedia articles of varying levels of quality. As I examined the Wikipedia articles cited in judicial opinions, I recorded any editorial notes attached to the articles.\textsuperscript{210} The results appear in the figure below.

**FIGURE 1. EDITORIAL NOTES APPEARING IN WIKIPEDIA ARTICLES CITED IN JUDICIAL OPINIONS**

<table>
<thead>
<tr>
<th>Editorial Note</th>
<th>Number of Opinions Citing Wikipedia Articles Containing Editorial Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Featured Article</td>
<td>2</td>
</tr>
<tr>
<td>Requires Cleanup</td>
<td>21</td>
</tr>
<tr>
<td>Stub</td>
<td>37</td>
</tr>
<tr>
<td>Doesn’t Cite Any Sources</td>
<td>45</td>
</tr>
<tr>
<td>Missing Footnotes</td>
<td>8</td>
</tr>
<tr>
<td>Requires Authentication by an Expert</td>
<td>2</td>
</tr>
<tr>
<td>Neutrality Disputed</td>
<td>2</td>
</tr>
<tr>
<td>Normal Article (no editorial note included)</td>
<td>284</td>
</tr>
</tbody>
</table>

These editorial rankings could be useful to judges evaluating the quality of Wikipedia entries. However, none of the judicial opinions examined in this study included any discussion of these editorial rankings. I am not advocating that a “featured article” on Wikipedia be considered any more favorably than a normal article or one that has been identified as needing improvement. Courts should not blindly accept evaluations made by Wikipedia editors when considering including a Wikipedia entry in a judicial opinion. Any entries that have received a negative ranking should certainly be approached with caution. Before including a reference to a Wikipedia entry in a judicial opinion, the court should conduct an assessment of the quality of the Wikipedia entry.

In her article *In Defense of Wikipedia*, Diane Murley concludes that Wikipedia entries should be evaluated for


\textsuperscript{210} It is important to note that these editorial notes appeared in the Wikipedia articles at the time I examined them. The notes may or may not have appeared in the Wikipedia articles at the time the court examined the article.
“authority, completeness, bias, and accuracy.” These criteria are also useful in determining if a particular entry is worthy of appearing in a judicial opinion.

It is difficult to evaluate the authoritiveness of a Wikipedia entry. In legal reasoning “the characteristic feature of authority is content-independence.” One source is more authoritative than another not because of what it says but because of who is saying it. A United States Supreme Court opinion is more authoritative than a decision of the district court of Guam. Federal Practice and Procedure, which has been cited over one hundred and fifty thousand times in judicial opinions, is more authoritative than the student nutshell on civil procedure. A Wikipedia entry is a product of collaboration and it is impossible to identify any one author for a particular entry. By its very nature, Wikipedia will never be viewed as high quality authority under the traditional content-independent view of authority that is prevalent in legal reasoning.

The editorial notes discussed above can give some clues of an entry’s completeness, bias, and accuracy. But careful jurists should dig deeper. One way to evaluate the entry is to compare it to a reliable source like a treatise, scholarly article, or other source that has undergone some type of editorial review. Scholarly treatises and articles and American Law Reports annotations are known for their in-depth coverage of all aspects of an issue. The completeness of a Wikipedia entry could be evaluated by comparing it to one of these traditional sources.

Bias and accuracy should be evaluated by comparing the Wikipedia entry to a source known to be neutral or to fairly represent all sides of an issue. In law it is common for courts to disagree on issues and for scholars to take up conflicting positions. Legal encyclopedias, American Law Reports annotations, and certain scholarly treatises may be useful for their neutral and unbiased presentation of the many facets of a particular issue. A Wikipedia entry may be evaluated for bias and accuracy by comparing it to a source that reconciles or fairly presents all sides of a legal issue. Law review articles or monographs written by scholars or judges advocating a particular point of view would not be good sources for comparison. Wikipedia entries should also be checked for bias manifested through “opportunistic editing.” Courts should be familiar with Wikipedia’s history tab and the WikiScanner tool discussed above and use them to detect opportunistic editing.

211 Murley, supra note 7, at 599.
212 Schauer, supra note 27, at 1935.
213 Id.
214 See supra note 152 and accompanying text.
When courts evaluate the quality of a Wikipedia entry they should explain how they evaluated the information. Additionally, it would be helpful to provide citations to any sources used to verify information contained in a Wikipedia entry. If this method of evaluating the quality of Wikipedia entries were adopted by courts the citation to Wikipedia entries might decline. Once judges become aware of the need to locate a treatise, law review article, or *American Law Reports* annotation to evaluate the quality of a Wikipedia entry, they might just decide to cite the traditional source and forgo the citation to Wikipedia.

**C. How Wikipedia Should Be Cited**

In comparison with other legal traditions, the common law is said to be obsessed with the citation of authorities. This obsession is reasonable given the common law’s reliance on the doctrine of stare decisis. Judges, lawyers, and academics use citations to precisely communicate the authority they are relying on. Citations leave bread crumb trails for future readers allowing them to retrace the logical steps of an argument. Accurate and complete citations are essential for unpacking legal arguments, advocating for their expansion or contraction in future cases, and for developing the law. They are an essential aspect of what Barbara Bintliff has called “thinking like a lawyer.” It is no accident that the leading treatise on American legal research begins with the quote “He [or She] Who Cites His [or Her] Source, Begins Deliverance to the World.”

The traditional sources that common law judges, lawyers, and academics cite come from a “stable universe of settled sources.” For example, once a case appears in a reporter it is essentially fixed for all time. Traditional citation methods work perfectly for these sources. In recent years lawyers and judges have begun citing less traditional sources like websites, blogs, and of course Wikipedia entries. Once cited these sources can be difficult

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216 Barbara Bintliff, *From Creativity to Computerese: Thinking Like a Lawyer in the Computer Age*, 88 *LAW LIBR. J.* 338 (1996).
219 Unless, of course, the lawyer or judge is toiling in one of the minority of jurisdictions where judicial decisions may be depublished. See Lee Faircloth Peoples, *Controlling the Common Law: A Comparative Analysis of No-Citation Rules and Publication Practices in England and the United States*, 17 *IND. INT’L & COMP. L. REV.* 307, 348 (2007).
to locate in the future. Several previous studies have documented “link rot,” the inaccessibility or disappearance of Internet sources cited in judicial opinions and law review articles. Studies examining citations to Internet sources in law reviews have revealed that only 30.27% of Internet sources cited in a sample of law review articles from 1997 are still accessible.\textsuperscript{220} Another study examining opinions of the appellate federal courts over a six year period found that an average of 46% of Internet sources cited in those opinions were inaccessible.\textsuperscript{221}

The purpose of legal citation “is to allow the reader to efficiently locate the cited source.”\textsuperscript{222} The majority of citations to Wikipedia entries in the judicial opinions discussed above are not meeting this standard. Many of the opinions examined in this study provide partial or incomplete citations to Wikipedia entries. These citations make it difficult or impossible for future researchers to locate the exact Wikipedia entry referenced in the court’s opinion. Twelve percent of the opinions did not include the URL of the Wikipedia entry but merely referred to the entry by its title.\textsuperscript{223} Typically a researcher can locate the entry by simply searching for its name in Wikipedia. But in some instances the name of the entry has changed or it has been merged with another entry. When the URL is not included the researcher cannot be certain that she is examining the same information referenced in the court’s opinion.

Researchers reading a judicial opinion on Westlaw who want to locate a Wikipedia entry referenced in that opinion will face additional difficulties. Unfortunately, this difficulty will occur even if the judge citing the Wikipedia entry includes the complete URL of the entry she viewed. When Westlaw adds the text of judicial opinions to its database, URLs included in the opinions are not always exact copies of the URLs as they appear in the print reporter. For example, in Pharmacy Records \textit{v. Nassar}, the court cited the Wikipedia entry for the hip hop artist DMX’s album \textit{Grand Champ} to establish the date of a fact at issue in the case, the date of the album’s release, and to support the court’s reasoning.\textsuperscript{224} The URL of the entry appears in the \textit{Federal Supplement Second} as “http://en.wikipedia.org/wiki/Grand_Champ (last visited Aug. 11, 2008).”\textsuperscript{225} In the version of the opinion available on Westlaw, the URL appears as “http://en.wikipedia.org/wiki/Grand-Champ (last visited Aug. 11, 2008).”\textsuperscript{226} The URL that appears on

\begin{itemize}
\item \textsuperscript{220} Rumsey, \textit{supra} note 185, at 30.
\item \textsuperscript{221} Barger, \textit{supra} note 90, at 449.
\item \textsuperscript{222} \textit{THE BLUEBOOK}, \textit{supra} note 186, at 2.
\item \textsuperscript{223} 49 out of 401 cases.
\item \textsuperscript{224} 572 F. Supp. 2d 869, 879 (E.D. Mich. 2008).
\item \textsuperscript{225} \textit{Id.}
\item \textsuperscript{226} \textit{Id.}
\end{itemize}
Westlaw includes several additional spaces—between “/” and “en”; between “en.” and “wikipedia”; between “.org/” and “wiki”; and between “wiki/” and “Grand.” A researcher examining this opinion on Westlaw who attempts to paste the URL into an open browser window will receive an “Address Not Found” message. In some instances the web browser is able to locate a Wikipedia page even with the extra spaces included in the URL. For example, in *Rickher v. Home Depot*, the court cites the Wikipedia entry for wear and tear and the URL appears in Westlaw with additional spaces added. But researchers who cut and paste the URL obtained from Westlaw into a browser will see the correct result displayed as a link located by their search engine.

Web savvy researchers who notice that Westlaw is adding spaces to the URL can easily make the URL work by simply removing the extra spaces. But not all researchers possess the same level of acumen with web resources. Some may see the “Address Not Found” message and give up. URLs in over one half of the 401 opinions on Westlaw citing Wikipedia included these extra spaces. In contrast to Westlaw, LexisNexis includes active hypertext links in their opinions which take the researcher directly to any web resource cited in a judicial opinion. A quick check of the opinions in LexisNexis revealed that the hyperlinks in LexisNexis usually correctly retrieved the Wikipedia pages cited in the opinions. However, it is likely that some researchers will not benefit from the LexisNexis feature in light of recent survey results documenting a strong preference for Westlaw over LexisNexis among law librarians.

A defining feature of Wikipedia is that its entries are in a constant state of change. The impermanent nature of the information on Wikipedia has serious consequences when Wikipedia entries are cited in judicial opinions. Unless they are provided with a date- and time-specific citation, researchers who

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227 Another example is provided by *United States v. Radley*, 558 F. Supp. 2d. 865, 882 (N.D. Ill. 2008), where the URL for the Houston Texas Wikipedia entry is correctly cited in the print reporter as “http://en.wikipedia.org/wiki/Houston_Texas” but appears as “http:// en.wikipedia.org/wiki/Houston_Texas” in the Westlaw online version. Researchers who copy and paste the URL from Westlaw into a browser will receive an “Address Not Found” message.


pull up a Wikipedia entry cited in a judicial opinion will never be absolutely certain they are viewing the entry as it existed when the judge viewed it. Changes in Wikipedia entries may be of little concern to researchers if the initial citation was for a trivial point or collateral matter. But if the Wikipedia entry was cited to support an assertion made in an opinion, or was otherwise relied upon by the court, then the inability to examine the entry as the judge saw it has more severe consequences. Future researchers may not be able to completely comprehend the point the judge was making if they cannot retrieve the exact Wikipedia entry as the judge viewed it. This may ultimately lead to uncertainty and instability in the law.

Unfortunately, the majority of citations to Wikipedia entries examined in this study do not include a reference to the date and time the entry was visited.\(^{230}\) When a judicial opinion citing a Wikipedia entry includes the date and time the entry was accessed, future researchers can utilize Wikipedia’s history tab to view the page as it existed when the court accessed it. Every Wikipedia entry includes the history tab, “which lists the date and time of each change to the article, with links to each version of the article, the user name of the registered user who edited the page or the IP address of an anonymous editor, and information about the changes made.”\(^{231}\) Viewing a Wikipedia entry exactly as it existed on the day and time it was accessed by a judge is relatively easy when the date the entry was visited is included in the judicial opinion. All future citations to Wikipedia in judicial opinions should include the date and time the Wikipedia entry was viewed.

Every Wikipedia entry cited in a judicial opinion examined in this study has changed since it was examined by the court. Some changes are minor and not relevant to the court’s citation of an entry. In other cases, the Wikipedia entry has changed so much that researchers would be unable to verify specific information from the entry cited in a judicial opinion. Recall the Helen of Troy case where the court took judicial notice of a Wikipedia entry stating that “urea is an acid having a very low pH” and did not indicate the date the entry was viewed.\(^{232}\) A researcher who viewed the Wikipedia entry today would find information about urea that contradicts the statement judicially noticed by the court. A similar example is provided in the case of Murdick v. Catalina Marketing Corp.,\(^{233}\) where the parties both cite the Wikipedia entry to define Buddhism as a “non-theistic religion, a way of life, a practical philosophy, and arguably a form of psychology.” A researcher who

\(^{230}\) See supra Section I.B.
\(^{231}\) Murley, supra note 7, at 596.
\(^{232}\) See supra notes 73-81 and accompanying text.
\(^{233}\) 496 F. Supp. 2d 1337, 1350 (M.D. Fla. 2007).
visited the Wikipedia entry in December 2009 would not find any of those terms used to describe Buddhism.

The history tab feature of Wikipedia serves to alleviate some concerns over the impermanence of information on Wikipedia. But when a judge does not include the date and time that a Wikipedia entry was accessed in the opinion, the ability of the researcher to accurately retrace the judge’s steps is greatly diminished. When sources cited in a judicial opinion cannot be located, the certainty and stability of the law may suffer.

The German Wikipedia community adopted a flagged revision system in 2008 that allows users to mark versions of articles that are “free of vandalism and of generally acceptable quality.” This system was recently applied to articles about living people in the English-language version of Wikipedia to reduce the number of hoaxes and to improve quality. Taking this idea one step further is Veropedia, an online encyclopedia founded by former Wikipedia editors that publishes finished articles “on a static website protected from editing.”

_The Bluebook_ currently does not have a rule that directly addresses the citation of a Wikipedia entry. As discussed above, Rule 18.2 favors the citation of traditional print sources over Internet sources. For material not available in a print source, the _Bluebook_ permits the citation of the Internet source.

The most appropriate _Bluebook_ rule for citing Wikipedia entries is the portion of the E-Mail Correspondence and Online Postings rule that applies to blog posts. It requires a citation to include the title of the page, URL (generic), and date- and time-stamp. Adapting this rule to Wikipedia entries has some serious shortcomings. A future researcher who pulls up a Wikipedia entry using a generic URL will view the page as it exists today, not as it

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235 Cohen, supra note 19.
236 Lih, supra note 234, at 228; Veropedia, http://www.veropedia.org (last visited Dec. 16, 2009). However, as of this writing, Veropedia displayed a message that the original version had been taken down and that a newer better version was coming soon.
237 I contacted the editorial staff of _The Bluebook_ to determine if a future edition may include a specific rule on citing wiki entries. The editor who replied was not able to give me a definitive answer. E-mail from Jennifer Philbrick, Bluebook Student Editor, to author (Jan. 27, 2009, 13:08 CST) (on file with author). Diane Murley notes that “[a]t least one law school journal, the Harvard Journal of Law and Technology, has adopted a special citation format for Wikipedia articles to identify the exact version of the article cited: [Signal] Wikipedia, [article], http://en.wikipedia.org/wiki/[article] [(optional other parenthetical)] (as of [date], [time] GMT).” Murley, supra note 7, at 597.
238 THE BLUEBOOK, supra note 186, R. 18.2.3, at 156.
239 Id. R. 18.2.4, at 158.
existed the day it was viewed by the court. The correct Bluebook rule may only be obvious to technically savvy researchers who fully comprehend the impermanence of Wikipedia content. A judge with less knowledge of how Wikipedia works might instead apply the Bluebook rule for Internet sources which requires only a date last visited and not a time-stamp. It is not uncommon for a Wikipedia entry to change several times during one day. Future researchers attempting to locate the exact Wikipedia entry the judge looked at will not be successful if they have only the date it was accessed rather than the date and time.

A specific explanation should be added to Bluebook Rule 18.2.4 to address citations to wikis. Any citation to a wiki should include the title of the page, a permanent link to the entry cited, not just the entry’s generic URL, and the date and time the page was visited. Additionally, an electronic or paper copy of the wiki entry should be retained and this should be noted parenthetically at the end of the citation. An example of this citation format, which has been used throughout this article, is: Wear and Tear, http://en.wikipedia.org/w/index.php?title=Wear_and_tear&oldid=237134914 (Mar. 26, 2009, 13:15:08 CST) (on file with court).

Wikipedia currently provides a “toolbox” section on the left hand side of every entry. The toolbox allows users to pull up a permanent link to the entry. A link titled “Cite this page” pulls up a pre-formatted citation in Bluebook style that includes a permanent link to the entry. Out of the 401 cases citing Wikipedia examined in this study only four included a permanent link to the cited Wikipedia entry.

Adding an explanation to the relevant Bluebook rule is only the first step towards improving Wikipedia citations that appear in judicial opinions. Most state and federal courts adopt their own citation rules as local court rules which take precedence over Bluebook rules. As of March 2009, there was no national or local federal rule on the citation of Wikipedia or other wikis, nor was there any state court rule on the citation of Wikipedia or

240 Id.
241 This proposed rule is similar to the citation standard proposed by Coleen M. Barger for citing Internet materials in On the Internet, Nobody Knows You’re a Judge: Appellate Courts’ Use of Internet Materials. Barger, supra note 90, at 446-47. Barger’s standard requires a correct URL, an indication of the date the page was accessed, and the retention of a paper copy of the Internet page. Id.
243 The Bluebook, supra note 186, at v.
wikis.\textsuperscript{244} The rule explanation proposed above should also be enacted as a local rule by federal and state courts. This would increase the number of lawyers who followed the rule when citing Wikipedia entries in documents filed with courts and would increase the number of complete and accurate citations to Wikipedia in judicial opinions.

The proposed rule would be a vast improvement over the way that Wikipedia entries are currently cited in most judicial opinions. Providing a permanent link to the entry cited will ensure that future researchers access the exact page the court looked at when writing the opinion.\textsuperscript{245} Including the date and time the entry was examined and archiving a paper or electronic copy will serve as additional insurance. If for some reason the permanent link does not work in the future, a researcher would be able to go into the history tab and pull up the exact page that was viewed using the time and date reference. Archiving a paper or electronic copy serves as additional back up protection should Wikipedia ever cease to exist.

**D. Judicial Conference Guidelines**

In May 2009, the Judicial Conference of the United States released Guidelines on Citing to, Capturing, and Maintaining Internet Resources in Judicial Opinions/Using Hyperlinks in Judicial Opinions.\textsuperscript{246} The Guidelines were the result of a policy approved by the Judicial Conference that “‘all Internet materials cited in final opinions be considered for preservation’ and that ‘each judge should retain the discretion to decide whether the specific cited resource should be captured and preserved.’”\textsuperscript{247}

\textsuperscript{244} The Westlaw database containing federal court rules (US-RULES), the LexisNexis database containing federal local court rules (LFDBRC), and the Westlaw databases containing state court rules (RULES-ALL) did not reveal any rules restricting or prohibiting the citation of Wikipedia or other wikis or giving any instruction on how they should be cited.

\textsuperscript{245} Another option would be to archive any URL cited in a judicial opinion in WebCite, an online system that enables permanent access to the cited material. WebCite, http://www.webcitation.org (last visited Dec. 16, 2009). WebCite was used by Professor Lawrence Lessig in amicus briefs filed with the Supreme Court in a recent case. Cohen, supra note 24. The citation rule proposed in this article requires a permanent link because it is an easy one click option instead of the additional steps required by WebCite.


The Guidelines provide judges with specific criteria to use in evaluating Internet sources that echo the criteria discussed above for evaluating Wikipedia entries. The Guidelines urge judges to evaluate Internet sources for accuracy, scope of coverage, objectivity, timeliness, authority, and verifiability. When a “readily accessible and reliable print version of the cited resource” exists, judges are urged to cite the print instead of the Internet version. The Guidelines do not provide a specific citation rule for citing Internet sources, but direct judges to follow applicable rules of citation including Bluebook Rule 18.2.

The Guidelines recommend capturing, preserving, and attaching as part of the opinion any Internet resource that is “fundamental to the reasoning of the opinion and refers to a legal authority or precedent that cannot be obtained in any other format.” Judges are urged to consider capturing cited Internet sources if there is reason to expect that the resource may “be removed from the website or altered.” Judges are directed to preserve an Internet resource “as closely as possible to the time it is viewed by the chambers, to ensure that the exact version of the Internet resource that was relied upon by the judge will be preserved.” Captured Internet materials are to be preserved with the corresponding opinion on the courts’ Case Management/Electronic Case Files (CM/ECF) system. The CM/ECF “system allows attorneys to file documents directly with the court over the Internet and allows courts to file, store, and manage their case files in an easy-to-access, transparent way.” Courts can make CM/ECF documents available to the public using the Public Access to Court Electronic Records (PACER) program. The Guidelines do not specify how captured internet resources are to be integrated into the CM/ECF system or whether they will be publically available through the PACER system. According to the Guidelines, those details “are to be determined by local court policy and operational procedures.”

On balance, the Guidelines are a step in the right direction. They provide useful guidance for answering the questions of if and how Internet sources should be cited. As this Article demonstrates, there is not currently any consistency in how judges select and cite to Internet sources. The Judicial Conference did not mandate that courts follow the Guidelines. Instead, courts are encouraged to consider the guidelines in developing local policies and will be

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248 GUIDELINES, supra note 246, at 2.
249 Id. at 3.
250 Id.
252 GUIDELINES, supra note 246, at 3.
asked to inform the Judicial Conference of their progress in one year. Hopefully, there will be uniformity in how the federal circuits implement the Guidelines. Circuits that ignore the guidelines run the risk of making important sources cited in their opinions unavailable and ultimately introducing instability and uncertainty into their circuit’s case law. The circuits would be wise to adopt a uniform approach to the citation of Internet sources and avoid standards that vary between the circuits.\(^{253}\)

The Guidelines do not indicate whether captured Internet sources would be made available to the public through PACER. Making Internet sources available through PACER is a logical choice but not the most efficient way to make them accessible to the public at large. Most lawyers and legal researchers do not search for case law on the PACER system but use LexisNexis, Westlaw, or free alternatives.\(^{254}\) The PACER system has come under criticism recently for being difficult to use and expensive.\(^{255}\) Another shortcoming of the Guidelines is that they only apply to federal courts. As this Article demonstrates, state courts cite to Wikipedia and other Internet materials with regular frequency. Twenty-six percent of the cases citing Wikipedia were state court cases.\(^{256}\) Hopefully, the National Center for State Courts or a similar entity will follow the lead of the federal judiciary in this area and develop similar guidelines for state courts.

IV. THE FUTURE OF LAW

A court’s citation of Wikipedia can have immediate consequences for the litigants in the case before the court. Wikipedia entries have been cited by the Seventh Circuit Court of Appeals “as the lead authority supporting their conclusion, and as


\(^{254}\) Options for free electronic legal research have increased dramatically in recent years. The Public Library of Law provides access to all Supreme Court cases, Federal Court of Appeals cases from 1950 to the present, and state case law from 1997 to the present. Public Library of Law, http://www.plol.org (last visited Dec. 16, 2009). Cornell’s Legal Information Institute is another example. Legal Information Institute, http://www.law.cornell.edu (last visited Dec. 16, 2009).


\(^{256}\) 103 out of 401 cases citing Wikipedia.
the source for their important and controversial definition\(^2\) of “wear and tear,”\(^2\) by the Court of Federal Claims in support of a factual finding in a wrongful death case,\(^2\) and by multiple Federal District Courts as the basis for granting or denying motions for summary judgment.\(^2\) Thankfully, appellate courts have reversed or found error in lower court decisions relying on Wikipedia entries for psychological research in a child custody case,\(^2\) for attempting to refute expert medical testimony with a Wikipedia entry,\(^2\) and perhaps most egregiously for denying an asylum seeker’s request based on information obtained from Wikipedia.\(^2\)

The citation of Wikipedia in judicial opinions has consequences that reach beyond the litigants in the case before the court and can be explained as part of broader trends occurring within the legal system. Some scholars see law transitioning from a system based on principles to one based more around facts.\(^2\) Erwin Surrency predicts that judgments in the future will be made on the basis of similar fact patterns instead of known principles.\(^2\) This transition is due in part to the growth of electronic databases that are excellent at locating cases involving unique factual situations but are “notoriously poor” at retrieving concepts and rules\(^2\) and often find “words but not wisdom.”\(^2\) The increasing number of references to Wikipedia entries in judicial opinions is not surprising in this context. Wikipedia is an excellent resource for locating certain types of factual information. But judges should be aware of its limitations as described above.

The popularity of Wikipedia may also contribute to its appearance in judicial opinions. Some citations to Wikipedia may

\(^{257}\) Volokh, supra note 25; see supra notes 37-38 and accompanying text.

\(^{258}\) Rickher v. Home Depot, Inc., 535 F.3d 661 (7th Cir. 2008); see supra notes 34-36 and accompanying text.

\(^{259}\) Hillensbeck v. United States, 69 Fed. Cl. 369, 380 (Fed. Cl. 2006).


\(^{263}\) Badasa v. Mukasey, 540 F.3d 909, 909 (8th Cir. 2008).


\(^{265}\) Id. at 665.

\(^{266}\) Bintliff, supra note 216, at 346.

be included in judicial opinions to “show how hip and contemporary the judge is.” Judges may also be influenced to include a citation to Wikipedia by their clerks who learn to use Wikipedia as undergraduates or law students and bring that knowledge into the judicial chambers.

The democratization of knowledge is partly to blame for the appearance of Wikipedia citations in judicial opinions. Suzanna Sherry explored the implications of the democratization of knowledge in the fields of constitutional and administrative law and civil procedure in a recent article. She argues that Wikipedia is an example of the democratization of knowledge because it makes knowledge democratically available to all and relies on the democratic process for its content. As a result, “misinformation is bound to creep in,” the role of experts has been diminished, and there have been some “unanticipated negative consequences.”

The use of Wikipedia by courts to define technical or scientific terms and in the context of expert witness testimony confirms Sherry’s observations.

Sherry speculates that a potential consequence of the democratization of knowledge is that “manufactured knowledge bubbles up from the democratic base and actual knowledge withers ... at precisely the time that expertise (especially scientific expertise) is the deepest and most specialized that it has ever been.” Ultimately, true knowledge could die “because it is entirely displaced.” These consequences can be avoided if future courts reach a clear consensus on the use of Wikipedia by expert witnesses and in other areas where specialized knowledge is needed.

Interestingly, Wikipedia’s co-founder Larry Sanger has criticized Wikipedia’s anti-elitism and failure to find a proper place for experts, writing:

268 Cohen, supra note 24.
271 Id.
272 Id. at 1056. A fascinating book that explores this idea in more detail is SUSAN JACOBY, THE AGE OF AMERICAN UNREASON (2008).
273 See the Helen of Troy case taking judicial notice of the acidic content of Urea based on a Wikipedia entry discussed supra Section I.B, the VDP Patent case for a term in relation to a patent discussed supra Section I.A, and the Campbell and Alfa Corp. cases where Wikipedia was referenced in the context of expert witness testimony discussed supra Section I.D.
274 Sherry, supra note 270, at 1053-54.
275 Id. at 1054.
As a community, Wikipedia lacks the habit or tradition of respect for expertise. As a community, far from being elitist (which would, in this context, mean excluding the unwashed masses), it is anti-elitist (which, in this context, means that expertise is not accorded any special respect, and snubs and disrespect of expertise are tolerated). This is one of my failures: a policy that I attempted to institute in Wikipedia’s first year, but for which I did not muster adequate support, was the policy of respecting and deferring politely to experts.\textsuperscript{276}

In 2007 Sanger launched Citizendium, an online collaborative encyclopedia that requires contributors to use their real names, does not allow anonymous editing, and gives individuals with academic degrees more editorial authority.\textsuperscript{277}

The de-legalization of law is another phenomenon that explains the citation of non-legal sources like Wikipedia in judicial opinions. Non-legal sources appeared in judicial opinions as early as the Supreme Court’s decision in \textit{Muller v. Oregon},\textsuperscript{278} spurred on by William Brandeis’s famous brief.\textsuperscript{279} Various studies have demonstrated that the use of non-legal sources in judicial opinions has steadily increased in recent decades.\textsuperscript{280} Scholars have been concerned about this phenomenon for several reasons. Some doubt the ability of lawyers to effectively use this information\textsuperscript{281} and are critical of judges for misusing non-legal information.\textsuperscript{282} Scholar Frederick Schauer sees the increased citation of non-legal sources in judicial opinions as evidence of the “de-legalization of law.”\textsuperscript{283}

In an article written a decade after he first hypothesized the de-legalization of law, Schauer expanded on the idea when discussing Wikipedia in the context of how authorities become

\textsuperscript{277} \textsc{Lh}, supra note 234, at 190.
\textsuperscript{278} 208 U.S. 412, 419 n. (1908).
\textsuperscript{280} Schauer & Wise, \textit{supra} note 1.
\textsuperscript{281} \textsc{Richard Neely}, \textit{Judicial Jeopardy: When Business Collides with the Courts} 148-49 (1986).
\textsuperscript{283} Schauer & Wise, \textit{supra} note 1.
authoritative. He describes an “informal, evolving, and scalar process by which some sources become progressively more and more authoritative as they are increasingly used and accepted.”\(^{284}\) Bans on the citation of Wikipedia at colleges, Schauer continues, are founded in a “genuine basis for worrying that legitimizing the use of this or that source will set in motion a considerably more expansive process.”\(^{285}\) The citation of a particular “source legitimizes the use of that source.”\(^{286}\) The increase in citations to “non-legal” sources in American law “reflects something deeper: a change in what counts as a legal argument. And what counts as a legal argument—as opposed to a moral, religious, economic, or political one—is the principal component in determining just what law is.”\(^{287}\)

If Wikipedia becomes a legitimate source it could bring instability and uncertainty to the law. Courts citing Wikipedia entries must include complete citations that allow future researchers to view the entries as they existed when originally cited. The Helen of Troy case discussed above is a perfect example of the destabilizing effect Wikipedia can have on the law. A lawyer who came across the case today and attempted to retrace the court’s steps by viewing the Wikipedia entry cited in the case would find material that contradicts the Wikipedia entry as it was relied upon by the court. Had the court included a complete citation to the Wikipedia entry any researcher could accurately retrace the court’s steps and view the entry exactly as it existed when the court viewed it.

The Helen of Troy example underscores why accurate and complete citations are essential. Incomplete or inaccurate citations hinder the abilities of lawyers and judges to unpack legal arguments and advocate for their expansion or contraction in future cases. Building arguments based on previous decisions is a cornerstone of the common law system of precedent and stare decisis. It is an essential aspect of “thinking like a lawyer.”\(^{288}\) Coleen M. Barger accurately distilled the consequences of disappearing sources when discussing the citation of Internet sources in judicial opinions:

> When, however, a court purportedly bases its understanding of the law or the law’s application to case facts upon a source that cannot subsequently be located or confirmed, the significance of the citation

\(^{284}\) Schauer, supra note 27, at 1956-57.
\(^{285}\) Id. at 1957.
\(^{286}\) Id.
\(^{287}\) Id. at 1960.
\(^{288}\) Bintliff, supra note 216, at 339.
to that source becomes more ominous. If present readers of the opinion cannot determine how much persuasive weight was or should be accorded to the unavailable source, they have little reason to place much confidence in the opinion’s authoritativeness.  

One practitioner and scholar put it plainly: “citation of an inherently unstable source such as Wikipedia can undermine the foundation not only of the judicial opinion in which Wikipedia is cited, but of the future briefs and judicial opinions which in turn use that judicial opinion as authority.” The continued inclusion of Wikipedia entries in judicial opinions without full and complete citations has the potential to introduce instability and uncertainty into the law and to undermine the authority of judicial opinions.

Accurate and complete citations to Wikipedia entries are important even when the entry is cited for collateral matters that do not seem to have any immediate impact on the case before the court.

“[E]ven dicta … can provide the inspiration for someone’s good faith argument to change the law at a later date.” The principles of the common law that we rely on today were developed through centuries of “application, re-application or non-application to varying fact situations. They are re-phrased, re-stated and re-iterated over and over again, and what eventually emerges is often startlingly different from that from which one started. The great principle of the common law in this context is that ‘great oaks from little acorns grow’ – this is the leitmotif of the judicial process.”

Accordingly, all Wikipedia entries should be evaluated according to the criteria described above and cited according to the proposed rule.

289 Barger, supra note 90, at 429-30.
291 The transition from a legal system based on rules to one based on facts further contributes to instability. See Bintliff, supra note 216, at 350. When judges rely on fact-based arguments, their decisions lose predictability and the legal system becomes less stable.
292 Barger, supra note 90, at 447.
CONCLUSION

The citation of Wikipedia in judicial opinions has already shaped the fabric of American law. The opinions examined in this article are evidence of the range of impact that a citation to Wikipedia can have on the case before the court, on future cases, and on the law as a whole. Some opinions reference Wikipedia for rhetorical flourishes or to define a non-essential term. But in other cases the reference to Wikipedia is used to support the court’s reasoning, logic, or analysis. The most significant examples of the influence of Wikipedia include courts taking judicial notice of Wikipedia content and granting or denying summary judgment motions based in part on a Wikipedia entry.

Judges must exercise care when citing a Wikipedia entry because of the collaborative and constantly changing nature of its content. Courts should not take judicial notice of Wikipedia content. They should not rely upon a Wikipedia entry as the sole basis for their holding or reasoning or to demonstrate the existence or absence of a material fact in the context of a motion for summary judgment. Wikipedia entries can be useful in some limited situations for defining slang terms and for getting a sense of a term’s common usage. Judges must be careful when conducting research on Wikipedia to not violate the recently updated Model Code of Judicial Conduct prohibiting ex parte research into the facts of cases before them.

Action should be taken to ensure that if courts cite Wikipedia they do so in a way that allows future researchers, lawyers, and judges to view the Wikipedia entry exactly as it appeared when the court accessed it. The Bluebook should add a specific explanation that requires any citation to a wiki to include the title of the page, a permanent link to the entry cited, not just the entry’s generic URL, and the date and time the page was visited. This citation rule should also be enacted as a local court rule at the federal and state level. Law librarians and legal research and writing professors have a role to play in training future lawyers and judges to use and cite Wikipedia appropriately.

This Article has only examined the practices of American courts. Courts in other jurisdictions have been busy citing Wikipedia. According to the Wikipedia entry “Wikipedia as a Court Source,” it has been cited 189 times by courts in foreign jurisdictions and by international tribunals. Two short articles have examined the citation of Wikipedia by courts in specific

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294 Wikipedia: Wikipedia As a Court Source, supra note 31. The accuracy of this page is questionable. I found 407 American cases citing Wikipedia entries. This page only reported 98 American cases citing a Wikipedia entry.
foreign jurisdictions. No study has approached the judicial citation of Wikipedia from a comparative perspective.

More research should be done into the citation of blogs in judicial opinions. Informal studies estimate that at least 72 state and federal judicial opinions have cited to blogs. Recently, the United States Supreme Court cited a blog in one of its opinions, a distinction not yet achieved by a Wikipedia entry. Many of the concerns over the permanence of information in Wikipedia entries are also applicable to blog entries. Blog entries can be easily removed or modified by their author. Some authors indicate when they have made edits to a blog post but some do not. These and other concerns will be explored at an upcoming symposium focusing on the research value of blogs and their preservation.

In his book *The Wisdom of Crowds*, James Surowiecki posits that “under the right circumstances, groups are remarkably intelligent, and are often smarter than the smartest people in them.” We should stop chasing experts, according to Surowiecki, and rely instead on “the wisdom of crowds.” The results of this study clearly demonstrate that judges should be careful before relying on the wisdom of the crowds who create and edit Wikipedia content. Wikipedia entries may be useful for a number of purposes, but their quality and impermanence raises a number of concerns that the American legal system has not come to terms with. The bench and bar should be aware of these concerns and take action to prevent uncertainty in the law and a decline of confidence in judicial decisions.

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301 SUROWIECKI, *supra* note 300, at xiv.