Googling for Meaning: Statutory Interpretation in the Digital Age

Alice A. Wang

INTRODUCTION

Dictionary use has become a common practice in modern statutory interpretation at the Supreme Court. With the rise of the “new textualism,” Justices increasingly rely on dictionaries to shed light on the plain meaning of statutes— that is, the understanding that an ordinary English speaker would draw from the text. This trend is not limited to textualists: Justices who favor purposivist analyses of legislative intent cite dictionaries just as often.

Scholars and practitioners have criticized this development in two main ways. The first critique questions the soundness of the interpretive

1. See, e.g., James J. Brudney & Lawrence Baum, Oasis or Mirage: The Supreme Court’s Thirst for Dictionaries in the Rehnquist and Roberts Eras, 55 Wm. & Mary L. Rev. 483 (2013); John Calhoun, Note, Measuring the Fortress: Explaining Trends in Supreme Court and Circuit Court Dictionary Use, 124 Yale L.J. 484 (2014); Jeffrey L. Kirchmeier & Samuel A. Thumma, Scaling the Lexicon Fortress: The United States Supreme Court’s Use of Dictionaries in the Twenty-First Century, 94 Marq. L. Rev. 77 (2010).


3. Plain meaning can diverge from ordinary meaning when a statute includes a specific definition for a term or when a statute uses a term that has a specialized meaning within a particular field. This Essay’s criticisms center on dictionaries’ failure to reflect ordinary meaning, although they also apply to statutory definitions and technical terms to a lesser degree.

4. Brudney & Baum, supra note 1, at 489. That liberal and conservative judges cite dictionaries at comparable rates has been found at the D.C. Circuit as well. Calhoun, supra note 1, at 511-12. For an overview of textualist versus purposivist approaches on the Court, see Abbe R. Gluck, The States as Laboratories of Statutory Interpretation: Methodological Consensus and the New Modified Textualism, 119 Yale L.J. 1750, 1762-64 (2010).

5. Sonpal, supra note 2, at 2197.
methodology, which they see as flawed or inconsistently applied. The second focuses on the limitations inherent in relying on fixed definitions, which by their nature cannot account for contextual factors.

This Essay offers a novel critique that challenges the status of the dictionary itself as an authoritative source of meaning. In today’s digitized world, traditional dictionaries—print dictionaries produced by professional lexicographers—are outmoded. Sales of reference books are plummeting, and people are going online in unprecedented numbers for reference resources such as online dictionaries and Wikipedia, the crowdsourced encyclopedia website. As a result, traditional dictionaries are losing both their descriptive authority to accurately reflect popular usage and their prescriptive authority to shape usage.

As they lose their power to describe and prescribe meaning, traditional dictionaries have become poor references for both plain meaning and legislative intent, calling into question their value to both textualist and purposivist analyses. Thus, even before we reach questions of methodology, there is a prior problem of whether we are even looking at the right sources for definitions. To justify continued judicial reliance on reference materials, we must recognize the dictionary’s diminishing role in today’s society and develop a theory that integrates new, Internet-driven resources into statutory interpretation.

6. See, e.g., Brudney & Baum, supra note 1, at 490–91. Brudney and Baum find that there is wide variation in which dictionaries each Justice prefers, as well as inconsistencies in how true they stay to that preference from case to case. In addition, the Justices appear to lack a coherent approach to addressing the temporal gap between the enactment of a statute and its construction by the Court. Id.

7. See, e.g., United States v. Costello, 666 F.3d 1040, 1044 (7th Cir. 2012) (“Dictionary definitions are acontextual, whereas the meaning of sentences depends critically on context, including all sorts of background understandings.”); Note, Looking It Up: Dictionaries and Statutory Interpretation, 107 HARV. L. REV. 1437, 1445 (1994) (“[I]t makes no sense to declare a unitary meaning that ‘the dictionary assigns to a term.’”).

8. This Essay uses the term “traditional dictionary” to refer to print dictionaries as distinguished from online dictionaries, including those which derive their primary content from print dictionaries. In addition, this terminology recognizes the existence of what one might consider non-traditional dictionaries, for example Wiktionary, which contain definitions that are crowdsourced from users rather than crafted by professional lexicographers. See Wiktionary, the Free Dictionary, WIKTIONARY, http://en.wiktionary.org/wiki/Wiktionary:Main_Page [http://perma.cc/5BXN-4ESQ].


10. Lexicographic approaches divide into two primary camps: descriptive and prescriptive. The descriptive approach attempts to describe how words are used by considering a wide variety of sources; the prescriptive approach draws from select reputable sources to show users how words should be used. See Ellen P. April, The Law of the Word: Dictionary Shopping in the Supreme Court, 30 ARIZ. ST. L.J. 275, 284 (1998).
1. **The Rise of Internet Resources**

The Internet has made traditional dictionaries obsolete. Sales of reference books decreased by thirty-seven percent just between 2007 and 2014, and some estimates see the market shrinking by tens of percentage points per year. Macmillan Publishers decided to stop printing its dictionaries in 2012, and the Oxford English Dictionary may never be printed again. At the same time, comparable resources on the Internet have grown enormously. From July 2011 to July 2015, for example, the number of unique monthly visitors to Wikipedia increased from approximately 88 million to 117 million; today, more than half of the adults who go online read Wikipedia. Similarly, Merriam-Webster’s online dictionary receives about two hundred million page views per month.

Table 1 provides an overview of some of the most popular Internet reference sites. These resources include online dictionaries, such as Dictionary.com; user-generated reference platforms, like Wikipedia.org and UrbanDictionary.com; and search engines that provide definitions, such as Google.com. In determining the influence of each resource, I took into account

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17. Bruce Joshua Miller, *The World Still Needs Its Dictionaries, but How We Define Them Is Changing,* CHI. TRIB. (Dec. 12, 2014), http://www.chicagotribune.com/lifestyles/books/ct-prj-dictionary-in-digital-age-20141212-story.html [http://perma.cc/7DVF-3549]. As we will see, online dictionaries are sometimes derived from print dictionaries but often differ significantly from print dictionaries by the same publishers. To the extent that the most popular dictionaries online are distinct from the prominent print dictionaries the Justices refer to, there is an interpretive difficulty in claiming that the print dictionaries reflect ordinary meaning.
both its popularity—defined by the number of daily visitors and page views—and its accessibility—the ease with which an Internet user would find her way to the resource from a search engine.¹⁸

¹⁸. For further explanations of the methodology, see infra notes a-e (accompanying Table 1).
<table>
<thead>
<tr>
<th>Resource</th>
<th>U.S. Website Popularity Rank&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Order in Google Results for “Dictionary”&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Order in Google Results for “Use”&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Order in Google Results for “Use definition”&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Definition Source&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google Dictionary (google.com)</td>
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<td>1</td>
<td>1</td>
<td>The Oxford American College Dictionary</td>
</tr>
<tr>
<td>Wikipedia (wikipedia.org)</td>
<td>6</td>
<td>12</td>
<td>10</td>
<td>9&lt;sup&gt;b&lt;/sup&gt;</td>
<td>User-generated&lt;sup&gt;b&lt;/sup&gt;</td>
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<tr>
<td>Dictionary.com (dictionary.reference.com)&lt;sup&gt;i&lt;/sup&gt;</td>
<td>177</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>Random House Unabridged Dictionary&lt;sup&gt;i&lt;/sup&gt;</td>
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<tr>
<td>Urban Dictionary (urbandictionary.com)</td>
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<td>9</td>
<td>—</td>
<td>—</td>
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<td>5</td>
<td>American Heritage Dictionary, 4th Ed.&lt;sup&gt;i&lt;/sup&gt;</td>
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<td>Merriam-Webster Online (merriam-webster.com)</td>
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<td>2</td>
<td>Merriam-Webster’s Collegiate Dictionary, 11th Ed.&lt;sup&gt;i&lt;/sup&gt;</td>
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<td>4</td>
<td>—</td>
<td>7</td>
<td>American Heritage Dictionary, 5th Ed.; Webster’s New World College Dictionary; Wiktionary&lt;sup&gt;i&lt;/sup&gt;</td>
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<td>26</td>
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<td>3</td>
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<td>Cambridge Advanced Learner’s Dictionary&lt;sup&gt;i&lt;/sup&gt;</td>
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<sup>a</sup> The “U.S. Website Popularity Rank” measures the website’s popularity among users in the United States.

<sup>b</sup> “Order in Google Results for “Dictionary”” indicates the ranking of the website in Google search results for the term “dictionary.”

<sup>c</sup> “Definition Source” provides information on the source of the definition.

<sup>d</sup> “Order in Google Results for “Use”” indicates the ranking of the website in Google search results for the term “use.”

<sup>e</sup> “Order in Google Results for “Use definition”” indicates the ranking of the website in Google search results for the term “definition.”

<sup>p</sup> For Dictionary.com, the number is temporarily unavailable due to technical reasons.

<sup>i</sup> Dictionary.com, Urban Dictionary, and Thesaurus.com are user-generated resources.

<sup>i</sup> Random House Unabridged Dictionary.

b. Google searches performed on February 6, 2016. To conduct this analysis, I searched “dictionary” in Google with the personalized search function disabled and counted from the top to assign a ranking to each website’s accessibility to those searching for online dictionaries. See GOOGLE, http://www.google.com [http://perma.cc/8ZUM-H8XX].

c. The Court turned to dictionaries to interpret the word “use” in a statute in Watson v. United States, 552 U.S. 74, 79 n.7 (2007). Resources not appearing in the first fifty search results are denoted with “—.” After the first page, most results were not reference materials but rather websites related to the ideas of “fair use” or “terms of use.”

d. Resources not appearing in the first fifty search results are denoted with “—.”

e. Where a website relies on multiple sources, I have listed the source or sources identified as the main source by that website.


g. Although Wikipedia appeared, the Wikipedia entry was on “Use-define chain” because of the common nature of the word “use.”


i. The website is accessible by typing “Dictionary.com” in the browser but redirects to “dictionary.reference.com” where the domain is actually located; the Alexa ranking reflects the position of “reference.com.”


p. This ranking is an overestimation of the popularity of Cambridge Free English Dictionary, since it was possible only to estimate the ranking of cambridge.org, rather than dictionary.cambridge.org, on Alexa.


t. Although the Collins English Dictionary appeared, the entry was on “cost-in-use” because of the common nature of the word “use.”

u. Despite the ease of access from Google, the actual accessibility of the Oxford English Dictionary is low because it is not free and requires a subscription for access. Free OED, Oxford English Dictionary, http://public.oed.com/about/free-oed [http://perma.cc/4CRV-T6GA] (explaining that the OED requires a subscription but some local libraries provide free access).
Based on the number of visitors and page views, Google and Wikipedia are by far the most influential in describing and shaping the common meanings of words. Google, the most popular website in the United States, boasts arguably the most influential dictionary of all. Its dictionary function has been integrated into the search function so that, when a user searches a word in Google, the word’s definition automatically pops up as the first entry in the search results. Since Google introduced this function, traffic to many of the largest online dictionaries has fallen steadily: in just a fourteen-month period, Dictionary.com experienced a 10.2% drop in traffic, and Merriam-Webster online lost about a third of its traffic.19 Wikipedia holds a similar position; on some Google searches, an excerpt from the relevant Wikipedia entry appears at the top of the page before the other search results.20

The differences between these Internet resources and the traditional dictionaries that the Justices favor are striking. First, Internet reference resources are not limited to professionally published dictionaries; they include services that provide solely user-generated content. The archetype is Wikipedia and its companion dictionary website, Wiktionary. Both rely on users, rather than designated professionals, to generate their content.21 As Table 1 shows, reference resources relying on user-generated content—Wikipedia, Wiktionary, and Urban Dictionary—outperform most other online dictionaries in both popularity and accessibility.

Second, even for online dictionaries that draw their content from their print counterparts, there is a clear mismatch between the dictionaries that people most commonly access and those that the Justices tend to use. As shown in Table 1, the most influential online resources—including online dictionaries and Google definitions—rely on the following print dictionaries: the Oxford American College Dictionary; Random House Unabridged Dictionary; American Heritage Dictionary, 4th Edition; and Merriam-Webster’s Collegiate Dictionary, 11th Edition. The four dictionaries that the Justices most favor, on the other hand,22 are Webster’s Third New International Dictionary, the

22. Although some of the names of the dictionaries in the two categories are similar, there is in fact not much overlap between the two lists.

Although both published by Oxford, the Oxford American College Dictionary is distinct from the Oxford English Dictionary; it is based on the New Oxford American Dictionary, which is derived from the Oxford Dictionary of English (ODE). The ODE is an entirely new dictionary distinct from the OED and takes a more descriptive approach. Among other differences, the ODE places the most common meaning first in its definitions, while the OED lists meanings in historical order. See Oxford Dictionary of English, WORLD
Oxford English Dictionary, Webster’s Second New International Dictionary, and the American Heritage Dictionary. Indeed, as Google pulls readers away even from online dictionaries with its self-populating definitions, whatever dictionary Google chooses to utilize may eventually become the only dictionary that matters.

II. DISCONNECTED FROM ORDINARY MEANING

The ability of print dictionaries to accurately reflect the ordinary meaning of words will deteriorate as the Internet continues to advance. In an age where Google definitions and Wikipedia entries serve as the primary points of reference for the average person, both the prescriptive and descriptive powers of traditional dictionaries are diminished.

It is most readily apparent that traditional dictionaries no longer exert the prescriptive influence they once did. A dictionary has prescriptive power to guide and shape our understanding of words only to the extent that people actually refer to it. As more people seek guidance online from a diversity of references that include user-generated resources, print dictionaries will lose their ability to shape “proper” usage. This decentralization of sources of meaning threatens to dethrone print dictionaries as the authoritative gatekeepers of the language.

Traditional dictionaries are also inferior to online resources in their descriptive power to capture language use as it exists. Revising a dictionary and publishing a new edition simply takes an enormous amount of time. Almost three decades passed between the second and third editions of Webster’s Third

[23] Brudney & Baum, supra note 1, at 529.

New International Dictionary; even abridged college dictionaries are typically revised thoroughly only every ten years or so, although publishers may make minor updates in the meantime. While it has always been inevitable that dictionaries lag behind current usage, the Internet has accelerated the evolution of language and created a faster-moving target with which print dictionaries cannot keep up.

Moreover, traditional dictionaries draw from a narrower pool of language than that which the ordinary English speaker experiences, a gap that has been exacerbated by the Internet. In collecting the usages that guide their definitions, traditional dictionaries tend to draw from well-established print sources, rather than Internet sources. This practice is particularly important to prescriptive dictionaries like the American Heritage Dictionary, which seek to set the standards for proper usage and thus may cull only from well-established sources to update existing definitions and add new words. But even descriptive dictionaries, like those published by Merriam-Webster, draw only from published material, including books, newspapers, magazines, and electronic publications. In contrast, ordinary English speakers are consuming more informal Internet websites and blogs and less published material. Thus, traditional dictionaries are increasingly out of touch with the ordinary understanding of words.

One might argue that the disconnect between dictionary-driven statutory interpretation and popular understanding is not problematic in itself. After all, many words bear multiple meanings, and formal uses of words are often

26. Id.
27. The tendency of the Internet and electronic communication to generate linguistic innovation has been recognized since its early days. See, e.g., Guy Merchant, Teenagers in Cyberspace: An Investigation of Language Use and Language Change in Internet Chatrooms, 24 J. RES. READING 293 (2001).
28. A survey of lexicographic staff suggested that the “polite press,” epitomized by the New York Times, exerts the most influence over the lexicographic record. Liptak, supra note 24.
29. Brudney & Baum, supra note 1, at 508. Although the difference between prescriptive and descriptive dictionaries is practically small because all twenty-first century dictionaries are largely descriptive, the distinction does seem to be important as an ideological matter for some Justices. Id.
readily distinguishable from their colloquial meanings. No one is likely to misunderstand a statute providing “relief” for tort victims to mean that it will relieve them of physical pain. But statutory interpretation—which becomes difficult only in cases of statutory ambiguity—requires a greater capacity for nuance and complexity.

First, judges use dictionaries not only to choose the correct meaning for a word from a list of possible definitions, but often also to ascertain the precise boundaries of what a word in a statute does or does not encompass. An accurate assessment of nuance and connotation is quite important in such cases. Consider Judge Richard Posner’s novel approach in United States v. Costello, which concerned whether a woman had “harbored” her boyfriend by permitting him to live with her despite knowing that he was in the country illegally.

Judge Posner sought to understand the connotation of that term through an analysis using Google search results. He ran searches for phrases such as “harboring fugitives,” “harboring enemies,” and “harboring friends” and compared the number of hits to determine how “harboring” is used in practice—that is, its ordinary meaning. The results—many hits for terms like “harboring fugitives” and few for things like “harboring friends” or “harboring guests”—led Judge Posner to conclude that “‘harboring,’ as the word is actually used, has a connotation . . . of deliberately safeguarding members of a specified group from the authorities.” So, because Ms. Costello had not actively shielded her boyfriend from the government, she had not violated the statute’s prohibition. When such subtle differences in connotation matter, even small gaps between dictionary definitions and ordinary understanding are problematic. Judge Posner’s choice to look to Google results—rather than dictionaries—illustrates the high stakes of these small gaps.

Second, mismatches with ordinary understanding have implications for fair notice, an important theoretical underpinning of textualism. Although actual notice of the law’s prohibitions is not required, the notion of fairness requires an opportunity to learn what the law prohibits. To the extent that dictionary

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32. United States v. Costello, 666 F.3d 1040, 1043 (7th Cir. 2012). The statute in question applies to anyone who “conceals, harbors or shields from detection” a person who has entered or remains in the United States in violation of the law. Id. at 1041. Because there was no evidence of concealing or shielding, the case came down to the question of what exactly constitutes “harbor[ing].” Id. at 1042-43.

33. Id. at 1044.

34. Id.

35. Id. at 1050.


37. Paul H. Robinson, Fair Notice and Fair Adjudication: Two Kinds of Legality, 154 U. PA. L. REV. 335, 364 (2005). This idea of fair notice anchors doctrines such as the due process prohibition on overly vague criminal statutes and the rule of lenity. Id. at 356.
definitions do not match up with the ordinary English speaker’s understanding of words, it is unfair to rely on them in statutory interpretation.

III. DETACHED FROM LEGISLATIVE INTENT

The obsolescence of traditional dictionaries also affects their role in purposivist analyses—the interpretation of legislative intent. Empirical surveys of congressional staffers have already shown that many do not routinely consult dictionaries in drafting legislation. The drafters’ use of a particular word in a statute is therefore likely to reflect their personal understanding of that word’s ordinary meaning. To the extent that their understanding of ordinary meaning is shaped by the Internet rather than traditional dictionaries, dictionary definitions are ill-equipped to shed light on legislative intent.

The young average age of staffers—those most intimately involved with drafting statutes—makes it especially unlikely that they engage with traditional dictionaries. A 2001 survey of Senate staff indicated that the average ages of junior and senior legislative assistants were twenty-six and thirty-two, respectively. These young staffers are more likely to use Internet resources than print dictionaries, out of familiarity and convenience. In a 2007 study of university students, over two-thirds said that they use dictionaries exclusively or mostly online.

Moreover, to the extent that congressional staffers do wish to consult reference material, they would likely be inclined to look to Internet resources simply because they are available for free. Surveys have suggested that the cost


40. Young people aged eighteen to thirty-three make up thirty-five percent of the Internet-using population, more than any other age group. Zickuhr, supra note 31, at 4. Ninety-five percent of individuals in this age group go online, also the most out of all age groups. Id. at 5. In addition, this cohort also displayed the greatest propensity for Internet search engines, with ninety-two percent using them, and for getting their news online, with eighty-two percent doing so. Id. at 11, 23.

41. Muffy E. A. Siegel, What Do You Do with a Dictionary?: A Study of Undergraduate Dictionary Use, 28 DICTIONARIES: J. DICTIONARY SOC’Y N. AM. 23, 31 (2007). Virtually all of the surveyed students said that they referred to dictionaries in order to find the correct meaning of words. Id. at 33.
of dictionaries prevents congressional staffers from using them. Online dictionaries, on the other hand, most often allow free access.

Of course, the concern is not that staffers may use new words that do not yet appear in print dictionaries in drafting statutes. Rather, it is that these staffers may use a common, existing word with a somewhat different meaning in mind than what the Justices’ traditional dictionary says. This situation is particularly likely to arise with statutes governing areas of law susceptible to technological and other changes, which must accurately track new developments in the world at large in order to serve their purpose. For all of these reasons, traditional dictionaries look ever more inaccurate as tools for inferring legislative intent.

CONCLUSION

Given popular usage patterns that favor Internet resources, traditional dictionaries struggle to fulfill their presumed interpretive role of providing reliable insight into the ordinary meaning of statutory terms and the legislative intent behind them. A new framework for constraining dictionary use is needed if reference resources are to continue to play a part in statutory interpretation.

Courts already refer to online resources like Urban Dictionary to shed light on testimony, and a body of literature has already begun to consider whether and how blogs and Wikipedia should be used by courts. Future scholarship should draw on this work to develop a theory of statutory interpretation that considers how these online resources should be used in interpreting statutes that are drafted in the Internet age.

Integrating these new resources will not be easy; such a theory would have to account for the shifting realities of online reference use and grapple with normative questions about what types of references should be given weight, and in what situations. Do user-generated resources like Wikipedia

42. Gluck & Bressman, supra note 38, at 938.

43. It is worth noting that the online version of the Oxford English Dictionary, one of the Justices’ favorite dictionaries, is not free and requires a subscription for access. Free OED, OXFORD ENGLISH DICTIONARY, http://public.oed.com/about/free-oed [http://perma.cc/4CRV-T6GA] (explaining that the OED requires a subscription but some local libraries provide free access).


and Urban Dictionary have a place in determining meaning, or do they lack the necessary safeguards to prevent abuse? Should we worry that non-American uses of English online may influence the interpretation of U.S. statutes? How do we determine when different usages or online definitions came into being?

It may be impossible to come up with satisfying answers to all of these questions. But if there is a way to harness these online references, they will become powerful tools with revolutionary potential for statutory interpretation.

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