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## Measuring the Fortress: Explaining Trends in Supreme Court and Circuit Court Dictionary Use

**ABSTRACT.** Recent research argues that the increasing use of dictionaries in Supreme Court and circuit court opinions may pose risks to the legitimacy, credibility, and accuracy of federal appellate court judgments. However, it is hard to understand why dictionary use has grown so much over the last thirty years, because existing data on Justices' and judges' dictionary use is insufficient. This Note introduces a comprehensive dataset covering dictionary usage in every Supreme Court and circuit court opinion from 1950 to 2010. The dataset allows one to test leading theories about Supreme Court dictionary usage by seeing how those same theories fare in light of circuit court dictionary usage trends. Such comparisons suggest that the Supreme Court's increasing dictionary usage reflects, among other factors, fear of charges of judicial activism, the rising popularity of originalism and textualism, the persuasive power of Justice Scalia, and an increased number of criminal law cases on the Court's docket.

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**INTRODUCTION**

*[I]t is one of the surest indexes of a mature and developed jurisprudence not to make a fortress out of the dictionary . . . .*

–Judge Learned Hand<sup>1</sup>

*The fox knows many things, but the hedgehog knows one big thing.*

–Archilochus

Over the last twenty-five years, legal scholars, linguists, and lexicographers have paid increasing attention to Supreme Court Justices' use of dictionaries in Court opinions. Driving this trend is a perceived increase in Justices' reliance on dictionaries to support their arguments about statutory interpretation.

Some observers, often associated with textualists like Justice Antonin Scalia, welcome the increased use of dictionaries in federal court opinions.<sup>2</sup> To supporters, dictionaries usefully catalog the ordinary meanings of words at different points in time.<sup>3</sup> Understanding a word's ordinary meaning, on this view, is important because legislatures usually intend to use words' ordinary meanings when passing statutes, unless otherwise specified. Statutory interpretations that hew to ordinary meanings are therefore more likely to capture legislative intent. In this way, dictionaries help judges act as faithful agents of the legislature.

Other commentators disagree about dictionaries' usefulness in statutory interpretation. Critics see dictionaries as blunt tools, especially compared to what are in their view more probative materials such as legislative history. For example, in a dissenting opinion in *Chamber of Commerce v. Whiting*, Justice Breyer wrote in response to Chief Justice Roberts's use of a dictionary to define "license" that "neither dictionary definitions nor the use of the word 'license' in an unrelated statute can demonstrate what scope Congress intended the word 'licensing' to have *as it used that word in this federal statute*."<sup>4</sup>

Another source of possible doubt regarding the probative value of dictionaries as tools for statutory interpretation is the work of some professional lexicographers and linguists. According to Jesse Sheidlower, a

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1. *Cabell v. Markham*, 148 F.2d 737, 739 (2d Cir. 1945).

2. See, e.g., ANTONIN SCALIA & BRYAN A. GARNER, *READING LAW: THE INTERPRETATION OF LEGAL TEXTS* 72, 415-19 (2012); Note, *Looking It Up: Dictionaries and Statutory Interpretation*, 107 HARV. L. REV. 1437, 1440 (1994); Phillip A. Rubin, Note, *War of the Words: How Courts Can Use Dictionaries in Accordance with Textualist Principles*, 60 DUKE L.J. 167, 168 (2010).

3. See SCALIA & GARNER, *supra* note 2, at 417 (discussing how weighing dictionary definitions can help judges discern ordinary meaning).

4. *Chamber of Commerce v. Whiting*, 131 S. Ct. 1968, 1988 (2011) (Breyer, J., dissenting).

former editor of the Oxford English Dictionary, “[I]t’s probably wrong, in almost all situations, to use a dictionary in the courtroom. Dictionary definitions are written with a lot of things in mind, but rigorously circumscribing the exact meanings and connotations of terms is not usually one of them.”<sup>5</sup> Leading reference materials for lexicographers suggest that dictionaries are not definitive accounts of how words always are, or should be, used.<sup>6</sup> Dictionaries, according to some who edit them, provide histories of how people have used words – not descriptions of complete meanings.<sup>7</sup>

Critics of court dictionary usage have raised a number of concerns about the manner in which Supreme Court Justices use dictionaries. First, Justices may quote selectively from a single dictionary entry. Instead of reporting all entries for a particular word in a single dictionary, a Justice may report the one entry for a word (in a list of five, six, seven, or more entries) that best supports the Justice’s preferred interpretation of a statute.<sup>8</sup> Second, and relatedly, Justices may choose only dictionaries with definitions that support their preferred interpretation of a statute.<sup>9</sup> This practice – called “dictionary shopping” – may disguise distortions of a word’s meaning as objective exercises in statutory interpretation.<sup>10</sup>

In addition to concerns about particular citations, some are concerned that Supreme Court Justices’ dictionary use may erode trust in the Supreme Court and the U.S. judicial system more generally. Although some observers already believe that Justices legislate from the bench,<sup>11</sup> a perceived lack of neutrality at

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5. Adam Liptak, *Justices Turning More Frequently to Dictionary, and Not Just for Big Words*, N.Y. TIMES, June 13, 2011, <http://www.nytimes.com/2011/06/14/us/14bar.html> [<http://perma.cc/H8LN-2YY2>].
  6. See, e.g., B.T. SUE ATKINS & MICHAEL RUNDELL, THE OXFORD GUIDE TO PRACTICAL LEXICOGRAPHY 45-48 (2008) (“A reliable dictionary is one whose generalizations about word behaviour approximate closely to the ways in which people normally use (and understand) language when engaging in real communicative acts . . . . [T]he job of the dictionary is to describe and explain linguistic *conventions* – the ways in which people generally use words – rather than trying to account for every individual language event.”).
  7. HOWARD JACKSON, LEXICOGRAPHY: AN INTRODUCTION 87-92 (2002).
  8. See 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, 566 (2013). Justices also accuse one another of citing definitions that are not the first-reported definition in the entry. *Id.* at 514.
  9. *Id.* at 566.
  10. See WILLIAM N. ESKRIDGE, JR. & PHILIP P. FRICKEY, CASES AND MATERIALS ON LEGISLATION: STATUTES AND THE CREATION OF PUBLIC POLICY 625-26 (2d ed. 1995); Ellen P. Aprill, *The Law of the Word: Dictionary Shopping in the Supreme Court*, 30 ARIZ. ST. L.J. 275, 281 (1998).
  11. Simon Lazarus, *Even Justice Scalia Recognizes Climate Change Is a Huge Problem: And He Was Willing to Legislate from the Bench to Fix It*, THE NEW REPUBLIC, June

the Supreme Court may feed cynicism about the federal judiciary<sup>12</sup> and, on this view, may have contributed to the decline in the Court's popularity over the last decade.<sup>13</sup>

Citing dictionaries to support statutory interpretations is necessarily controversial. First, routine reliance on seemingly objective dictionary definitions can obscure important contextual sources of meaning, such as legislative history and nearby words or phrases that modify the meaning of the word in question. For example, in *Taniguchi v. Kan Pacific Saipan, Ltd.*, the majority relied upon dictionary definitions to conclude that the word "interpreter" in the 1978 Court Interpreters Act<sup>14</sup> covers the cost of oral translation services but not the cost of translating printed documents. Despite the fact that the majority opinion, penned by Justice Alito, recognized that different dictionaries disagree substantially about "interpreter," Justice Alito nonetheless treated a handful of dictionaries' mention that interpreters translate, "esp. orally," as clear evidence that "interpreter" according to the Act covers only oral translation services.<sup>15</sup>

Justice Ginsburg argued in dissent that an exclusive focus on dictionary definitions led the majority to ignore clear, relevant contextual evidence of the legislature's intended meaning of the word "interpreter."<sup>16</sup> For example, the Senate Reporter indicated that Congress's intention in passing the Act was to "insure that all participants in our Federal courts can meaningfully take part."<sup>17</sup> Refusing to cover the translation of crucial court documents, Justice Ginsburg argued, hardly seems consistent with a legislative intention to expand the number of citizens who "can meaningfully take part" in court proceedings.<sup>18</sup> Another piece of relevant evidence, Ginsburg argued, was that district courts

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24, 2014, <http://www.newrepublic.com/article/118359/antonin-scalias-epa-decision-even-he-legislating-bench> [<http://perma.cc/Y9GZ-SU3C>]; Bill Marsh & Nilkanth Patel, *When Politics Approach the Bench*, N.Y. TIMES, May 10, 2014, <http://www.nytimes.com/interactive/2014/05/09/upshot/when-politics-approach-the-bench.html> [<http://perma.cc/6T29-42X6>] (cataloging the perceived increase in the rate at which Justices vote conservatively or liberally on Court cases in line with the party of the president who nominated them).

12. See Dan M. Kahan, *Foreword: Neutral Principles, Motivated Cognition, and Some Problems for Constitutional Law*, 125 HARV. L. REV. 1, 4-5 (2011).

13. See *Supreme Court Favorability Rebounds: Continuing Partisan Divide in Views of Court's Ideology*, PEW RESEARCH CTR. FOR PEOPLE & PRESS (May 6, 2014), <http://www.people-press.org/2014/05/06/supreme-court-favorability-rebounds> [<http://perma.cc/6B49-9AEJ>].

14. 28 U.S.C. § 1827 (2012).

15. *Taniguchi v. Kan Pac. Saipan, Ltd.*, 132 S. Ct. 1997, 2002-04 (2012).

16. *Id.* at 2008-10 (Ginsburg, J., dissenting).

17. S. REP. NO. 95-569, at 1 (1977).

18. *Taniguchi*, 132 S. Ct. at 2009 (Ginsburg, J., dissenting).

had subsidized oral and documentary translation services before, and for decades after, the passage of the 1978 Act, without comment by Congress.<sup>19</sup> The majority, in its exclusive focus on dictionaries, made no note of this fact.

A second risk of reliance on dictionaries is that dictionaries often differ in important ways with regard to how to define words.<sup>20</sup> Thus, a definition from a randomly selected generalist dictionary is unlikely to represent settled consensus amongst lexicographers about how to define a word or phrase. Justices and judges, whenever they cite dictionaries, choose sides—often unwittingly—in ongoing debates among experts.

A third risk of Court dictionary usage—this one relating to judicial consistency—may arise because Justices tend to lack systematic conventions about which dictionaries to cite; whether to use generalist or specialist dictionaries; and whether to cite editions of dictionaries in use during the enactment of the statute or at the filing date of the suit.<sup>21</sup> For example, James Brudney and Lawrence Baum found little consistency in when or why Justices relied upon specialist legal dictionaries (for example, Black’s or Ballentine’s) instead of generalist dictionaries (for example, Oxford English or Webster’s) to define certain terms.<sup>22</sup> Consequently, dictionary citation might threaten the Court’s reputation for accuracy, fairness, and consistency.

Given the controversies surrounding federal court dictionary use, it is important that the legal community understands how often, when, and why Justices and judges use dictionaries. Our current empirical understanding of federal court dictionary usage is imperfect. The leading articles in the field—empirical studies by Jeffrey Kirchmeier and Samuel Thumma, as well as by Brudney and Baum—draw incompletely on existing Supreme Court opinions

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19. *Id.* at 2008.

20. See JACKSON, *supra* note 7, at 21 (“What distinguishes [dictionaries] is more notable than what they have in common.”). For some excellent recent examples of the heated, and at times absurd, results of Justices’ marshaling contending dictionaries’ definitions of the same word, compare *Kasten v. Saint-Gobain Performance Plastics Corp.*, 131 S. Ct. 1325, 1331 (2011) (defining “file”), with *id.* at 1338 (Scalia, J., dissenting) (discussing definition of “file”); compare *Muscarello v. United States*, 524 U.S. 125, 128 (1998) (defining “carry”), with *id.* at 142 n.2, 143 n.5 (Ginsburg, J., dissenting) (discussing definition of “carry”); and compare *MCI Telecomm. Corp. v. AT&T Co.*, 512 U.S. 218, 225 (1994) (defining “modify”), with *id.* at 241-42 (Stevens, J., dissenting) (discussing definition of “modify”).

21. Brudney & Baum, *supra* note 8, at 566.

22. *Id.* at 510; see also Samuel A. Thumma & Jeffrey L. Kirchmeier, *The Lexicon Has Become a Fortress: The United States Supreme Court’s Use of Dictionaries*, 47 BUFF. L. REV. 227, 268 (1999) (discussing the Supreme Court’s disagreement in *Sullivan v. Stroop*, 496 U.S. 478 (1990), about whether “child support payments” is a specialist legal term whose meaning should be looked up in a legal dictionary, or common language term to be looked up in a generalist dictionary).

and not at all from circuit court opinions. These authors have been explicit about their inability to consult more data. For example, Brudney and Baum's functionalist analysis studied and tabulated dictionary citation rates for Supreme Court opinions in only three areas of law, and only from 1986 to 2011, in order to focus on building a powerful demonstration of how, and to a lesser extent how often, Justices actually abuse dictionaries.<sup>23</sup> Such studies are crucial contributions to the field, but as empirical examinations of longer-term trends in dictionary usage, they are incomplete.

Given the limited dataset upon which preexisting articles relied, it is not surprising that some of the conventional wisdom about circuit court and Supreme Court dictionary usage is incorrect or at least insufficiently nuanced. For example, Brudney and Baum contend there is no relationship between Supreme Court Justices' general jurisprudential ideology and the rate at which each Justice cites dictionaries.<sup>24</sup> However, as I will demonstrate in Part III.1.A, my fuller dataset reveals that textualist judges like Justices Scalia and Thomas do in fact cite dictionaries in a higher percentage of their opinions than non-textualist judges like Justices Ginsburg and Breyer. Additionally, Brudney and Baum report from their data that the Supreme Court's precipitous increase in dictionary usage began in the early 1990s, with the accession to the Court of Justice Souter and other more liberal Justices. My more comprehensive dataset reveals that this dating is inaccurate. The rise of the dictionary at the Supreme Court began in the mid-1980s, around the time of Justice Scalia's accession to the Court. Finally, my research has also raised a number of unanswered questions about dictionary use, most notably the extent to which the Supreme Court's use of dictionaries is unique in relation to circuit courts.

Both more generally and more importantly, extant empirical research lacks sufficient data on which to base broader statistical inferences about the biggest questions concerning Supreme Court and circuit court dictionary usage. What explains the ebb and flow of federal appellate court dictionary usage? What role do fashions in jurisprudential ideology play, as opposed to personnel changes on each court? Functionalist studies, or partial lists of defined words and phrases at the Supreme Court level, cannot answer these questions very well.

By introducing the most comprehensive existing dataset of Supreme Court and circuit court opinions, this Note both corrects some conventional wisdom and offers new and broader insights into how, when, and why Justices and

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23. Brudney & Baum, *supra* note 8, at 488.

24. *Id.* at 489.

judges cite dictionaries in opinions.<sup>25</sup> Using script search in conjunction with plain text copies of all Supreme Court and circuit court opinions from 1950 to 2010,<sup>26</sup> this Note introduces a dataset of dictionary usage that draws upon every full, published opinion from the Supreme Court and all eleven circuit courts.<sup>27</sup> The database is the first of its kind to cover a full sixty years of majority, concurring, and dissenting opinions on all areas of law and from each of the circuit courts and the Supreme Court.

The most critical gap this Note fills is the tabulation and analysis of circuit court dictionary usage. For a number of reasons, tabulating circuit court judges' use of dictionaries is more challenging than tabulating Supreme Court usage. First, there are fewer quality plain text versions of circuit court opinions. Second, circuit courts publish a large number of opinions without substantial discussion of the law (thereby raising the chance of false negatives when counting instances of dictionary use). This practice necessitates carefully designed search scripts. Third, the sheer number of opinions requires substantial time spent weeding out references to the words "dictionary" and "dictionaries" (false positives).

Nonetheless, as I will discuss more fully below, tabulating and analyzing circuit court opinions substantially enriches our understanding of the patterns and consequences of dictionary use. The surprisingly low rate of circuit court dictionary usage challenges, or at least adds nuance to, theories about the diffusion of interpretive canons and interpretive techniques from the Supreme Court to the circuit courts. The circuit courts' experiences also highlight the uniqueness of the Supreme Court, in addition to raising interesting questions about how judges and Justices influence each other behind closed chamber doors.

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25. The comprehensive dataset also provides a useful independent verification of preexisting data on Supreme Court dictionary usage. Below, I will point out only findings from my comprehensive dataset that contradict the findings in Brudney and Baum, *supra* note 8, or 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).

26. I also accessed Supreme Court opinions from 2011 to 2013. I report some of the data from these opinions, but with a few reservations. The results and my reservations in drawing overly hasty conclusions from the 2011 to 2013 data will be discussed below. Circuit court opinions from 2011 to 2013 were unavailable.

27. I exclude the Federal Circuit because, unlike any of the included courts, the Federal Circuit deals with very large numbers of patent and intellectual property disputes. These areas of law require judges to rely upon technical treatises to define certain specialist terms. Thus, the Federal Circuit judges' use of technical dictionaries does not present the same degree of concern about accuracy and legitimacy of dictionary usage (though some concern may be warranted). In this sense, including the Federal Circuit in the data below would run a substantial risk of failing to compare like with like.

Ultimately, the database reveals no single variable, event, or idea that explains fully the Supreme Court's or any circuit court's dictionary use, nor does any variable, event, or idea explain the entirety of the difference in how the Supreme Court and circuit courts use dictionaries. Instead, the database analysis reveals a set of explanatory variables that collectively explain a meaningful portion of federal appellate judges' dictionary usage.

The basic story is as follows: The Supreme Court, from the 1980s, began to rely on dictionaries far more often than did any of the circuit courts. One possible explanation for the rise in Supreme Court dictionary usage is that both originalism and textualism gained major intellectual currency around the same time, and this influenced the Justices to adopt more textualist interpretive practices, like dictionary citation. Yet this raises the question of why originalism and textualism would have influenced Supreme Court Justices so much more than circuit court judges, who did not increase their dictionary citation rates nearly as much as did Supreme Court Justices. The arrival of Justice Scalia on the Supreme Court likely plays at least some modest role in explaining this differentiation.

In addition to the persuasive powers of Justice Scalia, other factors unique to the Supreme Court clearly play a large role in driving the Justices' unusually high dictionary usage rates. In order to tease out this insight, I compare Justices' dictionary usage rates to their usage rates when they were circuit court judges. Every Justice's dictionary usage rate increases markedly and immediately upon accession to the Court. However, although broader institutional factors clearly play a role in Supreme Court Justices' unusually high dictionary usage rates, it is hard to identify exactly which factors are at work. Based on the dataset, charges of judicial activism and the persuasive power of Justice Scalia likely each contribute, whereas the liberal versus conservative distinction among the different Supreme Court Justices does not.

Finally, the percentage of a court's docket consumed each year by criminal law is variably predictive: compared to circuit courts' dictionary usage, the Supreme Court's dictionary usage is better predicted by the relative frequency of criminal law cases in a given term. However, at both the Supreme Court and circuit levels, the type of cases on the docket is at best a partial explanation.

Altogether, a statistical analysis of the database reveals that one can explain an important portion of the Supreme Court's dictionary usage, as well as the difference in dictionary use frequency between the Supreme Court and the circuit courts, as a combination of: a) fears of losing institutional legitimacy stemming from charges of judicial activism; b) the resulting or related rise of textualism and originalism; c) the persuasive force of Justice Scalia; and d) at the margin, an increasingly heavy load of criminal law cases. The rise of textualism and originalism, pressure to avoid charges of judicial activism, as well as perhaps the changing volumes of criminal law cases on the docket

explain a small portion of circuit courts' dictionary usage. Explaining specific trends within individual circuit courts is much harder and calls for closer analyses of each court's distinct pattern of dictionary usage, which largely fall beyond the scope of this study.

The collective wisdom drawn from the database represents the understanding of a fox, not of a hedgehog. But it provides a better understanding than scholars have ever previously had about federal appellate court dictionary usage.

Part I of the Note provides a brief summary of the research methods that I used to compile the comprehensive dictionary use database of Supreme Court and circuit court opinions. In Part II, I introduce and examine the most interesting findings drawn from the database.

## I. RESEARCH METHODS

I began the construction of the comprehensive database by gathering plain text copies of all circuit court and Supreme Court opinions from 1950 to 2010.<sup>28</sup> The advantage of plain text files is that they allow a researcher to search for key terms and phrases in an entire folder of plain text files without having to open each file individually. All the researcher must do is write a search script or set of scripts specifying which words, patterns, and phrases the computer should highlight in each file.

A plain text file search is only as accurate as its search script. When compiling a database of dictionary usage surveying sixty years of circuit court and Supreme Court opinions, the two main challenges a researcher confronts are false positives and false negatives. A false positive is an instance in which the search script counts a file that is not what the researcher seeks; a false negative is an instance in which the search script fails to count a file that the researcher seeks. While assembling the dictionary usage database, a likely false positive would be an opinion that uses the word "dictionary" or "dictionaries" with no particular citation, or which refers to a specific dictionary but does not cite it (perhaps to express disapproval of the dictionary). A likely false negative would be an opinion that cites to a dictionary without using the word "dictionary" (for example, "Webster's (2d ed.) (1973)").

In order to eliminate both false positives and false negatives, I used a set of graduated and exclusive search scripts. A graduated and exclusive approach is helpful for large data searches because the approach expands the database of positive identifications gradually, thereby affording the researcher more

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28. One can access plain text copies of the circuit court and Supreme Court opinions at <https://bulk.resource.org/courts.gov/c>.

opportunities to confirm by hand the accuracy of representative sets of each wave of incorporated data. By gradually expanding the database to new categories, the researcher can screen out false positives more effectively (and thus be more aggressive in minimizing false negatives). By removing all the true positives identified in each round from the initial database, the researcher avoids redundant positives in any subsequent searches.

The first script I designed searched for the word “dictionary” within three words or terms of a wide range of dictionaries prominent in judicial opinions from 1950 to 2010 (including, but not limited to: Webster, Webster’s, Funk & Wagnall, New Century, American Heritage, Oxford/OED, Black’s, etc.).<sup>29</sup> In order to minimize the risk of error, I evaluated five percent of the returns by hand, spread equally across the six decades searched. I discovered no significant number of false positives.<sup>30</sup> I then added the cases flagged by the search script to my database, thereby excluding them from further searches (to avoid redundant positives).

The second script dealt with the likely false negative mentioned above—citations to dictionaries that do not use the word “dictionary” (for example, “Webster’s (2d. ed) (1973)”). For this script, I took advantage of the regularity of dictionary citation formats I noticed from my manual evaluation of the dictionary citations identified by the first search script. In practically all cases, judges couched a dictionary reference with a citation to an edition (“edition” or “ed” or “ed.”) and/or a citation to a year. Therefore, I searched for the list of prominent dictionary titles within two words or terms of the various permutations representing edition and/or year (“19\_\_” or “18\_\_” or two numbers in parentheses “(73)”). Once again, to minimize the risk of error, I evaluated five percent of the returns by hand, spreading the five percent equally

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29. I took a number of steps to ensure I included all the relevant dictionaries. First, I visited a number of published lists of prominent English language generalist dictionaries. Second, I searched for more comprehensive dictionary lists that included obscure English language dictionaries. In an abundance of caution, I searched all Supreme Court and circuit court opinions from 1950-2010 to see if any of those dictionaries received a citation from a Supreme Court Justice or circuit court judge. If so, I included it in the search described in the main text above. It is possible that I missed a small number of dictionaries, but those would only be dictionaries with quite few citations—these omissions almost certainly would not substantially skew the results reported below. The list of legal and generalist dictionaries with more than two citations is in Appendix I.

30. The only false positives I discovered were a few cases in which Webster’s Dictionary and the Oxford English Dictionary were parties to federal appellate litigation. I eliminated those results from the database, and I conducted two quick ancillary script searches in order to ensure that other dictionary manufacturers and editors had not been parties to litigation either.

across the six decades searched. I discovered no false positives. I excluded these new returns to avoid redundant positives from the third search.

The third script search sought to remedy potential false negatives caused by citation to obscure yet suitably non-specialist dictionaries that both my initial search for dictionaries and my first script search might have missed. For this script, I again took advantage of the regularity of dictionary citation formats that I noticed from my manual evaluation of the dictionary citations identified by the first search script. I ran substantially the same search as the second search, but this time used the word “dictionary” in lieu of specific dictionary titles/brands. At this point, only a few hundred results returned, as the database had already accumulated the vast majority of results from non-specialist dictionaries. A manual examination of the results of the third search revealed only citations to technical, medical, scientific, and engineering dictionaries and reference books—instances of dictionary usage that do not raise the same problems as the use of more generalist dictionaries to define common, or at least not abstruse, terms.<sup>31</sup>

The only remaining set of false positives I needed to address were cases with opinions that mentioned specific dictionaries without actually citing them in support of an argument. I expected that, in most such cases, judges referred to dictionaries either to applaud or criticize the use of that particular dictionary (recall that by this point I had already filtered out general commentary about dictionaries). Therefore, I ran a search within the database of positives I had already accumulated. This search investigated all the dictionaries (mentioned in full [“Webster’s Dictionary”] or in part [“Webster’s”/“Webster”]) within three words or terms of “use\*,” “abuse\*,” “improper\*,” “proper\*,” “appropriate\*,” “inappropriate\*,” “cite\*,” “look to,” “should\*,” “should not,” “objective\*,” “subjective\*,” and/or “define\*.”<sup>32</sup> The search returned approximately six hundred results, which I checked by hand.

Once I had completed the search for my year-to-year numerator (that is, the number of cases with an opinion with a substantive citation to at least one dictionary), I had to set my denominator (the number of cases counted). This was relatively simple. In order to ensure that my search did not include summary orders or other opinions without substantial legal discussion, I gathered all the opinions from the original plain text database and eliminated

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31. The use of specialist dictionaries by generalists may raise its own set of problems, but those problems are beyond the scope of this Note.

32. The asterisk allows a researcher to search for a specific root word (for example, “use”) as well as all of the branches of that word (for example, “use,” “using,” “uses,” “used”).

all cases with opinions of fewer than four hundred words.<sup>33</sup> I first manually checked five percent of the eliminated cases to ensure I had not excluded short yet substantive opinions and then manually checked five percent of the cases remaining in the database to ensure I had not retained any non-substantive opinions. As with all the other manual checks, I spread out the five percent equally across the six decades surveyed. I discovered no false positives and only one false negative in the five percent.

In the end, the various searches returned a denominator representing only cases with substantive opinions and a numerator representing cases with substantive citations to dictionaries. The database tracked all the circuit courts and the Supreme Court from 1950 to 2010. Although with a very large database there is always the possibility of some non-negligible number of remaining false positives or false negatives, I have high confidence in the database produced by the searches.<sup>34</sup> Analysis of this comprehensive dictionary usage database has produced the key findings that I present here.

Finally, a note on statistical inference methods. After experimenting with various means of representing statistical inferences from the database, I determined that it would be inappropriate to present the results of multivariate regressions. The combination of a) the limited number of Supreme Court and circuit court terms (each with its own dictionary citation rate); and b) the large number of control variables led the vast majority of my regressions to be statistically insignificant. Even when multivariate regressions returned some statistically significant results, the same regressions included so many insignificant results that I grew concerned that any regression analysis might report more noise than signal. Due to healthy skepticism of regression analysis, I chose instead to report more cautious correlation results, both in numerical and graphical form, in order to leave the reader with an accurate appreciation of the limitations of statistical inferences regarding social and political phenomena as broad as the ones covered in this Note.

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33. I first attempted a search that was set at a minimum of two hundred words and found it returned too many false positives.

34. In order to further test my figures, I repeated the search process on LexisNexis Advanced and arrived at similar results.

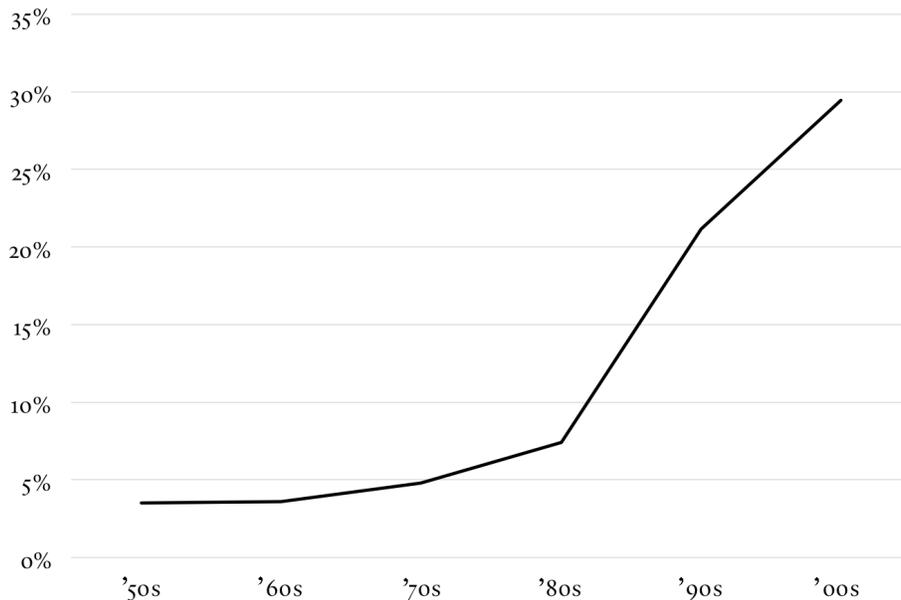
**II. FINDINGS**

*A. The Supreme Court's Rapidly Increasing Dictionary Citation Rate, 1950 to 2010*

Existing research on Supreme Court dictionary citation reports that Supreme Court dictionary usage has increased substantially over the last few decades.<sup>35</sup> While these conclusions are directionally correct, a comprehensive examination of Supreme Court dictionary usage from 1950 to 2010 shows how dramatically Supreme Court Justices increased their reliance on dictionaries since 1985.

**Figure 1.**

**SUPREME COURT DICTIONARY CITATION, BY PERCENTAGE OF CASES FROM 1950-2010**



Over the last thirty years the rate at which a majority, concurring, or dissenting opinion (or two or more) cited a dictionary definition increased dramatically. This finding is interesting in two ways. First, it qualifies Brudney and Baum's finding that the most substantial increase in dictionary usage

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35. See Brudney & Baum, *supra* note 8; Kirchmeier & Thumma, *supra* note 25.

began in the early 1990s with the arrival of Justices Souter, Thomas, and Breyer.<sup>36</sup> The comprehensive database, which accounts for all areas of law (unlike Brudney and Baum's database<sup>37</sup>), reveals that the sharpest increase in the use of dictionaries began in the mid-1980s, around the time Justice Scalia arrived at the Court. The increase continued in the early 1990s, but as Figure 1 shows, 1992 to 2010 exhibits a sharp, but not the sharpest, increase in dictionary usage rates. In fact, as we will see below, existing research overestimates Justice Souter's dictionary usage. The observed slowdown of the Supreme Court's dictionary citation rate is actually partially attributable to Justice Souter's relatively low dictionary citation rate.

Second, the graph charts a very dramatic increase in dictionary use over a short period. From 1985 to 1999, dictionary usage increased three hundred percent in proportional terms. By 2010, Supreme Court opinions cited dictionaries four times as often as in 1985—and over *seven* times more often than in 1950.

The sheer magnitude and the specific timing of the increase in dictionary usage revealed by the comprehensive dataset challenge earlier conclusions from less complete empirical studies—even research that noted an increase in dictionary usage did not report its size accurately. Putting aside these scholars' underestimation of Supreme Court citation rates, this Note turns next to test some of the contending theories they have offered to explain the increase in dictionary usage.

#### *B. The Effects of Originalism and Textualism on Supreme Court Dictionary Citation Rates*

One theory holds that dictionary usage increased in tandem with the popularity of the jurisprudential philosophies of originalism and textualism.<sup>38</sup> Textualism calls for judges to resolve ambiguities in statutory text by reference to the statutory text alone. Textualists, in theory, would never rely upon legislative history or understandings of legislative purpose.<sup>39</sup> Lacking a clear

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36. Brudney & Baum, *supra* note 8, at 496-97.

37. *Id.* at 488.

38. This theory appears frequently in legal scholars' writings. See, e.g., Aprill, *supra* note 10, at 277-78; Brudney & Baum, *supra* note 8, at 486; Kirchmeier & Thumma, *supra* note 25, at 119.

39. See, e.g., ANTONIN SCALIA & BRYAN A. GARNER, MAKING YOUR CASE: THE ART OF PERSUADING JUDGES 44-48 (2008) (describing the methodology for interpreting statutes); SCALIA & GARNER, *supra* note 2, at 53-68 (describing the fundamental principles of interpretation, including the supremacy of text); John F. Manning, *Second-Generation Textualism*, 98 CALIF. L. REV. 1287, 1288 (2010) ("Textualism maintains that judges should seek statutory meaning in the semantic import of the enacted text, and, in so doing, should

indication otherwise, one should always assume that legislators intended to use the ordinary meaning of words and phrases. Therefore, textualists often support judges' use of dictionaries to interpret statutes. Originalism, while not as directly related to dictionary use, tends to find support in the same circles as textualism does, and it dovetails with the same underlying currents of political conservatism that support textualist jurisprudence. The difficulty in assessing a theory of dictionary use based on jurisprudential ideologies is that intellectual influences do not leave many quantifiable footprints. It is hard to measure trends in different concepts' popularity.

Fortunately, Google's N-Gram search database represents a new and powerful tool for estimating the influence and popularity of different concepts, terms, ideologies, and arguments. N-Gram allows a user to search for the frequency with which certain words or phrases appear in print across time (controlled as a percentage of each year's total published output of both paper-based and Internet-based publications). Independently financed research finds that Google N-Gram is an accurate measure of print frequency.<sup>40</sup> Although N-Gram is an accurate measure of print frequency, N-Gram data does not reveal whether writers supported or opposed either textualism or originalism, or if they simply felt neutral towards the two jurisprudential ideologies. That said, one need not necessarily know the content of each reference to textualism and originalism to draw cautious conclusions from N-Gram's print frequency data. N-Gram data is very accurate insofar as it portrays the extent to which authors discuss certain words or concepts in the marketplace of ideas. The extent to which both textualism and originalism became hotter issues likely reflects the extent to which both concepts were in the minds of Supreme Court Justices and circuit court judges—both of which are groups of well-read, connected individuals.

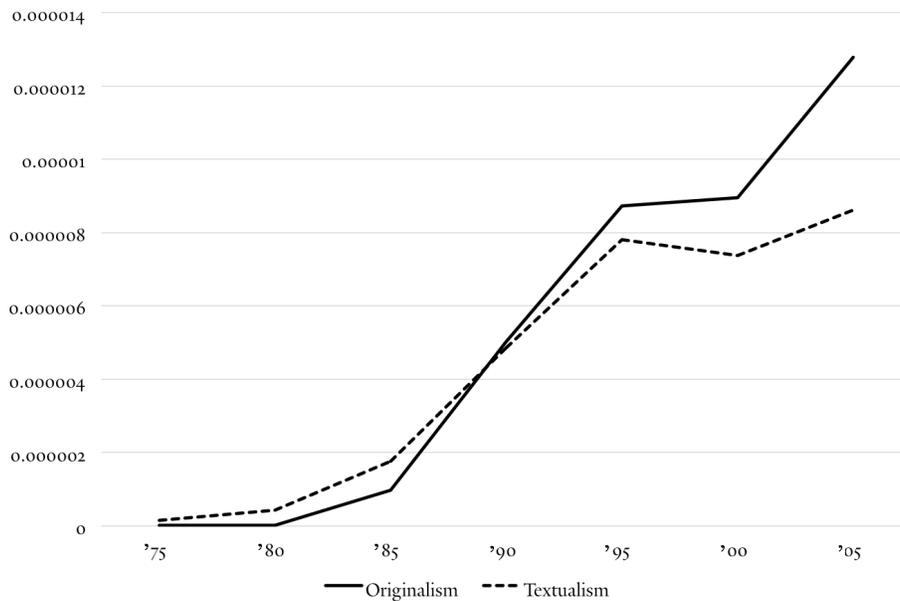
With these qualifications in mind, below is a Google N-Gram graph for the words "textualism" and "originalism" from 1975 to 2008 (Google N-Gram data currently extends only to 2008):

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reject the longstanding practice of using unenacted legislative history as authoritative evidence of legislative intent or purpose.”).

40. E.g., Martin Klein & Michael L. Nelson, *Correlation of Term Count and Document Frequency for Google N-Grams*, OLD DOMINION UNIV., DEP'T OF COMPUTER SCI. (2009), [http://www.cs.odu.edu/~mklein/publications/ecir2009-correlation\\_tc\\_df.pdf](http://www.cs.odu.edu/~mklein/publications/ecir2009-correlation_tc_df.pdf) [http://perma.cc/ERL6-JVGS]; Niket Tandon & Gerard de Melo, *Information Extraction from Web-Scale N-Gram Data*, MAX PLANCK INST. FOR INFORMATICS (2010), <http://www1.icsi.berkeley.edu/~demelo/papers/taison-demelo-ngram.pdf> [http://perma.cc/N8AN-LU4Q].

**Figure 2.**  
GOOGLE N-GRAM DATA ON “ORIGINALISM” & “TEXTUALISM,” 1975-2008



Although Supreme Court Justices relied upon dictionaries before textualism and originalism gained any currency (for example, the term textualism did not appear at all in 1975, even though approximately five percent of 1975 Term Supreme Court cases included one opinion that made substantive reference to a dictionary), the rise in the print popularity of textualism and originalism coincided fairly closely with the rise in dictionary usage by the Supreme Court. From 1985 to 1999, while Supreme Court dictionary usage increased 300% in proportional terms, the words “textualism” and “originalism” each increased in popularity by approximately 400%.

The correlation between Supreme Court dictionary usage and the popularity of textualism and originalism, however, breaks down around 1993, when the increase in textualism’s popularity in print reached a plateau. Supreme Court Justices’ use of dictionaries, on the other hand, continued to rise substantially (albeit more slowly than from 1985 to 1992). The print popularity of originalism, unlike that of textualism, continued in line with the rise in Supreme Court dictionary usage. Originalism’s trajectory from obscurity to popularity seems to track Supreme Court dictionary usage much more closely than the rise and plateau of textualism. Nevertheless, even mentions of originalism rose less quickly after 1993 than dictionary usage rose at the Supreme Court.

A conservative interpretation of the relationship captured by the N-Gram data is that the rise of originalism and textualism in the mid-1980s to mid-1990s reflected the development of an intellectual climate that quickly drove up Supreme Court dictionary rates. At that point, as the popularity of both originalism and textualism plateaued or grew more slowly, other factors—new Justices on the Court, changes in the Court’s docket, or other institutional or social factors—lifted the Court’s dictionary usage rate higher. At the very least, it would be surprising if the similar trend lines in the 1980s and early 1990s do not track anything meaningful about the importance of originalism and textualism in relation to Supreme Court dictionary usage. That relationship is, after all, something like conventional wisdom among scholars drawing from anecdotal observation, and N-Gram data supports this relationship.

Despite the statistical trends related to originalism, textualism, and dictionary use, it is impossible to draw any firm causative conclusions from what can only be, at best, suggestive correlations. However, the comprehensive dataset offers us another avenue of inquiry—circuit courts. If circuit courts experienced a similar increase in dictionary usage over time, in line with the increasing popularity of originalism and textualism, then the resulting pattern would bolster an inference that trends in jurisprudential ideology drove the increase in dictionary usage.

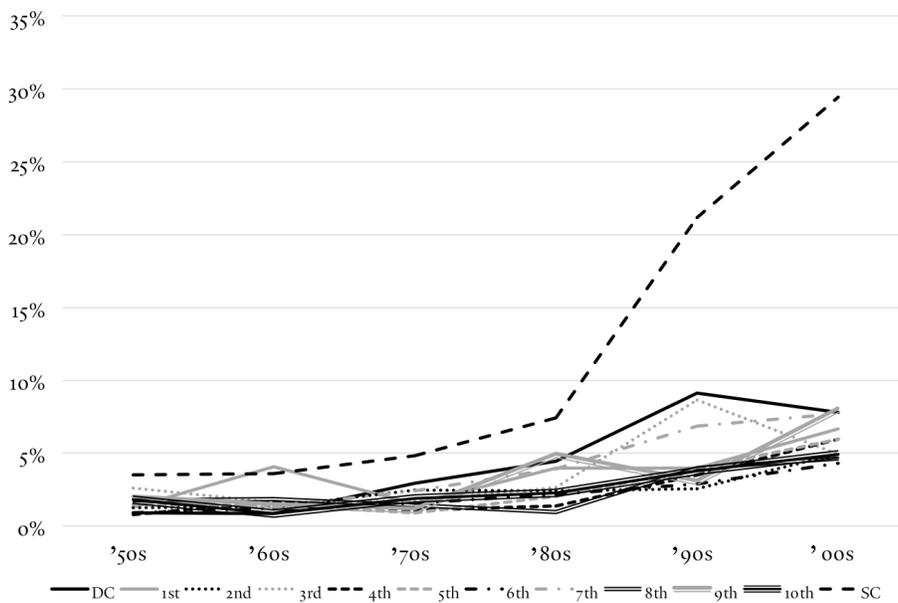
*C. Circuit Courts’ Relatively Low Dictionary Citation Rates, 1950-2010*

Comparing circuit court and Supreme Court dictionary usage rates reveals how much more often the Supreme Court cites dictionaries<sup>41</sup>:

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41. The trend line for the Eleventh Circuit is not shown because it spans only the period from the early 1980s to 2010 and falls within the cluttered area on the graph with the nine heavily clustered circuits. It is nonetheless clear that the Eleventh Circuit is no outlier.

**Figure 3.**  
**SUPREME COURT AND CIRCUIT COURT DICTIONARY CITATION RATES, 1950-2010**



Although the circuit courts slightly increased dictionary usage over time (the net trend line runs from approximately two percent in 1950 to seven percent in 2010), the Supreme Court—represented by the dashed line—dramatically increased its dictionary usage over the same period. In fact, the rapid 1985 to 2010 increase in dictionary usage by the Supreme Court renders a trend line for Figure 3 uninformative. What looked like a comparable increase at the circuit court level was merely generated by an inconsistent y-axis.

In order for the increase in circuit court usage rates to support the inference that trends in jurisprudential ideology drive dictionary usage, one must explain why the Supreme Court's dictionary usage has increased so much more dramatically than any circuit court's—and the explanation must be consistent with the influence of jurisprudential ideology. One popular explanation is that, whereas originalism and textualism influenced all judges across all circuit courts and the Supreme Court, the x-factor for dictionary usage at the Supreme Court is the presence of noted textualist Justice Scalia.

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SUPREME COURT AND CIRCUIT COURT DICTIONARY USE

*D. Parsing the Influence of Justice Scalia*

*1. Justice Scalia's Individual Dictionary Citation Rate*

One can make two claims about the relationship between Justice Scalia's dictionary usage practices and the Supreme Court's overall dictionary usage rates. The less nuanced understanding of the rise in dictionary usage by the Supreme Court is that Justice Scalia drove up Court-wide dictionary usage numbers upon his arrival in 1986 simply by relying on the dictionary far more often than anyone had before.

This statement, however, is false. Figure 4 makes this clear:<sup>42</sup>

**Figure 4.**  
**SUPREME COURT JUSTICES' DICTIONARY CITATION RATES, 1976-2010**

YEAR	SCALIA	STEVENS	SOUTER	THOMAS	GINSBURG
'76-'80		4%			
'81-'85		6%			
'86-'90	17%	11%			
'91-'95	21%	14%	25%	28%	19%
'96-'00	26%	20%	20%	25%	17%
'01-'05	21%	20%	23%	24%	19%
'06-'10	39%	32%	28%	37%	24%

YEAR	O'CONNOR	KENNEDY	BREYER	ALITO	ROBERTS	SOTOMAYOR
'76-'80						
'81-'85	6%					
'86-'90	13%	12%				
'91-'95	19%	27%				
'96-'00	30%	22%	20%			
'01-'05	19%	26%	20%			
'06-'10		36%	34%	34%	33%	36%

42. Data is aggregated as five-year blocks for presentational concision; the leading dictionary user per period is highlighted.

For most of his tenure on the Court, Justice Scalia did not cite dictionaries the most frequently of any Justice. In many periods Justices Thomas, O'Connor, and Kennedy surpassed Justice Scalia. The bottom line is that Justice Scalia's individual use of dictionaries is not an outlier. The phenomenal increase in Supreme Court dictionary usage may have occurred after Justice Scalia acceded to the Court, but the data show an increase in dictionary usage across many Justices.

It is also worth noting the relatively modest increases in dictionary usage of Justices Ginsburg and Souter. These two findings contradict Brudney and Baum's claim that Justice Souter, a relatively liberal judge, is actually one of the most frequent dictionary users on the Court.<sup>43</sup> It turns out that if one looks to all areas of law, as well as to dissenting and concurring opinions and not only majority opinions, then Justice Souter is a relatively infrequent citer of dictionaries. Furthermore, the chart above qualifies Kirchmeier and Thumma's claim that Justices Scalia and Thomas have become the paramount citers of dictionaries on the Court since 2000<sup>44</sup>—Justices Kennedy and Sotomayor have cited dictionaries more or less as frequently as the two leading textualists on the Court have. It is worth noting that the chart supports Kirchmeier and Thumma's claim that Justice Souter is a relatively frequent citer of dictionaries.

## 2. *Justice Scalia's Persuasive Role*

The relatively bold statement of Justice Scalia's responsibility for the increase in dictionary usage does not withstand empirical scrutiny. However, there is a second, more nuanced case to make—that Justice Scalia's well-known interpretive preferences have prompted his colleagues to shy away from citing legislative history<sup>45</sup> and instead to adopt dictionary citation as an interpretive, or at least argumentative, method. The best case for this statement draws on two time-stamped graphs. First, here is a time-stamped graph of Supreme Court dictionary usage rates:

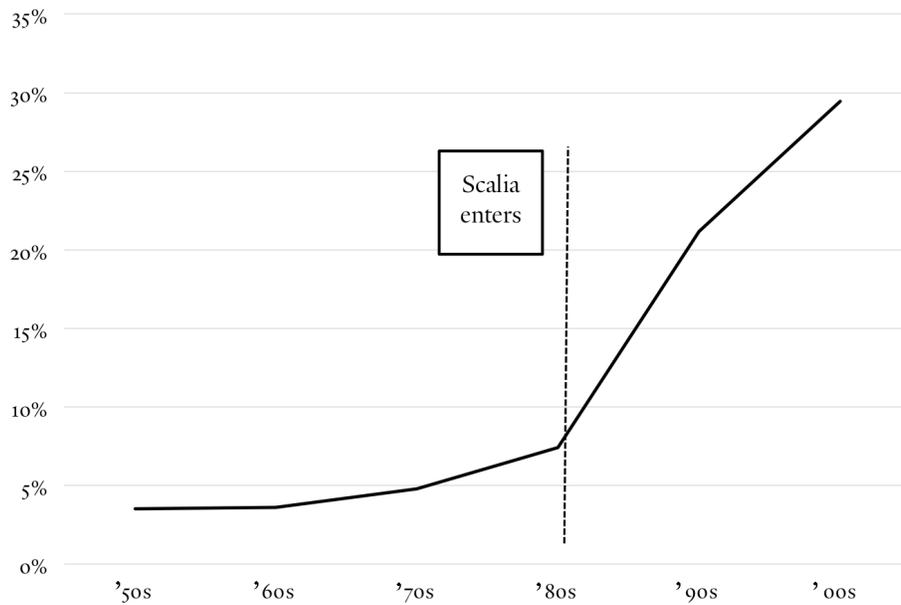
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43. Brudney & Baum, *supra* note 8, at 489.

44. Kirchmeier & Thumma, *supra* note 25, at 84-85.

45. Some scholars have suggested that Justice Scalia is particularly adept at convincing his colleagues to adopt his interpretive methods. See, e.g., James J. Brudney & Corey Ditslear, *Liberal Justices' Reliance on Legislative History: Principle, Strategy, and the Scalia Effect*, 29 BERKELEY J. EMP. & LAB. L. 117, 161-67 (2008).

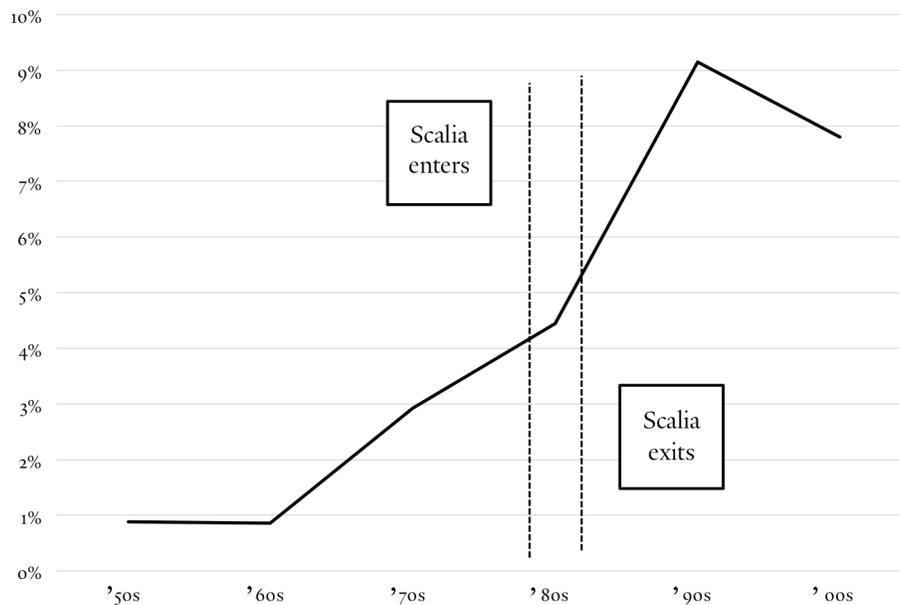
**Figure 5.**  
SUPREME COURT DICTIONARY CITATION RATE, 1950-2010



The vertical line represents Justice Scalia's accession to the Supreme Court for the 1986 Term. As is quite clear, the Supreme Court's dictionary usage increased markedly after Justice Scalia's arrival.

Lest one forget the dangers of *post hoc ergo propter hoc*, or one feel tempted to dismiss quickly this one data point as far less relevant than the increase in popularity of originalism and textualism demonstrated above, examine this graph of the D.C. Circuit's dictionary usage over time. Note that Justice Scalia joined the D.C. Circuit in August 1982 and departed in September 1986:

**Figure 6.**  
D.C. CIRCUIT DICTIONARY CITATION RATE, 1950-2010



Justice Scalia's tenure on the D.C. Circuit coincides with the transition from a modest to a rather rapid growth rate in the D.C. Circuit's dictionary usage.

It is possible that the observed correlation between Justice Scalia's arrival on a court and the increase in the rate of dictionary usage is merely coincidental. The best argument in this vein is that Justice Scalia may simply have had the good fortune to join both courts at just the right time, as the increasing influence of originalism and textualism, or some other factor, rendered Justice Scalia's colleagues more favorable to his preferred interpretive methods and resources. However, there is no denying that the relationships observed in Figures 5 and 6 suggest to some extent that Justice Scalia's presence on a federal appellate court might lead his colleagues to increase their use of dictionary citations.

It is not hard to theorize this trend. Justice Scalia is an aggressive and outspoken proponent of his beliefs.<sup>46</sup> Court observers have commented that Justice Scalia is unusually pugnacious in his written criticisms of his

46. Justice Scalia often does not mince words, especially in dissent. *See, e.g., Lee v. Weisman*, 505 U.S. 577, 637-38 (1992) (Scalia, J., dissenting) (describing the majority's argument as "nothing short of ludicrous" and "beyond the absurd"); *Austin v. Mich. Chamber of Commerce*, 494 U.S. 652, 685 (1990) (Scalia, J., dissenting) (describing a part of the majority opinion as "entirely irrational").

colleagues.<sup>47</sup> Perhaps his charisma, intellectual aggression, and force of personality lead his colleagues to bolster their arguments with data that minimize the chance that Justice Scalia will criticize them. A good way to accomplish this goal is to cite dictionaries when interpreting statutes. In other words, attributing some meaningful influence to Justice Scalia stems from more than just correlation; there may be an intelligible theory underlying the correlation.

### 3. *In Summary*

What we have teased out thus far is that from the 1980s the Supreme Court grew much fonder of dictionary usage than did any of the circuit courts. One possible explanation for the rise in Supreme Court dictionary usage is that both originalism and textualism gained major intellectual currency around the same time, and this influenced Justices to adopt more textualist-friendly interpretive practices, such as dictionary citation. Yet this raises the question of why originalism and textualism would seem to influence Supreme Court Justices so much more than circuit court judges. Justice Scalia's ascension to the Supreme Court likely plays at least a modest role in explaining this distinction.

However, before resting too quickly on a partial explanation, one must search for confounding or supplementary data. It seems quite plausible that the differing dictionary citation rates of the Supreme Court and the circuit courts have less to do with individual personalities of judges, and more to do with other differences between the Supreme Court and circuit levels, such as the especially acute politicization of the Supreme Court, differing dockets, and other factors discussed below.

#### *E. The Effects of Acceding to the Supreme Court upon Former Circuit Court Judges*

One promising way to determine whether the unique work of Justices leads to higher dictionary citation rates is to look at how current Justices used dictionaries during their time as circuit court judges. This innovative analytical method might reveal some useful data for making sense of the relatively dramatic increase in Supreme Court dictionary usage rates. After all, controlling by judge helps control for a substantial number of confounding variables.

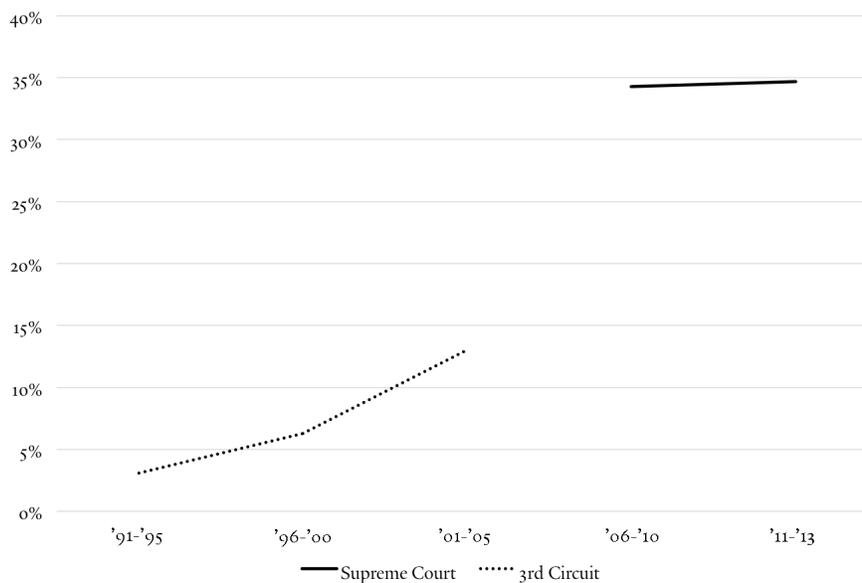
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47. See, e.g., Erwin Chemerinsky, *The Jurisprudence of Justice Scalia: A Critical Appraisal*, 22 U. HAW. L. REV. 385, 385 (2000) (decrying the "meanness" of Justice Scalia's "judicial rhetoric").

Fortunately, most of today's Supreme Court Justices formerly served as circuit court judges. Looking at how each of these Justices used dictionaries before acceding to the Supreme Court will in large part (though not entirely) control for judges' practices and long-held ideologies. Therefore, I used my database to determine the dictionary citation rate for each Supreme Court Justice.

The results of this particular investigation are pronounced and consistent across every Justice with three or more years of circuit court experience<sup>48</sup>:

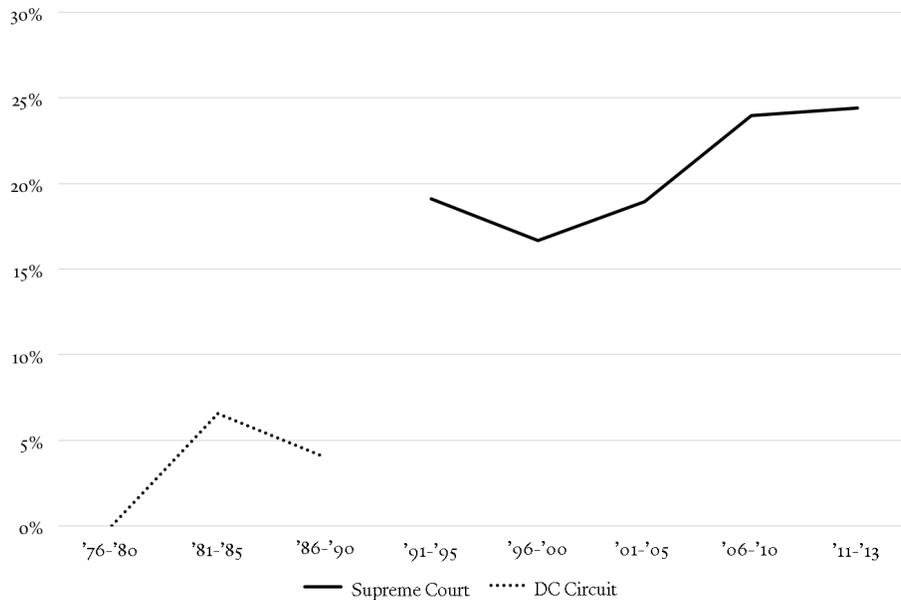
**Figure 7.**  
JUSTICE ALITO'S DICTIONARY CITATION RATE ACROSS THIRD CIRCUIT AND SUPREME COURT, 1991-2013



Justice Alito—now the most frequent user of dictionaries on the Supreme Court—used dictionaries relatively sparingly as a Third Circuit judge.

48. Justices Thomas and Roberts did not serve long enough on the D.C. Circuit (approximately one year and two years, respectively) to provide sufficiently robust data to warrant inclusion here. See *Biographies of Current Justices of the Supreme Court*, SUPREME COURT OF THE U.S., <http://www.supremecourt.gov/about/biographies.aspx> [<http://perma.cc/W2PE-7FUM>]. All the other current Justices who served substantial stints on circuit courts follow the patterns observed below: Justice Sotomayor's average termly dictionary citation rate is thirty-six percent, whereas her rate on the Second Circuit was only eleven percent; Justice Breyer's equivalent rate is twenty-six percent and his First Circuit rate only four percent; Justice Kennedy's equivalent rate is twenty-four percent, whereas his Ninth Circuit rate is only two percent.

**Figure 8.**  
**JUSTICE GINSBURG’S DICTIONARY CITATION RATE ACROSS D.C. CIRCUIT AND SUPREME COURT, 1976-2013**



Even Justice Ginsburg, who uses dictionaries the least frequently of any current Supreme Court Justice, began using dictionaries far more often once she joined the Supreme Court.

The same general pattern holds for all the other Supreme Court Justices who served for at least three years as circuit court judges, including Justice Stevens,<sup>49</sup> who acceded to the Court before the rapid increase in dictionary citation rates began in the 1980s.

Notably, Justice Scalia also substantially increased his dictionary usage upon his accession to the Court. During his relatively brief tenure on the D.C. Circuit, he cited dictionaries in only four percent of his opinions. Over the

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49. Justice Stevens’s dictionary citation rate during his five years on the Seventh Circuit (1970 to 1975) averaged 2.7%. Thus, while Justice Stevens’s dictionary citation rate rose upon his accession to the Supreme Court, it did not have room to rise dramatically. One should therefore interpret this result with some caution. Nonetheless, the fact that Justice Scalia’s own dictionary citation rate rose so dramatically upon *his* accession to the Supreme Court strongly suggests that the observed rise in citation rates for Justice Ginsburg, Justice Alito, and the other Justices likely has much to do with something about the institutional dynamics of the Court, rather than Justice Scalia’s influence alone.

course of his first five years on the Supreme Court, he cited dictionaries in seventeen percent of his opinions – and the percentage increased over time.

Given the consistency of the trend observed above, it seems likely that, while the persuasive power of Justice Scalia may play some role in the pronounced increase in Supreme Court dictionary usage rates vis-à-vis circuit courts, there is something more foundational going on than just the presence of Justice Scalia (or lack thereof). It is hard to imagine that Justice Scalia's persuasive power, to the extent it exists, could work so quickly and efficiently as to account for the trends we see in the two graphs above.

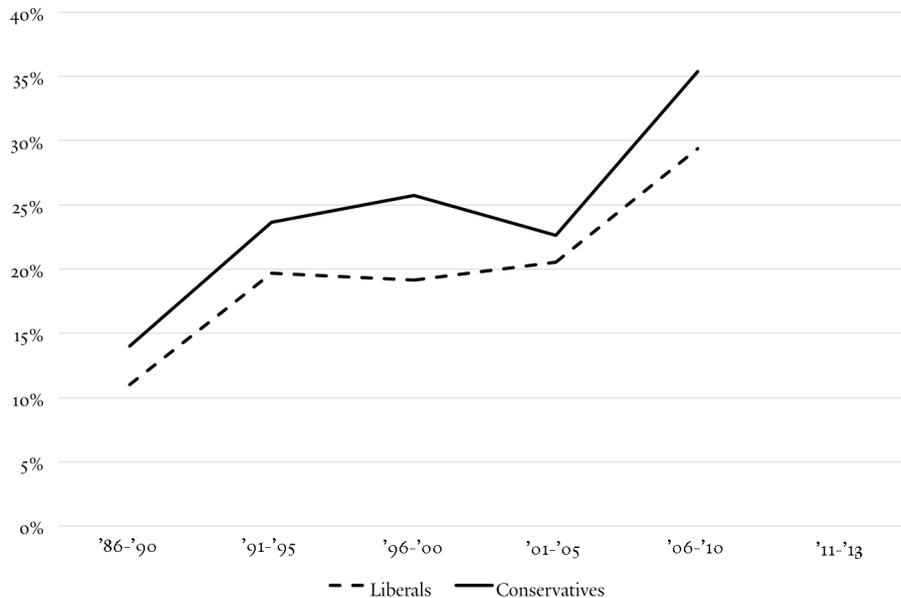
*F. The Weakness of the Liberal/Conservative Distinction*

Part II.E demonstrates that there seems to be something other than interpersonal relations among the Justices that explains at least a large portion of the unique frequency with which Supreme Court Justices rely on dictionaries to support their interpretive arguments. In addition to the persuasive power of Justice Scalia, which likely plays only a small role, what might those additional factors be?

A popular explanation is the changing jurisprudential ideology of Supreme Court Justices over time. Perhaps there are more judicial conservatives, who are much more often fond of textualism (and thus fond of dictionaries), on the Supreme Court than on the circuit courts. Not only would that explain the Supreme Court's relatively high dictionary citation rate compared to circuit courts, it might also explain the Supreme Court's increasing rate itself— as a result of the increased number of textualist judges, the Supreme Court's overall dictionary citation rate may have increased.

To explore this theory, I conducted a Google Scholar search for all the Justices of the Supreme Court from 1986 to 2010 and categorized the Justices as liberal or conservative depending on how often law review articles, legal blogs, and legal books described each Justice as either liberal or conservative. I excluded from the data Justice Sandra Day O'Connor, whose liberal/conservative breakdown was close enough to raise doubts about her proper classification. I then compiled the dictionary usage rates of all the liberal Justices and all the conservative Justices to produce the following graph:

**Figure 9.**  
**DICTIONARY CITATION RATES FOR LIBERAL AND CONSERVATIVE JUSTICES, 1986-2013**



At any given point in time, the correlation differential between the overall Supreme Court rate and the liberal and conservative rates, respectively, seems modest but far from negligible. This runs contrary to Brudney and Baum’s finding, which was that the relationship was weak or non-existent.<sup>50</sup> However, the data is insufficient as a basis for concluding that Supreme Court dictionary citation rates reflect merely the ascendancy of more textualist judges; the marked increase in dictionary citations from avowedly non-textualist judges explains an equally large part of the Court’s overall increase in dictionary usage. This different, more statistically robust finding is important for anyone interested in figuring out how to influence the rate of Supreme Court dictionary usage, insofar as it suggests that broader judicial ideology plays a moderate role in determining overall dictionary usage.

The observation that liberal and conservative jurists tend to cite dictionaries at comparable rates also seems to hold at the D.C. Circuit.<sup>51</sup> Unlike

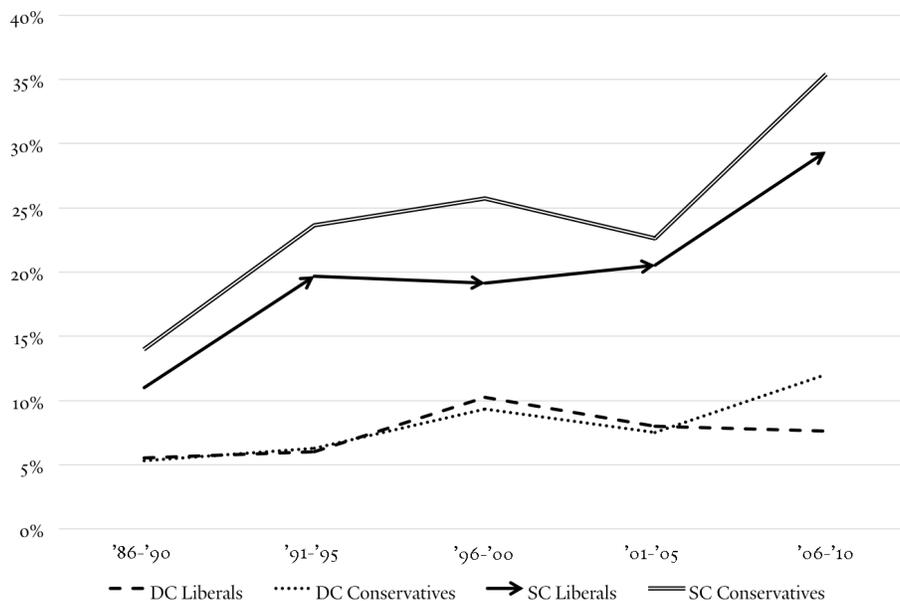
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50. For a representative statement, see Brudney & Baum, *supra* note 8, at 489: “[W]e found little apparent relationship between dictionary use and ideology in our dataset.”

51. I chose to examine the D.C. Circuit rather than alternative circuits because there was more N-Gram data on the political leanings of D.C. Circuit judges than any other circuit’s judges.

for the Supreme Court Justices, there is not enough discussion of the political leanings of all D.C. Circuit judges from 1986 to 2010 to use the same classification system that I used for the Supreme Court Justices. Therefore, whenever a D.C. Circuit judge had little to no N-Gram data with which to classify him or her, I classified the judge as liberal or conservative according to the party of the judge's nominating president. I also excluded from the data judges with senior status because senior judges often write too infrequently for citation-rate frequency percentages to be useful. The results are as follows, overlaid with the Supreme Court data from above:

**Figure 10.**  
PERCENTAGE OF OPINIONS WITH DICTIONARY CITATIONS, BY D.C. CIRCUIT AND SUPREME COURT JUSTICE IDEOLOGY, 1986-2013



As one sees, while there is some difference in how much more frequently conservative Justices cite dictionaries than do liberal Justices, the differences are not substantial, even when compared to the differing frequency with which liberal and conservative judges on the D.C. Circuit cite dictionaries. Indeed, the fact that liberal Supreme Court Justices cite dictionaries far more often than conservative D.C. Circuit judges suggests there is something unique about the Supreme Court that explains the Court's high dictionary citation rates.

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Compiling similar graphs for other circuit courts in order to conduct further tests of these findings is a fruitful area of further research.

Nonetheless, moderate correlation does not an explanation make. Furthermore, the graphs above make clear that while the claims about usage parity between liberals and conservatives are overstated, the rise in Supreme Court dictionary usage is not solely a story about the ascendancy of more conservative Justices to the Court. Liberals have also participated in the trend.

*G. Fears of Judicial Activism and the Increasing Reliance on “Objective” Data*

*1. Reactions by the Supreme Court*

Although previous scholarship has overstated the similarity in dictionary citation rates between liberal and conservative judges, one leading article seems to have put its finger on an institutional dynamic of the Supreme Court that might explain a substantial portion of the Court’s increased dictionary usage.

In their recent article, Brudney and Baum speculate that the rise in the use of dictionaries by the Supreme Court “may well reflect the Court’s search for an oasis from which to deflect or rebut charges of judicial activism.”<sup>52</sup> The period in time shortly before the most precipitous rise in Supreme Court dictionary usage featured an unusually high number of congressional overrides of Supreme Court decisions.<sup>53</sup> Perhaps Supreme Court Justices feared the perception that they were too activist. Dictionaries provide a veneer of objectivity that Justices may have felt they needed to quell institutionally damaging charges of legislating from the bench. This theory may also explain the difference between Supreme Court and circuit court dictionary usage rates – circuit courts are subject to much less public scrutiny than the Supreme Court.

Google N-Gram once again offers a compelling way to estimate the frequency over time of charges of judicial activism. The results of a Google N-Gram search for “judicial activism” are below. It is worth noting that, unlike textualism and originalism, the idea of judicial activism seems to have entered the marketplace of ideas as a loaded, negative concept. Describing the practice of a judge who legislates from the bench as opposed to one who faithfully applies the law,<sup>54</sup> N-Gram data suggest the phrase first appeared around 1953, at the beginning of the Warren Court. While one must interpret the N-Gram data with the same caution discussed above, the frequency with which judicial activism appears is a less complicated measurement of its normative currency

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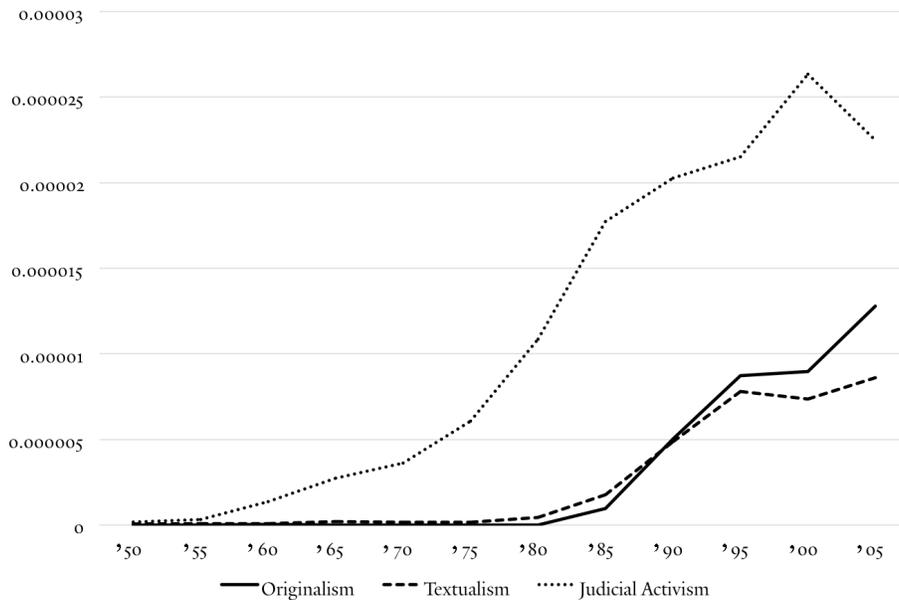
52. Brudney & Baum, *supra* note 8, at 490.

53. *Id.* at 499-500.

54. *Judicial Activism*, ENCYCLOPEDIA BRITANNICA, <http://www.britannica.com/EBchecked/topic/1676694/judicial-activism> [<http://perma.cc/G4LF-HM2Q>].

than is the frequency of either textualism or originalism. In order to help interpret the y-axis properly, I have included textualism and originalism as well:

**Figure 11.**  
GOOGLE N-GRAM DATA, “JUDICIAL ACTIVISM,” “ORIGINALISM,” AND  
“TEXTUALISM,” 1950-2010



The graph supports the conclusion that charges of judicial activism drove Supreme Court dictionary usage more than did the influence of originalism, textualism, or Justice Scalia.

Yet one cannot entirely disentangle the rise of fears of judicial activism from the rise of originalism and textualism in the post-Warren Court era. Textualism and originalism developed in part in response to discomfort with the perceived excesses of the Warren Court.<sup>55</sup> Textualists recommend textualism because it respects the law-making prerogative of legislatures, in

55. Many scholars have observed and analyzed the connection between conservative dissatisfaction with the Warren Court and the rise of originalism and textualism. See, e.g., Jonathan T. Molot, *The Rise and Fall of Textualism*, 106 COLUM. L. REV. 1, 25 (2006) (characterizing textualism as a “multipronged backlash against what was perceived to be a liberal and activist Warren Court era”); Keith E. Whittington, *The New Originalism*, 2 GEO. J.L. & PUB. POL’Y 599, 599 (2004) (tracing the development of originalism in the 1980s to politicians’ and legal academics’ desire to combat the Warren Court’s “rights revolution”).

contrast to the “activism” of liberal theories of jurisprudence that reigned during the 1950s and 1960s.<sup>56</sup>

It is not hard to surmise why the judicial activist charge might have led the Supreme Court, but not the circuit courts, to increase its use of dictionaries. The Supreme Court is substantially better known and more closely scrutinized than are the circuit courts. In fact, one critique of the public’s perception of the federal court system is that the public underestimates the influence and power of the circuit courts.<sup>57</sup>

A Google N-Gram search confirms that the Supreme Court receives more charges of activism than do the circuit courts (individually and combined). Phrases like “activist Supreme Court,” “Supreme Court activism,” and “activist Justices” have all increased in popularity since 1970. Authors rarely or never use phrases like “activist circuit court” or “circuit court activism.”

Overall, there seems to be a good case that charges of judicial activism may have driven Supreme Court Justices to shroud their opinions in the seeming legitimacy conferred by dictionary citations. Circuit court judges may have felt this effect less strongly.

## 2. *Reactions by Circuit Courts*

If the Supreme Court’s massive increase in dictionary usage seems in part driven by fears of judicial activism, and a concomitant desire to appeal to authorities commonly perceived as objective, then what explains the more modest rise in circuit court dictionary usage?

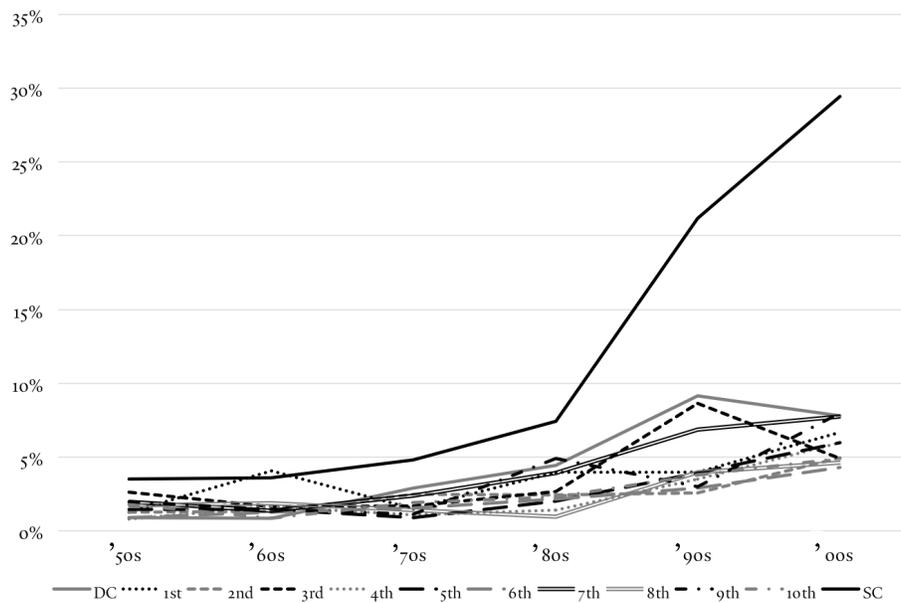
The similarities between Figure 11 and the following graph charting Supreme Court and circuit court dictionary usage rates are striking:

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56. Thomas W. Merrill, *Faithful Agent, Integrative, and Welfarist Interpretation*, 14 LEWIS & CLARK L. REV. 1565, 1596 (2010) (“Textualism is regarded by its proponents as a type of faithful agent theory. It seeks to ascertain the instructions of the enacting body by asking what an ordinary reader would understand the text to mean, taking into account the context in which the words are used.” (citations omitted)).

57. Both legal scholars and informed lay observers air this critique. *See, e.g.*, Frank B. Cross, *Decisionmaking in the U.S. Circuit Courts of Appeals*, 91 CALIF. L. REV. 1457, 1459 (2003) (“Although decisions of the U.S. Supreme Court are preeminent, circuit court decisions are far more numerous and of far greater practical significance.”).

**Figure 12.**  
**SUPREME COURT AND CIRCUIT COURT DICTIONARY CITATION RATES, 1950-2010**



As a year-on-year increase, the rise of dictionary usage in the circuit courts closely tracks the increasing popularity over time of textualism and originalism. As discussed earlier, there is good reason to believe that circuit court judges did not worry as much about charges of judicial activism. Therefore, social and intellectual pressures on circuit courts, insofar as these pressures drove increases in dictionary usage across those courts, likely consisted of the knock-on effects of the rise of textualism and originalism. Fears of institutional illegitimacy from charges of judicial activism likely played an insignificant role (or, only to the extent that fears of judicial activism fed the rise of textualism and originalism more broadly). Instead, the ascendancy of textualist-friendly judges to circuit courts, and the broader intellectual impact of the rise of textualism as a more credible jurisprudential ideology, may explain some of the overall rise in circuit court dictionary usage.

### 3. *In Summary*

What we have learned thus far is that the Supreme Court, from the 1980s, began to cite dictionaries at a substantially higher rate than any of the circuit courts did. One reason behind this rise might be that the rising popularity of originalism and textualism convinced judges to use seemingly objective data like dictionary definitions more frequently. However, that explanation raises

the question of why the increasingly originalist/textualist legal climate did not affect circuit court judges equally. Justice Scalia's presence on the Court likely plays at least some role in driving that distinction.

Although there is surely something about the work of the Supreme Court that explains at least some of the difference between the Supreme Court and circuit courts, the question of exactly what kind of factors are at work has been harder to answer. Charges of judicial activism and the persuasive power of Justice Scalia likely each play a role, whereas the liberal/conservative distinction among the Supreme Court Justices seems not to do so.

There is, finally, another possible explanation for both the relative difference in dictionary usage trends between the Supreme Court and the circuit courts, as well as the individual performance of each circuit court: the docket.

*H. The Percentage of Criminal Law Cases as a Predictor of Supreme Court and D.C. Circuit Dictionary Usage Rates*

Different areas of law are more or less ripe for dictionary analysis. In their study of Supreme Court dictionary citation in cases related to criminal, business and commercial, and labor and employment law, Brudney and Baum found that Justices now cite dictionaries most often in criminal law cases (38.3% of majority opinions between 2005 and 2010)—and by a wide margin (12.4% more than in business and commercial law cases; 19.2% more than in labor and employment law cases).<sup>58</sup>

There are a number of possible explanations for this disparity. One theory is that when judges dole out criminal sanctions, which may involve imprisonment, they apply particularly stringent notice requirements before concluding that defendants knowingly violated the law.<sup>59</sup> As a result, judges in criminal cases might rely more on lay understandings of particular words in statutes, and therefore concern themselves more with the ordinary meaning of words.<sup>60</sup> Another possible explanation is that, since many criminal defendants

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58. See Brudney & Baum, *supra* note 8, at 496 fig.1.

59. *Lambert v. California*, 355 U.S. 225, 228 (1957) (“[D]ue process places some limits on its exercise. Engrained in our concept of due process is the requirement of notice. Notice is sometimes essential so that the citizen has the chance to defend charges. Notice is required before property interests are disturbed, before assessments are made, before penalties are assessed. Notice is required in a myriad of situations where a penalty or forfeiture might be suffered for mere failure to act.”).

60. For one discussion of this theory, see Lawrence M. Solan, *Law, Language, and Lenity*, 40 WM. & MARY L. REV. 57, 94 (1998).

are relatively poor and undereducated,<sup>61</sup> judges are less likely to assume that criminal defendants have a sophisticated understanding of statutory terminology. Consequently, judges may refuse to read more than the common, ordinary meaning into any term in a criminal statute.

Given the high stakes of using dictionaries to interpret criminal statutes, there is much to gain by trying to understand whether perhaps the frequency with which courts face criminal law questions might affect courts' overall dictionary citation rates. After all, there is no reason to believe that, over time, the frequency with which courts address certain areas of law remains fixed year-to-year. In the following two subsections, I look at whether the frequency of criminal law cases—and research shows that these are the cases most likely to generate dictionary citations<sup>62</sup>—before the Supreme Court and the D.C. Circuit explains the upward trend of the courts' respective overall dictionary citation rates.

### 1. *Supreme Court*

Brudney and Baum showed that today's Justices, for example, are three times more likely to cite a dictionary in criminal law cases than the Justices were in 1986.<sup>63</sup> Brudney and Baum did not examine whether the Supreme Court now addresses more criminal law cases as a percentage of its total docket than it did in the past. Yet their finding that Justices cite dictionaries especially frequently when deciding criminal law cases would suggest that the percentage of the Court's docket consumed by criminal law is a good predictor of the Court's dictionary citation rate.<sup>64</sup> Fortunately, we can answer this question by reference to the comprehensive database. Is it possible that part of what has driven the Supreme Court's dictionary usage rate so high is that the Court has decided more criminal law cases over the past twenty-five years?

The two charts below provide a partial answer to this question. The chart on the left tracks the percentage of the Supreme Court's docket that concerned criminal law from 1950 to 2010. The chart on the right tracks the percentage of

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61. See Erica J. Hashimoto, *Class Matters*, 101 J. CRIM. L. & CRIMINOLOGY 31, 55-64 (2011) (discussing a range of alarming statistics about the low incomes and educational attainment levels of most criminal defendants).

62. Brudney & Baum, *supra* note 8, at 496. Like Brudney and Baum, I chose criminal law cases that substantially implicate statutes listed under Title 18 of the U.S. Code.

63. *Id.* I independently verified the statistics for the rise in the criminal law dictionary citation rate and arrived at the same percentages from 1986 to 2010 that Brudney and Baum discovered.

64. *Id.* at 541.

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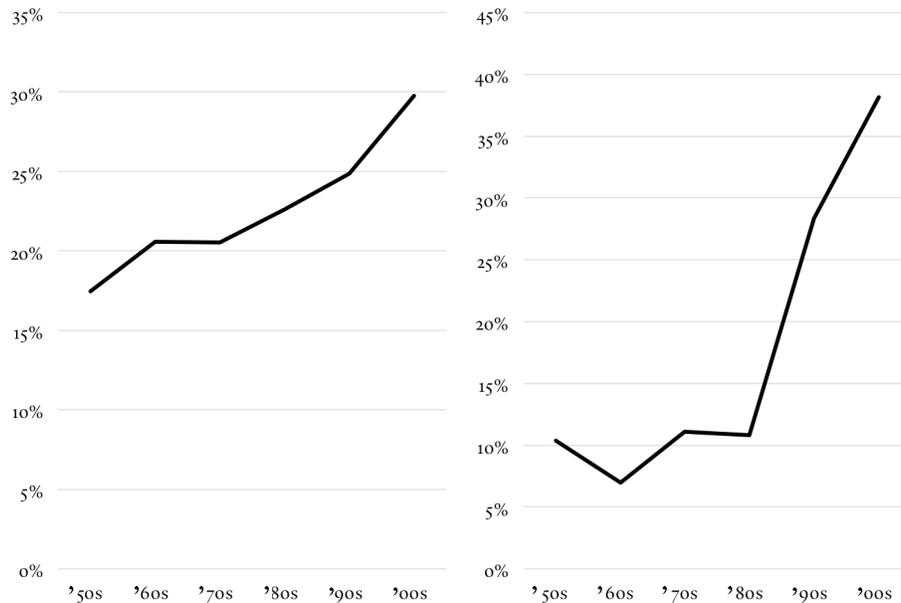
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SUPREME COURT AND CIRCUIT COURT DICTIONARY USE

criminal law cases each term that included a citation to a dictionary in order to support a substantive argument:

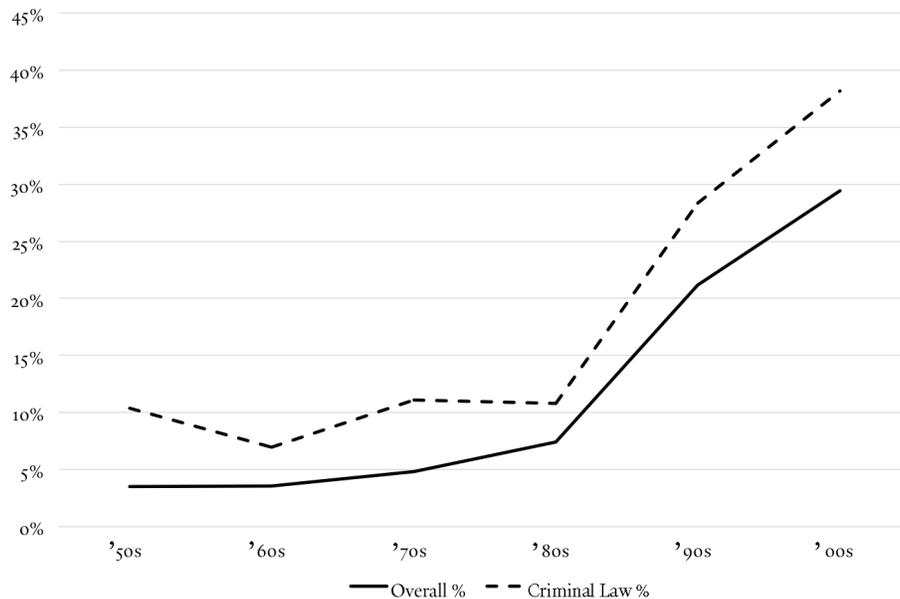
**Figure 13 (A & B).**

**(A) PERCENTAGE OF SUPREME COURT'S DOCKET DEDICATED TO CRIMINAL LAW CASES, 1950-2010; (B) PERCENTAGE OF SUPREME COURT CRIMINAL LAW CASES FEATURING AT LEAST ONE DICTIONARY CITATION, 1950-2010**



The percentage of the Supreme Court's docket each term that concerns criminal law has increased modestly over the past sixty years (from seventeen percent to thirty percent). Meanwhile, the percentage of criminal law cases that include at least one substantive citation to a dictionary has increased markedly since 1985 (from eleven percent to thirty-eight percent). This increase is almost exactly contemporaneous with the Supreme Court's overall increase in dictionary usage. Given the substantial portion of the Court's attention that is devoted to criminal law, as well as the high dictionary citation rate in criminal law cases, it may come as no surprise that criminal law cases have helped to increase the Court's overall dictionary citation rate:

**Figure 14.**  
**OVERLAY OF OVERALL SUPREME COURT DICTIONARY CITATION RATE AND**  
**SUPREME COURT DICTIONARY CITATION RATE IN CRIMINAL LAW CASES, 1950-**  
**2010**



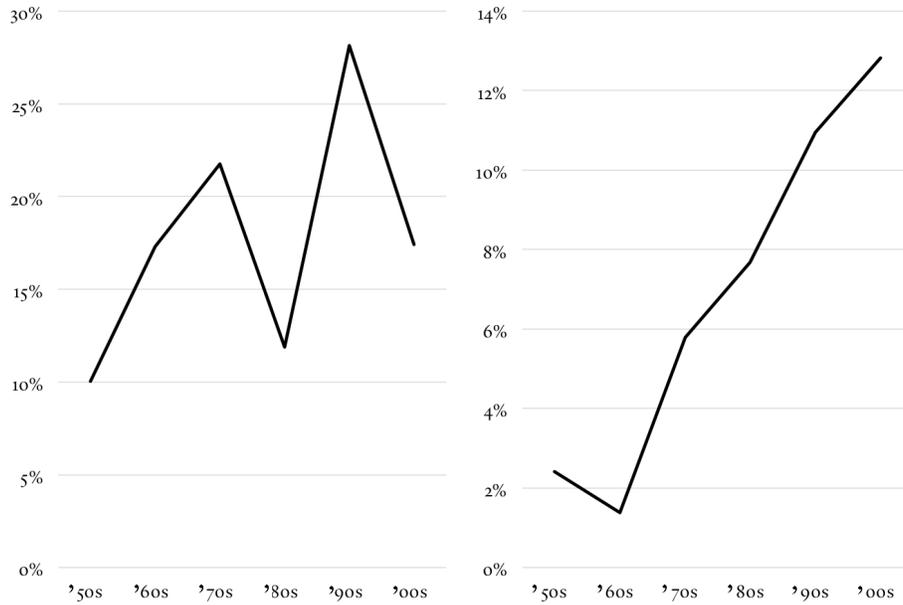
Nevertheless, given the results in Figure 13.A, it is impossible to attribute much of the rise in the Supreme Court's dictionary usage to the proportionally larger number of criminal law cases the Court rules on each term because the rate has increased too slowly. A better candidate is Figure 13.B, which shows a sharp increase in how often the Justices cite a dictionary in support of an argument about criminal law. However, Figure 13.B raises some of the issues with which this paper has wrestled, concerning the incompleteness of our understanding of institutional dynamics, notwithstanding the existence of some robust, yet partial, explanations.

## 2. *D.C. Circuit*

The percentage of the Supreme Court's docket dedicated each term to criminal law is a modest, positive predictor of the Court's dictionary usage. Does the same relationship apply to the D.C. Circuit? Of particular interest is whether a decrease in the percentage of criminal law cases that the D.C. Circuit has adjudicated since 1995 can explain the D.C. Circuit's curious decrease in dictionary usage from 1995 to 2010. The graphs below reproduce the side-by-side charts above for the Supreme Court for the D.C. Circuit:

**Figure 15 (A & B).**

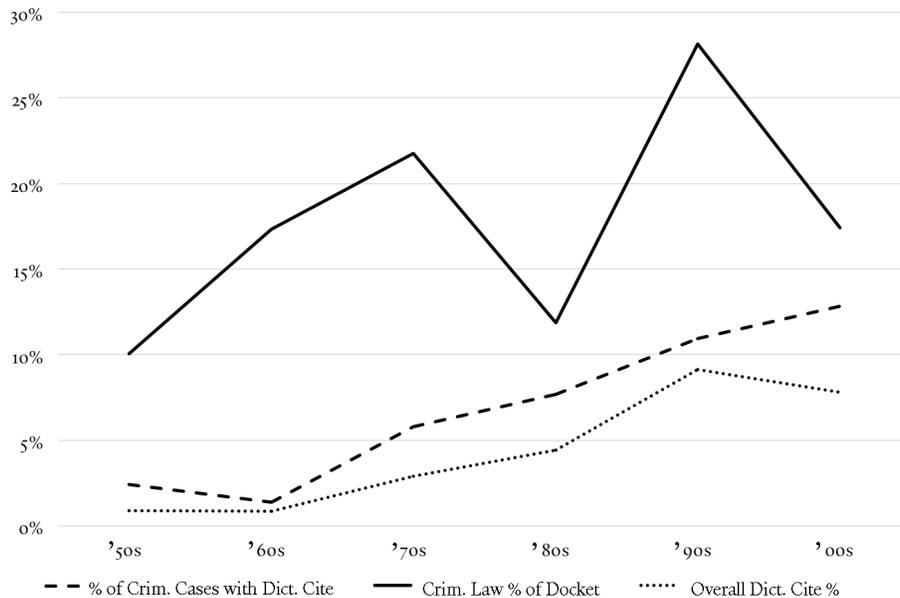
**(A) PERCENTAGE OF D.C. CIRCUIT’S DOCKET DEDICATED TO CRIMINAL LAW CASES, 1950-2010; (B) PERCENTAGE OF D.C. CIRCUIT COURT CRIMINAL LAW CASES FEATURING AT LEAST ONE DICTIONARY CITATION, 1950-2010**



At first glance, these charts bode well for the hypothesis that a decline in the number of criminal law cases caused the D.C. Circuit’s decline in dictionary citation rates after 1995. After all, the percentage of the D.C. Circuit docket concerning criminal law (Figure 15.A) falls a little more than ten percent beginning in 1994, which is around the same time the court’s overall dictionary citation rate declined.

However, the graph below helps make clear that the D.C. Circuit’s dictionary usage rate is only weakly related to the percentage of the court’s docket dedicated to criminal law:

**Figure 16.**  
**OVERLAY OF D.C. CIRCUIT'S OVERALL DICTIONARY CITATION RATE AND D.C.**  
**CIRCUIT'S DICTIONARY CITATION RATE IN CRIMINAL LAW CASES, 1950-2010**



One can see fairly clearly the modest relationship between the variables—specifically that major fluctuations in criminal law cases as a percentage of the docket do not correlate with particularly abrupt changes in the overall dictionary citation percentage. Unfortunately, while the percentage of the Supreme Court’s docket dedicated to criminal law can predict a modest yet noticeable amount of the Supreme Court’s overall citation rate, one cannot say the same for the D.C. Circuit. Of course, none of these calculations probes the even deeper question, pondered above, of why the Supreme Court’s absolute rates of dictionary citation are so much higher than those of the D.C. Circuit or any other circuit court. Answering that question requires exploring questions—about the personalities of D.C. Circuit judges, roster changes on the D.C. Circuit, etc.—that are beyond the scope of this Note.

Overall, the percentage of a court’s docket consumed each year by criminal law is variably predictive: the Supreme Court’s dictionary usage is better predicted by the relative frequency of criminal law cases in a given Term than is the D.C. Circuit’s dictionary usage (or the Ninth or Fifth Circuits<sup>65</sup>).

65. I present the Fifth and Ninth Circuit results in Appendix II.

## CONCLUSION

The preceding analysis suggests that one can likely explain much of the Supreme Court's uniquely high dictionary usage as a combination of: a) fears of decreased institutional legitimacy stemming from charges of judicial activism; b) the resulting and related rise of textualism and originalism; c) the persuasive force of Justice Scalia; and d) at the margin, an increasingly heavy load of criminal law cases. While these factors also explain a small portion of circuit courts' dictionary usage, it is much harder to explain specific trends within individual circuit courts.<sup>66</sup>

This Note provides a fox's understanding of dictionary use in the circuit courts and Supreme Court—an understanding of many different, partial contributing factors. There is no single unifying understanding befitting a hedgehog. But this Note offers more of an understanding than scholars have ever had before about federal appellate court dictionary usage.

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66. A promising area of further research might be that differing dictionary citation rates between the Supreme Court and circuit courts hinge on the length of Supreme Court opinions as opposed to circuit court opinions. This theory begins with the recognized fact that Supreme Court majority opinions have substantially increased in length since 1970, from a termly median of around 2,300 words in 1970 to 4,700 words in 2009. One might draw on this observation to theorize that, if circuit court opinions did not increase in length as substantially over the same period, perhaps the length of the opinions explains differences in dictionary citation rates.

However, aside from the fact that my early estimates found that circuit court opinion length also increased over the same period, such a theory runs a serious risk of ignoring a confounding variable—the sheer relative difficulty of the questions that the Supreme Court answers. Although it is impossible to code for the difficulty of a statutory interpretation question facing a Supreme Court or circuit court, the Supreme Court likely addresses, on average and at the median, more difficult legal questions than do the circuit courts. After all, in the majority of its cases, the Supreme Court addresses legal questions that split circuit courts. The Supreme Court rarely hears questions that circuit courts have answered decisively. Therefore, the Supreme Court might write longer opinions because a) difficult questions generate more dissent, which in turn requires majority opinion authors to spend more time addressing counterarguments; or b) difficult questions require more elaboration in order to build a convincing argument.

**APPENDIX I: LEGAL & GENERALIST DICTIONARIES**

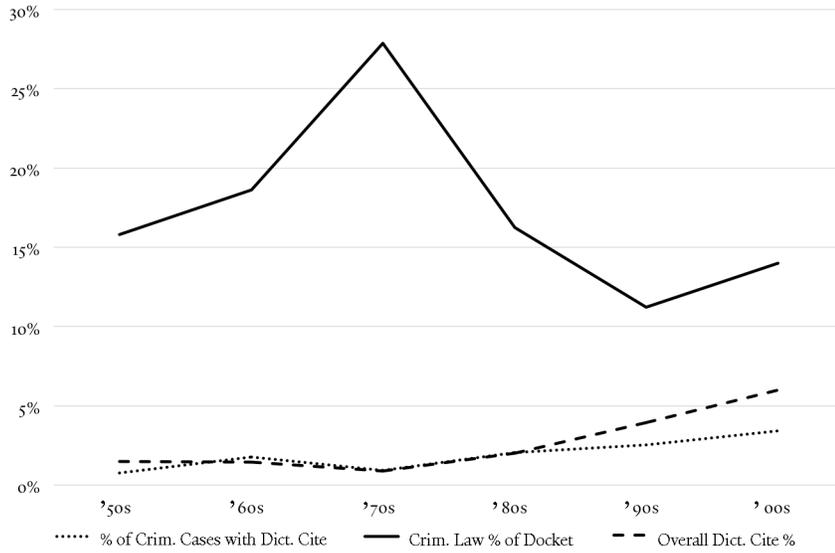
*For each dictionary, my search script covered all editions and years of publication.*

Abbott's  
W. Anderson's Dictionary of Law  
American College  
American Dictionary of the English Language  
American Heritage  
American Universities Unabridged  
Bailey's  
Ballentine's Law  
Barnhart Dictionary of Etymology  
Black's Law  
Blount's Law  
Bouvier's Law  
Brown's Law  
Burn's New Law  
Burrill's Law  
Cambridge Dictionary of American English  
Cassell's English  
Century  
Chambers  
Chambers Twentieth Century  
Chambers Dict. of Etymology  
Complete Dictionary of the English Language  
Cunningham's Law  
Dictionarium Britannicum  
Dictionary of American Slang  
Dictionary of the English Language  
General Dictionary of the English Language  
Imperial Dictionary  
Kersey's New English  
Linguae Britannicae  
Funk & Wagnalls Standard  
Funk & Wagnalls New Standard  
Funk & Wagnalls New Comprehensive  
Funk & Wagnalls Standard College  
Funk & Wagnalls Standard Dictionary of Folklore, Mythology & Legend

Johnson's Dictionary of the English Language/Johnson's Dictionary  
Merriam-Webster's  
Merriam-Webster's Collegiate  
McCulloch's Commercial  
Oxford English  
Oxford American/New American  
Concise Oxford Dict. of Current English  
Oxford Illustrated  
Shorter Oxford English/New Shorter  
Oxford Dictionary of English Etymology  
Oxford Universal  
Random House  
Richardson's New Dict. of the English Language  
Scriber-Bantam English  
Sheridan's Complete/General Dictionary of the English Language  
Standard Dictionary  
Stormonth's English  
Tolin's Law  
Tomlins' Law  
Walker's Critical Pronouncing Dictionary  
Webster's  
Webster's American  
Webster's Deluxe Unabridged  
Webster's Dictionary of Synonyms  
Webster's Handy College  
Webster's New & Revised  
Webster's International/Webster's New International  
Webster's Second New International ("Webster's Second")  
Webster's Third New International ("Webster's Third")  
Webster's Seventh New Collegiate  
Webster's Word Dict. of the American Language  
Worcester's  
World Book

**APPENDIX II: FIFTH & NINTH CIRCUIT CRIMINAL LAW FIGURES**

**Figure 17.**  
**FIFTH CIRCUIT'S OVERALL DICTIONARY CITATION RATE AND FIFTH CIRCUIT'S DICTIONARY CITATION RATE IN CRIMINAL LAW CASES, 1950-2010**



**Figure 18.**  
**NINTH CIRCUIT'S OVERALL DICTIONARY CITATION RATE AND NINTH CIRCUIT'S CITATION RATE IN CRIMINAL LAW CASES, 1950-2010**

