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The Dictionary as a Specialized Corpus

Jennifer L. Mascott*

Scholars consider reliance on dictionary definitions to be the antithesis of objective, big-data analysis of ordinary meaning. This Article contests that notion, arguing that when dictionaries are treated as a specialized database, or corpus, they provide invaluable textured understanding of a term. Words appear in dictionaries both as terms being defined and as terms defining other words. Examination of every reference to a contested term throughout a dictionary's definitional entries of other words may substantially benefit statutory and constitutional interpretation. Because dictionaries catalog language, their use as a specialized corpus provides invaluable insight into the ways a particular word is used in relation to terms throughout the English language. Such evidence provides a crucial interpretive launchpad, even for corpus-based researchers looking for a collection of possible word meanings to analyze in a database of ordinary-language documents.

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INTRODUCTION

Scholars have suggested that dictionary-based interpretive research may be the antithesis of broad-based, objective corpus linguistics analysis.¹ And done in its most traditional, and limited, manner, it is.

Corpus linguistics research involves researching the way a particular term is used in a big database² containing “a balance of different genres of texts” to acquire a “representative slice” of the term’s “usage and meaning.”³ The idea is that by studying the context of how a word is used in natural language the interpreter can acquire a more unbiased picture of “ordinary meaning”⁴ than by consulting dictionaries—written for the express purpose of inviting “linguistic scrutiny.”⁵ Giving excessive weight to a single dictionary definition may generate a conclusion about word meaning that is substantially less-informed than interpretive analysis employing a broad-based corpus.⁶

Despite these potential shortcomings of dictionary definitions used as isolated interpretive tools, this Article will explore how dictionaries used as a specialized corpus may supplement, and even benefit, traditional corpus linguistics research. Looking in just one

1. See, e.g., Stephen C. Mouritsen, *The Dictionary Is Not a Fortress: Definitional Fallacies and a Corpus-Based Approach to Plain Meaning*, 2010 BYU L. REV. 1915, 1915–16, 1951–55 (characterizing dictionaries as “inadequate objects of our devotion” and contrasting reliance on dictionary definitions with the use of more broad-based, empirical corpus linguistics techniques); James C. Phillips et al., *Corpus Linguistics & Original Public Meaning: A New Tool to Make Originalism More Empirical*, 126 YALE L.J.F. 21, 23–24 (2016) (contrasting the deficiencies of exclusive reliance on founding era dictionaries with the benefits of corpus linguistics analysis).

2. See Jennifer L. Mascott, *Who Are “Officers of the United States”?*, 70 STAN. L. REV. (forthcoming 2018) (manuscript at 9) (available at <https://ssrn.com/abstract=2918952>) (discussing Stephen C. Mouritsen, *Hard Cases and Hard Data: Assessing Corpus Linguistics as an Empirical Path to Plain Meaning*, 13 COLUM. SCI. & TECH. L. REV. 156, 161–62 (2011)).

3. Phillips et al., *supra* note 1, at 24.

4. See Mouritsen, *supra* note 1, at 1953–54 (suggesting that one way to assess a statutory term’s “ordinary meaning” is to identify “the ‘common usage’ of a statutory term,” which may be located “quantifiably through a linguistic methodology called corpus linguistics”).

5. *Id.* at 1954–55.

6. See Phillips et al., *supra* note 1, at 23–24.

dictionary at the meanings specifically assigned to a given term may very well provide a distortedly narrow understanding of the word. But what if dictionaries contain previously unmined interpretive data? Treating a dictionary as a mini corpus to examine how a particular term is used in the context of defining the dictionary's other terms can provide richness to the study of word meaning.⁷ Corpus linguistics interpretive methodology often involves searching in a database containing a wide variety of documents such as letters, newspapers, pamphlets, and speeches—representing the language usage of a large community.⁸ But a corpus may also be specialized, focusing just “on a particular linguistic community, such as a particular region, type of language user, or genre of language.”⁹ Dictionaries similarly could serve as one type of mini specialized corpus—searched as their own self-contained database containing definitions of words and utilizing those words in context to define other terms. Examination of each and every reference to a contested term throughout a dictionary's definitional entries of other words may substantially benefit constitutional and statutory interpretation. It could bring greater texture to one's understanding of a contested term to see how it is used to define other words throughout the breadth of the English language. This may help an interpreter uncover numerous permissible meanings of a term beyond those listed by the dictionary author in the definitional entries for the term itself.

Such an approach may benefit constitutional interpretation in particular. Linguistics scholars have shown that a legal interpreter's instinctive sense of the meaning of a term is not reliably consistent, even when the term arises in a contemporary statute using contemporary English.¹⁰ Certainly, in comparison, a twenty-first

7. See, e.g., Mascott, *supra* note 2, Section II.B.2 (utilizing Nathan Bailey's 1783 dictionary as a mini corpus as one resource to better understand the eighteenth-century meaning of the word “officer”).

8. See Phillips et al., *supra* note 1, at 25, 31.

9. *Id.* at 25 (observing, for example, that “a corpus created [just] of the debates on the federal Constitution would be a specialized corpus”).

10. See, e.g., Lawrence M. Solan & Tammy A. Gales, *Finding Ordinary Meaning in Law: The Judge, the Dictionary or the Corpus?* 2016 INT'L J. LEGAL DISCOURSE 253, <https://www.degruyter.com/downloadpdf/j/ijld.2016.1.issue-2/ijld-2016-0016/ijld-2016-0016.pdf> (describing research that shows “speakers of English are frequently unaware of the contextual layers of meaning that accompany words—connotative meaning that is shared by speakers of a language but is not recorded in dictionaries”).

century interpreter of the Constitution could not reliably claim to instinctively understand the terms in a 200-year-old document without additional study. Such an interpreter would need to gain basic familiarity with the historic English language. Canvassing how the relevant term was used to help define other words throughout a founding era English dictionary could be one tool to understand the potential wide range of meaning of that term in the distant past. Or it may help the interpreter to better discern how each of the dictionary's listed definitions for the word are more likely to be utilized in the context of explaining other, perhaps related, words.

That said, if using a dictionary as a mini corpus simply helps to give a little more context to an interpreter trying to choose from among multiple definitional options (i.e., the various senses) of a given term, is there any reason not to skip the dictionary and just head straight to a more broad-based corpus? Why devote any more time to a dictionary?

For starters, dictionaries serve as a kind of catalog of language.¹¹ They provide somewhat encyclopedic coverage of terms used throughout the English language and often attempt to present language in a way that is “representative of their times.”¹² Identifying evidence of the manner in which a particular word is used in relation to other terms throughout the entire range of the English language in the targeted, relatively concise, form of the dictionary¹³ may provide an excellent starting point for interpretation.

In Part I, this Article first will catalog in greater depth the potential downfalls that scholars have identified about overreliance on dictionary definitions in constitutional and statutory interpretation. Part I then will continue to explain how a more comprehensive review of a dictionary as a mini corpus escapes some of those pitfalls and in fact complements more traditional corpus linguistics analysis.

11. *But see* United States v. Costello, 666 F.3d 1040, 1043 (7th Cir. 2012) (quoting Judge Frank Easterbrook's description of a dictionary as a “historical catalog,” a description used by Judge Easterbrook and former Judge Richard Posner to contest the notion that dictionaries are a useful tool for statutory interpretation) (citing Frank H. Easterbrook, *Text, History, and Structure in Statutory Interpretation*, 17 HARV. J.L. & PUB. POL'Y 61, 67 (1994)).

12. Carey McIntosh, *Eighteenth-Century English Dictionaries and the Enlightenment*, 28 Y.B. ENG. STUD., 3, 3–4, 8–10 (1998) (noting also, however, some of the numerous problems with eighteenth-century dictionaries).

13. *See infra* notes 70, 93 and accompanying text.

For example, in working to flesh out the proper methodology for the use of corpus linguistics in constitutional interpretive research, Professor Lee Strang has suggested that a researcher should begin by canvassing the case law and legal scholarship to identify several possible meanings for the eighteenth-century constitutional term or phrase under review.¹⁴ He suggests the interpreter next should identify which of those meanings (or “senses”) is being utilized each time the term under review appears in the relevant corpus of documents that the researcher is studying.¹⁵ Professor Strang then suggests that empirical assessment of the frequency with which the corpus employs each potential meaning of the term may shed light on whether that particular definition in fact represents what the word most likely meant.¹⁶

In an article analyzing the eighteenth-century meaning of the term *commerce*, Professor Randy Barnett engaged in an approach similar to the method that Professor Strang describes.¹⁷ Professor Barnett examined every use of the word *commerce* from 1728–1800 in a well-known founding era newspaper¹⁸ to determine which of two definitions of *commerce* debated in Supreme Court opinions was more likely correct—a narrower meaning encompassing just “trading activity” or a broader meaning including both “manufacturing and agriculture.”¹⁹ The absence of even a single unambiguous use of the word *commerce* to describe manufacturing or agriculture provided evidence that the eighteenth-century word *commerce* most likely referred to just “trading activity.”²⁰

But what if a researcher has to answer a more open-ended question about a word’s meaning rather than a binary inquiry such as whether

14. Lee J. Strang, *How Big Data Can Increase Originalism’s Methodological Rigor: Using Corpus Linguistics to Reveal Original Language Conventions*, 50 U.C. DAVIS L. REV. 1181, 1207–08 (2017).

15. *See id.* at 1209 (describing aspects of a possible method for analyzing the corpus via a “stable of potential conventions” for the meaning of the term under review).

16. *See id.*

17. *See generally* Randy E. Barnett, *New Evidence of the Original Meaning of the Commerce Clause*, 55 ARK. L. REV. 847, 855, 858 (2003).

18. *See id.* at 856–57.

19. *See id.* at 848–49, 857–58 (quoting *United States v. Lopez*, 514 U.S. 549, 586 (1995) (Thomas, J., concurring)).

20. *See id.* at 850, 858–62.

the eighteenth-century meaning of *commerce* encompassed “manufacturing and agriculture”?²¹ And what if modern cases stray so far from a term’s possible eighteenth-century meaning that plugging those distorted meanings into an eighteenth-century corpus search would be useless or misleading?²²

In those cases, careful examination of how dictionaries from the relevant time period used the term in the context of defining other language might help the interpreter gain insight into a fuller, more accurate range of plausible meanings to bear in mind during the interpreter’s analysis of his corpus. The dictionary’s use of the relevant word as it defines terms across the entire range of language might give an interpreter a more informed understanding of the word “from the ground up.”²³

After canvassing the potential pitfalls and benefits of dictionary usage in Part I, Part II of this Article will walk through specific examples demonstrating the interpretive benefits of using a dictionary corpus in both constitutional and statutory interpretation. It will describe the kind of information to be gleaned from using an eighteenth-century dictionary as a mini corpus to define the term *officer*, in comparison to the interpretive information available from a broader corpus investigation of the word. Part II also will demonstrate how consulting a dictionary as a mini corpus may benefit and strengthen even more modern statutory interpretation.

In contemporary interpretation cases, judges have started to use corpus linguistics-style techniques to better understand statutory terms, such as former Seventh Circuit Judge Richard Posner’s use of

21. See, e.g., Mascott, *supra* note 2, at 47, 47 nn.270–73; cf. Mouritsen, *supra* note 2, at 204–05 (noting that corpus linguistics analysis can be applied in a more straightforward fashion to a “neat, binary question of lexical ambiguity and ordinary meaning”).

22. See, e.g., Mascott, *supra* note 2, at 3–13 (describing how modern jurisprudence interpreting the Article II term “officer” has diverged from the most likely eighteenth-century meaning of the word); see also Strang, *supra* note 14, at 1208–09 (acknowledging the possibility that “our practice is so unmoored from the Constitution’s original meaning that none of the candidate conventions drawn from the practice will fit the evidence”; in such a case, at least where originalist research has already been done on the constitutional provision of interest, the researcher could consult the “secondary literature” to build the “stable” of plausible definitions for the term).

23. Mascott, *supra* note 2, at 47.

a form of collocation²⁴ to understand the statutory term *harbor*.²⁵ The tendency has been for judges to look for the most frequently employed sense of a word to discern the ordinary meaning of a statutory provision.²⁶ But taking a quick snapshot of how the statutory term is used throughout a dictionary in defining language may suggest in some cases that the statutory term covers multiple compatible senses of the word²⁷—not just the word’s most frequently used definition. Rather than trying to limit statutory meaning to the most frequently used meaning of a term, perhaps *all* permissible meanings (and subcategories) consistent with the statutory context should be seen as within a statute’s scope.

For example, in contrast to Judge Posner’s conclusion in the *harbor* case, maybe *to harbor* includes both the behavior of intentional concealment as well as the provision of a place to stay.²⁸ Similarly, the constitutional phrase “Officers of the United States” includes both principal and inferior Officers.²⁹ And the statutory phrase “discharge . . . of [a] firearm” may encompass both a single shot and

24. See *United States v. Costello*, 666 F.3d 1040, 1044 (7th Cir. 2012) (examining the frequency of the use of the verb “harboring” in connection with various objects such as “enemies” or “refugees”); Phillips et al., *supra* note 1, at 25 (describing collocates as “word neighbors” that “allow one to search for the words that most commonly appear within a certain range of the key word or phrase”).

25. See *infra* notes 146–53 and accompanying text; see also Phillips et al., *supra* note 1, at 28–29 (describing Judge Posner’s analysis of forms of the word “harbor”).

26. See, e.g., *Costello*, 666 F.3d at 1044 (relying on a Google search that indicated the word “harboring” had been used much more frequently in a way that described the concealment of people needing to hide (e.g., “harboring enemies”) than as part of a phrase indicating just provision of a “place to stay” (e.g., “harboring guests”)); see also Mouritsen, *supra* note 2, at 196–99 (examining the frequency of usage of the word “enterprise” to refer to a “non-economically motivated enterprise” as opposed to an “economically motivated one” as a method to help assess whether the “ordinary meaning” of “enterprise” carries with it an economic connotation) (emphasis omitted).

27. See *infra* notes 171–75 and accompanying text.

28. Cf. *infra* notes 173–75 and accompanying text.

29. See U.S. CONST. art. II, § 2, cl. 2 (indicating as a textual matter that within the larger class of “Officers of the United States” there is a subset of “inferior Officers”); see also, e.g., *Edmond v. United States*, 520 U.S. 651, 658–69 (1997) (discussing the categories of principal and inferior officers subject to the Constitution’s Appointments Clause in Article II). The Appointments Clause’s applicability to both principal and inferior officers would not become any less legitimate if one were to run a corpus analysis and discover that the use of the phrase “Officers of the United States” more frequently referred to principal officers than to inferior officers. It always encompasses both kinds of officers, even though one of the two categories of officers might be more frequently discussed than the other.

a round of shots—which would mean it could be textually correct to charge a defendant with only one statutory offense for firing a burst of shots instead of charging separately for each and every bullet fired.³⁰ In this way, adopting an interpretive approach that views statutes as encompassing all categories of meaning consonant with the relevant statutory context may not necessarily lead to more criminalization or regulation—but to less.

I. THE STRENGTHS OF DICTIONARIES AS CORPORA

Scholars and jurists have expressed concern about the dangers of overreliance on dictionary definitions when trying to understand the meaning of a term either in the Constitution or in a rank-and-file question of statutory interpretation.³¹ Stephen Mouritsen has done extensive work unearthing essential insight into the relevant, but quite limited, information available from dictionary definition entries in statutory interpretation cases.³² And in an article explaining the proper limited role of founding era dictionaries in constitutional interpretation, Professor Gregory Maggs identified six potential problems with reliance on founding era dictionaries in particular.³³ He describes them as the following: “(1) insufficiency, (2) incompleteness, (3) inapplicability, (4) inconsistency, (5) imprecision, and (6) incorrectness.”³⁴

Referencing a dictionary as a corpus, however, may help to overcome some of these challenges. First, the problem of “insufficiency” arises only where an interpreter relies solely on a term’s dictionary definition to determine its meaning.³⁵ The second problem, “incompleteness,” is a little broader. It refers to the fact that a

30. See *infra* note 175 and accompanying text; *cf.* *State v. Rasabout*, 2015 UT 72, ¶¶ 1–6, 356 P.3d 1258, 1261–62 (interpreting Utah Code section 76-10-508(1)(a) (“A person may not discharge any kind of dangerous weapon or firearm . . .”); *id.* at 1281–82 (Lee, J., concurring).

31. See *supra* notes 1, 6 and accompanying text; see also Solan & Gales, *supra* note 10, at 3 (describing criticisms of dictionary use).

32. See generally Mouritsen, *supra* note 1; Mouritsen, *supra* note 2.

33. See Gregory E. Maggs, *A Concise Guide to Using Dictionaries from the Founding Era to Determine the Original Meaning of the Constitution*, 82 GEO. WASH. L. REV. 358, 359–61 (2014).

34. *Id.* at 361.

35. See *id.* at 368–69.

dictionary definition may not list every possible meaning of a term because of space constraints or the author's views that a particular usage is inaccurate.³⁶ On this point, examination of multiple dictionaries³⁷—or investigation of a dictionary as a corpus—may be helpful. A dictionary author may use the term under review in the context of defining other words, thereby inadvertently providing insight into a different or more nuanced definition omitted from the dictionary entry for the term itself.

The other four concerns raised by Professor Maggs also may be addressed by looking at sources other than just a single dictionary's definition. For instance, an ordinary dictionary's definition may be inapplicable because the Constitution was employing a term with a specialized legal meaning not found in the particular dictionary the interpreter referenced.³⁸ Or it may be imprecise because when compiling dictionaries, lexicographers at times “[chose] broad definitions that cover several possible meanings” rather than specifying every single possible meaning of the term.³⁹ Professor Maggs suggests these concerns can be ameliorated by consulting multiple dictionaries⁴⁰ or founding era legal dictionaries⁴¹ in addition to ordinary language dictionaries.

In addition to the techniques suggested by Professor Maggs, consulting a dictionary as a mini corpus may assist an interpreter, particularly in cases of imprecision. Numerous additional distinct

36. *See id.* at 369–73.

37. *See, e.g., id.* at 371–72 (observing that the constitutional meaning of the term “capitation” was missing from the definition of the term in Samuel Johnson’s dictionary but present in John Ash’s dictionary).

38. *See id.* at 374.

39. *Id.* at 378.

40. *Id.* at 372–73. In contrast to Professor Maggs’s suggestion that consulting multiple dictionaries may address the pitfalls of relying on just one dictionary, Stephen Mouritsen has contended that multiple dictionaries are unlikely to provide additional insight because no dictionary author wants to diverge too far from the definitions used by competitors. *See Mouritsen, supra* note 1, at 1943–44. Therefore, Mouritsen contends dictionary authors may really represent only one point of view, rather than seeking to uncover the widest possible range of meanings of the given term. *See id.* at 1941–45. But examining a dictionary as a corpus might address Mouritsen’s concern. Additional senses of a term may be apparent from a dictionary author’s inadvertent use of that term in the context of defining another word, which could reveal the term has more possible meanings than just those the author was willing to directly state in the definition for the term itself.

41. Maggs, *supra* note 33, at 375.

shades of meaning (not included in the actual definition of the term) might be apparent by the term's use within the context of other dictionary definitions. Using one, or even multiple, dictionaries as a specialized corpus could help ensure no relevant usage of a term is missed. For example, in a recent research project to identify the meaning of *officer* in the late eighteenth century, I used the popular Nathan Bailey's dictionary⁴² as a mini corpus.⁴³ The dictionary's entry for the term *officer* told the reader only that an "Officer" was "one who is in an office."⁴⁴ But in the course of searching for the word *officer* in the dictionary's definitions of all other words, I came across more than 500 instances of use of the terms *office(s)* and *officer(s)*.⁴⁵ These uses indicated that the terms *officer* and *office* encompassed an enormously wide scope of governmental positions, ranging from "The Lord President [of the King's Council]," an apparently important "officer of the Crown" who was "to propose business at the Council-Table," down to the "Swabber," "an inferior officer on board a ship of war" whose "office" was "to take care that the ship be kept clean."⁴⁶

Professor Maggs provides the additional cautionary warning that researchers should not apply inconsistent methodology in their use of dictionaries—such as by consulting multiple dictionaries about one contested term but only a single dictionary for another.⁴⁷ Further, he notes that, at times, definitions in founding era dictionaries have been found to be just plain incorrect through the author's inadvertent mistake or incorporation of obsolete meanings.⁴⁸ Other scholars have echoed this concern that reliance on the use of words by too few speakers, such as a single dictionary author, may give undue weight to an author with an idiosyncratic view.⁴⁹ To account for these concerns,

42. N. BAILEY, AN UNIVERSAL ETYMOLOGICAL ENGLISH DICTIONARY (Edward Harwood ed., 25th ed. 1790).

43. See Mascott, *supra* note 2, Section II.B.2; *id.* at 38 n.209.

44. See *id.* at 40, 40 n.220 (internal quotations omitted).

45. See *id.* at 43.

46. See *id.* Section II.B.2; see also BAILEY, *supra* note 42 (defining "Swabber" as "an inferior officer on board a ship of war, whose office is to take care that the ship be kept clean"); *id.* (defining, under the letter "P," "The Lord President [of the King's Council]" as "an officer of the Crown, who is to attend the Sovereign to propose business at the Council-Table, and to report the several transactions there managed").

47. See Maggs, *supra* note 33, at 377–78.

48. See *id.* at 380–81.

49. See Solan & Gales, *supra* note 10, at 3–5.

interpreters of course should view examination of a dictionary corpus as just one tool in the toolbox. But it is a very useful tool.

Former Judge Richard Posner, who has extensively theorized about statutory interpretation, has raised the additional complication that “[d]ictionary definitions are acontextual.”⁵⁰ This is a key concern because to really understand a term, interpreters must pay “careful attention to the nuances and specialized connotations that speakers of the relevant language attach to particular words and phrases in the context in which they are being used.”⁵¹

A dictionary’s use as a mini corpus alleviates this particular difficulty, however, inasmuch as uses of the contested term within definitions for other words are in fact contextual. For example, an interpreter seeking to understand whether the term *enterprise* carries a connotation of “economic motivation”⁵² may gain insight from examining a dictionary’s contextual use of the word *enterprise* to define other terms. Contextual uses of the term *enterprise* throughout *Webster’s Seventh New Collegiate Dictionary*⁵³ show the word carries

50. *United States v. Costello*, 666 F.3d 1040, 1044 (7th Cir. 2012).

51. *Id.* (quoting John F. Manning, *The Eleventh Amendment and the Reading of Precise Constitutional Texts*, 113 YALE L.J. 1663, 1704 (2004)).

52. *See Mouritsen, supra* note 2, at 180 (using corpus linguistics techniques to evaluate whether the term “enterprise” in the Racketeer Influenced and Corrupt Organizations Act (RICO) includes within its scope only organizations with an “economic motivation”). Mr. Mouritsen’s statistical analysis led him to conclude that the word “enterprise” is used overwhelmingly to refer to economically motivated organizations. *See id.* at 196–202. But the more than seventy uses of variants of the word “enterprise” to define other words in *Webster’s Seventh New Collegiate Dictionary* (7th ed. 1963) had both economic and noneconomic connotations, *see infra* notes 53–57, falling more in line with the linguistics studies critiqued by Mr. Mouritsen, which had declined to define “enterprise” in primarily economic terms, *see Mouritsen, supra* note 2, at 185–86. Nonetheless, Mr. Mouritsen’s ultimate conclusion that the RICO statute criminalizes economic activity likely is correct—but more because the context surrounding the statutory term “enterprise” seems to suggest it refers to economic activity, not because the word “enterprise” inherently has that limited meaning. *See id.* at 184–85; *see also* 18 U.S.C. § 1962(c) (2012) (“It shall be unlawful for any person employed by or associated with any *enterprise* engaged in, or the activities of *which affect, interstate or foreign commerce*, to conduct . . . such *enterprise’s* affairs through a pattern of racketeering activity or collection of unlawful debt.” (emphasis added)).

53. WEBSTER’S NEW COLLEGIATE DICTIONARY (7th ed. 1963), <https://ia800503.us.archive.org/32/items/webstersseventhn00unse/webstersseventhn00unse.pdf> [hereinafter WEBSTER’S]. This collegiate dictionary represents that it is based on *Webster’s Third New International Dictionary, id.*, a dictionary much maligned by Justice Antonin Scalia, *see Antonin Scalia & Bryan A. Garner, A Note on the Use of Dictionaries*, 16 GREEN BAG 2D 419, 427 (2013) (describing *Webster’s Third International Dictionary* as “a dictionary to be used cautiously because of its frequent inclusion of doubtful, slipshod meanings without adequate usage

with it both economic and noneconomic meanings. The dictionary defines (i) an *adventurer* to be “one that engages in risky commercial *enterprises* for profit”⁵⁴ and (ii) a *cartel* as “a combination of independent commercial *enterprises* designed to limit competition”⁵⁵—both uses that connote a commercial endeavor. But it also defines *management* as “the collective body of those who manage or direct an enterprise”⁵⁶ and a *jumping-off place* as “a place from which an enterprise is launched”⁵⁷—uses that suggest an *enterprise* can be any type of collective venture.

Corpus linguistics scholars generally have preferred “naturally occurring” samples of language⁵⁸ over dictionaries. The thinking is that dictionary definitions exist primarily to inform language study and thus are somewhat contrived.⁵⁹ In contrast, writers and speakers generating documents typically found in a corpus, like newspapers and letters, did not necessarily write or speak intending their words to be used as evidence of a particular term’s meaning.⁶⁰ Therefore, these word uses are more genuine, better reflecting a term’s ordinary meaning.

notes”). Nonetheless, this Article utilizes the collegiate dictionary because it is freely available on the Internet, thus making it possible for readers to easily access the cited dictionary and replicate this paper’s analysis. For purposes of simply illustrating the possible interpretive information to be gleaned from use of a dictionary as a corpus, this collegiate dictionary is adequate. A spreadsheet cataloging the dictionary’s uses of variants of the term *enterprise* is available at <https://drive.google.com/drive/u/3/folders/1c-55oJnBDue8I3XFeIYiPVjUkbDjI7Kv>.

54. WEBSTER’S, *supra* note 53, at 13 (including this meaning as one of the definitions of the term *adventurer*) (emphasis added).

55. *Id.* at 128 (including this meaning as one of the definitions of the term *cartel*) (emphasis added).

56. *Id.* at 513 (including this meaning as one of the definitions of the term *management*).

57. *Id.* at 460 (including this meaning as one of the definitions of the phrase *jumping-off place*).

58. See Mouritsen, *supra* note 2, at 190.

59. See *id.* at 170 (observing that dictionary authors intend to set forth all permissible meanings of a given word without regard to the frequency of use of a particular meaning and without attempting to address “what meaning a word must bear in a particular context” (quoting HENRY M. HART, JR. & ALBERT M. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF THE LAW* 1190 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994))).

60. See Mouritsen, *supra* note 1, at 1954–55 (“[D]ata in a corpus are considered ‘natural’ because they were not elicited for the purpose of study. That is, generally no one asks the speakers or writers whose words are represented in the corpus to speak or write for the purpose of subjecting their words to linguistic scrutiny.”).

But use of dictionaries as a corpus ameliorates this disparity. A dictionary author's use of a particular word within its definitions for other terms is not intended to influence the public's perception of the contested word. Rather, the author inadvertently referenced the contested term in the course of trying to define another word. As such, the contested term's use in a dictionary corpus is at least somewhat less skewed evidence than the dictionary entry for the term itself.

The real benefit of turning to dictionaries as a specialized corpus, however, may be their potential for increasing an interpreter's understanding of the range of permissible meanings of a contested term. Scholars agree that one legitimate use of dictionaries is to demonstrate that a certain meaning of a word is permissible.⁶¹ Professor Lee Strang builds on this idea by suggesting that constitutional analysis in particular may benefit from interpreters first identifying the range of potential meanings associated with the term in question.⁶² Specifically, Professor Strang explains that scholars may build this "stable of possible language conventions" by looking at Supreme Court case law defining the relevant term, studying prior scholarship on the term, or "conducting a pilot study of the corpus" to see what relevant meanings are contained within primary and secondary sources.⁶³ Equipped with a well-developed list of meanings that "plausibly fit the studied text," the scholar can then test those meanings to see which has the "best fit" with the relevant corpus.⁶⁴

Here again, examination of a dictionary as a corpus could be immensely useful. A dictionary attempts to define terms throughout the entire range of language. Examining how the term of interest is used in relationship to multiple other words (in the context of defining those words) could assist in the compilation of a complete stable of

61. *See id.* at 1921–23 (contrasting this with the use of a dictionary to prove that one of the permissible meanings is the most typical, or the most likely, ordinary meaning of the word); Maggs, *supra* note 33, at 359–61, 364–67 (suggesting that founding era dictionaries may provide evidence relevant to interpreters seeking to discern several different types of original meaning of the Constitution—despite dictionaries' potential pitfalls).

62. *See* Strang, *supra* note 14, at 1207–09.

63. *Id.* at 1207–08.

64. *Id.* at 1207–09, 1228.

potential meanings of a term.⁶⁵ Such an examination may identify meanings that are not immediately apparent from existing case law or scholarship. Or it may identify meanings that were excluded from the dictionary's definition of the term under review, as that term's definitional entry may not capture every nuance available from seeing the term used in context.⁶⁶ Just like "computer-assisted" research techniques in general,⁶⁷ a comprehensive search of a dictionary corpus helps identify a potentially wide range of meanings of a term.

Examination of dictionary corpora also preserves an additional corpus linguistics-related benefit cited by judges and scholars. Justice Thomas R. Lee has praised corpus linguistics analysis as being "subject to replication" because it utilizes a "transparent database that is publicly available."⁶⁸ This is superior to earlier, conventional styles of statutory and constitutional analysis in which an interpreter might "cherry pick" and selectively cite evidence supportive of his interpretation.⁶⁹ Similarly, a corpus linguistics-style analysis of every use of a term in one dictionary, or set of dictionaries, also is replicable and transparent. Any follow-on researcher can access the cited dictionary and examine its contextual uses of the contested term to verify whether they support the interpreter's position.

Even if dictionaries fail to reflect the true, contemporary usage of a word,⁷⁰ they nonetheless are a huge part of our culture's "common linguistic experience"—which is what makes objective statutory and constitutional interpretation possible in the first place.⁷¹ Dictionaries

65. *Cf. id.* at 1207–08 (observing that "a pilot study of the corpus" or review of the "secondary literature on the subject" might be helpful if case law and current legal practice do not seem to provide "plausible conventions" for the eighteenth-century meaning of the relevant constitutional term or phrase).

66. *See* Phillips et al., *supra* note 1, at 23 ("Context matters, and dictionaries (especially from the Founding Era) do not capture context . . .").

67. *See* Strang, *supra* note 14, at 1204–07 (describing the use of "[c]omputer-assisted research techniques" in originalism).

68. *State v. Rasabout*, 2015 UT 72, ¶ 93, 356 P.3d 1258, 1282 (Utah 2015) (Lee, J., concurring).

69. *See* Barnett, *supra* note 17, at 856, 856 n.30 (describing the difficulty in the past of "know[ing] whether the evidence of usage offered by a particular historian was typical or cherry-picked" prior to the advent of the wide availability of electronic founding era sources).

70. *See* Mouritsen, *supra* note 1, at 1922–24, 1931–32 (noting the shortcomings of a dictionary in determining a word's ordinary usage).

71. *See* Strang, *supra* note 14, at 1220–22 (concluding that eighteenth-century Americans had a sufficiently "common linguistic experience" through the circulation of newspapers and

are routinely consulted as evidence of a word's linguistic meaning.⁷² Whether or not a particular dictionary accurately reflected the meaning of a term at the time it was written, that dictionary certainly will have a prospective influence on words' meanings. Just as courts reference dictionaries to assist in statutory interpretation, ordinary citizens access dictionaries to acquire greater insight into the meaning of particular words. As dictionaries are likely to shape the meaning of words moving forward in time from their publication and circulation, they must be consulted by anyone seeking to uncover how an educated English speaker would understand the studied term.⁷³ Comprehensive examination of a dictionary as a corpus is a great means for acquiring a more textured and in-depth understanding of a word.

One final concern raised about founding era dictionaries, in particular, is that their authors often engaged in what today would be considered plagiarism⁷⁴—cribbing at least in part from earlier dictionaries. Therefore, founding era dictionary definitions may not necessarily reflect an author's attempt to accurately and independently characterize the correct contemporary meaning of a term as of the time the author was compiling the dictionary.⁷⁵ Founding era

their wide familiarity with certain texts like the Bible that it is possible to discern a nationwide objective meaning of the Constitution); *cf.* McIntosh, *supra* note 12, at 4 (noting that founding era dictionaries were “intended for a wide current readership” and the “compilers of dictionaries and the booksellers who offered dictionaries to the public would not have printed one that seemed completely out of touch with current usage”).

72. See Maggs, *supra* note 33, at 359–60; Phillips et al., *supra* note 1, at 30 (noting that both lawyers and judges use dictionaries and the potential fallacies of dictionary usage do “not mean we should not use dictionaries” but simply that “we should strive to use them better”); Mouritsen, *supra* note 1, at 1915–16 (describing judges' reliance on dictionaries).

73. *Cf.* Phillips et al., *supra* note 1, at 21–22 (“Original public meaning originalism . . . seeks to determine ‘the meaning the words and phrases of the Constitution would have had, in context, to ordinary readers, speakers, and writers of the English language, reading a document of this type, at the time adopted.’” (quoting Vasan Kesavan & Michael Stokes Paulsen, *The Interpretive Force of the Constitution's Secret Drafting History*, 91 GEO. L.J. 1113, 1118 (2003))).

74. See Maggs, *supra* note 33, at 383–84 (reporting that Samuel Johnson and one of the compilers of Nathan Bailey's dictionaries may have relied on each other's efforts when compiling their respective dictionaries); McIntosh, *supra* note 12, at 3–4 (“[E]very eighteenth-century dictionary drew heavily on its predecessors, sometimes lifting definitions word-for-word from books published fifty years earlier or more.”).

75. See Mouritsen, *supra* note 1, at 1943–44 (questioning the independence of dictionary authors because “the history of English lexicography usually consists of a recital of successive

dictionaries like Samuel Johnson's dictionary also included sample uses of words from very old, non-contemporaneous texts like the Bible or works by Shakespeare.⁷⁶ But such a critique evaluates dictionaries simply as reflections of some kind of contemporary, objectively correct word meaning—suggesting they are inaccurate reflections at best. It neglects to account for the idea that widely available dictionaries may have been powerful influencers of word meaning moving forward.⁷⁷ Not only would William Shakespeare and the Bible have remained influential sources of understanding in the founding era,⁷⁸ the very fact that an eighteenth-century dictionary incorporated particular word meanings may have had great influence on a learned writer's sense of the meaning of language in 1787 and 1788.

II. EXAMPLES OF DICTIONARIES AS A MINI CORPUS, IN PRACTICE

Part II of this Article will provide concrete examples of some of the interpretive benefits of consulting dictionaries as corpora. First, in constitutional interpretation, examination of the specialized corpus of Nathan Bailey's founding era dictionary⁷⁹ provides detailed insight into the vast scope of government officials viewed as *officers* in the eighteenth century. Second, examination of a contemporary dictionary's contextual references to the term *harbor*—a contested statutory term in a recent federal appeals court case—shows how the use of dictionaries as a corpus may provide an in-depth, textured starting point to discerning ordinary meaning.⁸⁰

and often successful acts of piracy” (internal quotation omitted)); Phillips et al., *supra* note 1, at 23 (observing that founding era dictionaries “are more likely to reflect what words meant in the early 1600s than the late 1700s” because many of them were “based on Samuel Johnson’s Dictionary,” which in turn “heavily relied on earlier sources”).

76. *See, e.g.*, SAMUEL JOHNSON, A DICTIONARY OF THE ENGLISH LANGUAGE (3d ed. 1768) (citing the Bible as the source for one of its definitions of “artillery” and Shakespeare as its source for the meaning of “all-cheering”), https://books.google.com/books/about/A_Dictionary_of_the_English_Language.html?id=03Q7AAAacAAJ.

77. *Cf.* McIntosh, *supra* note 12, at 4 (referring to dictionaries as “intended for a wide current readership”).

78. *See* Strang, *supra* note 14, at 1221 (noting that the Bible “was a staple throughout the nation” in the founding era).

79. BAILEY, *supra* note 42.

80. *See infra* Section II.B.

A. Constitutional Interpretation: Article II Term Officer

In recent work, I analyzed the meaning of the term *officers* in Article II of the Constitution.⁸¹ Examination of every use of the terms *office(s)* and *officer(s)* in a founding era dictionary imparted a range of understanding of the term that expanded on the information about *officers* available from a more traditional corpus linguistics-style analysis.⁸²

Article II permits only four specific appointment methods for “Officers of the United States.”⁸³ As an initial matter, corpus linguistics-style analysis was critical in determining that the phrase “Officers of the United States” was not a new term of art setting aside an especially important group of government positions. Rather, evidence suggested the phrase referenced a class of federal-level, as opposed to state-level, officers.⁸⁴

This conclusion was supported by the Article II drafting history as well as a key-word-in-context (KWIC)-style analysis of every use of the phrase “Officer(s) of the United States” in a specialized corpus.⁸⁵ Specifically, that research indicated the phrase “Officers of the United States” first came into use during the Continental Congress era and was used to describe officers in the Continental Army.⁸⁶ Multiple speakers described the group of “Officers of the United States” using different phrasing like “officers of the government” or “officers of the union,” suggesting the precise Article II phrasing did not constitute a

81. *See generally* Mascott, *supra* note 2.

82. *See id.* Section II.B.2.

83. U.S. CONST. art. II, § 2, cl. 2 (“[The President] shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments.”).

84. *See* Mascott, *supra* note 2, Section II.A.2.

85. *See id.*; *see also* Phillips et al., *supra* note 1, at 24–25 (discussing the use of specialized corpora, including Professor Randy Barnett’s use of the *Pennsylvania Gazette* as a specialized corpus). This specialized corpus consisted primarily of legally significant documents traditionally viewed as relevant to originalist analysis such as the Constitution, Articles of Confederation, one Readex database of eighteenth-century newspapers, the Journals of the Continental Congress, the Federalist and anti-Federalist essays, and the drafting and ratification debates. *See* Mascott, *supra* note 2, Part II.

86. *See* Mascott, *supra* note 2, Section II.A.2.e.

term of art.⁸⁷ Moreover, there were relatively few references to the full phrase “Officers of the United States” in a specialized corpus of documents related to the Constitution’s formation, suggesting the framers did not believe they were creating a specialized new level of federal official in the Appointments Clause.⁸⁸ For example, out of approximately 600 uses of *office[s]* and *officer[s]* in *The Federalist Papers* and anti-Federalist essays, the phrase “Officer(s) of the United States” appeared only thirteen times.⁸⁹

Elimination of the likelihood that “Officers of the United States” was a new term of art creating a special subcategory of officials was a significant contribution of the corpus analysis. It suggested that research into the meaning of the individual term *officer* was relevant for determining the scope of government officials subject to the Appointments Clause requirements for “Officers of the United States.”

But the question remained—how would speakers of eighteenth-century English have defined the term *officer*? What is the full range of federal officials that came within the scope of the phrase “Officers of the United States” at the time of the Constitution’s formation?

Identifying the entire scope of federal officials encompassed by the Article II Appointments Clause in some ways is a different type of interpretive question than the kind that judges and courts previously have evaluated utilizing corpus linguistics methods.⁹⁰ For example, the Supreme Court in 2010 evaluated whether the word *personal* ordinarily includes a reference to corporations.⁹¹ In addition, Justice Thomas R. Lee of the Utah Supreme Court conducted an empirical corpus linguistics analysis of whether the term *discharge* more

87. See *id.* Part II.A.2.c (internal quotations omitted).

88. See *id.*

89. See *id.*; Mascott, *Who are “Officers of the United States”?: Appendix*, 70 STAN. L. REV. (forthcoming 2018) (manuscript at 4–5) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2918956 [hereinafter *Appendix*] (depicting this data based on a search using the AntConc corpus linguistics research platform). See Anthony, L. (2014), AntConc (Version 3.4.4w (Windows)) [Computer Software], Tokyo, Japan: Waseda University, <http://www.laurenceanthony.net/>.

90. See Mascott, *supra* note 2, at 47.

91. See Mouritsen, *supra* note 1, at 1955 n.224 (discussing the debate over “personal privacy” in *FCC v. AT&T Inc.*, 562 U.S. 397 (2011)).

ordinarily means one single shot or multiple shots.⁹² These binary questions lend themselves to the empirical analysis of which one of two possible answers to the legal question is more probable based on the most common usage of a term.⁹³ But what if an interpreter is trying to uncover the definition of a term “from the ground up”?⁹⁴

Applying Professor Strang’s methodology of identifying a “stable of possible language conventions”⁹⁵ to a search for the eighteenth-century meaning of *officer* would lead to the identification of several initial possible meanings for the term. Current Supreme Court doctrine suggests officers have “significant authority”;⁹⁶ Executive Branch research suggests that officers hold a “continuing” position that has been delegated “a portion of the sovereign powers of the federal Government”;⁹⁷ and legal scholarship suggests, in one instance, that officers are those with continuing sovereign authority delegated by statute.⁹⁸ But none of these standards provides much direction due to lack of specificity, and evidence suggests that none of the standards is entirely accurate, at least as an original matter.⁹⁹

So how would an interpreter make sure to uncover all possible language conventions defining *officer* and determine the full range of officials coming within that definition? Professor Lee Strang suggests an initial search of primary and secondary sources may be beneficial.¹⁰⁰ Another possible starting point could be to consult a dictionary.

In this case, as one might expect, examination of founding era dictionary entries for “office(r)” was not immediately instructive. Multiple founding era dictionaries defined “officer” simply as a “man

92. See *State v. Rasabout*, 2015 UT 72, ¶¶ 54–88, 356 P.3d 1258, 1275–82 (Lee, J., concurring).

93. See Mascott, *supra* note 2, at 47, 47 n.271; Mouritsen, *supra* note 2, at 196, 204–05 (describing how binary questions about a word’s meaning are readily compatible with a straightforward empirical corpus linguistics analysis).

94. See Mascott, *supra* note 2, at 47.

95. See Strang, *supra* note 14, at 1207–08.

96. *Buckley v. Valeo*, 424 U.S. 1, 125–26 (1976).

97. See Steven G. Bradbury, *Officers of the United States Within the Meaning of the Appointments Clause*, 31 OP. OFF. LEGAL COUNS. 73, 73, 77 (2007).

98. Stacy M. Lindstedt, *Developing the Duffy Defect: Identifying Which Government Workers Are Constitutionally Required to be Appointed*, 76 MO. L. REV. 1143, 1177–78 (2011).

99. See Mascott, *supra* note 2, at 3–13.

100. See Strang, *supra* note 14, at 1207.

employed by the publick”;¹⁰¹ Nathan Bailey’s 1783 dictionary defined “officer” even more simply as “one who is in an office.”¹⁰²

But use of a founding era dictionary as a corpus was highly informative. In particular, I examined each of the more than 500 references to *office* and *officer* in the twenty-fifth edition of Nathan Bailey’s dictionary from 1783¹⁰³—thought to be “the bestselling dictionary of the eighteenth century.”¹⁰⁴ Bailey’s dictionary has received praise for working “to include common words and to define words as they were actually used.”¹⁰⁵ In particular, the dictionary’s introduction admonished that it ought “to be the special Care and Study of every one” to “get a true and distinct Idea of the proper Sense and Meaning of Words, and Terms of Art, in which they are expressed, without which no good Progress can be made.”¹⁰⁶ The dictionary editor then marketed the dictionary as helping people better understand the entirety of language¹⁰⁷ by eliminating the redundancies in other dictionaries and adding “several thousand English words and phrases” that had not appeared previously in any English dictionary.¹⁰⁸

Regardless of whether Bailey’s twenty-fifth edition suffered from some of the typical founding era dictionary ailments like incorrectness, it certainly was intended to shape the public meaning of the terms that it defined. Thus, the dictionary is relevant in assessing the culturally

101. Mascott, *supra* note 2, at 39. Alternate senses of the word were “a commander in the army” or “one who has the power of apprehending criminals.” *See id.* at 39, 39 n.211. But it is apparent from the surrounding context of Article II, Section 2, Clause 2, that the Appointments Clause is broader than just referencing military commanders or law enforcement. *See* U.S. Const. art. II, § 2, cl. 2. Consequently, the sense of the word relevant to this clause is “man employed by the publick.” *See* Mascott, *supra* note 2, at 39, 39 n.211.

102. *See* Mascott, *supra* note 2, at 40 n.220.

103. *See id.* at 38, 43.

104. Maggs, *supra* note 33, at 383.

105. *See id.*

106. BAILEY, *supra* note 42, at vii.

107. *Id.* at vi (“It has therefore been the universal Practice of all polite Nations, to make the Study of Letters the first Business of Life: And because this Accomplishment is necessary to all Persons, and but few, comparatively speaking, have the Advantage of a learned Education to any considerable Proficiency, *Dictionaries* have in all Languages been compiled, to which, as to Storehouses, such Persons may have Recourse, as often as any Thing occurs in Conversation or Reading, with which they are unacquainted, or when they themselves would speak or write properly and intelligibly.”).

108. *Id.* at xii.

shared understanding of words at the time the Constitution was drafted and ratified—several years after the dictionary’s publication in 1783.

In contrast to Bailey’s definitions of the terms *officer* and *office* themselves,¹⁰⁹ his use of these words in context to define other terms greatly informs the understanding of the broad scope of founding era officials considered to be *officers*. The dictionary described numerous officials as “officers” or as holding “offices” even when their jobs consisted of recordkeeping, assisting higher-level officials, and performing menial tasks¹¹⁰ that seem to fall below the current Supreme Court’s standard of “significant authority.”¹¹¹

Following is a partial list of such officials:¹¹²

Record-Keepers: (i) “Corrector [of the Staple]”: recorded bargains by merchants in a public store-house; (ii) “Purser” on the king’s ship: provided food and bedding supplies to people on board the ship and kept track of crew member pay; (iii) “Clerk of the Acts”: registered orders by the Commissioners of the Navy and received warrants and commissions; (iv) “Clerk of the Ordinance”: recorded the names of officers and government orders; (v) “Clerk of the Peace”: read indictments and enrolled government acts; (vi) “Clerk of the Pells”: recorded bills on a parchment roll.

Assistants: (i) “[M]essengers [of the Exchequer]”: “attend[ed] the Lord Treasurer, and carr[ie]d his letters and orders”; (ii) “[S]atellites, [L]ife-Guards, or [O]fficers: attend[ed] upon a Prince”; (iii) “[S]word-bearers”: “carrie[d] the sword of state before a magistrate.”

Officials with Menial Duties: (i) “[A]gistor”: “took cattle into the forest”; (ii) “[A]le-Conner/Ale-Taster”: tested the “goodness of bread [and] ale”; (iii) “[A]ssay Master”: weighed bullion to make sure it was “according to the national standard”; (iv) “[B]eadle”: made “garnishments for the courts of the forest”; (v) “[B]otiler/Butler”: provided the king with wine; (vi) “[C]hafe-Wax”: “fit[ted] the wax for

109. *Id.* (“Duty”: “any Thing that one is obliged to do; a publick Tax.”; “Officer”: “one who is in an Office”; “Office”: “the Part or Duty of that which befits, or is to be expected from one; a Place or Employment; also a good or ill Turn.”).

110. See Mascott, *supra* note 2, at 43–46.

111. See Freytag v. Commissioner, 501 U.S. 868, 881–82 (1991) (concluding that it was relevant to Article II “officer” status whether an official exercises “significant discretion” or “perform[s] more than ministerial tasks”); Buckley v. Valeo, 424 U.S. 1, 125–26 (1976).

112. The terms in the next three paragraphs and their descriptions, often verbatim, are taken from Mascott, *supra* note 2, at 43–46.

the sealing of writs”; (vii) “Expenditor”: “a steward or officer, who look[ed] after the repairs of the banks of [a] [m]arsh”; (viii) “Gauger[s]”: measured liquids on merchant ships; (ix) “Searcher[s]”: examined and marked defects on cloth; (x) “Sewer”: placed the meat on the table of the King or a Nobleman; (xi) “Swabber[s]”: cleaned warships.

The detailed nature of the picture of *officers* that emerges from this review of Nathan Bailey’s dictionary adds even to the depth of information available from studying a specialized corpus of key founding era documents that debated the meaning of the Constitution.¹¹³ Numerous statements from this specialized corpus suggest the eighteenth-century public would have understood *officers* to include many government officials including those with less significant duties.¹¹⁴ For instance, a speaker in the North Carolina ratifying convention described “petty officers with ‘trifling’ duties.”¹¹⁵ And statements during the convention to draft the Constitution referenced “ministerial officers” and suggested the Appointments Clause applied to officials with duties as minor as those of “tide-waiter[s]” who monitor the unloading of imported goods.¹¹⁶ But no statement in the specialized corpus purported to identify a comprehensive group of officials falling under the term *officers*.

Similarly, evidence from the mini corpus of Bailey’s dictionary builds upon the understanding of *officer* available from a more typical, broad-based corpus linguistics study incorporating a variety of more everyday texts. Scholars are building a new Corpus of founding era American English (COFEA), which will give constitutional interpreters access to “at least 100 million words”¹¹⁷ from a representative set of founding era texts.¹¹⁸ COFEA-affiliated scholars generously provided me with access to more than 16,000 documents from the papers of various founding fathers that the COFEA developers acquired from <http://founders.archives.gov> and

113. See *supra* note 85.

114. See *supra* note 85.

115. Mascott, *supra* note 2, at 49, 49 n.280.

116. *Id.* at 50 (alteration in original) (internal quotations omitted).

117. Phillips et al., *supra* note 1, at 31.

118. *Id.* at 22, 31; see also Mascott, *supra* note 2, at 56.

converted to text files for use in corpus linguistics software.¹¹⁹ This particular group of documents ranged primarily from 1783 to 1789 and included letters, diaries, and speech texts,¹²⁰ providing the representative types of naturally occurring communicative sources desirable in corpus analysis.¹²¹

A sampling¹²² of references to *office(s)* and *officer(s)* in these documents provided useful but limited information helping to flesh out the eighteenth-century meaning of “officer.” Within these “naturally occurring” documents the phrase “Officer(s) of the United States” occurred only ten times—exclusively in duplicate materials already included in my specialized founding era corpus.¹²³ In contrast,

119. See Mascott, *supra* note 2, at 56. These documents are available on Google Drive at <https://drive.google.com/open?id=0BwymGPo3iNE4TUJScjNFQnU4a0k> in a sub-folder labeled “Confederacy files/text/”.

120. See Mascott, *supra* note 2, at 56; see also the spreadsheet labeled “Confederacyindex17831789.xls” located within the folder labeled “Confederacy files” at the Google site listed in *supra* note 119. The COFEA developers created this spreadsheet, which lists the date, title, and source of each of the 16,000 documents.

121. See Mouritsen, *supra* note 1, at 1955 (describing the compilation of a typical corpus as including “newspapers, books, transcripts of conversations, or interviews”).

122. See Strang, *supra* note 14, at 1206 (suggesting that a researcher “may randomly sample” results if “search returns are too large to manage effectively”); cf. Mouritsen, *supra* note 1, at 1958 (examining a random sample of 500 of one corpus’s 82,687 references to the word “carry”); Solan & Gales, *supra* note 10, at 13 (sampling the “even numbered occurrences” of the uses of a particular term).

123. See Mascott, *supra* note 2, at 57; see also *Appendix, supra* note 89, at 9 (including screen shots depicting these search results). The documents also included four additional references to the proper noun phrase, “Loan Officer of the United States” (or “of the U.S.”). See *Report of a Committee to Establish a Land Office, 30 April 1784*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Jefferson/01-07-02-0148> (last modified Nov. 26, 2017) (file labeled “228716-body.txt”); *Report Concerning Continental Bills of Credit, [7 May 1784]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Jefferson/01-07-02-0157> (last modified Nov. 26, 2017) (file labeled “228758-body.txt”); *To George Washington from John Hopkins, 10 April 1789*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/05-02-02-0044> (last modified Nov. 26, 2017) (file labeled “243663-body.txt”); *To James Madison from John Hopkins, 10 April 1789*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Madison/01-12-02-0048> (last modified Nov. 26, 2017) (file labeled “243665-body.txt”). The other ten uses of “Officer(s) of the United States” arose during the Constitutional Convention or the ratification debates or within essays from *The Federalist Papers*—duplicates of sources my specialized corpus already contained. See *supra* note 85 and accompanying text; see also *Constitutional Convention. Plan of Government, [18 June 1787]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Hamilton/01-04-02-0099> (last modified Nov. 26, 2017) (file labeled “237557-body.txt”); *The Federalist Number 44, [25 January] 1788*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Madison/01-10-02-0251> (last modified Nov. 26, 2017) (file labeled “239831-body.txt”); *The Federalist No. 67, [11 March 1788]*, FOUNDERS ONLINE, <http://founders.archives.gov/>

within just this seven-year period of documents, the terms *office* and *officer* occurred 5,897 times¹²⁴—arguably an unwieldy quantity of concordance lines to meaningfully examine. So, to get a quick sense of the range of usages of *office(s)* and *officer(s)* in this corpus I examined the first 200 concordance lines containing those terms.¹²⁵

In the vast majority of cases across this sample, the term *officer* referred to military positions. Scores of those military *officer* references included no immediate context describing their particular rank or authority level.¹²⁶ Some references were a little more revealing, showing that a fairly wide range of military positions were considered to be “officer” positions. For instance, the words *officer* and *office* described people with positions ranging from brigadier general,¹²⁷ to

documents/Hamilton/01-04-02-0217 (last modified Nov. 26, 2017) (two uses) (file labeled “240320-body.txt”); *The Federalist No. 69, [14 March 1788]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Hamilton/01-04-02-0220> (last modified Nov. 26, 2017) (two uses) (file labeled “240342-body.txt”); *The Federalist No. 76, [1 April 1788]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Hamilton/01-04-02-0228> (last modified Nov. 26, 2017) (two uses) (file labeled “240473-body.txt”); *The Federalist No. 77, [2 April 1788]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Hamilton/01-04-02-0229> (last modified Nov. 26, 2017) (file labeled “240477-body.txt”); *New York Ratifying Convention. Fourth Speech of June 28 (John McKesson’s Version), [28 June 1788]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Hamilton/01-05-02-0012-0044> (file labeled “241222-body.txt”).

124. See Mascott, *supra* note 2, at 56; see also *Appendix, supra* note 89, at 8 (depicting these results).

125. Selecting the first 200 concordance hits in this particular database was nonrepresentative in the sense that this database generally was ordered by date, meaning that most of the uses I studied occurred within only a very short time span of the corpus data. See *supra* note 120 (date column described in in the Confederacy spreadsheet). Nonetheless, the sampling shows at least a taste of the interpretive information available from a search of naturally occurring corpus documents, in contrast to the wider swath of information that may be available through a dictionary mini corpus. (This particular research on 200 concordance lines from the COFEA files does not appear in my detailed Stanford study on eighteenth-century officers. The corpus linguistics-style analysis in that article focused mainly on the specialized founding era materials previously referenced by this Article.) See generally Mascott, *supra* note 2, Part II.

126. See, e.g., *To George Washington from Antoine-Jean-Louis Le Bègue de Presle Duportail, 30 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11871> (last modified Nov. 26, 2017) [hereinafter *To Washington from Duportail*] (file labeled “227395-body.txt”) (referring numerous times to “Artillery Officer(s)” without any immediate contextual information indicating the rank or authority level of the officers).

127. *Virginia Delegates to Benjamin Harrison, 8 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Madison/01-07-02-0169> (last modified Nov. 26, 2017) (file labeled “227252-body.txt”) (referring to “Brigr. Genl. McClene, the british officer commdg. at Detroit”).

captains and lieutenants¹²⁸ and lieutenant colonels and majors,¹²⁹ to ensigns, “Surgeons Mates,”¹³⁰ engineers,¹³¹ and a deputy quarter master.¹³² In contrast, sergeants, corporals, and privates were indicated as nonofficers.¹³³ Documents described military personnel as belonging to one of two categories, labeled “officers [and] men”¹³⁴ or “[o]fficers and [s]oldiers.”¹³⁵

There were a few references to “officer” that were meaningful in that they helped to identify a number of distinct, fairly high-level officials who were characterized as *officers* or as holding *offices*. But none of the references provided contextual information indicating the particular characteristics that led these officials’ positions to be thought of as *offices*. For example, one document referred to “many Officers” at “the head of the Departement of the Artillery.”¹³⁶ Another

128. *To Washington from Duportail, supra* note 126 (“Thus one of the Captains or Lieutenants may be detached that makes 16 Officers for the two Regiments . . .”).

129. *Id.* (“[O]ne of the field Officers, the Lt Col. or the Major may be detached also . . .”).

130. *From George Washington to United States Congress, 8 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11803> (last modified Nov. 26, 2017) (file labeled “227250-body.txt”) (“Perhaps it is rather unimportant . . . whether the third Officer of a Compy shall be called a Lt or an Ensign, . . . but I highly approve the scheme of having supernumeraries appointed to fill the Staff-Offices, without depriving the Compys of their proper full proportion of Officers. The same reason which makes it proper to have two Sergt Majors &c. in each Regt of Infantry, will also make it equally necessary to have two Surgeons Mates.”).

131. *To Washington from Duportail, supra* note 126 (“So that after the Union every Officer Should be without any Distinction an Artillery Officer and an Engineer.”).

132. *To George Washington from Richard Platt, 21 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11837> (last modified Nov. 26, 2017) (file labeled “227342-body.txt”) (referring to “the undesirable office of Deputy Quarter Master”).

133. *To Washington from Duportail, supra* note 126 (“[E]ach Company in time of peace . . . [s]hall be composed of 3 Sergeants, 6 Corporals, 24 privates commanded by a first Captn a Second Captn one first Lt and one Second Lieutenant. . . . I propose four Officers in each Company . . .”).

134. *See, e.g., To George Washington from Charles, Marquis de La Rouërie Armand Tuffin, 28 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11866> (last modified Nov. 26, 2017) (file labeled “227383-body.txt”).

135. *To George Washington from Charles, Marquis de La Rouërie Armand Tuffin 30 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11870> (last modified Nov. 26, 2017) (file labeled “227394-body.txt”).

136. *To Washington from Duportail, supra* note 126; *see also id.* (“The Academy must be commanded (under the Director General) by a field Officer . . .”); *id.* (referring to “the Director General” and then explaining that “[t]hrough him shall the Orders of Congress or of the Board of War be transmitted to the Corps. Such an Office appears to me absolutely

letter described officials on the “Executive Council to the Assembly of Pennsylvania” as “executive officers.”¹³⁷ Writers used the term “office” in reference to the position of Governor of the Province of Quebec,¹³⁸ the position of Treasurer,¹³⁹ and the position of President of the Continental Congress.¹⁴⁰ Dr. Benjamin Franklin described himself as having spent fifty years of his life “in public offices and Trusts,”¹⁴¹ and during his time serving as a diplomat overseas, John Adams described himself as holding an “Office.”¹⁴²

necessary”). There also was a category of “Staff Officers,” *From David Cobb to Timothy Pickering, 17 September 1783*, FOUNDERS ONLINE, <https://founders.archives.gov/documents/Washington/99-01-02-11825> (last modified Nov. 26, 2017) (file labeled “227317-body.txt”), and state “Militia officers” were discussed, *From Alexander Hamilton to John Dickinson, [25–30 September 1783]*, FOUNDERS ONLINE, <https://founders.archives.gov/documents/Hamilton/01-03-02-0288> (last modified Nov. 26, 2017) [hereinafter *From Hamilton to Dickinson*] (file labeled “227391-body.txt”).

137. *From Hamilton to Dickinson, supra* note 136. This letter also referred generally to “officers” on a committee of the Continental Congress but did not provide any additional information about the specific positions these “officers” held. *See id.*

138. *See To James Madison from Edmund Pendleton, 29 September 1783*, FOUNDERS ONLINE, <https://founders.archives.gov/documents/Madison/01-17-02-0339> (last modified Nov. 26, 2017) (file labeled “227389-body.txt”) (“Sr. Guy Carltons Enquiry into the forgery had probably a double view of screening the Offenders, & of exposing his predecessors in Office . . .”).

139. *V. Jefferson’s Draft Resolution Authorizing Erection of Public Buildings for Use of Congress, [1783?]*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Jefferson/01-06-02-0287-0006> (last modified Nov. 26, 2017) (file labeled “227207-body.txt”) (“[T]he Treasurer is hereby authorized and required to make on warrants from the Auditors according to the established forms of his office.”).

140. *To George Washington from Elias Boudinot, 17 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Washington/99-01-02-11822> (last modified Nov. 26, 2017) (file labeled “227314-body.txt”) (letter drafted by Elias Boudinot referring to his “Office” during the time period that he served as president of the Continental Congress); *see also* LIBR. OF CONGRESS, 24 JOURNALS OF THE CONTINENTAL CONGRESS 1774-1789, at 377 (Gaillard Hunt ed., 1922), <https://ia601405.us.archive.org/4/items/journalsofcontin24unit/journalsofcontin24unit.pdf> (reporting on June 2, 1783, that the “Seal of the United States of America” had been affixed to Elias Boudinot, the President of the United States in Congress assembled).

141. *To John Adams from Benjamin Franklin, 10 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Adams/06-15-02-0134> (last modified Nov. 26, 2017) (file labeled “227272-body.txt”).

142. *From John Adams to Robert Morris, 14 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Adams/06-15-02-0141> (last modified Nov. 26, 2017) (file labeled “227302-body.txt”) (written when John Adams served as U.S. Minister to the Netherlands). Writers also used the term “office” in contexts other than descriptions of government or military positions. For example, the word “office” was used to describe the relationship between nations. *David Hartley to the American Peace Commissioners, 4 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Adams/06-15-02-0115>

These uses of the terms *office(s)* and *officer(s)* in the corpus files from the 1780s provide some enlightening information about the understanding of those terms during the time period leading up to the Constitution's ratification. But they arguably do not provide nearly as detailed an understanding of the broad range of the concept of *officer* evident from Nathan Bailey's eighteenth-century dictionary.

*B. Dictionaries as a Corpus in Statutory Interpretation:
The Term Harbor*

Examining a dictionary as a type of corpus also may provide relevant information to a court engaged in statutory interpretation. One of the advantages of searching throughout Bailey's dictionary as a corpus was that it enabled a manageable, but still somewhat comprehensive, study of uses of the terms *officer(s)* and *office(s)*. Those terms appeared around 500 times in the dictionary¹⁴³—in contrast to the more than 5,000 *office(s)* and *officer(s)* references in the seven-year span of COFEA documents, which many scholars might choose just to sample.¹⁴⁴

Sampling is an informative tactic.¹⁴⁵ But there is also a positive breadth of information available from looking at every single use of a term to define words throughout the entire range of the English language as recorded in a dictionary. Such an examination of a recently contested statutory term, “to harbor[],” gave insight relevant to the issue before the federal circuit court hearing the case.

The question before Judge Posner and the Seventh Circuit in *United States v. Costello* was whether a woman had “harbor[ed]” her boyfriend by permitting him to live in her home after he entered the country illegally and then committed a drug offense while living in

(last modified Nov. 26, 2017) (file labeled “227220-body.txt”) (describing how a treaty would lead to “the future Intercourse of all good offices between us”). And one sense of the term “office” denoted a task or role. See, e.g., *Abigail Adams to John Adams, 20 September 1783*, FOUNDERS ONLINE, <http://founders.archives.gov/documents/Adams/04-05-02-0140> (last modified Nov. 26, 2017) (file labeled “227331-body.txt”) (“No man was happier in the sons his daughters had given him, two of whom attended him in his last moments, administering to him, those kind *offices*, which his afflicted daughters could not perform.” (emphasis added)).

143. See Mascott, *supra* note 2, Section II.B.2.

144. See *supra* note 124 and accompanying text.

145. See Strang, *supra* note 14, at 1206.

her home.¹⁴⁶ In other words, was it *harboring* just to provide one's boyfriend with a "place to stay," or does *harboring* require a more intentional action like "providing . . . a known illegal alien a secure haven, a refuge, a place to stay in which the authorities are unlikely to be seeking him"?¹⁴⁷ Judge Posner relied in part on a Google search suggesting that the term *harboring* co-occurs frequently with terms that connote "deliberately safeguarding" someone from the authorities.¹⁴⁸ He rejected the government's alternative interpretation that *harboring* includes any provision of a place to stay, which was based in part on dictionary definitions indicating that *to harbor* includes acts as minor as housing a person.¹⁴⁹

In a recent essay, Justice Lee and linguistics scholars praised Judge Posner for moving in the right direction by expanding his interpretive research beyond dictionary definitions.¹⁵⁰ They point out, however, that Judge Posner's search may have been somewhat arbitrary because he did not explain how he chose which terms to pair with the present participle *harboring*.¹⁵¹ Also, Justice Lee and his co-authors pointed out that Judge Posner omitted any research results on the frequency of usage of the precise phrase that would have been of most relevance to the statute—"harboring aliens."¹⁵²

Both Judge Posner and the scholars are correct that the Google corpus research in *Costello* provided helpful information beyond the mere entry in a dictionary defining the word *harbor*. But expanding dictionary use by examining it as a specialized corpus also could have provided context and depth beyond the entry defining *harbor* itself.

146. See *United States v. Costello*, 666 F.3d 1040, 1041, 1049–50 (7th Cir. 2012) (interpreting 8 U.S.C. § 1324(a)(1)(A)(iii), which punishes "anyone who 'knowing or in reckless disregard of the fact that an alien has come to, entered, or remains in the United States in violation of law, conceals, harbors or shields from detection [or attempts to do any of these things], such alien in any place, including any building or any means of transportation'" (quoting 8 U.S.C. § 1324(a)(1)(A)(iii) (2012) (alteration in original))).

147. See *Costello*, 666 F.3d at 1050.

148. See *id.* at 1044 (discussing the frequency of phrases such as "harboring fugitives," "harboring enemies," and "harboring refugees").

149. See *id.* at 1043.

150. Phillips et al., *supra* note 1, at 29.

151. See *id.* at 29, 29 n.36.

152. See *id.* at 28–29, 29 n.36 (describing how Judge Posner performed a Google search for "harboring fugitives" and "harboring guests," among other phrases—but not for "harboring alien[s]"—the term referenced in the statute).

One significant contribution of Judge Posner's corpus work was showing that the term *harboring* frequently arises in phrases that imply intentional concealment such as "harboring fugitives" and "harboring Jews."¹⁵³ Examining one dictionary's use of the term *harbor* in the context of definitions for other terms similarly reveals this *possible* connotation. But the dictionary's contextual use of *harbor* actually more frequently associates the term with the concepts of residence and provision of a place to stay.¹⁵⁴

For instance, *Webster's Seventh New Collegiate Dictionary*¹⁵⁵ uses *harbor* in defining *to cherish* in part as "to entertain or harbor in the mind deeply and resolutely."¹⁵⁶ A connotation of concealment is absent from this definition. *Harbor* also appeared in a definition for *carrier*: "one that harbors and disseminates the causative agent of disease infectious to its kind to which it is immune."¹⁵⁷ The use of *harbor* here also has more to do with residence than concealment, similar to the other definitions for *carrier* like "a container for carrying," a "conveyer," or a "bearer, messenger."¹⁵⁸ Finally, *harbor* is used in a way that does not connote concealment when *Webster's* defines "to hold" as to "harbor" or entertain a theory.¹⁵⁹

In contrast, perhaps sounding more like Judge Posner's conclusion that *harboring* necessarily involves "deliberate safeguarding" from discovery, *Webster's* defines the term *haven* both as a (i) "harbor, port" and as (ii) "a place of safety: asylum."¹⁶⁰ This reference to *harbor* cuts both ways. On one hand, listing *harbor* as a kind of synonym for *haven* along with the word *port* suggests the idea of just a residence or a general safekeeping. On the other hand, the

153. *See Castello*, 666 F.3d at 1044.

154. Use of "Ctrl-F" identified more than seventy references to "harbor" and its variants in the dictionary, but many of these uses occurred in back matter such as a pronunciation guide. *See WEBSTER'S*, *supra* note 53. A spreadsheet detailing the references to "harbor" within the dictionary definitions themselves is available at the Google drive referenced in *supra* note 53.

155. *See WEBSTER'S*, *supra* note 53.

156. *Id.* at 143. The dictionary defined the verb *to harbor* itself as "to give shelter or refuge to"; "to keep possession of (an animal)"; "to be the home or habitat of: contain"; "to hold a thought or feeling of"; "to take shelter in or as if in a harbor" as well as some other meanings that it listed as relating only to animals. *Id.* at 379.

157. *Id.* at 128.

158. *See id.*

159. *See id.* at 396.

160. *Id.* at 381.

association of *harbor* with terms like *haven* and *asylum* suggests the more freighted concept of protection from harm or discovery.

Finally, some of the dictionary's references to *harbor* were not immediately determinative one way or the other. For example, the noun form of the term is defined in part as "a place of security and comfort: refuge."¹⁶¹ The term *harbor*'s association with "refuge" perhaps implies protection from discovery; alternatively, the idea of "security and comfort" is consistent with merely providing someone a place to live. Similarly, the verb form of *to harbor* is defined both as the more open-ended, "to be the home or habitat of: contain" as well as the somewhat more freighted "to give shelter or refuge to."¹⁶² The related noun "[h]arborage" is defined as "shelter" or "harbor."¹⁶³ Judge Posner suggested the verb "[t]o shelter" has an aura of protectiveness."¹⁶⁴ He thus concluded that the term *harbor*'s association with the concept of shelter suggests that *harboring* involves something more serious than housing one's boyfriend.¹⁶⁵ A quick check of just the first ten of 137 references to *shelter* in *Webster's Seventh New Collegiate Dictionary*¹⁶⁶ echoes Judge Posner's point but also brings more depth to the analysis. Each of the first ten references to *shelter* indeed associates the term with a sense of protection. For example, an "accessory" is defined as "one who knowing that a crime has been committed aids or *shelters* the offender with intent to defeat justice."¹⁶⁷ But sometimes the protection invoked by the word *shelter* is just protection from outdoor elements like rain and sun—the type of sheltering that occurs when one gives a friend a temporary place to live.¹⁶⁸ This connotation of *shelter* arises in definitions for the term *airport* (noting it usually "has facilities for the *shelter*, supply, and

161. *Id.* at 379.

162. *Id.*

163. *Id.*

164. *United States v. Costello*, 666 F.3d 1040, 1043 (7th Cir. 2012).

165. *See id.*

166. This is based just on the use of "Ctrl-F" to search the electronic file of the dictionary for references to *shelter*. A spreadsheet containing these first ten uses of *shelter* and its variants is available on the Google drive cited in *supra* note 53.

167. WEBSTER'S, *supra* note 53, at 5 (emphasis added).

168. *Cf. supra* note 147 and accompanying text (identifying the legal question in *Costello* as whether giving one's boyfriend a place to stay amounts to "harbor[ing]").

repair of planes”)¹⁶⁹ as well as the term *bivouac* (“an encampment under little or no *shelter* usu. for a short time”).¹⁷⁰

Here again, examining the dictionary as a corpus with numerous contextual references to *shelter* illuminates a more comprehensive range of the ordinary meanings associated with the term. The interpreter then can return to the context of the relevant statutory provision to determine whether the provision’s ban on harboring more likely imports the synonym of *shelter* (i) in the freighted sense of concealment, or (ii) the general sense of providing residence, or (iii) both.

As scholars have noted, using corpora to identify all of the permissible meanings of a term still leaves unaddressed how the interpreter should select from those meanings to identify a term’s “ordinary meaning.”¹⁷¹ Should a term’s “ordinary meaning” be measured by which meaning of the word most frequently arises in the relevant corpora?¹⁷² Or does the ordinary meaning of a statutory term encompass all of the permissible meanings that fit within the relevant statutory context?

Perhaps the proper question for the Seventh Circuit panel to have addressed about the meaning of *to harbor* was not whether English language speakers more frequently associate *harboring* with concealment versus provision of a place to stay. Maybe instead the court should have asked, what are all of the ordinary meanings of *to harbor* that fit properly within the statutory context? Perhaps *to harbor* encompasses both provision of a residence and deliberate concealment—and both acts therefore are criminal under the statute. Perhaps *enterprise* includes both organizations that have an “economic

169. WEBSTER’S, *supra* note 53, at 20 (emphasis added).

170. *Id.* at 87 (emphasis added).

171. *See, e.g.*, Maggs, *supra* note 33, at 376 (noting there is still the question of selecting between multiple dictionary definitions and recommending that interpreters “should consider all of the possible meanings listed in a dictionary and state expressly the reasons that they are choosing one meaning over others”).

172. *Cf.* Mouritsen, *supra* note 2, at 190, 201 (relying on the *Oxford English Dictionary*’s “linguistic definition of *ordinary*” as language or usage “that [is] most commonly found or attested” as guidance for basing his evaluation of the “ordinary meaning” of the term *enterprise* on the context in which the word “is most frequently used”).

motivation” and those that do not.¹⁷³ Perhaps the ordinary meaning of the term *to carry*¹⁷⁴ includes both transporting a gun in a car and the more common act of carrying a gun on one’s person. Perhaps the statutory phrase “discharg[ing] [a] firearm” encompasses both a single shot and multiple shots,¹⁷⁵ meaning the government could charge someone who fires a burst of shots with just a single offense rather than with multiple counts of discharging a weapon. In other words, ordinary meaning might not mean picking the most common use of a term but rather, identifying the full range of actions encompassed by the permissible meanings of that term.

CONCLUSION

As linguists, legal scholars, and courts seek to perfect the most appropriate way to incorporate corpus linguistics research techniques into statutory and constitutional interpretation,¹⁷⁶ they should consider using dictionary corpora as an interpretive starting point. Legal interpreters certainly should not use dictionaries as their only information source. But expanding the use of dictionaries to include their examination as specialized mini corpora alleviates many of the traditional concerns with reliance on dictionaries in constitutional and statutory interpretation. Furthermore, examination of dictionaries as corpora provides one manageable means to canvas language to identify a wide range of permissible uses of a contested term. As COFEA is developed, founding era dictionaries perhaps should be included alongside the corpus’s natural language documents. And before turning to a typical corpus linguistics database, interpreters might better orient their empirical research by using a dictionary corpus to identify the range of permissible language conventions.

173. See *supra* notes 52–57 and accompanying text (discussing the analysis of the RICO statute included in Mouritsen, *supra* note 2).

174. See Mouritsen, *supra* note 1, at 1916 (analyzing the Supreme Court’s decision in *Muscarello v. United States*, 524 U.S. 125 (1998), which analyzed the meaning of “carry” in this context).

175. See *supra* note 92 and accompanying text (discussing Justice Lee’s opinion in *State v. Rasabout*, 2015 UT 72, 356 P.3d 1258 (2015), which utilized corpus linguistics analysis to assess the ordinary meaning of “discharge”).

176. Cf. Phillips et al., *supra* note 1, at 30 (noting that scholars have not yet fully “operationalized original public meaning” and, in particular, it is not yet explicitly clear whether finding “original public meaning” is equivalent to “finding the most frequent usage between competing senses of the word or phrase in question”).