THE HORSELESS CARRIAGE OF CONSTITUTIONAL INTERPRETATION: CORPUS LINGUISTICS AND THE MEANING OF “DIRECT TAXES” IN HYLTON V. UNITED STATES

JOHN K. BUSH* AND A.J. JEFFRIES**

“The great object of the Constitution was, to give Congress a power to lay taxes, adequate to the exigencies of government; but they were to observe . . . the rule of apportionment, according to the census, when they laid any direct tax.”

_Hylton v. United States_, 3 U.S. (3 Dall.) 171, 173 (1796) (opinion of Chase, J.)

INTRODUCTION

“What would the Founders do?”† That is a worthwhile question for corpus linguistics to ask as its methodology matures and foundational corpora like the Corpus of Founding-Era American English come into being. What sources would they consult? What did they read? Answering those questions will make corpus linguistics a more valuable tool to answer the foundational question in constitutional interpretation: what did We the People agree to in 1788?‡

---

* Judge, United States Court of Appeals for the Sixth Circuit.
** Law clerk to Judge Justin Walker, United States Court of Appeals for the D.C. Circuit. Former law clerk to Judge Bush. J.D. Stanford Law School, B.A. Southern Methodist University. JLPP’s editorial staff has not independently reviewed the corpus linguistics analysis presented herein.
‡ See Gary Lawson & Guy Seidman, _Originalism as a Legal Enterprise_, 23 CONST. COMMENT. 47, 59 (2006) (“[W]hen the Constitution declares that ‘We the People’ ‘ordain and
We consider those questions in the context of “direct taxes”—a hotly debated topic throughout our nation’s history.\(^3\) The Constitution gives Congress a broad power to tax, but it places important limitations on that power, including that direct taxation may occur only if the tax is apportioned among the states.\(^4\) A direct tax is constitutionally apportioned when the amount of the tax paid from each state is equal to its share of the nation’s total population.\(^5\)

The subject of direct taxation first came up in federal court after Congress imposed a tax on carriage ownership in 1794.\(^6\) A century later, Congress enacted an income tax.\(^7\) And today, as the conception of the proper role of government expands yet further, prominent politicians have begun to advocate for a tax on wealth.\(^8\) Each of those novel federal taxes has faced the same constitutional challenge: an argument that each is a “direct tax” and therefore are unconstitutional unless they are apportioned according to the so-called “Direct Tax Clause” of Article I.\(^9\) Yet despite the apportionment requirement’s importance, it has remained accepted wisdom

---

Corpus Linguistics and the Meaning of “Direct Taxes”

at the Supreme Court that “[e]ven when the Direct Tax Clause was written it was unclear what else, other than a capitation (also known as a ‘head tax’ or a ‘poll tax’), might be a direct tax.”

Corpus linguistics offers a way to test the Court’s claim that those who wrote and ratified the Direct Tax Clause enacted constitutional text that they did not themselves understand. “[C]orpus linguistics is the study of language function and use by means of an electronic collection of naturally occurring language called a corpus.” By examining hundreds of uses of a phrase in its natural context, researchers can better identify the “relevant senses or meanings of the words and phrases that appear in the constitutional text.” This Article applies the technique to the phrase “direct tax” in the Direct Tax Clause, which reads, “No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or enumeration herein before directed to be taken.” Defining that clause is vitally important because of the “practical impossibility in modern times of apportioning just about any plausible tax.”

Our analysis sought to answer three questions. Did “direct tax” have an established meaning at the Constitution’s ratification? If so,
what was that meaning? And finally, what role should corpus linguistics play in assessing questions of original public meaning like the first two? To the first question, the corpus offered a resounding yes. Our answers to the second and third questions, however, offer support for Lawrence Solum’s view that, while corpus analysis can be a useful tool for constitutional interpretation, it alone is not always enough to determine a constitutional text’s meaning.15

Part I of this Article describes the clause’s origins and the modern debate among scholars over the meaning of “direct tax.” Part II.A briefly explains corpus linguistics and the corpus we used. Part II.B presents our findings. Then Part II.C analyzes them. Part IV discusses our findings’ implications for *Hylton v. United States*,16 the Supreme Court’s first foray into interpreting the Direct Tax Clause and a case that provides clues as to what the Framers would advise that we should do with respect to the use of corpus linguistics. Finally, Part IV offers our brief thoughts on avenues for future analysis of the Direct Tax Clause.

### I. The Uncertain Academic Debate

#### A. The Introduction of the Phrase Direct Tax into the Constitution

Three clauses in Article I of the Constitution shape the national government’s taxing power. First, in describing the composition of the House of Representatives, Section Two says that “Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers . . . .”17 Second, Section Eight provides: “The Congress shall have Power To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United

---

16. 3 U.S. (3 Dall.) 171 (1796).
17. U.S. CONST. art. I, § 2, cl. 3.
States.”18 And third, Section Nine limits the taxing power by dictating that “No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or enumeration herein before directed to be taken.”19 So how did the national government’s taxing power take shape?

Under the Articles of Confederation, the federal government had no taxing authority.20 Instead, it had to ask the states for funds in proportion to the value of the states’ respective lands.21 If the states chose not to comply, they faced no repercussions, so the states’ compliance rate was a paltry 37%.22 That left the federal government impotent if it had to face war, rebellion, or any other national crisis.23 So when the delegates to the Constitutional Convention arrived in Philadelphia, taxation was near the top of the agenda.24

At the convention,25 after much debate over the proper principle by which to allocate representation in the lower house, Gouverneur Morris moved to introduce into the Constitution a requirement that “taxation shall be in proportion to Representation.”26 In

20. See Dodge, supra note 7, at 848.
21. Id.
23. See id. at 2380.
24. Id. at 2381 (“Creation of an adequate revenue system was, for many if not most founders, a critical aspect of constitution making.”); Dodge, supra note 7, at 848 (“The Constitutional Convention of 1787 largely resulted from an effort (led by Virginia) to create a national government with a meaningful taxing power.”).
25. There was, of course, no official history of the convention, but Madison’s notes—though far from perfectly reliable—offer insight into the drafting process. Dodge, supra note 7, at 848–49 & n.27.
response to objections, including George Mason’s fear that it might “drive the Legislature to the plan of Requisitions,” 27 Morris then introduced the critical distinction between direct and indirect taxes. He proposed to address the objections “by restraining the rule to direct taxation” so that “[w]ith regard to indirect taxes on exports & imports & on consumption, the rule would be inapplicable.” 28 So limiting the rule would not introduce inequality between the states, he thought, because “[n]otwithstanding what had been said to the contrary he was persuaded that the imports & consumption were pretty nearly equal throughout the Union.” 29 James Wilson, a future member of the Hylton Court, “approved the principle, but could not see how it could be carried into execution; unless restrained to direct taxation.” 30

Later, the Convention added a specific “clause requiring capitation taxes to be apportioned according to the census.” 31 Then, when the final draft of the Constitution emerged from the Committee on Style and Arrangement, the capitation and direct-tax provisions merged into the current language requiring apportionment of a “Capitation, or other direct, Tax.” 32

Before that final version, however, one other brief mention of direct taxes was made. On August 20, late in the convention but before the draft went to the Committee on Style and Arrangement, Rufus King “asked what was the precise meaning of direct taxation? No one answd[sic].” 33

27. Id.
28. Id.
29. Id.
30. Id.
31. Dodge, supra note 7, at 853.
32. Id. at 854; U.S. CONST. art. I, § 9, cl. 4.
B. Academic Disagreement

Over the years, many academics have drawn from that page in Madison’s notes the conclusion that the term “direct tax” was simply devoid of meaning when the Framers placed it in the Constitution. Others have concluded that the Framers must have had a reason for differentiating between direct and indirect taxes, and they have offered interpretations of their own. Taken together, those theories offer a spectrum of possible meanings for the phrase ranging from nugatory to expansive. We briefly survey those views, starting from disregarding the clause altogether and moving to the most expansive reading. Our survey is not comprehensive, but it offers a sense of the possible meanings “direct tax” could carry.

Professor Bruce Ackerman contends that we should simply ignore the requirement that Congress apportion all direct taxes. He

34. See, e.g., Dwight W. Morrow, The Income Tax Amendment, 10 Colum. L. Rev. 379, 398 (1910); Johnsen & Dellinger, supra note 14, at 117–18 (“The evidence establishes that the term’s meaning was unclear to the Framers themselves.”); Bruce Ackerman, Taxation and the Constitution, 99 Colum. L. Rev. 1, 4 (1999) (“[T]he Founders didn’t have a very clear sense of what they were doing in carving out a distinct category of ‘direct’ taxes for special treatment.”). Erik Jensen, in refuting this somewhat apocryphal reading of the historical record, points out that “[a]t the Massachusetts ratifying convention, King himself did not appear to be the hopelessly confused soul that the unanswered question would suggest. In urging ratification, King stated, ‘It is a principle of this Constitution, that representation and taxation should go hand in hand.’” Jensen, Consumption Taxes, supra note 22, at 2379 (quoting 2 The Debates in the Several State Conventions on the Adoption of the Federal Constitution 36 (Jonathan Elliot ed., 1876)). Charlotte Crane, in a draft article, goes a step further and posits “not only the possibility that the expression did have a meaning, but also that conscious efforts may have been made during the early years of the republic to obscure that meaning.” Charlotte Crane, Reclaiming the Meaning of “Direct Tax” 3 (Feb. 15, 2010) (unpublished manuscript) (available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1553230)[https://perma.cc/ACW8-TFT4].

35. See infra note 41.

36. Ackerman, supra note 34, at 58.
believes that because Gouverneur Morris introduced the requirement that Congress apportion direct taxes as part of a deal with the slave states, we should disregard it in light of the repudiation of slavery in the Reconstruction Amendments. Perhaps, he says, “some future court might find itself obliged by the express language of the Constitution to strike down a classic ‘Capitation Tax.’” Beyond that narrow example, though, Professor Ackerman would have the courts refuse to classify any other tax as a direct tax.

Next comes what we will call the pragmatic approach. Dawn Johnsen and Walter Dellinger break with Professor Ackerman and argue instead for this approach because they “must assume that the Framers included the phrase ‘or other direct’ following ‘capitation’ for a reason,” and “constitutional text may not be ignored simply because it was the product of compromise rather than thoughtful policy—even compromise inextricably infected by the evils of slavery.” Under their reading, only capitations, slave taxes, and taxes on real property are direct taxes. They take those limits from their reading of the Justices’ opinions in Hylton v. United States. On top of that “categorical” meaning, they add a “functional” rule: only a tax that can be apportioned sensibly, with “just and equitable” results, can be a direct tax. The functional rule admits of some circularity—a tax can only be direct if it can be apportioned, and when

37. Id. at 10, 51.
38. Id. at 51.
39. Id.
40. Johnsen & Dellinger, supra note 14, at 120.
41. Id. at 124–25.
42. Id. at 122.
43. Id. at 125; see also Calvin H. Johnson, Apportionment of Direct Taxes: The Foul-Up in the Core of the Constitution, 7 WM. & MARY BILL OF RTS. J. 1, 71–82 (1998) (advocating for a similar functionalist approach limiting apportionment to cases “when it is reasonable and convenient” while acknowledging that such an approach is ahistorical); but see Dodge, supra note 7, at 916–17 (disputing Johnson’s interpretations of Hylton). Johnson actually believes that the original meaning of direct tax is broader than any of these definitions, encompassing any internal tax, including an excise or consumption tax. See
it is deemed direct it must be apportioned—but Johnsen and Dellinger contend that it accurately describes how the Supreme Court has interpreted the Direct Tax Clause for most of our history.\textsuperscript{44}

Slightly more expansively, Joseph Dodge argues that direct tax is limited to “requisitions, capitation taxes, and taxes on tangible property.”\textsuperscript{45} After first discussing and rejecting the prior two interpretations, Dodge draws his principle from several sources. First, he describes the “unanimous agreement in historical sources, legislative and executive practice, and judicial doctrine that ‘direct tax’ encompasses taxes on real estate.”\textsuperscript{46} Second, he decides that any tax that is subject to apportionment must have “a definite geographical location in a state” because the national government must know how much of an item exists within each state’s borders to properly extract that state’s share of the tax.\textsuperscript{47} Third, he notes the difficulty of determining “what constitutes a real estate tax.”\textsuperscript{48} And fourth, he explains the states’ comparative advantage in taxing tangible personal property and the national government’s comparative advantage in taxing intangible property, income, and other easily movable forms of value.\textsuperscript{49} That combination of historical sources and policy considerations leads to his conclusion that tangible personal property is the best place to draw the line between direct and indirect taxes.\textsuperscript{50}

Finally, and most broadly, Professor Jensen has argued in numerous pieces that the line between direct and indirect taxes is

\begin{footnotesize}
\begin{itemize}
  \item Johnson, supra, at 46. An abundance of data in the corpus anecdotally disproved Johnson’s conception of the phrase’s original meaning.
  \item Johnsen & Dellinger, supra note 14, at 122–25 (relying heavily on Hylton).
  \item Dodge, supra note 7, at 841.
  \item Id. at 918.
  \item Id. at 922 (emphasis in original).
  \item Id. at 927.
  \item Id. at 930–31.
  \item Id. at 932.
\end{itemize}
\end{footnotesize}
whether the tax is imposed directly on an individual and is not “shiftable”; whether the person paying the tax can, at least in theory, pass the burden of the tax on to someone else. Jensen offers this example: take a widget seller that faces a new five percent tax on its $1 widgets. It can pass that tax on to consumers by selling its widgets for $1.05, so the tax is shiftable. Economic realities, like a competitor who does not face the tax burden, may force the seller to instead pay the tax itself, but that does not change the nature of the tax as shiftable. On Jensen’s theory, a tax that is at least theoretically shiftable is indirect, and a tax that cannot possibly be shifted is direct.

Throughout these scholars’ sometimes heated debate over the Direct Tax Clause’s meaning, none has closely examined the Clause’s original public meaning. We turn to corpus linguistics for the insight it offers into that facet of the interpretive question.

52. Jensen, Consumption Taxes, supra note 22, at 2395.
53. Id.
54. Id.
55. Id. at 2405–06.
56. See, e.g., Ackerman, supra note 34, at 52–56 (accusing Jensen of having an “intemperate formulation,” creating “distortion,” making “a hash of the Founding text,” and taking a “backwards approach to the definition of key terms”); Jensen, How to Read, supra note 51, at 689 (“Life is too short to respond to all the problems in Professor Ackerman’s article.”); id. at 688 (“I should have left interpretation of constitutional matters to the Grand Theorists at Yale, who generally avoid the racism that taints my article and who are never enterprising.”).
II. CORPUS LINGUISTICS ANALYSIS OF “DIRECT TAX” AND “DIRECT TAXES”

To find greater context for the meaning of “direct tax” in the Constitution, we searched for “direct tax” and “direct taxes” in the Corpus of Founding-Era American English (COFEA). In this section, we will describe corpus linguistics and how it works, then briefly describe COFEA. Then we will analyze the findings from our corpus linguistics analysis.

A. Corpus Linguistics

1. What It Is and How It Works

Corpus linguistics is based on the simple idea that the best way to determine ordinary meaning is “to analyze real examples of language as it is actually used.” At its most basic level, corpus linguistics is simply a method for determining meaning in which one uses a random sample of relevant sources that use a particular word or phrase. Lawyers do an informal version of this when they search Westlaw to look at how a bunch of cases use a particular word or phrase in order to determine its meaning. Corpus linguistics is a way to formalize this process and, hopefully, make it more accurate and replicable. The main advantages of using corpus linguistics are (1) it prevents cherry-picking sources, (2) it allows for larger and more representative sample sizes, and (3) it limits sources to those that are relevant for answering the particular question at issue (e.g., for the original meaning of the Constitution, only including sources from the Founding era).

Corpus linguistics has long been used by linguists and has recently been imported into law. Its growing popularity in legal circles stems from two beliefs: first, that words have meaning; and second, if the ordinary meaning of a legal text is discernible, then we should follow it. In effect, corpus linguistics offers a way to try to make the search for ordinary meaning scientific and replicable. That makes it very appealing to “original public meaning” originalists, who believe that the Constitution’s meaning is based on the public’s understanding of its text at the time the states ratified it.

Whether it always succeeds in those noble aspirations is a subject of some debate. But at the very least, it offers enough promise to be a valuable tool that legal interpreters should consider adding to their belts.

First, someone must assemble an appropriate “corpus”—a large database of naturally occurring language that will be representative of the people whose use of the word the researcher hopes to understand. If, for example, an originalist hopes to understand how the Founding generation understood the phrase “establishment of religion,” it would do no good to search in a corpus of twenty-first century newspaper articles. Rather, that researcher would look in a corpus of Founding-era texts. Using an appropriate corpus is essen-

59. Id. at 793–95.
63. See Lee & Phillips, supra note 60, at 290.
tial to the inquiry—“[a]s in the computing term ‘garbage in, garbage out,’ corpus linguistic analysis can be no better than the corpus one is using.”

After finding or creating an appropriate corpus, the researcher has several ways to analyze the data. First, one can look generally to word frequency over time and within different types of sources. Second, one can look to collocation, which considers the tendency of words “to be biased in the way they co-occur.” Words that appear near each other with uncommon frequency have some relationship, though it takes further analysis to discern their specific relationship. Third, one can examine “the heart of corpus linguistics analysis”: the concordance line.

A concordance line is “a listing of each occurrence of the sought word or pattern presented with the words surrounding it.” Basically, each concordance line looks like a Google search result—it contains a snippet of text “centered on the word or phrase searched.” For an example, see Figure 1 below.


67. Id. at 200 (quoting SUSAN HUNSTON, CORPORA IN APPLIED LINGUISTICS 68 (2002)).
68. Id. (offering the collocation of “dark” and “light” as an example).
69. Id. at 201.
70. Barclay et al., supra note 64, at 530.
71. Phillips & White, supra note 65, at 201.
Examining concordance lines allows our hypothetical researcher to see how each occurrence of the word was used in context. “It is the slow and difficult analysis of concordance lines—the qualitative aspect of corpus linguistic analysis—that usually provides the best and most important data in corpus linguistic analysis.”

One starts by identifying different “senses” of the relevant word or phrase. For example, a researcher investigating the Second Amendment could identify two possible senses of “bear arms”: the arms of an ursine mammal or carrying weapons. The researcher then codes (i.e. labels) different concordance lines according to which sense is used. If, after coding enough lines, the latter sense predominates over the former, it is “strong evidence” that the Second Amendment defends our right to carry weapons rather than our right to consume bears’ arms. After identifying senses, the re-

---

72. Barclay et al., supra note 64, at 531.
73. Phillips & White, supra note 65, at 201; see Lee & Phillips, supra note 60, at 291 (“Sense-distribution coding (from concordance-line analysis) is arguably the most important use of a corpus; other tools are more exploratory than confirmatory in nature (or at best provide only weak evidence of meaning).”).
74. Lee & Phillips, supra note 60, at 292. But see Kyra Babcock Woods, Note, Corpus Linguistics and Gun Control: Why Heller Is Wrong, 2019 B.Y.U. L. Rev. 1401 (demonstrating that a corpus linguistics analysis of the Second Amendment is far more difficult
The searcher embarks upon the hard work of corpus linguistics analysis—going through each concordance line and determining which sense it fits within. If a word or phrase has only a few hits, one can code every line. More often, one will code a sufficiently large sample of the hits to provide confidence in the results. Such analysis is inherently “qualitative in nature,” and thus introduces an element of subjectivity. Ideally, researchers can counter that subjectivity by having multiple people examine the same concordance lines to ensure agreement. At the end of that long, laborious process, the researcher should have greater insight into the frequency with which the relevant population used each sense of a word or phrase.

It is important to note, however, that although one sense predominating over another is “strong evidence that meaning is how that term or phrase was most commonly understood,” it is not dispositive. Often, corpus linguistics will be most useful in determining the scope of ordinary meaning rather than providing the single, correct, concrete meaning of a phrase. “Corpus data may tell us something about the relative frequency of the various meanings, but the most frequent meaning is not necessarily the ordinary meaning in context.” Thus, although corpus linguistics can shed light on a word’s ordinary meaning, it cannot alone determine that

75. See Lee & Phillips, supra note 60, at 291.
76. Id.
77. Id. at 291, 329.
78. Phillips & White, supra note 65, at 207 (doing so); Jones, supra note 74, at 173 (“The last caveat I would add is that this Note’s concordance line coding was obviously the product of my own intuition and biases. Ideally, coding decisions are reviewed by multiple people and decisions are subject to quality control.”).
80. Solum, supra note 12, at 1645.
81. Id. at 1647.
meaning. Carissa Byrne Hessick offers a helpful example.\textsuperscript{82} Imagine, she invites us, “a dispute over the scope of a statute that provides relief for flood victims.”\textsuperscript{83} In a relevant corpus, one could easily imagine that the most frequently used sense of flood refers to extreme flooding, “such as New Orleans after Hurricane Katrina in 2005 or Houston during Hurricane Harvey in 2017,” because those events receive more news coverage and generate more discussion than smaller-scale floods do.\textsuperscript{84} That analysis is not dispositive of the question “whether the average American would understand the statutory term ‘flood’ to include three inches of water in a homeowner’s basement after a neighboring water main burst.”\textsuperscript{85} Now that we have briefly explained the benefits, limitations, and techniques of corpus linguistics analysis, we can turn to our chosen corpus.

2. COFEA

COFEA, the Corpus of Founding-Era American English, is a historical corpus covering the period from “1760–1799—the beginning of the reign of King George III until the death of George Washington.”\textsuperscript{86} It combines the Evans Early Imprint Series, the National Archives Founders Papers Online Project, and relevant materials from Hein Online.\textsuperscript{87} The Evans Series contains “nearly two-thirds of all books, pamphlets, and broadsides known to have been printed in this country between 1640 to 1821.”\textsuperscript{88} Of those nearly 40,000 documents, approximately 6,000 were available in fully searchable form; COFEA contains those 6,000.\textsuperscript{89} The Founders

\textsuperscript{82} Carissa Byrne Hessick, Corpus Linguistics and the Criminal Law, 2017 B.Y.U. L. REV. 1503.

\textsuperscript{83} Id. at 1509.

\textsuperscript{84} Id.

\textsuperscript{85} Id.

\textsuperscript{86} Lee & Phillips, supra note 60, at 293.

\textsuperscript{87} Id.

\textsuperscript{88} Id. (quoting TEXT CREATION PARTNERSHIP, http://www.textcreationpartnership.org/tcp-evans/ [https://perma.cc/9Y6J-48XU] (last visited Oct. 16, 2018)).

\textsuperscript{89} Id.
Online database contributed the “correspondence and other writings of six major shapers of the United States: George Washington, Benjamin Franklin, John Adams (and family), Thomas Jefferson, Alexander Hamilton, and James Madison,” including the letters those six received from other Founders and ordinary citizens.90 And Hein Online provided legal materials from the relevant year range, including statutes, case law, legal papers, legislative debates, and the like.91 In total, COFEA contains 100,000 texts and over 150 million words.92 It’s not perfect,93 but it’s “the best tool we currently have.”94

B. Our Corpus Analysis

Our search for “direct tax” and “direct taxes” in COFEA yielded 1,161 results (475 for the singular, 686 for the plural). Initially, we analyzed the frequency of results within each source and between years. Then, after collocate analysis offered little insight, we embarked on the “hard work of qualitatively analyzing concordance lines.”95 First, we identified which senses of the term we should look for, while remaining open to new ones as the analysis progressed. Next, because there were too many results to code all of them, we used an online tool to calculate how many hits we would need to analyze to get a 5% confidence interval (after removing unusable lines like quotations of the Constitution or congressional indices, for example).96 Finally, after coding five-hundred hits (with eighty-eight exclusions97), we analyzed our data.

90. Id. at 294 (quoting Founders Online, NAT’L ARCHIVES, https://founders.archives.gov/ [https://perma.cc/GD48-CDCH] (last visited October 16, 2018)).
91. Id.
92. Id.
93. Id. at 294–95 (describing its three major shortcomings in representativeness).
94. Id. at 295.
95. Id. at 312.
96. See Phillips & White, supra note 65, at 205–06 (using the same methods).
97. We noted a reason for excluding each of these concordance lines to ensure future scholars seeking to replicate our results could understand our logic.
1. General Frequency Data

Two types of frequency analysis proved interesting with regard to direct taxes.

First, we examined which corpora our hits came from. We saw dramatic disparities in the frequency with which our search terms appeared in the different sources:

Figure 2: Source Distribution as Percentage of Hits

![Pie chart showing source distribution](image1)

Figure 3: Frequency of “direct tax” and “direct taxes” by corpus

![Bar chart showing frequency](image2)
As the pie chart shows in Figure 1, the overwhelming majority of our hits came from Hein Online. Materials in Hein Online are primarily legal. So the strong representation in Hein Online can be “evidence that the term either has a legal meaning, or at least has more relevance to a legal context compared to an ordinary one.” That disparity raises the possibility that “direct tax” is a legal term of art rather than a phrase in common parlance. But it is also possible that the term simply has greater salience to a legal context without being a term of art. Thus, the source comparison tells us that “direct tax” is a predominately legal term, even if it is not necessarily a term of art.

Second, we examined which years had the most hits. We saw a huge spike for one year:

Figure 4: Number of hits for “direct tax(es)” by year in COFEA

---

98. Phillips & White, supra note 65, at 204.
100. See id.
101. See id.
In 1790, a year and a half after the Constitution’s ratification, direct tax appears 818 times in COFEA. That sum represents just over 70% of the total hits, with most of those coming from congressional debates about the assumption of state debt and whether to impose a direct tax to pay for it. For comparison, the year with the next-most hits was 1788, when the ratification debates produced seventy-three uses of the searched-for phrases. There were thirty-seven hits for 1787, the year with the most hits until the Constitution was ratified; before that, the year with the most hits was 1781, with only five hits.

From that data, we could draw two possible conclusions. On the one hand, we could conclude that the phrase “direct tax” was simply a made-up term that required later interpretation by Congress, the President, and the courts, as some scholars believe. On the other hand, we could conclude that it was an understood term that simply had limited importance, at least among the sources COFEA draws on, until it received attention as a limitation on Congress’s power to tax. Again, the frequency data in isolation cannot answer that question. So we turn now to the sense analysis.

2. Senses We Used

Because we (perhaps ambitiously) sought to answer two questions, we coded for two different categories of senses. To answer the larger question of what a direct tax is, we coded for “concrete uses” of direct tax[es] when possible. By that we mean concordance lines where we could determine from the context what kind of tax the speaker referred to or how he decided whether a tax would be direct or not. When we could not code for a “concrete sense,” we then coded to answer the narrower question whether people understood the phrase direct tax at the Founding and, if so, any frame of reference they had for the term. We called those “determinate senses.”

We derived our concrete senses primarily from the different academic definitions described above, but we ultimately removed one and added one. For removal, we (unsurprisingly) found no
support for Bruce Ackerman’s desire to ignore the apportionment requirement in light of its role in the constitutional debate over slavery, so we will not list it as a possible sense. As to the sense we added, we thought it came from a sufficiently reputable source to merit inclusion—Alexander Hamilton. In his brief in Hylton, the carriage tax case, Hamilton argued that “[t]he following are presumed to be the only direct taxes: capitation or poll taxes. Taxes on lands and buildings. General assessments, whether on the whole property of individuals, or on their whole real or personal estate; all else must of necessity be considered as indirect taxes.”

Essentially, Hamilton’s approach is Johnsen and Dellinger’s categorical rule discussed above with two crucial changes: first, he added “general assessments” on individuals’ whole property or whole estate; second, he did not argue for Johnsen and Dellinger’s functional limitation on the direct-tax rule.

That leaves the following senses, with the shorthand we used for graphics in parentheses:

- A tax that is capable of apportionment as Johnsen and Dellinger describe it (apportionable);
- The Hamiltonian “baseline” of real estate, capitations, and general assessments (baseline);
- Dodge’s “all tangible property” approach (all personal property);
- Jensen’s “any tax that is not shiftable” approach (not shiftable).

It bears noting that all of these terms overlap, such that each sense necessarily includes any tax that would fit within the prior. A Venn diagram helps to display the relationship. See Figure 5.

---


Today, the only direct tax that could possibly be apportioned in a “just and equitable” fashion is a capitation.\textsuperscript{104} As a capitation is part of all other definitions, the “apportionable” meaning fits within the others. Next, all taxes within the Hamiltonian baseline fall on property, so it is a subset of the “all tangible property” meaning. And finally, as Jensen explains in defining his shiftableness approach, no tax on the ownership of property is shiftable.\textsuperscript{105}

As we discuss in further detail below, that overlap—combined with the heavy weight of Congressional Record sources—makes it difficult to reach a firm conclusion as to the correct sense of “direct tax.”

We had less academic guidance on our determinate senses. Initially, we expected to have only two: used as an accepted term and treated as ambiguous. But as we conducted the corpus analysis, we

\textsuperscript{104} Id. at 125; Dodge, supra note 7, at 844 (explaining why only a capitation can be fairly apportioned).

\textsuperscript{105} Jensen, Consumption Taxes, supra note 22, at 2360.
determined that we could use two more particular determinate senses. Thus, our final sense-coding included:

- Used as an understood term without questioning (accepted term);
- Used to refer to state direct taxes (state direct taxes);
- Used in contradistinction to indirect taxes (all non-indirect taxes);
- And treated as ambiguous or accompanied with expressions of uncertainty (treated as ambiguous).

We almost exclusively used the determinate senses when we could not decide on a concrete sense (though in a few rare cases we double-coded a term as using both a concrete sense and the state-direct-tax sense). Thus, we had to add all of the concrete uses to the non-ambiguous determinate uses to fully answer the question whether “direct tax” was simply an unknown term. Now that our senses are clear, we can present our data.

3. Sense Analysis

First, in our analysis of the 199 concrete uses of the term, we found that discussions of the baseline conception of a direct tax predominated over all other conceptions.

Notably, we found only one concordance line that used direct tax in the “apportionable” sense. In 1794, Representative Theodore Sedgwick of Massachusetts argued that a carriage tax must not be a direct tax because “as several of the States had few or no carriages, no such apportionment could be made, and the duty of course could not be imposed.”106 But just a few paragraphs earlier, he had also conceded that, of course, “a capitation tax and taxes on land and on property and income generally, were direct charges, as well in the immediate as ultimate sources of contribution.”107 Because it

106. 4 ANNALS OF CONG. 644–645 (1794).
107. See id. at 644.
is unclear how those principles would interact—if, as for Johnsen and Dellinger,\(^\text{108}\) the specific examples of direct taxes might yield to the broader apportionability principle—we erred on the side of coding it as both baseline and apportionable.

**Figure 6: Distribution of senses of “direct tax” and “direct taxes”**

Second, our analysis of determinate uses of direct tax—especially once we accounted for the uses we coded as concrete—undermines the notion that “the term’s meaning was unclear to the Framers themselves.”\(^\text{109}\)

---

108. See *supra* notes 41–45 and accompanying text.
Figure 7: Usage Determinacy

Figure 8: Percentage of senses of direct tax(es)
That only three of the 412 concordance lines we coded expressed uncertainty or confusion as to the term’s meaning seems to resolve the question that the year data, by showing a spike in uses after the Constitution’s ratification, raises. Rather than being an undefined term, the term “direct tax” had a definite meaning but little salience, at least in the sources in COFEA, until the Constitution granted the power to impose direct taxes to Congress and limited that power with the apportionment requirement. That conclusion also finds support in the frequent recourse of concordance lines to state taxes as a basis for understanding what a direct tax was—if the states’ normal means of imposing taxes, other than state imposts, were generally understood to be direct taxes, then the term necessitated little discussion.

C. Analysis

What can we draw from our corpus data, then? We will note at the outset of our analysis two problems that weakened our ability to draw firm conclusions. Then we will nonetheless offer at least tentative findings, and we will note areas of future research that our determinate-use analysis indicates could prove fruitful in understanding the original meaning of direct tax. Finally, we will offer our thoughts about the value of corpus linguistics in answering difficult interpretive questions.

1. Caveats

There are two issues we had to account for in our final analysis. First, as we showed earlier, the overwhelming majority of our hits came from Hein Online. On top of the legal tilt that shows, almost the entirety of those 834 hits came from Hein Online’s collection of the debates in the House of Representatives. More specifically, they came from debates in the House about whether to impose a direct tax (and, if one must be imposed, how best to do so), as well as from discussion of the actual bill to impose a tax on land, houses, and slaves. In discussing whether and how to impose a direct tax, most Representatives accepted that a tax on real estate
would be the most manageable and constituted the quintessential direct tax. Thus, that context may have biased the data in favor of the “baseline” formulation.

Second, especially in light of the first issue, the overlapping nature of the senses makes it difficult to conclude that a narrower sense of the term necessarily sets its upper bound. It is similar to Carissa Hessick’s flood problem. Just as everyone agrees that the post-Katrina flooding is a flood, everyone in the Founding generation understood that at a minimum a tax on land would be a direct tax, so land taxes were a common point of reference. But that does not necessarily mean that land taxes exhaust the phrase’s meaning.

2. Findings

After that necessary bit of throat clearing, we can at last offer our findings. First, the clear point: the Supreme Court was incorrect in National Federation of Independent Businesses v. Sebelius, at least when it claimed that “[e]ven when the Direct Tax Clause was written it was unclear what else, other than a capitation (also known as a ‘head tax’ or a ‘poll tax’), might be a direct tax.” If nothing else, everyone accepted that a land tax was a direct tax. More broadly, though, the data show very few instances of people expressing uncertainty about the phrase’s meaning—in a staggering 99.28% of concordance lines, the speaker spoke confidently about the term, even when he did not offer a concrete sense. And it seems quite clear that, at a minimum, the types of direct taxes that fell within Alexander Hamilton’s baseline category (land, houses, slaves, capitations, and general assessments) were unanimously accepted as direct taxes. Thus, our corpus analysis can disprove the myth that

110. See Hessick, supra note 82, at 1509.

111. As one of us is a sitting federal judge, it is important to note that these are our tentative findings as to the original meaning of direct tax. In a case involving the issue of whether a particular tax is a direct tax, Judge Bush would have to consider more than the narrow questions we are analyzing—most importantly, binding Supreme Court precedent that is outside the scope of this Article.

the Founders plucked the phrase “direct tax” from thin air and plugged it into the Constitution.

Second, although the corpus data do not provide a concrete, usable definition or test for what the constitutional phrase “direct tax” means, they offer some clarity as to particular uses. For example, it has long been accepted wisdom, even among prominent proponents of a wealth tax like Thomas Piketty, that such a tax would be unconstitutional.113 Some scholars who hope to see a wealth tax enacted have challenged that accepted wisdom.114 But a wealth tax is the exact kind of “[g]eneral assessment[,] whether on the whole property of individuals, or on their whole real or personal estate,” that Hamilton noted lay at the heart of direct taxation.115 As such, our corpus analysis indicates that the accepted wisdom is correct. It also confirms the conventional wisdom that any tax that falls on real property must be apportioned to pass constitutional muster.116

Our more-particularized-determinate-use analysis also offers valuable insight into avenues of research that might further clarify what exactly a direct tax is. First, its frequent use as encompassing all non-indirect taxes supports Erik Jensen’s view that the two terms constitute the entirety of the taxing power.117 So an indirect way to define the original meaning of direct taxes would be to de-

114. See Ackerman, supra note 34, at 6; see generally Johnsen & Dellinger, supra note 14.
115. Brief for the United States, supra note 102, at 382.
117. See Jensen, Consumption Taxes, supra note 22, at 2395.
termine concrete definitions of the three types of indirect taxes: imposts, duties, and excises. More particularly, finding the line between an excise, a duty, and a direct tax could be dispositive because the Supreme Court has often characterized taxes challenged as direct as instead being either an excise or a duty. If a litigant can show that a tax is neither a duty nor an excise, then a court will likely find it to be a direct tax. Second, the term's use to refer to state taxes indicates that there would be great value in an analysis of state taxation practices at the Founding. To that end, Secretary of the Treasury Oliver Wolcott Jr.'s report to the House of Representatives on a plan to lay a direct tax offers an excellent starting point. It describes state taxing methodologies in some detail and, at a minimum, reinforces the conclusion that a general assessment on a person’s property is a direct tax.

3. Observations about Corpus Linguistics

At least in matters of constitutional interpretation, we are persuaded that corpus linguistics is a useful tool for determining the scope of a phrase’s possible meanings, but that it alone will rarely be enough to prove which sense is correct. But it can definitively disprove theories and senses, as we have shown. In the context we studied, it disproved both the notion that “direct tax” has no original meaning to be found and the claim that its meaning turns on

118. See U.S. CONST. art. I, § 8, cl. 1.
120. 6 ANNALS OF CONG. 2635–2713 (1799-1801).
121. See id. at 2645–58 (describing the systems in Vermont, New Hampshire, and Massachusetts).
122. See Solum, supra note 12, at 1645. But see Lee & Phillips, supra note 60, at 296–300 (using corpus linguistics to prove the correct sense of domestic violence). The domestic violence example may, however, be the exception that proves the rule because the original public meaning of the Domestic Violence Clause was clear before any corpus analysis.
the apportionability of a particular tax. That makes corpus linguistics a valuable tool in any originalist’s toolbelt.

That being said, it is a tool that very few judges will be able to employ of their own accord. Even an analysis that does not meet the gold standard—a single coder using only a sample of the concordance lines—took well over a hundred hours, far more than can be devoted by a court of appeals judge to the average case. It is true, as Justice Lee and Stephen Mouritsen argue, that it will be a “relatively rare case” where it is necessary and useful to turn to corpus linguistics. But even in those cases, judges will probably have to rely on litigants or, more likely, interested professors or researchers to conduct the corpus analysis. Even then, though, the inherent subjectivity of sense division means that judges will have to check those interested parties’ work to be sure that their interests in a case’s outcome—consciously or unconsciously—did not lead them to dress up advocacy with the scientific gloss of corpus linguistics.

In short, corpus linguistics is a valuable tool in the search for meaning. But its use is tempered by the large number of hours it demands of its users. And the inherent subjectivity of some aspects of the analysis presents serious risks for biased analyses misleading courts. As such, advocates for corpus linguistics should not just focus on teaching judges how to do it and extolling the virtues of corpus linguistics; they should also teach judges how to recognize dubious analyses and explain the reasons to be skeptical of litigants bearing corpora.

III. *Hylton v. United States* and Its Implications for Our Analysis

With the corpus results in hand, we now turn to the first case in which the Supreme Court had the opportunity to provide an answer to Rufus King’s question about what a direct tax is. In *Hylton* 123.

---

123. Lee & Mouritsen, *supra* note 58, at 872.
the Court held that carriage taxes were not “direct taxes,” but it did not offer a comprehensive definition of the term. Nonetheless the parties’ arguments and the Court’s seriatim opinions are useful for our purposes because they reveal how an early dispute over constitutional meaning was litigated and resolved. Our findings from COFEA allow for assessment of the extent to which the arguments and opinions in *Hylton* aligned with recorded linguistic usage at the time. In addition, the methodologies followed by the litigants and the Court in *Hylton* provide clues to fashion the appropriate use of corpus linguistics today.

*Hylton* concerned the constitutionality of a federal tax on various types of carriages that Congress imposed in 1794. Carriage taxes were akin to luxury taxes—more politically palatable than, say, a tax on whiskey. There was never a “Carriage Rebellion.” Instead, the Carriage Act generated controversy in Congress because of the constitutional questions it raised. In the House debate, Madison argued that the carriage taxes were unconstitutional because they were direct taxes and did not satisfy the Constitution’s apportionment requirement. But Congressman Fisher Ames of Massachusetts responded that the legislation need not comply because the carriage duties were indirect excise taxes.

This congressional sparring over the “Carriage Tax Law,” as it was called, was driven less by carriages than by larger issues as to the scope of Congress’s power to tax. John Taylor of Caroline (Hylton’s counsel in the circuit court) described a parade of horribles if the statute were allowed to stand: “The excise is a precedent,

124. 3 U.S. (3 Dall.) 171 (1796).
125. Act of June 5, 1794, 1 Stat. 373.
127. Id.
128. See Crane, *supra* note 34, at 8 (arguing that the carriage tax was effectively a test case that the Washington administration brought to expand federal taxing powers).
enabling Congress to intercept such a portion of a man’s victuals, drink, and cloathing, the fruits of his own manual labour, as they may think proper—and under that of the carriage tax, every other species of property, is exposed.”

When the case came before the Supreme Court the next year, Hamilton and Charles Lee (the United States Attorney General) were the natural choices to defend the constitutionality of the Carriage Act in the Supreme Court. As Secretary of the Treasury, Hamilton had proposed taxation of not just carriages but also an array of personal property. On top of that, he was a highly skilled appellate advocate and had retired from public office in early 1795, shortly before Hylton was argued in the circuit court. A successful defense of the Carriage Act would significantly further Hamilton’s financial vision.

But before that could happen, the government needed an opponent. Finding one proved no easy task. The reason was jurisdictional: at the time, the Supreme Court had a $2000 amount-in-controversy threshold, and the applicable taxes and penalties totaled $16 per carriage, which meant that a plaintiff had to owe taxes on a lot of carriages to obtain Supreme Court review. To overcome that obstacle, the defendant, Virginia businessman Daniel Hylton, entered into a joint stipulation with the government that he “owned possessed and kept one hundred & twenty five chariots for the conveyance of persons.”

The submission also claimed that the carriages were kept “exclusively for [the Defendant’s] own separate use, and not to let out for hire, or for the conveyance of persons for

131. Id.
132. Documentary History, supra note 129, at 382. Interestingly, the document seemed to initially say one carriage—a caret rises after one to add “hundred and twenty five” to complete (or perhaps create) his seemingly legendary carriage stable. Id.
Added up, the $16 in taxes and penalties imposed per coach gave a sum equal to exactly the jurisdictional amount. No one on the Court questioned whether Hylton was really such an avid carriage collector. Nor did anyone claim a conflict of interest when Hylton’s son-in-law Alexander Campbell replaced Taylor as Hylton’s counsel, despite the fact that Campbell also served as United States Attorney for the District of Virginia and had even “played a role in the case on behalf of the Government at the circuit court.” Campbell’s co-counsel was Jared Ingersoll, the Attorney General of Pennsylvania. The Department of the Treasury paid the attorneys’ fees for both sides.

The Supreme Court elided those curious circumstances to address the substantive question presented: “whether the law of Congress, of the 5th of June, 1794, entitled ‘An act to lay duties upon carriages, for the conveyance of persons,’ is unconstitutional and void?”

---

133. Id.
134. Jensen, Consumption Taxes, supra note 22, at 2351–52. Jensen notes that the parties’ agreement that Hylton could satisfy his tax liability for only $16 highlights the dubiousness of the “patently phony claim” that Hylton owned 125 carriages for personal use. Id. at 2352. Ironically, even setting aside its falsity, the dubious accounting that Hylton and the government agreed on did not actually satisfy the jurisdictional requirement. Like today’s amount-in-controversy requirement for diversity jurisdiction, the Supreme Court’s jurisdiction required more than the threshold amount to hear a case. Id. Because even with the carriage-quantity stipulation Hylton owed exactly $2000, the Supreme Court lacked jurisdiction to decide Hylton. Id. Which raises a further interesting—but open—question: does an opinion issued by a court that clearly lacked jurisdiction still constitute binding precedent?
135. Crane, supra note 34, at 69.
136. Id. at 70–71, 71 n.116.
137. Hylton v. United States, 3 U.S. (3 Dall.) 171, 172 (1796). The Court thus was called upon to interpret the meaning of the Constitution some seven years before Marbury v. Madison and Chief Justice Marshall’s famous dictum that “[i]t is emphatically the province and duty of the judicial department to say what the law is.” 5 U.S. (1 Cranch) 137, 177 (1803).
Many involved in *Hylton* had personal experience in the Constitution’s creation. Two of the advocates (Hamilton and Ingersoll) and two of the Justices on the Court (William Paterson and James Wilson)\textsuperscript{138} were Framers of the Constitution.\textsuperscript{139} Those Justices, along with two of the other Justices (James Iredell and William Cushing), also had participated in their respective states’ debates over its ratification.\textsuperscript{140} One of the principal congressional opponents of the carriage tax (Madison) also participated in the adoption and ratification of the Constitution. The fact that the very people responsible for the legal terms in dispute were the same people who ended up arguing over what those terms meant gives pause to any corpus linguistics endeavor that purports to determine constitutional meaning with absolute certainty. Indeed, the dispute pitted co-authors of *The Federalist Papers* (Madison and Hamilton) against each other, so it is fair to say that the constitutional question was close.

One explanation for the disagreement, of course, might be that the relevant text simply was ambiguous. That was what Hamilton argued to the Court:

> What is the distinction between *direct* and *indirect* taxes? It is a matter of regret that terms so uncertain and vague in so important a point are to be found in the Constitution. We shall seek in vain for any antecedent settled legal meaning to the respective terms—there is none.\textsuperscript{141}

One Justice (Paterson) also found the Constitution to be unclear, but he found ambiguity not in the distinction between direct and

\textsuperscript{138} Only three of the Supreme Court’s then-six members voted in *Hylton*. Chief Justice Oliver Ellsworth “was sworn into office in the morning” that the opinion issued, “but not having heard the whole of the argument, he declined taking any part in the decision of this cause.” 3 U.S. (3 Dall.) at 172 n.1. The other justice who abstained, William Cushing, explained that “it would be improper to give an opinion on the merits of the cause” because he had “been prevented, by indisposition, from attending to the argument.” \textit{Id.} at 184 (Cushing, J.).

\textsuperscript{139} U.S. \textsc{Const}. Signatories.

\textsuperscript{140} See Ackerman, \textit{supra} note 34, at 21.

\textsuperscript{141} Brief for the United States, \textit{supra} note 102, at 378–79.
indirect taxes, but rather in the parties’ agreement that the carriage tax must fall within one of four explicit categories mentioned in the nation’s charter: a duty, impost, excise, or direct tax. Justice Paterson noted that “[t]he argument on both sides turns in a circle.” Hylton argued that the carriage tax was “not a duty, impost, or excise, and therefore must be a direct tax,” while the government contended the carriage tax was not a direct tax, “and therefore must be a duty or excise.” The circular arguments over the categories led nowhere, Justice Paterson concluded, in part because some categories were ill-defined: “What is the natural and common, or technical and appropriate, meaning of the words, duty and excise, it is not easy to ascertain. They present no clear and precise idea to the mind. Different persons will annex different significations to the terms.”

Where Hamilton and Paterson saw ambiguity, however, the other Justices found clarity. Justice Iredell flatly stated, “I think the Constitution itself affords a clear guide to decide the controversy,” and Justice Chase likewise thought the constitutional text admitted of no uncertainty. And, although the Court rejected Hylton’s argument that the carriage tax was a direct tax, a majority of the Justices seemed to agree with him that the relevant constitutional text could be plainly read.

Lack of ambiguity also underlay the arguments in the circuit court. Taylor, on behalf of Hylton, noted that the Carriage Act, by its terms, imposed “duties and rates” and that both “duty” and “rate” were defined in various secondary sources as forms of

---

142. 3 U.S. (3 Dall.) 171, 176 (opinion of Paterson, J.).
143. Id.
144. Id.
145. Id.
146. Id. at 173–75 (opinion of Chase, J.); id. at 181 (opinion of Iredell, J.).
From this basis he argued that “direct taxes” included duties and rates that were directly imposed, and that because the Act directly imposed duties and rates on carriages, it was a direct tax within the meaning of the Constitution. Wickham, for the government, rejected Taylor’s logic as inconsistent with other sources that differentiated between direct and indirect taxes. He “contend[ed] that, long before the Constitution of the United States was framed, a tax upon the revenue or income of individuals, was considered and well understood to be a direct tax. A tax upon their expenses, or consumption an indirect tax—That this is a tax on expense or consumption, and therefore an indirect tax.”

That both Wickham and Taylor were certain as to meaning—albeit with diametrically opposite conclusions as to whether a carriage tax fit that meaning—is consistent with our corpus findings that people wrote and spoke of direct taxation as if they knew what it meant. A majority of the Justices who issued opinions in the case shared the litigants’ confidence in clarity too. By adding the argument that the line between direct and indirect taxes was, in fact, fuzzy, Hamilton expressed views that seem to have been in the distinct minority.

However, all of the Justices ended up ruling in favor of Hamilton’s client, but reached their ruling through different routes. Some Justices opined more than others as to what taxes could be considered “direct taxes.” However, none of them purported to provide a complete list or a concrete definition.

For Justice Chase, the distinguishing characteristic of a direct tax was whether “[t]he rule of apportionment” could “reasonably

147. DOCUMENTARY HISTORY, supra note 129, at 386.
148. Id. at 386–87.
149. Id. at 413.
150. It bears noting that Hamilton found far greater certainty about the term in other contexts like the Federalist Papers. See Jensen, Consumption Taxes, supra note 22, at 2357–58. His arguments from ambiguity in Hylton may have been little more than good lawyering.
apply” to the tax.\textsuperscript{151} He did not believe apportionment could be applied to carriage taxes “without very great inequality and injustice.”\textsuperscript{152} He gave as an example two states with equal populations, but one of which had “100 carriages, and in the other 1000.”\textsuperscript{153} In that scenario, “[t]he owners of carriages in one State, would pay ten times the tax of owners in the other.”\textsuperscript{154} He rejected Hylton’s argument that this harsh effect could be eliminated by allowing the tax to be apportioned based on other items (horses, tobacco, and rice, for example) in addition to carriages: “it seems to me, that it would be liable to the same objection of abuse and oppression, as a selection of any one article in all the States.”\textsuperscript{155} Justice Chase characterized an “indirect tax” as any tax on an expense, and he thought “an annual tax on a carriage for the conveyance of persons, is of that kind; because a carriage is a consumeable commodity; and such annual tax on it, is on the expence of the owner.”\textsuperscript{156} He also was “inclined to think, but of this [he did] not give a judicial opinion, that the direct taxes contemplated by the Constitution, are only two, to wit, a capitation, or poll tax, simply, without regard to property, profession, or any other circumstance; and a tax on LAND.”\textsuperscript{157} He “doub[ed] whether a tax, by a general assessment of personal property, within the United States, is included within the term direct tax.”\textsuperscript{158} Justice Chase, then, took a narrower view of the term than even Hamilton did, a view that is not altogether consistent with our corpus findings.

Perhaps because of that narrow construction, Justice Chase’s reasoning also expressed no concern with the Framers’ decision to

\textsuperscript{151} Hylton, 3 U.S. (3 Dall.) at 174 (opinion of Chase, J.).  
\textsuperscript{152} Id.  
\textsuperscript{153} Id.  
\textsuperscript{154} Id.  
\textsuperscript{155} Id. at 174–75.  
\textsuperscript{156} Id. at 175.  
\textsuperscript{157} Id.  
\textsuperscript{158} Id.
carve out an area of taxes that required apportionment. Justice Paterson’s opinion, in contrast, revealed intense dislike for apportionment. He claimed that the apportionment requirement was included to benefit southern slaveowners.\footnote{Id. at 177 (opinion of Paterson, J.).}

Justice Paterson had heard and participated in the debates at the Constitutional Convention. He was famous for having introduced the so-called “New Jersey Plan,” which called for equal representation of the states in Congress.\footnote{William Paterson, Notes for Speeches in Convention, June 16, 1787. Manuscript. William Paterson Papers, Manuscript Division, Library of Congress (59.01.00) [Digital ID# us0059_01p1] (accessible at www.loc.gov/exhibits/creating-the-united-states/convention-and-ratification.html#obj4) [https://perma.cc/EAJ2-KS53]).} Justice Chase was not at the Convention, and he did not have access to Madison’s notes from the Convention, which would not be published until years later.\footnote{Gregory E. Maggs, A Concise Guide to the Records of the Federal Constitutional Convention of 1787 as a Source of the Original Meaning of the U.S. Constitution, 80 GEO. WASH. L. REV. 1707, 1728 (2012); Richard Beeman, Plain, Honest Men: The Making of the American Constitution (New York: Random House), pp. 429–30 (listing all the delegates without naming Chase).} So, it was understandable that Justice Chase’s opinion was limited to logic deduced from the constitutional text without reference to any debate from the Convention. But Justice Paterson had personal knowledge of that debate, and he revealed some of it in his discussion of the apportionment provision:

The provision was made in favor of the southern States. They possessed a large number of slaves; they had extensive tracts of territory, thinly settled, and not very productive. A majority of the states had but few slaves, and several of them a limited territory, well settled, and in a high state of cultivation. The southern states, if no provision had been introduced in the Constitution, would have been wholly at the mercy of the other states. Congress in such case, might tax slaves, at discretion or arbitrarily, and land in every part of the Union after the same rate or measure: so much a head in the first instance, and so much an acre in the second. To guard them against imposition in these particulars, was the
reason of introducing the clause to the Constitution, which directs that representatives and direct taxes shall be apportioned among the states, according to their respective numbers.\textsuperscript{162}

According to Justice Paterson, “[t]he Constitution has been considered as an accommodating system; it was the effect of mutual sacrifices and concessions; it was the work of compromise.”\textsuperscript{163} He characterized “the rule of apportionment” as “of this nature.”\textsuperscript{164} But, he added, the rule was “radically wrong; it cannot be supported by any solid reasoning.”\textsuperscript{165} He found no justification for giving southerners special tax treatment for their slaves.\textsuperscript{166} The rule of apportionment, in his mind, was an aberration that “therefore, ought not to be extended by construction.”\textsuperscript{167} Nor did “numbers” (i.e., a state’s population) “afford a just estimate or rule of wealth. It is, indeed, a very uncertain and incompetent sign of opulence.”\textsuperscript{168} That was yet “another reason against the extension of the principle” of apportionment “laid down in the Constitution.”\textsuperscript{169} Thus, even though Justice Paterson did not think the question presented in the case was as clear-cut as the rest of the court deemed it to be, one thing was clear to him: the category of direct taxes should be narrowly construed because of the seeming unfairness of the apportionment requirement.

Justice Paterson also agreed with Justice Chase that “[a] tax on carriages, if apportioned, would be oppressive and pernicious” because of the uneven distribution of carriages between the states.\textsuperscript{170} He claimed that Hylton’s argument constituted nothing more than

\begin{flushright}
163. \textit{Id.} at 177–78.
164. \textit{Id.} at 178.
165. \textit{Id.}
166. \textit{Id.}
167. \textit{Id.}
168. \textit{Id.}
169. \textit{Id.}
170. \textit{Id.} at 179.
\end{flushright}
a return to the method of raising money under the Articles of Confederation, which was a disaster: "Requisitions were a dead letter, unless the state legislatures could be brought into action; and when they were, the sums raised were very disproportional. Unequal contributions or payments engendered discontent, and fomented state-jealousy." And Justice Paterson belittled Hylton’s argument that the tax could be imposed on other goods to avoid unfair impact on particular carriage owners. He called it “absurd” and “novel,” and that “[t]here will be no rule to walk by” if apportionment were adopted for carriage taxes.

Justice Iredell was not as harsh in his rhetoric as was Justice Paterson, but he too ruled against Hylton all the same. With respect to Hylton’s argument about apportioning the tax based on a variety of items, Justice Iredell remarked, “I should have thought this merely an exercise of ingenuity, if it had not been pressed with some earnestness; and as this was done by gentlemen of high respectability in their profession, it deserves a serious answer, though it is very difficult to give such a one.” He then proceeded to give an example of a tax that allowed for horses to be substituted for carriages in apportioning taxes. Such apportionment, he noted, might end up with only horses being taxed by a statute that purports to be a tax on carriages. That hypothetical was enough for Justice Iredell to reject Hylton’s attempt to address the perceived unfairness of apportionment. In the end, Justice Iredell shared Justice Chase’s view that because the carriage tax could not be fairly apportioned, it was “not a direct tax in the sense of the Constitution.”

171. Id. at 178.
172. Id. at 179–80.
173. Id. at 182 (opinion of Iredell, J.).
174. Id. at 182–83.
175. See id.
176. See id. at 183.
177. Id.
Justice Iredell also agreed with Justice Chase that “[t]here is no necessity, or propriety, in determining what is or is not, a direct, or indirect, tax in all cases.”\textsuperscript{178} Nonetheless, he speculated that “a direct tax in the sense of the Constitution” might be “a tax on something inseparably annexed to the soil: Something capable of apportionment under all such circumstances.”\textsuperscript{179} And he noted that “[a] land or a poll tax may be considered of this description.”\textsuperscript{180} Iredell’s view of what would be a direct tax appears to be consistent with our corpus results, insofar as it confirms that a tax that falls on land is a direct tax. As to any other article that might be taxed, Justice Iredell observed that “there may possibly be considerable doubt.”\textsuperscript{181} What was not in any doubt was that the carriage tax was “not a direct tax in the sense of the Constitution.”\textsuperscript{182}

Finally, Justice Wilson penned the shortest opinion of any Justice who decided the case. He wrote simply that he had expressed his views before—he was one of the judges who had ruled for the government in the circuit court—and “the unanimity of the other three Judges” on the Supreme Court served to “relieve” him “from the necessity” of giving his reasoning again.\textsuperscript{183} Unfortunately, Justice Wilson’s circuit court opinion is not available in any publication we have located.

One informative aspect of the Justices’ opinions and counsel’s arguments in \textit{Hylton} is the use of secondary sources to determine constitutional meaning. Hamilton mentioned “the doctrine of the French Economists,” along with a reference to “Locke and other speculative writers,” but he did not rely on those sources for the

\begin{flushleft}
\textsuperscript{178} Id.
\textsuperscript{179} Id.
\textsuperscript{180} Id.
\textsuperscript{181} Id.
\textsuperscript{182} Id.
\textsuperscript{183} Id. at 183–84 (opinion of Wilson, J.).
\end{flushleft}
definition of “direct taxes.”” 184 Instead, he argued that the common denominator of those writings—that “land taxes only would be direct taxes”—was inconsistent with the Constitution, in which “a capitation is spoken of as a direct tax.” 185 Thus, he concluded “something more” than just land “was intended by the Constitution” when it used the term “direct taxes.” 186 But what that was, Hamilton argued, was unclear.

Wickham also cited the French economists, along with Adam Smith’s Wealth of Nations, but, unlike Hamilton, he found no ambiguity of terms used in those sources. 187 Even though the Frenchmen disagreed with Smith “on the question” in particular of “whether direct or indirect taxes are to be preferred,” both sides agreed that the term “direct tax” meant “a tax on revenue, or the source from which it is drawn” and that “indirect tax” meant “a tax on consumption and expense.” 188

Taylor did not directly respond to Wickham’s cited works, but instead relied on dictionaries to interpret the relevant constitutional terms. He argued that “[i]n all the glossaries, legal, scientific or general to which I have referred, the term excise is expounded to mean tribute, and tribute is a tax.” 189 Taylor cited, in particular, Samuel Johnson’s Dictionary of the English Language, published in 1755, for its definitions of a “tax,” a “duty,” and “direct.” 190 He also discussed English common law practice as well as policy arguments rooted in political philosophy and history. 191

The Justices, however, placed only limited reliance on anything other than the constitutional text in their opinions. The only source

---

184. Brief of the United States, supra note 102.
185. Id.
186. Id.
188. Id. at 416–17.
189. Id. at 385.
190. Id. at 386–87.
191. Id. at 389–92.
cited other than the Constitution and the Carriage Act was Adam Smith’s *Wealth of Nations*, which Justice Paterson’s opinion quoted for its discussion of taxation of consumable goods.\(^{192}\) And other than a fleeting reference to “[t]he history of the United Netherlands” for a small point in Justice Paterson’s opinion, the Justices gave no indication that foreign law had any relevance to the issue presented.\(^{193}\)

What are we to make of the Court’s apparent inattention to secondary sources, even dictionaries, to determine constitutional meaning? If corpus linguistics as we know it had been available to the *Hylton* Court, would the Justices have used it?

One answer is that today’s practice of corpus linguistics was not needed because the advocates and the Justices were so close in time to the Constitution’s adoption and ratification—indeed, some of the Framers and Ratifiers themselves were in court. The reasoning of the Justices, particularly those who attended the Constitutional Convention, evinces personal knowledge of the framing and ratification debates. Today we can replicate that knowledge, albeit imperfectly, through corpus linguistics research.

But despite the fact that some Framers and Ratifiers were present in *Hylton*, the legal arguments and reasoning in that case relied on more than simply personal recollection. Hylton’s counsel used “glossaries,” including a well-known British dictionary; both sides cited philosophical and legal writings of the French economists and the Scottish enlightenment. The use of such a “corpus,” though limited, in early Supreme Court and lower federal court advocacy suggests the propriety of reliance on the corpus linguistics available today in more robust form. The advocacy in *Hylton* also suggests that more than just American sources should be included in the cor-


\(^{193}\) *Id.* at 178.
pus to determine constitutional meaning: counsel in Hylton implicitly argued that the Framers were influenced by usage of words not only from the British Isles (as the reliance on Adam Smith and John Locke suggests) but also from translated writings from the Continent (for example, the citations to the French economists and the history of the Netherlands). So determining which sources made it to the United States and incorporating them into COFEA could increase its value as a resource for academics, litigants, and courts. The absence of foreign sources in COFEA weakens the force of our findings based on that database.

Finally, Justice Paterson’s extensive references to the experiences of the states under the Articles of Confederation confirm the relevance of word usage not just at the national level but also in state laws, customs and practices. And, again, to the extent the states’ experience was informed by foreign examples, particularly England, sources from those jurisdictions may be relevant for determining constitutional meaning as well.

IV. AVENUES FOR FUTURE STUDY

Our research left us with two crucial open questions as to the original meaning of direct tax. We still do not know where the line is between a direct tax on property and an indirect excise. And we do not know whether a tax’s directness turns on the class of property to which it applies or its economic characteristics. How should we seek the answers to those open questions, having exhausted the assistance corpus linguistics can provide? There are a few possible avenues.

First, as we noted above, research into state systems of taxation and into the original meaning of excise and duty could help clarify the meaning of “direct tax” in the Constitution.¹⁹⁴ Such study should include state practices both before and after ratification of the Constitution, and even as late as the early nineteenth century (a

¹⁹⁴. See supra notes 117–121 and accompanying text.
time period beyond COFEA’s 1799 cutoff date). For example, during the War of 1812, Congress imposed taxes on real estate and various forms of personal property, including household furniture and gold and silver watches. Some of those taxes were apportioned by state; others were not. In a letter published in 1815 in response, Gouverneur Morris declared his “Belief that a Tax on Houses Lands Slaves Cattle or Furniture is a direct Tax” that “ought to be apportioned among the States in the Ratio pointed out by the national Compact.” Though Morris was only one voice in the public debate, his writing suggests that additional corpus research after the timeframe that COFEA covers may be probative. At the very least, it should extend beyond its current termination point, Washington’s death year, to a year that would capture most of the lifetimes of the founding generation.

Second, Lawrence Solum’s constitutional triangulation method offers some promise. He advocates for using a combination of corpus linguistic analysis, immersion, and intense study of the Constitutional Record. Immersion—delving into “sources such as diaries, newspapers, broadsheets, novels, and letters” and even into state and English tax laws—could further clarify popular understanding of the power to impose direct taxes. And thorough analysis of less-studied aspects of the constitutional record (at least with respect to direct taxation) like the ratification debates could shed further light on what the people understood themselves to agree to

196. Act of Jan. 9, 1815, 3 Stat. 164 (apportioning the tax on real property); Act of Jan. 18, 1815, 3 Stat. 186 (imposing an unapportioned tax on personal property).
199. Id.
200. Id. at 1649.
when they gave the national government the power to impose direct taxes.\textsuperscript{201}

Third, Professor William Baude’s revival of the Madisonian notion of constitutional liquidation offers another avenue future researchers could take.\textsuperscript{202} It is a hotly contested concept, but for those who agree with Baude about liquidation, the Direct Tax Clause could be a prime candidate. Liquidation requires three things: indeterminacy, a course of deliberate practice, and settlement.\textsuperscript{203} First, a term or phrase in the Constitution must have “doubtful or contested meanings.”\textsuperscript{204} That is clearly present here. Although there are some clear meanings of direct tax, there remains a doubtful gray area that is subject to great contestation. Thus, future scholars could seek to determine whether a course of deliberate practice and an ultimate settlement occurred as to the meaning of direct tax, so as to liquidate its meaning as to the close questions the early congresses and Court faced.\textsuperscript{205} For liquidation purposes, it bears noting that the all-Federalist Supreme Court’s decision in \textit{Hylton} could not liquidate the meaning of direct tax; the final stage (settlement) instead required the acquiescence of the opposing party (in the carriage tax context, Jeffersonian Republicans like Madison) and the acquiescence of the people at large.\textsuperscript{206} Whether those features existed merits further exploration.

\begin{flushleft}
\textsuperscript{201} See \textit{id.} at 1655–63.  
\textsuperscript{203} Baude, \textit{supra} note 202, at 13.  
\textsuperscript{204} \textit{id.} at 14 (quoting Letter from James Madison to Martin L. Hurlbut (May 1830), \textit{reprinted in} 9 \textit{THE WRITINGS OF JAMES MADISON} (Gaillard Hunt ed., 1910)).  
\textsuperscript{205} See \textit{id.} at 16–21.  
\textsuperscript{206} \textit{id.} at 18–21. 
\end{flushleft}
CONCLUSION

Soon after the American Revolution ended, Alexander Hamilton wrote to Gouverneur Morris, “Let us both erect a temple to time; only regretting that we shall not command a longer portion of it to see what will be the event of the American drama.” Corpus linguistics goes in the opposite direction of Hamilton’s vision: it allows for time travel of sorts to study a digital record from the beginning of the drama—the world of the Framers. Like Marty McFly’s DeLorean, corpus linguistics can be improved with modification for subsequent trips back to the past.

But the vehicle, as is, proved usable enough for our purposes. First, the corpus confirmed that the Founding generation did in fact speak of “direct taxes” with confidence that the term could be defined. Second, our findings revealed consensus as to at least some types of taxes that were considered to be direct. Finally, corpus linguistics fits comfortably within the methodology used in *Hylton*. Counsel in that case relied on a rudimentary body of secondary-source materials that predated or were contemporaneous with the Constitution as an aid for its interpretation. Corpus linguistics is simply a more robust approach that is consistent with early federal-court advocacy. And, at least in this instance involving research into the taxing of carriages, corpus linguistics shows promise to be as technologically revolutionary as carriages of the horseless variety.

---


208. Compare BACK TO THE FUTURE (Universal Pictures 1985) with BACK TO THE FUTURE PART II (Universal Pictures 1989) and BACK TO THE FUTURE PART III (Universal Pictures 1990).