

## Scientific Methods for Analyzing Original Meaning: Corpus Linguistics and the Emoluments Clauses\*

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In interpreting the Constitution’s text, courts “are guided by the principle that ‘[t]he Constitution was written to be understood by the voters; its words and phrases were used in their normal and ordinary as distinguished from technical meaning.’” *District of Columbia v Heller*, 554 U.S. 570, 576 (2008) (quoting *United States v. Sprague*, 282 U.S. 716, 731 (1931)). In a speech delivered a few days before he was nominated to the Supreme Court, the author of the *Heller* decision, Antonin Scalia, stated that the focus of constitutional interpretation should not be “original intent” but rather “original meaning”: “What was the most plausible meaning of the words of the Constitution to the society that adopted it – regardless of what the Framers might secretly have intended?”<sup>1</sup> He quoted in support of this position a letter written by James Madison: “[W]hatever respect may be thought due to the intention of the Convention, which prepared and proposed the Constitution, as a presumptive evidence of the general understanding at the time of the language used, it must be kept in mind that the only authoritative intentions were those of the people of the States, as expressed through the Conventions which ratified the Constitution.”<sup>2</sup>

In looking for “presumptive evidence of the general understanding at the time of the language used” courts have generally relied on dictionary definitions and selected quotations from texts dating from the period of ratification.<sup>3</sup> This essay presents a completely different, scientifically-grounded approach: applying the tools of linguistic analysis to “big data” about how written language was used at the time of ratification. This data became publicly available in Fall 2018 when the website of the *Corpus of Founding Era American English (COFEA)* was launched. *COFEA* contains in digital form over 95,000 texts created between 1760 and 1799, totaling more than 138,800,000 words.<sup>4</sup>

The authors illustrate this scientific approach by analyzing the usage of the word *emolument* by writers in America during the period covered by *COFEA*, 1760-1799. The authors

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<sup>1</sup> *Original Meaning*, SCALIA SPEAKS 183 (Christopher J. Scalia & Edward Whelan eds. 2017).

<sup>2</sup> *Id.* at 185 (emphasis in Madison’s original letter).

<sup>3</sup> See, e.g., *District of Columbia v. Trump*, 315 F.Supp.3d 875, 889-95 (D.Md. 2018) (discerning “original public meaning” of emolument from dictionaries and sixteen sentences from a handful of 18th century texts).

<sup>4</sup> *COFEA* was created by the J. Reuben Law School at Brigham Young University. See Stephanie Frances Ward, *New web platform helps users research meanings of words used in Constitution, Supreme Court Opinions*, ABA JOURNAL (Sep. 17, 2018). Both the data in *COFEA* and basic on-line search tools are freely available at: <https://lawncf.byu.edu/>. Access to *COFEA* requires registration using a Google or Gmail account to guard against hacking.

selected this project both because the interpretation of two clauses in the Constitution using *emolument* are of considerable current interest and because the meaning of *emolument* is a mystery to modern Americans.<sup>5</sup>

The District of Columbia and State of Maryland are currently suing President Donald Trump alleging that his continued ownership of the Trump Hotel in Washington puts him in violation of Constitutional prohibitions on receiving or accepting “emoluments” from either foreign or state governments. The President’s primary line of defense is a narrow reading of *emolument* as “profit arising from an office or employ.”<sup>6</sup>

The authors accessed every text in *COFEA* in which *emolument* appeared – over 2500 examples of actual usage – and analyzed all of these examples using three different computerized search methods. The authors found no evidence that *emolument* had a distinct narrow meaning of “profit arising from an office or employ.” All three analyses indicated just the opposite: *emolument* was consistently used and understood as a general and inclusive term.

#### The Constitution’s Domestic and Foreign Emoluments Clauses

While the Revolutionary War was still being waged, the Continental Congress adopted the Articles of Confederation, including the following provision: “nor shall any person holding any office of profit or trust under the united states, or any of them, accept any present, emolument, office or title of any kind whatever from any king, prince or foreign state”.<sup>7</sup>

Early drafts of the Constitution considered by the Constitutional Convention did not carry over from the Articles of Confederation what has come to be known as “the Foreign Emoluments Clause.” However, on August 23, 1787, Charles Pinckney of South Carolina successfully moved<sup>8</sup> to add to the Constitution the following provision:

“no Person holding any Office of Profit or Trust under them [the United States], shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.” U.S. Const. art. I, § 9, cl. 8

The Constitution as submitted to the states for ratification also included what is known as “the Domestic Emoluments Clause”:

“The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall

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<sup>5</sup> The current nominee for Attorney General, William Barr, told the Senate during his confirmation hearings, “There is a dispute as to what the Emoluments Clause relates to. I can’t even tell you what it says at this point.” *Emoluments and the Trump administration*, CNN POLITICS, Jan. 22, 2019, <https://www.cnn.com/videos/politics/2019/01/22/john-avlon-reality-check-emoluments-trump-newday-vpx.cnn>.

<sup>6</sup> Memorandum in Support of Defendant's Motion to Dismiss at 32, *District of Columbia v. Trump*, 315 F.Supp.3d 875 (D. Md. 2018).

<sup>7</sup> Robert G. Natelson, *The Original Meaning of “Emoluments” in the Constitution*, 52 GA. L. REV. 1, 26 (2017).

<sup>8</sup> *Id.* at 37.

have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.” U.S. Const. art. II, § 1, cl. 7

At Virginia’s ratifying convention, Governor Edmund Randolph offered the following explanation of the Foreign Emoluments Clause:

“[It] restrains any person in office from accepting of any present or emolument, title or office, from any foreign prince or state. ... This restriction is provided to prevent corruption. ... [This] provision [is] against the danger ... of the President receiving emoluments from foreign powers. If discovered, he may be impeached. ... I consider, therefore, that he is restrained from receiving any present or emolument whatever. It is impossible to guard better against corruption.”<sup>9</sup>

There has been no significant court litigation over the Emoluments Clauses since the founding until the Presidency of Donald J. Trump. Nine days before the inauguration of President Trump a “White Paper” was prepared for a January 11, 2017 press conference.<sup>10</sup> That White Paper, attributed to the law firm of Morgan, Lewis & Bockius, LLP, took the position on behalf of the President that revenue generated from business conducted by foreign governments at the Trump International Hotel or similar enterprises owned by the Trump Organization were not “emoluments” within the meaning of the Foreign Emoluments Clause:

The scope of any constitutional provision is determined by the original public meaning of the Constitution’s text. ... [A]n emolument was widely understood at the framing of the Constitution to mean any compensation or privilege associated with an *office* .... a payment or other benefit received as a consequence of discharging the duties of an *office*. ... Emoluments did not encompass all payments of any kind from any source, and would not have included revenues from providing standard hotel services to guests, as these services do not amount to the performance of an office, and therefore do not occur as a consequence of discharging the duties of an office.<sup>11</sup>

### The Trump Hotel Case

On June 12, 2017, the District of Columbia and the State of Maryland filed suit in the United States District Court for the District of Maryland against Donald J. Trump, in his official capacity as President of the United States of America. The complaint alleged that the President had violated both the Domestic Emoluments Clause and the Foreign Emoluments

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<sup>9</sup> Edmund Randolph, Address to the Virginia Convention (June 15, 1788), in 3 THE DEBATES IN THE SEVERAL STATE CONVENTIONS ON THE ADOPTION OF THE FEDERAL CONSTITUTION 465,486 (1836). As a delegate from Virginia to the Constitutional Convention, Randolph introduced the “Virginia Plan,” which was the initial template for the Constitution. He later served on the Committee of Detail which converted the Virginia Plan into the existing articles of the Constitution. He chaired the Virginia Ratifying Convention and later served as America’s first Attorney General, under President George Washington. John R. Vile, THE MEN WHO MADE THE CONSTITUTION: LIVES OF THE DELEGATES TO THE CONSTITUTIONAL CONVENTION 179-86 (2013).

<sup>10</sup> WHITE PAPER: CONFLICTS OF INTEREST AND THE PRESIDENT (2017), <https://assets.documentcloud.org/documents/3280261/MLB-White-Paper-1-10-Pm.pdf>

<sup>11</sup> *Id.* at 4 (emphasis in original).

Clause. The plaintiffs claimed that the President had received emoluments in violation of these clauses through his continued ownership interest in The Trump International Hotel Washington, D.C., located a few blocks from the White House in the renovated Old Post Office building.<sup>12</sup>

On September 29, 2017, the President filed a Motion to Dismiss, expanding on the theory from the White Paper to argue that when the Constitution was ratified the term “emolument” had two distinct meanings -- a “narrow” sense limited to “profit arising from an office or employ” and a “broad” sense meaning “benefit, advantage or profit” – and that *emolument* in the Constitution only referred to the narrow meaning.<sup>13</sup> The motion primarily relied on a dictionary published by an English clergyman in 1774 which defined *emolument* as follows:

“profit arising for an office or employ; gain or advantage”<sup>14</sup>

The district court accepted this framing of the issue to be decided,<sup>15</sup> but concluded that “the term ‘emolument’ in both Clauses extends to any profit, gain or advantage of more than *de minimis* value, received by [the President], directly or indirectly, from foreign, the federal, or domestic governments.”<sup>16</sup> The court cited at length with approval a study by Georgetown Law Professor John Mikhail that reproduced definitions from forty dictionaries published from 1604 to 1806 and reported that 92% of these dictionaries only printed some version of the broad definition.<sup>17</sup> In addition to relying on the dictionary definitions listed by Mikhail, the district court also quoted sixteen sentences using *emolument* taken from a handful of 18<sup>th</sup> century texts.

On December 20, 2018, the court of appeals granted the President’s motion seeking to stay the district court proceedings, and ordered the parties to address not only the procedural issues regarding the President’s mandamus petition but also “the underlying issue[] of whether the two Emolument Clauses provide plaintiffs with a cause of action”.<sup>18</sup> The appeal is currently

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<sup>12</sup> Plaintiffs also alleged violations arising from the President’s ownership interests in the Trump Tower on 5th Avenue and the Trump World Tower on United Nations Plaza, both in New York City; various trademarks registered in China; the “Celebrity Apprentice” reality television shows; and real estate projects in the United Arab Emirates and Indonesia. These claims were dismissed without prejudice on standing grounds. *District of Columbia v. Trump*, 291 F.Supp.3d 725 (D. Md. March 28, 2018).

<sup>13</sup> Memorandum in Support of Defendant's Motion to Dismiss at 32, *District of Columbia v. Trump*, 315 F.Supp.3d 875 (D. Md. 2018).

<sup>14</sup> James Barclay, A COMPLETE AND UNIVERSAL ENGLISH DICTIONARY ON A NEW PLAN (1<sup>st</sup> ed. 1774), reproduced in John Mikhail, *The Definition of 'Emolument' in English Language and Legal Dictionaries, 1523-1806* A 8, A 68-69 (June 30, 2017), available at SSRN: <https://ssrn.com/abstract=2995693>. See Memorandum in Support of Defendant's Motion to Dismiss at 32, 34, *District of Columbia v. Trump*, 315 F.Supp.3d 875 (D. Md. 2018). Although the President does not make this point in his brief, his position could be articulated as assuming that the semi-colon after “employ” marks the distinction between the narrow and broad meaning.

<sup>15</sup> 315 F.Supp.3d at 889-90.

<sup>16</sup> *Id.* at 904.

<sup>17</sup> *Id.* at 890-92, citing Mikhail, *supra* note 14, at 8.

<sup>18</sup> *In re Donald J. Trump*, No. 18-2486 (4th Cir. 2018). The authors have filed an amicus brief in support of neither party in the 4<sup>th</sup> Circuit, reporting the results of the research described in this article. The brief can be downloaded at: <http://www.clarkcunningham.org/ScientificMethods.html> See Aaron Blake, *A big Trump case hinges on the definition of 'emoluments.'* *A new study has bad news for him*, WASHINGTON POST (Jan. 29, 2019), <https://www.washingtonpost.com/politics/2019/01/29/big-trump-case-hinges-definition-emoluments-new-study-has->

set for argument on March 19, 2019.

### Analyzing *emolument* using computerized searches of the *COFEA* data base

Until the middle of the 19<sup>th</sup> century, the creation of English language dictionaries was not based on rigorous empirical evidence or scientific methods. Definitions found in dictionaries available during America’s Founding Era – even in the most respected and widely used version, Samuel Johnson’s *Dictionary of the English Language* published in 1755 – generally reflected the ideas of a single author<sup>19</sup> or were simply copied from other dictionaries.<sup>20</sup>

In 1857 the Philological Society of London “declared existing English language dictionaries to be incomplete and deficient”<sup>21</sup> and launched the ambitious project that ultimately resulted in the publication of the *Oxford English Dictionary* [OED] in 1928. “One of the innovations the OED developed was collecting, from the general public, real-life evidence of words in context to help editors create the most complete picture of the language possible.”<sup>22</sup> Hundreds of thousands of slips of paper submitted by volunteers to the OED editors served as the basis for determining and presenting word definitions in the dictionary. When creating dictionaries, it is now standard practice for lexicographers to rely heavily data from a *corpus* (plural: *corpora*), a large sample of texts produced by language users in natural settings.<sup>23</sup>

In the 1960s, Henry Kucera and W. Nelson Francis collected the *Brown Corpus*—the first large electronic corpus, composed of just over one million words of written English.<sup>24</sup> However, it was not until the 1980s that corpus data began to be integrated into mainstream linguistic scholarship. Developments in computer technology around this time made it possible to acquire, store, and process large amounts of natural language data. Since that time, corpora have been used widely to study word meaning. One of the earliest applications of this approach was the *Collins COBUILD* dictionary project.<sup>25</sup> The use of corpora has, among other things, allowed lexicographers to determine whether particular word senses are typical or rare.

Corpora have been used widely in linguistics to document and describe patterns of natural language use at every linguistic level, including morphology (word parts), lexis (words),

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bad-news-him/.

<sup>19</sup> “Characteristic of most early dictionaries, Johnson’s [dictionary] predominantly was the work of the author himself.” Samuel A. Thumma & Jeffrey L. Kirchmeier, *The Lexicon Has Become a Fortress: The United States Supreme Court’s Use of Dictionaries*, 47 *BUFF. L. REV.* 227, 234 (1999) (quoting description of Johnson as “incompletely educated ... an obscure scribbler from an impoverished provincial background”).

<sup>20</sup> “The history of English lexicography usually consists of a recital of successive and often successful acts of piracy.” Stephen C. Mouritsen, *The Dictionary Is Not a Fortress: Definitional Fallacies and a Corpus-Based Approach to Plain Meaning*, 2010 *BYU L. REV.* 1915, 1943 (quoting Sidney I. Landau, *DICTIONARIES: THE ART AND CRAFT OF LEXICOGRAPHY* 43 (2d ed 2001)).

<sup>21</sup> *Oxford Dictionaries: Our history*. <https://www.oxforddictionaries.com/our-story/history>

<sup>22</sup> *Id.*

<sup>23</sup> See Patrick Hanks, *The corpus revolution in lexicography*, 25 *INT’L J. LEXICOGRAPHY* 398 (2012).

<sup>24</sup> Henry Kučera & Winthrop Nelson Francis, *COMPUTATIONAL ANALYSIS OF PRESENT-DAY AMERICAN ENGLISH* (1967).

<sup>25</sup> <https://www.collinsdictionary.com/cobuild/>.

phraseology (multi-word units), grammar (sentences and sentence structure), discourse (texts and text parts), and pragmatics (context and meaning).<sup>26</sup>

In the early years of corpus research, corpora were used primarily by linguists interested in analyzing and describing patterns of language use for their own sake. Increasingly, however, corpora are now being used for applied purposes in areas such as second language teaching and learning, translation, computational linguistics, language testing, and forensic linguistics (i.e. the use of linguistics to solve crime), just to name a few. In nearly every case these applications of corpus analysis have proven to be fruitful, providing researchers with unprecedented insights into the ways language is actually used and abundant opportunities to use this new information to solve real-world problems.

When properly executed, corpus linguistic research results meet the scientific standards of *generalizability*, *reliability*, and *validity*.

A properly collected corpus is sufficiently large and varied that it represents the entire population to be studied. In contrast to using a handful of definitions written by individual, idiosyncratic dictionary authors and evaluating sixteen sentences, as the District Court did in the Trump Hotel case, conclusions drawn from analyzing the 138,800,000 words in *COFEA* can be *generalized* as representing common usage by American writers in the period 1760 - 1799.

The texts in *COFEA* come from the following six sources: the National Archive Founders Online; HeinOnline; Evans Early American Imprints from the Text Creation Partnership; Elliot - The Debates in the State Conventions on the Adoption of the Federal Constitution; Farrand – Records of the Federal Constitutional Convention of 1787; and the U.S. Statutes-at-Large from the first five Congresses. The sample of Evans Early American Imprints included in *COFEA* contains over 3000 books, pamphlets, and other written materials published in America between 1760 and 1799. Founders Online is a free on-line resource maintained by the National Archives providing digital copies of over 90,000 records found in the papers of six major figures of the founding era: George Washington, Benjamin Franklin, John Adams, Thomas Jefferson, Andrew Hamilton, and James Madison.<sup>27</sup> Founders Online contains official documents, diaries and personal letters written by and to these six persons. *Hein* contains over 300 legal materials published during the founding era, primarily federal and state statutes, executive department reports, and legal treatises.<sup>28</sup>

*Reliability* is defined as the degree to which a method produces consistent results, allowing a different researcher applying the same method to duplicate the outcome. The use of computers to analyze corpus data provides reliability in the form of stable and consistent results that can be replicated.

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<sup>26</sup> For a complete introduction to corpus linguistic research see THE CAMBRIDGE HANDBOOK OF ENGLISH CORPUS LINGUISTICS (Douglas Biber & Randi Reppen eds. 2015).

<sup>27</sup> <https://founders.archives.gov/> about Founders contains 27,639,683 words, distributed as follows: Washington Papers 12,044,694; Adams Papers 7,274,489; Hamilton Papers 3,895,699; Franklin Papers 2,578,518; Jefferson Papers 1,726,603; and Madison Papers 119,680. About 70% of the words in Founders come from either the Washington Papers (44%) or the Adams Papers (26%). <https://lcl.byu.edu/projects/cofea/>

<sup>28</sup> <https://lcl.byu.edu/projects/cofea/>

*Validity* refers to how well a method measures results defined by a well- formed research question and how well those results reflect real world patterns. For example, the multiple-choice Multistate Bar Examination has been shown to be a reliable test, but there is widespread doubt whether it provides a valid measure of a law graduate's competence to practice.<sup>29</sup>

A common validity problem with existing scholarship about the meaning of *emolument* is the tendency to begin with the unquestioned assumption that there were two distinct meanings for *emolument* in 18th century America, then to frame the analysis narrowly to determine which of the two meanings was understood at the time to apply to the Emoluments Clauses. For example, in their article *The Meaning of the Three Emoluments Clauses in the U.S. Constitution: A Corpus Linguistic Analysis of American English, 1760-1799*<sup>30</sup> James Cleith Phillips and Sara White write: "most scholars, as well as founding-era dictionaries, indicate there are two senses of the word "emolument" ... we coded just whether the use of "emolument" fell into one of the two main senses: broad or narrow".<sup>31</sup>

Linguists generally consider dictionaries an unreliable source for research of actual usage. If the full universe of possibilities is limited *a priori* by the lexicographer(s) who created a particular dictionary, the subsequent research is likely be biased from start to finish.

The authors proceeded directly with their corpus-based study of the word, without allowing their research to be framed by assumptions -- from dictionaries or any other source -- about the possible meaning or meanings of *emolument* in the Founding Era. They used computer-based quantitative methods of linguistic analysis, combined with qualitative review of actual texts, to develop hypotheses about the ways *emolument* was used and understood that could be subjected to empirical testing.

They began by finding all uses of the word *emolument* in *COFEA*.<sup>32</sup> The search for every

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<sup>29</sup> See, e.g., Deborah Jones Merritt, *Validity, Competence and the Bar Exam*, AALS NEWS (Spring 2017), <https://www.aals.org/about/publications/newsletters/aals-news-spring-2017/faculty-perspectives/>.

<sup>30</sup> 59 S. TEX. L. REV. 181 (2017).

<sup>31</sup> *Id.* at 217, 220. Cf. Norman L. Eisen, Richard Painter & Laurence H. Tribe, THE EMOLUMENTS CLAUSE: ITS TEXT, MEANING, AND APPLICATION TO DONALD J. TRUMP 11, Brookings Institution Dec. 16, 2016, available at <https://www.brookings.edu/research/the-emoluments-clause-its-text-meaning-and-application-to-donald-j-trump/> (arguing that broad meaning applies); Amandeep S. Grewal, *The Foreign Emoluments Clause and the Chief Executive*, 102 MINN. L. REV. 639 (2017) (arguing for narrow meaning); Mikhail, *supra* note 14 (broad); Natelson, *supra* note 7 (arguing there were two narrow and two broad meanings and that one of two narrower meanings applies). Phillips & White also based their analysis on a study of *COFEA*; however, the work reported in their article used a different set of research methods than employed in the authors' analysis of the original public meaning of *emolument*.

<sup>32</sup> The authors downloaded all instances of *emolument* from *COFEA* in order to perform manual analysis and more flexible computerized searches. Also, because *COFEA* is currently being added to, this approach established a static data set to avoid encountering unexpected changes in the data during the course of the research. The authors plan to update the on-line appendix to this article with an option to download the complete data file used for this research and information about the search tools used by the authors. However, this article will also provide guidance for using the on-line *COFEA* data base and *COFEA* search tools to approximate the authors' research and indicate where, at any point, there may be slight variations in results between the authors' analysis of the off-line data base versus what readers may find using *COFEA* online. The on-line appendix is available at:

instance in which the word *emolument* appeared in either singular or plural form resulted in over 2,500 examples (or “hits”) across all six sources, divided approximately 60%-40% between plural and singular.<sup>33</sup> The authors then determined how many times *emolument* occurred in each source. The term was not concentrated in any one source but occurred in comparable numbers in legal texts (Hein and Statutes), primarily non-legal publications (Evans), and in the Founders’ papers, which represent a mixture of official documents and personal correspondence. The total number of occurrences and the distribution across various genres, shown in the table below, gave the authors confidence that *COFEA* could produce a sufficiently large and representative sample for meaningful analysis.

Founders	Evans Texts	Convention	State Debates	Hein	Statutes
37%	25.9%	2.7%	2.6%	29.6%	2.2%

The authors then conducted three independent, computerized linguistic analyses of the retrieved cases to determine where *emolument* was (1) modified or described by a preceding adjective or a subsequent prepositional phrase, (2) included in a coordinated list, especially when preceded by the word ‘other’ and (3) modified when it is the object of the verbs *receive* and *accept* (the verbs used in the Domestic Emoluments Clause and Foreign Emoluments Clause, respectively).<sup>34</sup>

### **Analysis One: *emolument* with a pre-modifying adjective or a post-modifying prepositional phrase**

The authors found that *emolument* was post-modified by a prepositional phrase (such as “emolument for” or “emolument of”) for over 29% of all occurrences of *emolument*, compared with 16% for other nouns. Pre-modifying attributive adjectives were used for 30% of all occurrences of *emolument*,<sup>35</sup> compared with 15% for other nouns. These percentages reveal that *emolument* was modified with additional information, in the form of

<http://www.clarkcunningham.org/ScientificMethods.html>.

<sup>33</sup> The authors’ search can be approximately replicated by entering “emolument\*” in the initial search box that appears after logging into *COFEA*. The use of the asterisk produces every word containing the string of letters that precede the asterisk. This *COFEA* search will produce 2,789 cases when singular and plural are combined. In producing the off-line data base for their research, *see supra* note 32, the authors corrected the raw results of this *COFEA* search by looking for and adding texts that contained variant spellings or errors in typography or optical character recognition (OCR) that were missed by the initial search. The number of instances in the authors’ data set download is higher (2,824) as a result of these corrections.

<sup>34</sup> *COFEA* contains some duplication of texts, for example texts that appeared in two different source materials. (A letter from Alexander Hamilton to George Washington may appear in both the Hamilton and Washington Papers.) For each set of search results, the authors manually reviewed and removed such duplications. Readers’ search results using *COFEA* on-line may vary from the authors’ analysis because their on-line search results may miss the variant spellings added to the authors’ master data set but may also be inflated by occasional duplication of texts.

<sup>35</sup> Readers can approximately replicate the attributive adjective search by putting “\*/j emolument\*” in the *COFEA* search box, and the following searches for the most frequent prepositional phrases: “emolument\* of,” “emolument\* for,” “emolument\* to,” and “emolument\* from”. Such an online *COFEA* search will produce the following slightly different percentages: 30% for attributive adjectives and 33.5% for prepositional phrases

adjectives and prepositional phrases, approximately twice as often as the average noun. These results indicated to the authors that *emolument* had a broad meaning that frequently relied upon modification to constrain or specify that meaning.

Further, the attributive adjectives that modify *emolument* in the corpus were diverse and not merely limited to modifiers of degree (e.g. small emolument, sufficient emolument). These adjectives include references to official emoluments (e.g. *official, federal, public*) as well as emoluments that are personal in nature (e.g. *private, personal, individual*), both of which were frequent in the corpus. The presence of a large number of references to *emolument* that were private or personal in nature tends to refute the theory that *emolument* was primarily understood as “profit arising from an official’s services rendered pursuant to an office or employ.”

The frequent modification of *emolument* with the adjective “official” also was evidence tending to refute this theory. In linguistics, a prototype is a good example of, or a central member of, a semantic category. If a word has a prototypical use, then the word should not require modification to communicate the essence of the prototype. The prototype of *fork* is the metallic table utensil. Therefore “metal fork” sounds strange, outside of unusual contexts where, say, people are eating with plastic forks. In ordinary situations, it is only when *fork* refers to something different than the prototype that modification is appropriate: for example “plastic fork” or “wooden fork.”

The authors found examples such as these:

- (1) “I shall regret your final determination to resign at the same time, that I should be wanting in candour were I to hold out to you the probability of any material increase of your present official emoluments.”<sup>36</sup>
- (2) “the committee to whom this bill is referred be instructed to inquire into the annual official emoluments received by marshals, clerks, and district attorneys, distinguishing between fees paid by individuals and what is paid by the United States”<sup>37</sup>
- (3) “it shall be the duty of the respective collectors, naval officers, and surveyors, to keep accurate accounts of all fees and official emoluments received by them”<sup>38</sup>

In each of these examples, *emoluments* clearly arise from holding an office. If “profit arising from office” was the prototype of *emolument*, the authors concluded they should not have found “metal fork” expressions like “official emoluments.”

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<sup>36</sup> Alexander Hamilton to John Davidson, 13 April 1793. 14 THE PAPERS OF ALEXANDER HAMILTON 315 (Harold C. Syrett 1969) (emphasis added), <https://founders.archives.gov/documents/Hamilton/01-14-02-0208>. Images of the original texts from which this and following examples are taken can be found in the on-line appendix.

<sup>37</sup> History of Congress, 8 Annals of Cong. 1569-1570 (1798-1799) (emphasis added).

<sup>38</sup> Appendix to the History of the Fifth Congress, 9 Annals of Cong. 3914 (1798- 1799) (emphasis added).

## Analysis Two: coordinated noun phrases

The authors noted that *emolument* seemed to appear frequently along with one or more other nouns conjoined by either *and* or *or*, a linguistic structure known as a coordinated noun phrase. This prompted Analysis Two, in which search tools were used to find all the texts containing such noun phrases. It was discovered that coordinated noun phrases accounted for about 35% of all occurrences of *emolument*.<sup>39</sup>

One common coordinated noun phrase combined *emolument* with *profit*. In particular, the authors found many examples regarding public officials where *emolument* was used in addition to *profit*, a finding that is inconsistent with the theory that when *emolument* is used in reference to a public official it “has the natural meaning of the narrower definition of profit arising from an official’s services rendered pursuant to an office or employ.” If this theory is accurate, then it should be possible to replace *emolument(s)* with *profit(s)* in texts relating to public officials. However, in the actual texts found by the authors such a modification would produce an apparent redundancy, as illustrated by the following examples (with replacement indicated in brackets):

- (4) “The Commonwealth of Virginia To \_\_\_\_\_ Esquire, greeting: ... you are, by these Presents, constituted and appointed Deputy Attorney for the County of \_\_\_\_\_ . ...[Y]ou are empowered to hold and enjoy all Profits and Emoluments [all Profits and *Profits??*] which unto the same may of Right belong. Witness Patrick Henry, Esq; Governour”<sup>40</sup>
- (5) On American Representation in Parliament. “I am persuaded that will never be done, as every ministry has already difficulty enough to satisfy those, who think they have a right to divide, or to recommend the division of all posts, profits and emoluments; [all posts, profits and *profits??*] and those who think they have such right, will never agree to increase their own number, by which the chance in favour of each would be diminished”<sup>41</sup>
- (6) “... for several years previous to the late War, he enjoyed the Office of Deputy Marshall of the Court of Vice Admiralty for the then Colony of Rhode Island the emoluments and profits of which [the *profits* and profits of which??] he was deprived of by the Revolution... He therefore most humbly solicits your Excellency ... to grant him some Office or Employment under

<sup>39</sup> While readers can approximately replicate these results by searching *COFEA* for “and emolument\*” and then for “or emolument\*” it should be noted that these searches will only capture cases where *emolument\** occurs at the end of a list preceded by *and/or*. Such an on-line *COFEA* search will produce a lower percentage, 28%, than the authors’ results. The authors coded results manually to ensure that they captured all instances where *emolument\** occurred anywhere within a coordinated noun phrase.

<sup>40</sup> Form of Commission to Deputy Attorney Generals (1779) 3 THE PAPERS OF THOMAS JEFFERSON 21 (Julian P. Boyd ed. 1951) <https://founders.archives.gov/documents/Jefferson/01-03-02-0025> (emphasis added).

<sup>41</sup> Reply to Vindex Patriae on American Representation in Parliament, THE GAZETTEER (Jan 29, 1776), 13 THE PAPERS OF BENJAMIN FRANKLIN 63-66 (Leonard W. Labaree ed. 1969) (emphasis added) (attributed to Benjamin Franklin) <https://founders.archives.gov/documents/Franklin/01-13-02-0022>.

the new Constitution”<sup>42</sup>

This second analysis also examined coordinated noun phrases consisting of lists that ended “and emoluments,” suggesting that *emolument* was being used as an inclusive, “catch-all” term, as in these examples:

- (7) “to William Palfrey, Esquire, Greeting. We, reposing special trust and confidence in your abilities and integrity, do by these presents constitute you our consul in France, during our pleasure, to exercise the functions, and to enjoy all the honours, authorities, pre-eminences, privileges, exemptions, rights and emoluments to the said office appertaining.”<sup>43</sup>
- (8) “That the stile [style] of said Battalion be the French Legion - and that those who may inlist in it be entitled to the same Pay, Bounties and Emoluments which are allowed to other Soldiers in the Continental Service. ... [and] any reputable Inhabitant of Canada, who shall in like Manner, recruit and deliver 15 able bodied Recruits who shall pass Muster, shall be entitled to the Rank Pay and Emoluments of a Ensign in the Battalion in which the said Recruits shall be incorporated.”<sup>44</sup>

The authors tested this hypothesis about the use of *emolument* as an inclusive term by searching for all examples in which the term was preceded by “other.” This search produced 69 uses of *emolument* in coordinated noun phrases in which the term appeared at the end of a list, preceded by “other” -- “[list] other emolument”.<sup>45</sup> Approximately one out of every 40 cases of *emolument* occurs in this structure. The authors investigated whether “[list] other [noun]” was a common or unusual structure in *COFEA* and found that it is very unusual. On average, nouns in *COFEA* appear in this structure in only one out of 1250 texts.

These linguistic expressions clearly indicate that the meaning of the word *emolument* includes the preceding words in the list, but is also not limited to those words. For example, it is possible to say “dogs, cats, and other animals” but not “birds, cats, and other dogs” because the meaning of the word following “other” must include the preceding nouns in the coordinated noun phrase. The authors found a wide variety of nouns conjoined with “other emolument(s),” as shown in these examples:

- (9) “A motion was made by Mr. [Elbridge] Gerry, seconded by Mr. [Roger] Sherman ... Resolved, That Congress will not appoint any member

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<sup>42</sup> To George Washington from William Mumford, 9 May 1789, May 9th, 1789, 2 THE PAPERS OF GEORGE WASHINGTON 240-242 (Dorothy Twohig ed. 1987) (emphasis added), <https://founders.archives.gov/documents/Washington/05-02-02-0179> . The on-line appendix contains a chart listing 24 further examples from *COFEA* of coordinated noun phrases in the form of profit and/or emolument from a variety of sources ranging from 1769 to 1794.

<sup>43</sup> 20 JOURNALS OF THE CONTINENTAL CONGRESS 735 (1781) (emphasis added).

<sup>44</sup> 9 JOURNALS OF THE CONTINENTAL CONGRESS 986-987 (1777) (emphasis added).

<sup>45</sup> The on-line appendix contains a chart listing all these uses. Comparable results can be obtained by searching *COFEA* for “and other emolument\*” and “or other emolument\*”.

thereof during the time of his sitting, or within six months after he shall have been in Congress, to any office under the said states for which he or any other for his benefit may receive any salary, fees or other emolument<sup>46</sup>

- (10) “having Receiv’d a wound in the month of October 1779 which has rendered him incapable of doing duty with his Regiment ever since— and being much Embarrass’d by not having receiv’d any pay, Cloathing or other Emoluments granted to the Officers of your State, Since July 1779— ...woud be much oblided to you if convenient that he Cou’d have Some money Advanced”<sup>47</sup>
- (11) “when I accepted of my appointment as Commissioner of the war office, I expressly stipulated ... that I shou’d retain my commission, and with it, every right and privilege belonging to it, the current pay, rations, forage and other lucrative emoluments only excepted”<sup>48</sup>
- (12) “the memorial of William Finnie late Deputy Quarter Master General in the southern department, praying that the donation of lands and other emoluments appertaining to the rank of a Colonel in the line of the late continental army may be extended to him.”<sup>49</sup>
- (13) “Rivers and lakes are useful for navigation or for fishing, or for other emoluments arising from their possession.”<sup>50</sup>

Lists ending with *emolument* preceded by *other* produced the following 23 nouns that writers of these texts considered to be types of *emolument*:

Bounties	Lands	Rank
Clothing	Liberty	Rations
Command	Offices	Subsistence
Commissions	Pay	Sum
Contracts	Pensions	Tithes
Fees	Perquisites	Toll
Forage	Places	Commutation
Gratuity	Privileges	

<sup>46</sup> 15 JOURNALS OF THE CONTINENTAL CONGRESS 1307 (1779) (emphasis added).

<sup>47</sup> Leonard Cooper to Virginia Delegates, 22 June 1781, 3 THE PAPERS OF JAMES MADISON 166-167 (William T. Hutchinson & William M. E. Rachal eds. 1963) (emphasis added), <https://founders.archives.gov/documents/Madison/01-03-02-0085>.

<sup>48</sup> To Thomas Jefferson from George Muter, 6 March 1781, 5 THE PAPERS OF THOMAS JEFFERSON 78-80 (Julian P. Boyd ed. 1952) (emphasis added), <https://founders.archives.gov/documents/Jefferson/01-05-02-0103>.

<sup>49</sup> 29 JOURNALS OF THE CONTINENTAL CONGRESS 635 (1785) (emphasis added).

<sup>50</sup> George Friedrich von Martens, SUMMARY OF THE LAW OF NATIONS (tr. from the French by William Cobbett) (Philadelphia 1795) (emphasis added).

This is a very wide variety of terms, which includes both concrete and abstract nouns.

### **Applying the first and second analyses to the Constitutional text**

The Domestic Emoluments Clause exemplifies the pattern discovered by the authors in the second analysis of using a concluding “any other emolument” phrase to show general inclusion:

The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

U.S. Const. art. II, § 1, cl. 7. The clause clearly means that the President shall receive for his services compensation but not any other *emolument*, whether from the United States or any individual state. The use of “any other” and the concluding placement of “any other Emolument” indicates that “a Compensation” is a type of *emolument* but that *emolument* also refers to other things than compensation.

The authors’ first analysis indicated that *emolument* typically appears in a modified form. The Foreign Emoluments Clause states:

. . . no Person holding any Office of Profit or Trust under them [the United States], shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

U.S. Const. art. I, § 9, cl. 8. Two prepositional phrases modify *emolument* in this clause. The final seven words indicate *emolument* is restricted to something accepted “from any King, Prince, or foreign State.” However, the other prepositional phrase does not restrict the reference of *emolument* in any way; instead, in the most explicit way possible, the phrase “of any kind whatever” signals that *emolument* should be given the widest possible meaning.<sup>51</sup>

### **Analysis three: emolument with receive or accept**

Although the application of findings from the first two analyses to the Domestic and Foreign Emoluments clauses seemed clearly to indicate a broad meaning for *emolument*, the authors undertook a third analysis specifically designed to locate data supporting the theory that *emolument* in the founding era had “the natural meaning” of “profit arising from an official’s services.” The authors developed the hypothesis that, if that theory is correct, *COFEA* would contain numerous texts in which the writer used *emolument* without modification because the text described a situation in which the emolument related to an official’s services. The idea behind the hypothesis was that if the “natural” meaning of *emolument* necessarily implied the performance of an official service, there would have been no need to modify the

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<sup>51</sup> The use of commas to frame the prepositional phrase is a clear signal that the phrase modifies all four nouns that precede it, and not just “Title.”

word when it was used in its “natural” way. This is a necessary implication of the President’s position because *emolument* does not appear in either the Domestic or Foreign Emolument Clause with any modification limiting its meaning to “arising from an official’s service.”

To test this hypothesis, the authors searched for all cases of *emolument* within six words on either side of the words *receive* and *accept*. (These are the verbs used in the Domestic and Foreign Emolument Clauses, respectively.) This produced 137 cases using *receive* and 12 cases using *accept* in reference to *emolument*.<sup>52</sup>

The data failed to support the hypothesis that *emolument* would be commonly used without other explanatory words to communicate that something had been received or accepted “arising from an official’s services.” The data showed just the opposite: 93% of the cases of *receive emolument* and 77% of the cases of *accept emolument* were pre-modified or post-modified by a linguistic structure that served to further specify the meaning of *emolument*.<sup>53</sup> Many of these texts specifically referred to receiving or accepting an emolument for “services rendered pursuant to an office” and yet added words to *emolument* to so indicate.

Typical examples of modified *emolument* are these:

- (14) “I have finally determined to accept the Commission of Commander in Chief of the Armies of the United States ... I must decline ... that I can receive any emoluments annexed to the appointment”<sup>54</sup>
- (15) “many instances may be produced of many needless offices being created, and many inferior officers, who receive far greater emoluments of office than the first President of the State”<sup>55</sup>
- (16) “will not justify to my scruples the receiving any future emoluments from my commission. I therefore renounce from this time all claim to the compensations attached to my military station during the war or after it ... [however] I shall accordingly retain my rank”<sup>56</sup>

<sup>52</sup> Readers can replicate the initial search by using the ‘Collocates’ tab, entering ‘emolument\*’ in the ‘Query’ box and ‘accept\*’ or ‘receive\*’ in the ‘Collocate’ box, and selecting ‘6’ Left and ‘6’ Right. The results of this COFEA search will produce 73 hits for ‘accept’ and 175 hits for ‘receive’. These numbers are higher than those reported by the authors because the authors refined their search results by eliminating cases where *emolument\** was not the direct object of ‘accept’ or ‘receive’ and eliminating duplicates.

<sup>53</sup> The modifying linguistic structures accounted for in this analysis were: prepositional phrases, relative clauses, adverbials, attributive adjectives, complement clauses, ‘other’ in coordinated noun phrases, and semi-determiners. The on-line appendix contains a chart listing all 149 cases.

<sup>54</sup> From George Washington to John Adams, July 13, 1798, 2 THE PAPERS OF GEORGE WASHINGTON, RETIREMENT SERIES 402-404 (W. W. Abbot ed. 1998) (emphasis added), <https://founders.archives.gov/documents/Washington/06-02-02-0314>. Images of the original texts from which this and following examples are taken can be found in the on-line appendix.

<sup>55</sup> Pelatiah Webster, POLITICAL ESSAYS ON THE NATURE AND OPERATION OF MONEY, PUBLIC FINANCES, AND OTHER SUBJECTS: PUBLISHED DURING THE AMERICAN WAR, AND CONTINUED UP TO THE PRESENT YEAR, 1791(emphasis added).

<sup>56</sup> To George Washington from Alexander Hamilton, March 1, 1782, 3 THE PAPERS OF ALEXANDER

- (17) “That a salary of dollars pr annum be allowed for the Agent of Marine and that he receive no other fee or emolument whatever for his services in that office”<sup>57</sup>
- (18) “I mentioned there was no prospect, that the nett income of my Office in the succeeding six months, would be much encreased. By comparing that with the inclosed Statement it will appear that my opinion was well founded; and it is not probable that the emoluments of my office will be augmented this year.”<sup>58</sup>
- (19) “public Ministers who are receiving the Emoluments of Office ... may be under the necessity of Living with a Splendor ill suited to the Genius of rising Republics”<sup>59</sup>
- (20) “if the officers are men of sense, they must know, that being in possession of the letter of appointment ... they will receive from the date of their letter of acceptance, the pay & emoluments of their office”<sup>60</sup>

The many counter-examples where *emolument* was modified to indicate that the emolument “arose from official service” were sufficient to disprove the hypothesis. Still the authors determined to examine all 11 cases (out of a total of 149) in which *emolument* was associated with *receive* or *accept* but without any modification. Original underlying sources were accessed for all 11 cases to provide maximum context for each case. This inquiry further disproved the hypothesis. In at least five of these 11 cases, when the writer failed to modify *emolument* the writer was describing something *not* related to an official’s services. In two cases *emolument* was used without a limiting modification to refer to obtaining a financial benefit from the activities of a private company.

- (21) “The following scheme for the organization of the Company ... No Director shall receive any emolument unless the same shall have been allowed by the Stockholders at a General meeting.”<sup>61</sup>

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HAMILTON 5-6 (Harold C. Syrett ed. 1962) (emphasis added), <https://founders.archives.gov/documents/Hamilton/01-03-02-0006>.

<sup>57</sup> 20 JOURNALS OF THE CONTINENTAL CONGRESS 766 (1781) (emphasis added).

<sup>58</sup> To Alexander Hamilton from William Ellery, July 18, 1791, 8 THE PAPERS OF ALEXANDER HAMILTON 553-554 (Harold C. Syrett ed. 1965)(emphasis added), <https://founders.archives.gov/documents/Hamilton/01-08-02-0501>.

<sup>59</sup> James Smith to the Commissioners, August 24, 1778, 6 THE ADAMS PAPERS, PAPERS OF JOHN ADAMS 389-392 (Robert J. Taylor ed. 1983) (emphasis added), <https://founders.archives.gov/documents/Adams/06-06-02-0299>.

<sup>60</sup> To George Washington from James McHenry, March 31, 1799, 3 THE PAPERS OF GEORGE WASHINGTON, RETIREMENT SERIES 453-458 (W. W. Abbot and Edward G. Lengel. eds. 1999) (emphasis added), <https://founders.archives.gov/documents/Washington/06-03-02-0345>.

<sup>61</sup> Prospectus of the Society for Establishing Useful Manufactures (Philadelphia, Aug. 1791), 9 THE PAPERS OF ALEXANDER HAMILTON 144-53 (Harold C. Syrett, ed., 1965) (emphasis added), <https://founders.archives.gov/documents/Hamilton/01-09-02-0114>.

- (22) “the House of Hunter, Banks and Company, contracted to supply us. . . . I never held any commercial connection with this Company, other than what concerned the public, either directly or indirectly, or ever received one farthing profit or emolument, or the promise of any from them”<sup>62</sup>

The results of the third analysis did not undermine but affirmed the conclusions developed from the first two, namely that (1) *emolument* had a broad meaning that included, but was certainly not limited to, profits related to an official office, and (2) *emolument* was not an ambiguous term with multiple senses. Rather it had a single, broad meaning that typically required further qualification or modification in order to fully specify its intended meaning.

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<sup>62</sup> [General] Nathanael Greene to His Excellency The President of Congress (Newport, Aug. 22, 1785), 10 THE PAPERS OF ALEXANDER HAMILTON 421-28 (Harold C. Syrett, ed., 1966) (emphasis added), <https://founders.archives.gov/documents/Hamilton/01-10-02-0060-0002>. Three other cases also clearly did not describe duties of a public official; these texts applied an unmodified version of emolument to the work of a midwife, to the charitable activities of a Quaker merchant, and to serving as the librarian to a private organization. A chart showing all eleven cases and images of original texts can be found in the on-line appendix.