American Constitutional Praxis:

How the Constitution of the United States Was Drafted

Benjamin Reese

"When Mr. Lippmann says that the founders of our free institutions were adherents of the philosophy of natural law, and that 'the free political institutions of the Western world were conceived and established' by men who held certain abstract beliefs, he speaks with the shortened perspective of an American way of thinking in which a manner of conducting affairs is inconceivable without an architect and without a premeditated 'dedication to a proposition.' But the fact is that nobody ever 'founded these institutions.' They are the product of innumerable human choices, over long stretches of time, but not of any human design."

- Michael Oakeshott

Many prominent political theorists and historians treat the Constitution of the United States as if it were cut from whole cloth by the framers and instilled with the wisdom of great political thinkers. Students of this school of thought focus on the influence of a few key political philosophers in the Western tradition – Aristotle, Machiavelli, Locke, Hobbes, and Montesquieu - as integral to the drafting of the US Constitution. Central to this perspective is the notion that the framers of the US Constitution channeled the political thinking of the wise philosophers that they read and crafted a bespoke document in their image. Evident in this tradition of thought is an emphasis on the ingenuity and innovation put forward by the delegates to the constitutional convention. Even critics of the US Constitution, such as Charles Beard (1913), still accept the ingenuity aspect of constitutional drafting as a core trait of the founders. While the Straussians may argue that the framers gave Americans an optimistic Aristotelian document and Beard may argue that the framers created a government to maximize their personal wealth, much of the theoretical and historical work on American Constitutional thought presents the US Constitution as a singular document. Reasoning about the Constitution in this fashion ignores the empirical fact that, for over 100 years before its drafting, the American colonies and then states under the Articles of Confederation and Perpetual Union, devised social compacts, governing charters, and written constitutions with the express purpose of delineating the rights of governments and the rights of people. These early American political texts, rarely studied by scholars of American political thought and political science more broadly, capture the political systems of early America and offer a unique dataset to explore the relationship between the framer's command of western political thought and the blueprint of the early American national government. Found in early American Constitutional design is a commitment of colonies and states to popular sovereignty, limited government, civil rights and liberties, and systems of checks and balances—the same core features of the US Constitution. The quantitative text analysis methods used in this paper show that the US Constitution was written in common terms and connotes the same emotions as the state constitutions. Primary source analysis and machine learning methods also show that early constitutions can be classified as: Plantation states, the Commonwealths, the Federalist states, and the Religious Test states. The US Constitution, sharing features of each classification, is most associated with the Federalist state constitutions of New York and Maryland. The common language, sentiments, and provisions of early American Constitutions demonstrate that the state constitutions had the same features a decade earlier while the national government was still under the Articles of Confederation, undermining the notion that the US Constitution was a singular document lifted from the imaginations of the framers.

This paper begins by presenting the Straussian school of thought towards the American Constitution and describing how it contrasts with the development of American Constitutional thought as presented by Charles Thach (1922). The next section details the text-as-data analysis methods utilized in this study: term frequency-inverse document frequency, sentiment analysis, and Latent Dirchelet Allocation (LDA). I then present the results of the primary source and text-as-data analysis to argue that the US Constitution is highly reflective of the state constitutions that

predated it. The goal of this paper is to present a practical approach to the Constitution's framing, rooted in historical empiricism, and to show how text analysis methods can be utilized in political theory to add another dimension of analysis to traditional scholarship.

THE SCHOOLS OF THOUGHT OF THE AMERICAN FOUNDING

Much of the political theory written about the founding of the American Constitution can be divided into two dominant schools of thought: the Straussian school, or the notion that the framers reached into the Western canon and brought forth a singular, cohesive document, and the Thachian school of thought that argues framers did not draw conclusions from the texts of prominent political philosophers but, instead, took inspiration their contemporary governments. The distribution of scholars ascribing to these schools of thought are heavily skewed towards the Straussian interpretation, while Charles Thach is largely a lone voice urging political scientists and historians to consider how the political developments of the colonial period influenced the drafting of the American Constitution. Though outnumbered by the Straussians, Thach offers a far more compelling and comprehensive theory of the framing of the US Constitution than his intellectual counterparts.

Strauss argued that an education focused on the great political theorists is a "counterpoison to mass culture," as it frees people from the ails of modern society and exposes them to beauty and to nobility (Strauss 1968, 24). This great-text-focused thinking, when applied to political developments, leads scholars to overlook the practical aspects of politics. Strauss himself rarely wrote about the founding, but his students and adherents have written extensively on the framing period and use Straussianism to frame their analyses of the merits of the US Constitution (West 1991). The distinction drawn in this section concerns the methodology and the datasets that the Straussians use, not specifically their normative conclusions. The goal of this paper is not to

critique the substantive conclusions of Straussians, but to show how the US Constitution should not be considered a unique document instilled only with the political wisdom of great philosophers. Scholars looking to understand the Constitution will find themselves benefitted by examining the entire corpus of American constitutions, charters, and other political documents, not simply the federal Constitution, as the federal Constitution reflects the values and systems previously enumerated in state constitutions.

Isolating single political thinkers as influences of the US Constitution is extremely problematic and attempting to do so glosses over the heterogeneity in the philosophical preferences of the framers at the constitutional convention. From the beginning, the heterogeneity in the preferences of framers makes it difficult to say that the final draft of the Constitution specifically incorporated one thinker over another. If the great philosophers had an impact on the thinking of the framers, it would be tempered by the political realities of drafting a viable document palatable to all framers, who held differing views on the great Western political philosophers, as well as the American people, who were perhaps not as well read in the Western canon. One scholar who attempts to isolate singular thinkers as influences on the design of the American Constitution is Harvey Mansfield.

Mansfield (1989) offers a sweeping account of the political philosophy purported to have played an influential role in how the framers of the US Constitution designed the presidency. Mansfield isolates Aristotle's theory of kingship; Machiavelli's introduction of modern republicanism; Hobbes' theory of how political power is wielded; and Locke's presentation of how executives use executive power, as particularly strong contributors to the ultimate delineation of the American national executive (Mansfield 1989). Mansfield critiques theories of presidential power ranging from the qualitative empirical work on how the president's power is rooted in

persuasion (Neustadt 1960) to the psychological theories of the presidency (Barber 1972) and instead looks towards the great books of Western political philosophy to present his theory of executive power. Mansfield goes so far as to say that the framers created the American president as an Aristotelian regime formalized in writing (Mansfield 1989, 276-281). Mansfield's perspective about executive power is rooted in the notion that understanding prominent political philosophers is the principal way to grasp how the American Constitution works. In other words, scholars must understand the philosophy of Locke and Montesquieu to properly understand how the president of the United States exercises executive power. Inseparable from this notion is the claim that the framers themselves curated a national constitution to enshrine these theories into law. As mentioned above, isolating the influence of particular figures is unscientific at best. Further, attributing executive power directly to the virtues of Aristotle's political philosophy, as Mansfield does, overlooks the fact that state executive offices have a design nearly identical to the presidency, originating a decade or more earlier. Thach (1922) offers an elegant treatment on the futility of this line of reasoning as applied to the creation of the American presidency.

Thach (1922) argues that the key to understanding executive power, and understanding how the framer's conceived of executive power, is not found in the texts of great political philosophers, but in the political dynamics of late 18th century America. Thach argues that the framers used canonical theorists – the same ones Mansfield claims to be instrumental in the design of executive power – only to bolster, not to derive conclusions (171). In other words, the framers had specific intentions in mind when they were presenting their conceptions of what powers the American national executive would be endowed with, separate from the teachings of political philosophy. They would cite Aristotle's theory of kingship or Locke's claims of how people are justified to overthrow the state when rulers act against natural law only to increase the probability

of their proposals passing. Thach deftly points out that if the teachings of the great thinkers were the primary guiding principles of the US Constitution, then the Articles of Confederation would never have been written in the manner that they were (169). The framers would have devised the US Constitution, in its current form, in 1776, not a decade later after the failures of the Articles of Confederation were made clear. Thach's conclusion of executive power, that the national executive appeared much like New York's executive, is based on the notion that the role of the American executive developed slowly and over time (166), not all at once during the summer of 1787. The presidency was not designed in one attempt but rather developed over time throughout the late 18th century.

Other theorists have considered the political origins of the Constitution as well. Diamond (1992) argues that the founders instilled great political wisdom in the US Constitution beyond their self-interest, in the image of the political philosophy of the great western thinkers. Eidelberg (1968) argues that the founders designed the US Constitution as an Aristotelian mixed regime. Jaffa (2001) theorizes that the framers built a system of rights based on Lockean ideals and goes so far as to say that the framers were dedicated readers of Locke. The shortcoming in all of these works is that they look at the US Constitution as an isolated document, separate from the myriad of constitutional proposals that were considered during the founding period. The fact that state constitutions articulate grandiose passages of the relationship between natural rights and consent to be governed, the role of executive power, and the separation of powers before the US Constitution was drafted seriously undermines the position that the framers lifted the Constitution directly from the works of great thinkers.

Lutz (1979), in one of the few examinations of the theoretical determinants of early American state constitutions, argues that state constitutions were far more progressive than the subsequent national constitution. His analysis still focuses on the great texts, but he also offers the view that state-level constitutions focused on the relationship between the government and the people, while the national constitution focuses on the relationship between the different branches of government. Lutz's (1979) perspective is stunted by a focus on the teachings of great thinkers, and it further reaches an incomplete conclusion that the substance of state and national constitutions is divergent. The approach Lutz employs relies heavily on the notion of consent and uses a consent framework to advance the theory that state constitutions reserved more powers to the people and local governments than the national constitution. While it may be empirically true that state constitutions use the term "consent" more than the national constitution, a point made in Lutz's argument, consent is such an infrequently used and unimportant term in the formulation of constitutional provisions that focusing on its mentions overlooks the more substantively important features of American Constitutional thinking. The core tenets of institutional design, election mechanisms, appointment powers, geographic representation, and suffrage rights are all prevalent in both state and national constitutions. So much so, as is shown in a subsequent section, that the use of consent is not even in the top 15 most common words in any state constitution written of the time. Further, the New York and Maryland constitutions—what this paper calls the Federalist state constitutions—similarly focus on the relationship between the different branches of government over the relationship between the government and the people, showing how the US Constitution is not unique in that regard.

As Thach shows how an empirical approach offers new insights into the design of the American presidency, this paper seeks to utilize an empirical approach, inspired by the tools of data science, to draw new inferences about the drafting of the US Constitution and how it reflects the state constitutions that preceded it. This paper seeks to put positivism, historicism, and

empiricism at the forefront of understanding the drafting of the American Constitution. This paper looks for similarities between the national and state constitutions in terms of the specifics of language, emotional sentiment, institutional design, and commitment to civil liberties and freedoms to show that the US Constitution is not a unique document, but one of the many constitutions being considered and adopted in early America. The framers had a wealth of previous documents to consider, from colonial charters, state constitutions, and English law to the Articles of Confederation and the Albany Plan. This paper argues that the framers used these documents, copied the features they wanted and believed could pass the convention and ratification hurdles, and drafted a national constitution in their image, not the image of political philosophers. This paper tests this theory using text-as-data analysis methods, supplemented by primary source reading.

DATA & METHOD

Despite the relatively scarce attention political scientists have paid to them, historic state constitutions, colonial charters, and other early American political documents are readily available through online archives. The Avalon Project at Yale Law School and National Humanities Center both have web pages displaying the text of nearly all prominent early American political documents. From these archives, scholars and researchers can build diverse datasets of the most impactful written documents in American history. This paper utilizes 15 of these such documents: each state constitution and the national constitution. Each constitution, as found on both the Avalon Project and the National Humanities Center archives, is the exact text that was adopted by state legislatures after independence. The text of the US, Massachusetts, and Maryland Constitutions as well as the Connecticut colonial charter, adopted as Connecticut's governing document after independence, were scraped from the National Humanities Center archives. The Virginia

Constitution was scraped from Encyclopedia Virginia, and the remaining documents were scraped from Yale Law School's Avalon Project archives.

Data

State constitutions, just like the national constitution, contain the rights of the government, the rights of the people, voting requirements, and the electoral mechanisms through which people elect their government. During the late 18th-century, many states were experimenting with different ways to define these core aspects, and several states would adopt numerous constitutions both before and after the constitutional convention to further refine their state governments (Lutz 1979). These states would regularly change their election mechanisms, appointment procedures, and limit legislative supremacy in favor of further empowering their state executives (Lutz 1979). For this study, the full possible dataset of every adopted state constitution is limited to only the renditions of the state constitutions that existed during the constitutional convention. While this omits how each constitution developed and changed over time, limiting the dataset in this fashion better captures the existing constitutional politics and constitutional thinking that the framers of the US Constitution would have been aware of. Further, due to the similarities in state constitutions across each state's respective provisions, not much is gained from including an exhaustive list of constitutions and colonial charters. Both Rhode Island and Connecticut did not ratify state constitutions in the period before the drafting of the national constitution, and, instead, re-adopted their colonial charters upon statehood (Lutz 1980), so each colonial charter is included in the dataset. I include Vermont, though it did not become a state until 1791, due to its passing of a state constitution in 1786. Finally, in another data decision, I include the Bill of Rights, Amendments I-X, in the analysis as these were integral to the passage of and framer's thinking about the national constitution. As will be discussed, many of the core similarities between state and national

constitutions lay beyond the guarantee of civil rights and civil liberties, so the conclusions of this paper are consistent with or without the inclusion of the Bill of Rights amendments. The First through Tenth amendments are included only for constitutional completeness.

Text Preprocessing

The text of the documents is scraped from the HTML pages with a relatively simple web scraping procedure in *R*. Once scraped, the text from each document is then cleaned to remove any text found in the original document such as notes added by the Avalon Project curators. The result of this cleaning is a character variable containing the full text of each constitution. To prepare the texts to be analyzed, each cleaned document must be processed. The processing first removes capitalization and punctuation and then reconstructs the documents into a "bag-of-words." A bag-of-words model is a method of simplified rendering commonly utilized in natural language processing (NLP) and information retrieval research. In a bag-of-words model, indicative of its nomenclature, a document is rendered as simply a bag of its words. Bag-of-words models necessarily disregard word order and grammatical structure to measure word multiplicity, or the number of times a word is mentioned in a text. What this method loses in contextuality, it gains in the ability to systematically analyze and then visualize the distribution of important words in a document.

To create the bag-of-words, each document is tokenized, or split into individual words called tokens. For example, the sentence "elected by popular vote" would be tokenized to the individual tokens of "elected", "by", "popular", and "vote. With the documents split into tokens, the next step is to stem each word. Word stemming reduces a word to its root, or stem, form. For example, "fish" and "fishing" would both be reduced to "fish." Finally, insignificant words are removed from each document in a process called stop word removal (Rajaraman and Ullman

2011). Words like articles and prepositions, such as "to", "not", "and", etc., are removed. Further, domain specific stop words are removed from each document. For example, the signatories are consistently mentioned in different state constitutions. The Rhode Island and Connecticut colonial charters mentioned the names of the company partners that managed the plantation. As names are not important political features of constitutions, they are removed, as are any mentions to specific locations such as state capitals or county names used when establishing geographic representation. Other words that are removed are meta-words that refer to the structure of the document such as "section" or "act". Without this step, when examining the most important words of each constitution, only names and places unique to each state will be returned, precluding a meaningful analysis of the political systems designed by the framers in each state. A full list of stop words can be found in **Appendix A**. Each of these steps allows for ease of computation and comparison and has a long history in linguistic computing (Dawson 1974, Hafer & Weiss 1974, and Frakes 1984) for estimating optimal results. The result of this processing is 15 constitutions rendered as tokenized, stemmed, and cleaned bags-of-words.

Methodology

In combination with traditional primary source analysis of the state constitutions, this paper utilizes three text-as-data computational methods that build off one another to create a unified analysis. The text-as-data methods are used in tandem with, not in place of, reading the primary sources. The first method is simply a counting of the most important and most frequently used words for each state constitution. While this by itself is not necessarily conclusive evidence that the framers borrowed elements from state constitutions, it does show how each constitution draws upon a shared language, nomenclature, and stylistic approach that constitutes the basis of the more theoretically important similarities. Importantly, a simple counting of words shows where the

constitutions differ the most in the terms that they use. If the federal constitution is a singular document meant to create a novel form of government, the words that are most important in the US Constitution will reflect this. The terms of the US Constitution will stand out against the common terms of the state constitutions. As later shown, this, however, is not the case.

The specific method of word counting employed by this paper is the informational retrieval method term frequency—inverse document frequency (tf-idf). Tf-idf is a numerical statistic which shows how important a word is in a document compared to a corpus of documents (Rajaraman and Ullman 2011). Tf-idf weights the importance of a word in each document with its use in the total corpus. The tf-idf score shows the number of mentions a word has in a document, adjusted for the fact that some words appear in higher frequencies in general throughout a corpus (Rajaraman and Ullman 2011). For example, the word senate is mentioned many times throughout most of the early state constitutions. Simply counting the number of mentions of "senate" would overstate its importance to any given document because it is such a common word. When this word appears as important, given this constraint, it is because it is mentioned so frequently that its use is central to the document. More importantly, tf-idf controls for the fact that there is some degree of commonality among any and all written constitutions. The important words left over after controlling for this commonality show an unbiased degree of importance not offered by mere counts. Not controlling for commonality of terms is perhaps why Lutz (1979) found consent to be important to state constitutions. Perhaps all, or most, western constitutions will mention consent. That fact, alone, does not make the term consent important. For a basic counting of the most frequently used words without using tf-idf, see **Appendix D** for word clouds of each constitution.

The second method employed is called sentiment analysis. Sentiment analysis is a natural language processing (NLP) method that allows researchers to rigorously identify, extract, quantify,

and study the positive and negative connotation of words. Sentiment analysis has been employed across the social sciences and has been used to study the sentiments of state laws (Valdez & Goodson 2022). Sentiment analysis uses a lexicon of classified "positive" and "negative" words and assigns each word in a text as positive or negative depending on the categorization of the word in the lexicon. This paper utilizes the Bing lexicon created by Bing and Minging (2004), perhaps the most common lexicon employed in sentiment analysis. Sentiment analysis will show the overall sentiment of each state constitution and whether they focus on ensuring "freedom" and "prosperity" – positive words – or discuss "punishment", "slavery", and "disenfranchisement" – negative words. Comparing the sentiment of each state constitution to the national constitution is another step in showing how reflective the national constitution is of the early state constitutions. If the national constitution is such a singular document, as many scholars purport it to be, especially a document that enshrines freedoms to its people when other governments did not, as Diamond (1992) would argue, sentiment analysis will show that distinction. If, however, the national constitution reflects the state constitutions in its overall tenor, the sentiment analysis will be nearly identical in state and national contexts.

The third and final method is an overall classification scheme that utilizes Latent Dirichlet Allocation (LDA) to compare the "topics" of documents across the corpus of constitutions. The goal of LDA is to describe the data generating process, or, for our purposes, describe how the framers wrote the national constitution. The model results can show how similar or how different the drafting of the US Constitution was to the drafting of the state constitutions. LDA is a probabilistic model that treats documents as a bag-of-words and topics as collections of words. LDA is a machine learning method that compares the tf-idf, or the frequency of the use of words, across documents to create topics. These topics are like themes that exist within documents. LDA

can be used to reduce a large corpus of text documents down to a more tractable set of classifications. For example, if LDA was run on several democratic and authoritarian constitutions, the model would create two topics: one for democratic countries and one for authoritarian countries. By running LDA on the corpus of early American constitutions, the resulting topics represent the broad, yet not mutually exclusive, categories of constitutions. The model then assigns a probability that each state constitution is of a certain classification. LDA only assigns documents to numbered groups, it does not offer any explanation for why the documents are grouped together. It is up to researchers to then examine the documents closely to create a classification scheme. The resulting LDA analysis in this paper recommends four categories and assigns states to each of the different classifications. If the US is a singular document, then it would be in a classification of its own; if, however, the US Constitution fits in some subset of other state constitutions, the resulting LDA classification will place it in a topic along with other states. As shown below, LDA does not place the US Constitution in a category of its own but with New York and Maryland.

Limitations

While this paper does contend with the theoretical weight of each document, the focus of this analysis is to measure the similarities and differences in state and national constitutions to show how the national constitution is reflective of the state constitutions ratified before it. To this end, this paper treats state constitutions in broad strokes, comparing them at the macro-level. This is a necessary limitation to this study, as the principal theory being tested is not a theoretical conclusion or a discussion of the merits of a particular aspect of the US Constitution, but an extension of the logic underpinning Thach's (1922) methodology to show how the US Constitution is not an isolated document. The power struggles found in state legislative chambers that produced these texts would offer a unique perspective on the thoughts of the framers of each constitution,

but that is beyond the scope of this paper. Also beyond the scope of this paper is a detailed close reading of each section of the state constitutions; instead, as previously mentioned, this paper treats early American constitutions only in broad strokes. Despite this paper's specific choice of neglecting a traditional approach to analyzing political documents, the theoretical importance of early state constitutions to understanding American political thought should not be understated. The theoretical importance of these documents is very much the same as the national constitution but can offer new insights, as Thach (1922) affirms. The corpus of early American constitutions show how state framers were enshrining a devotion to limited republican government, civil liberties, checks and balances, and popular sovereignty in their guiding political documents (Lutz 1980 & Slauter 2011) and should be given closer attention by scholars of American political thought.

In sum, the goal of this paper is to critique the Straussian approach to interpretating the Constitution by showing how related and interconnected the state and federal constitutions are. More specifically, the federal constitution is in many ways derivative or reflective of the constitutions that came before it. The choice to focus on quantitative methods over a theoretical analysis limits the substance of the conclusions but does offer a rigorous empirical examination of how the American Constitution was written. Finally, the research design of this paper operates under the potentially big assumption that if the national constitution appears like some or all the state constitutions, then this is evidence that the federal constitution is not a singular document. Further work needs to be conducted to concrete this notion, and this analysis is much like a first take at re-imagining the founding period in terms indicative of Thach (1922) and indicative of the practical nature of politics that leads framers to use the great thinkers to *argue* their intended policies, rather than to *form* their policy positions.

AMERICAN CONSTITUTIONAL PRAXIS

Consider first the practice of introducing, debating, and drafting the US Constitution. While it is a romantic view to imagine the framers as tucked in their libraries with Hobbes in hand thinking how best to design an American republic, the actual practice of creating a ratifiable written constitution is fraught with political barriers. Provisions of the document must pass the convention and then be ratified by a vote in the American states. Each article of the constitution must be designed with practical implications in mind, not unlike the consequences that members of Congress must contend with. When a modern-day US Senator is deciding what bill to introduce or how to vote on a given legislative proposal, are they more concerned that the bill conforms to the political philosophy of Montesquieu or if they can garner enough support for the bill to be passed? This paper firmly argues that the framers had practical political realities in mind just as modern politicians do. The framers had concrete provisions, with proven track records in the American states, to look at and design a federal constitution that would accomplish the goal of improving upon the Articles of Confederation and succeed in becoming ratified.

In this section, I present the results of the analyses utilizing the above-described methods. I begin by briefly discussing the tf-idf and the sentiment analysis results. I then show the results of the LDA model and discuss the four classifications of early American constitutions and how the US Constitution fits within the classification scheme.

The Common Language & Sentiments of American Constitutions

The perhaps least consequential, though still important, aspect of written constitutions is the exact vernacular and choice of words that will comprise the final written draft. Through primary source reading, the overall structure, stylistic conventions, and philosophical ideals presented in the body and preambles of state constitutions are shown to be extraordinarily like their national counterpart.

To begin, the preamble of the US Constitution remarkably reflects the preambles of many state constitutions, showing similar thinking and affirming the possibility that the US Constitution borrowed elements from the state constitutions. For example, the New Hampshire constitution begins with a preamble not unlike the US Constitution. The framers of the New Hampshire Constitution write, "We, the members of the Congress of New Hampshire, chosen and appointed by the free suffrages of the people of said colony, and authorized and empowered by them to meet together, and use such means and pursue such measures as we should judge best for the public good (Thorpe 1906)." The royal we used in both the New Hampshire and US Constitution show both documents' approaches to the inclusivity of government and show the devotion to popular sovereignty. Further, the public good language is consistent with the "We the People of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity," found in the US Constitution (Thorpe 1906).

The Pennsylvania constitution begins, "Whereas all government ought to be instituted and supported for the security and protection of the community as such, and to enable the individuals who compose it to enjoy their natural rights, and the other blessings which the Author of existence has bestowed upon man; and whenever these great ends of government are not obtained, the people have a right, by common consent to change it, and take such measures as to them may appear necessary to promote their safety and happiness (Thorpe 1906)."

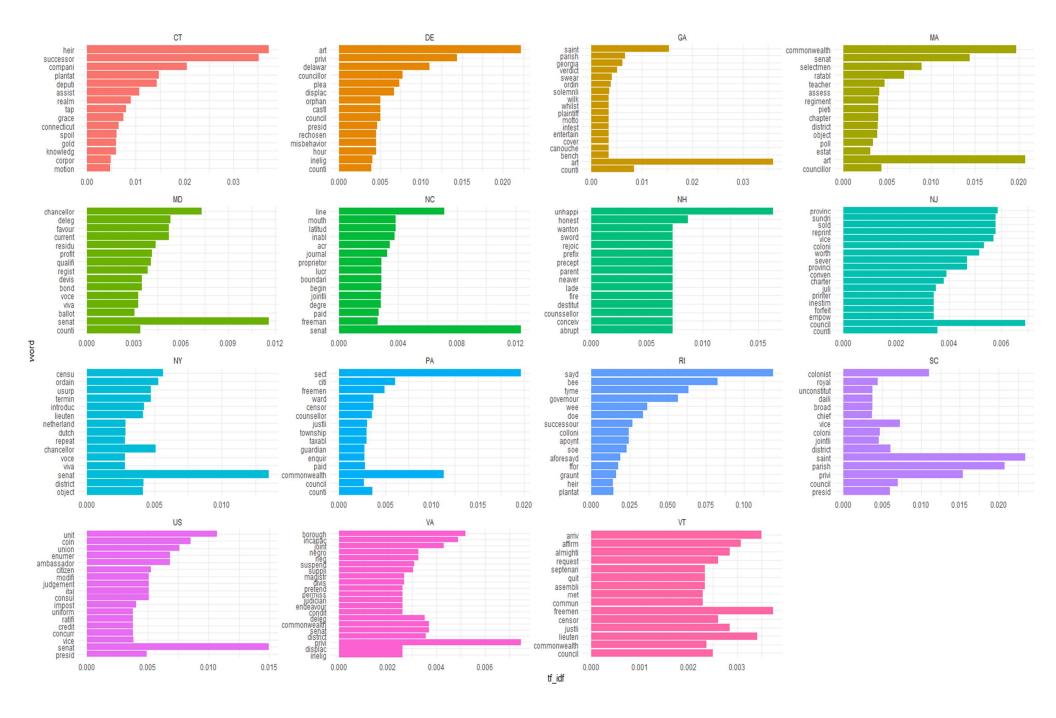
The Vermont constitution begins: "WHEREAS, all government ought to be instituted and supported, for the security and protection of the community, as such, and to enable the individuals

who compose it, to enjoy their natural rights, and the other blessings which the Author of existence has bestowed upon man (Thorpe 1906)."

The Rhode Island Colonial Charter of 1663, written over a century before the War for Independence includes a preamble discussing how the men of the colony have agreed to pursue a common civility and consent to a popularly elected government. This sampling of preambles shows how the goal of the state constitutions were very much in line with that of the subsequent national constitution. The sections of the US Constitution that Straussians such as Jaffa (2001) and Mansfield (1989) point to that are most indicative of the influence of the great thinkers consistently appear in the state constitutions as well. The Pennsylvania constitution specifically mentions protecting the people's natural rights as a core aspect of its purpose. The notion of a popular sovereign, of limited government, and of checks on governmental power were all enshrined in the preambles of these early constitutions. This is the same language that appears in the preamble of the US Constitution. By taking even a cursory look at the full sample of American Constitutions, readers can immediately see how the desire to protect natural rights, divide governing powers, and establish popular sovereignty are expressed through the choice of language in state constitutions just as they are in the later national constitution.

Moving beyond the preambles, the terms that are used to describe the governing bodies and rights of the people are consistent across state and national constitutions. The use of the terms "Congress", "sovereign", "council", "magistrate", and "governor" is perhaps mundane and unsurprising, but the common pool of shared language across the early American constitutions is the bedrock of constitutional thought. These terms are still important to each constitution even after accounting for their universality. The framers of the state constitutions, just as the more famous framers of the federal Constitution, used the same terminology and rhetorical conventions

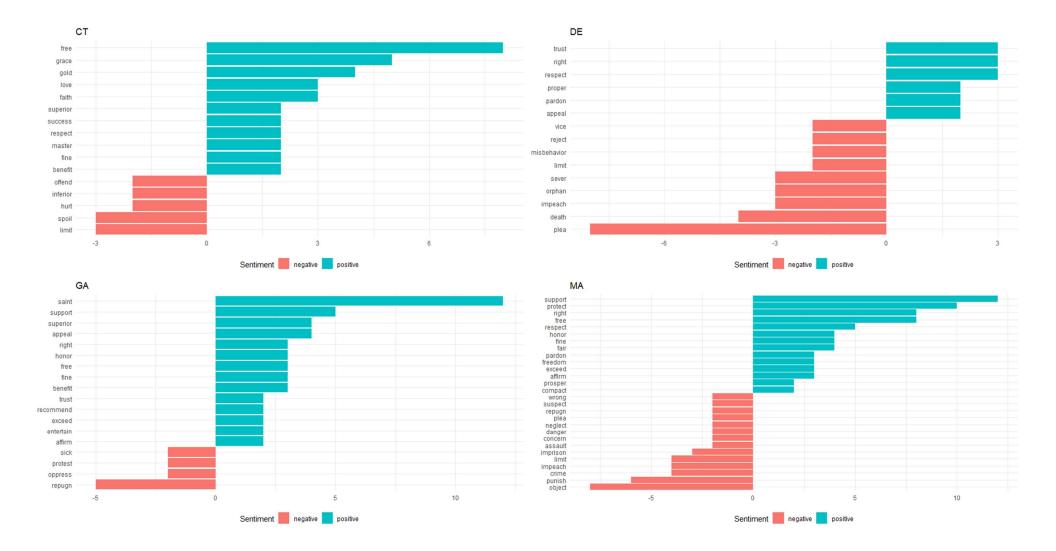
to both positively and normatively describe government. Using tf-idf, the frequency of each word, compared to the word's overall use in the total corpus of American constitutions, can be easily calculated. The figure below shows the top 15 most frequently used words, controlling for overall frequency, of each constitution. The words are in stemmed form, so interpretation is not the easiest, but the goal of this analysis is only to show that the terms that set the US Constitution apart from the state constitutions are not the theoretically important terms that Straussains argue are indicative of the US Constitution. The differences, instead, rely on the fact that the US Constitution is a document governing a nation with inherently different responsibilities than the states. The first noticeable characteristic of these plots is the consistency in nomenclature. The constitutions of Delaware, South Carolina, and the US, for example, use the term "president." Thach (1922) shows how the New York constitution inspired the presidency, but several other states spent large portions of their constitutions outlining the powers of their executives. The Virginia, New York, North Carolina, Maryland, and US Constitutions make frequent use of the term "senate". Clearly from the plots below, the language utilized in the national constitution is the same as the language the framers of state constitutions utilized. More interesting is where the language differs. There are differences between the US and the state constitutions due to the unique vantage point of the national constitution, seen in terms like "union" and "ambassador" that show the role of the national government as compared to state governments. The states that simply re-adopted their colonial charters, Rhode Island and Connecticut, discuss the British monarchy and use terms such as heir and successor and are written in a more antiquated form of English than the later state constitutions. Virginia is the only state constitution that mentions African Americans. The conclusion to draw from this analysis is that the terms that are most important to the US Constitution compared to the state constitutions are those that are not about the fundamental goods

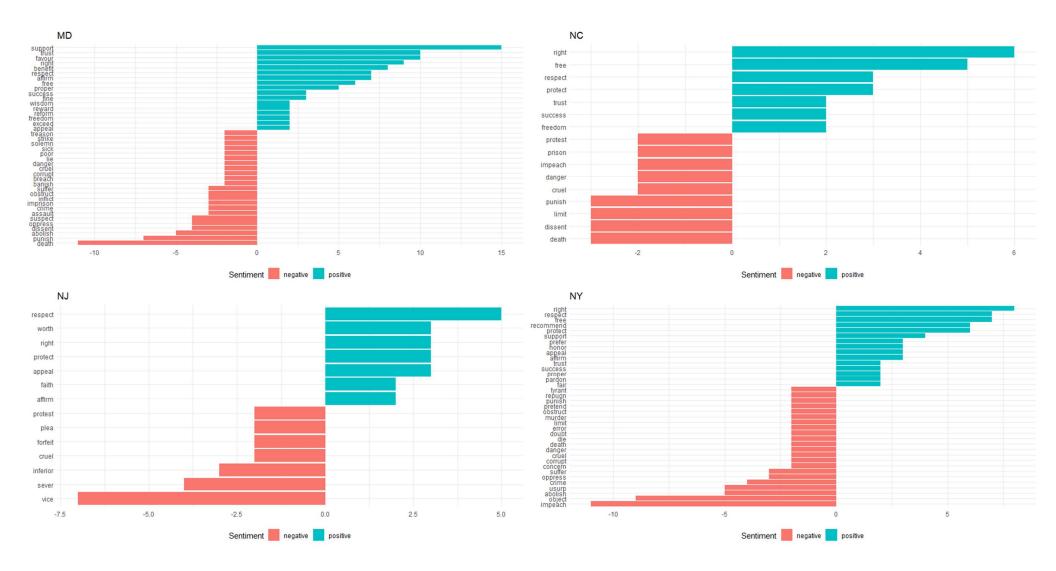


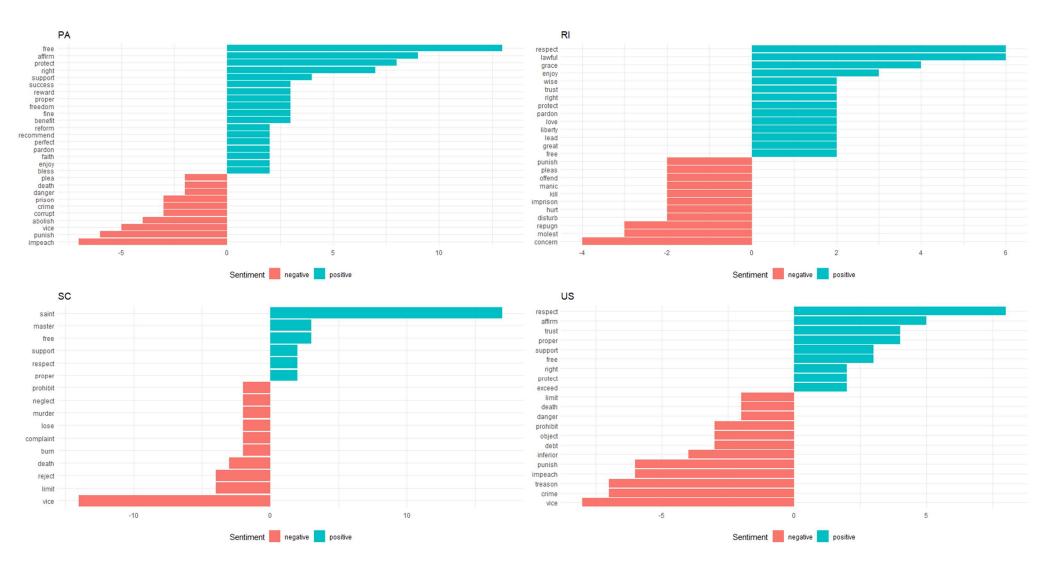
that the Straussians purport to the inventions of the founders. Terms like "ambassador", "union", "coin", "unit", and "enumer" are what set the US Constitution apart from the other documents, not discussions of natural rights or differences in executive power. Approaching this analysis from a Straussian perspective, it would be reasonable to predict that the terms most important and frequently used in the US Constitution would relate to natural rights, a unique delineation of executive powers, or methods of selection for elected officials. This is not the case, however. The differences are not truly substantive or representative of the US Constitution being a singular document. The inherent benefit of utilizing tf-idf, in tandem with the brief description of the language of state constitution preambles, is that we can see the terms most important to each document and net out the common terms. The common terms that were netted out are related to the most crucial aspects of American constitutional design. The selection mechanisms, the specific powers of office, the suffrage requirements, the appointment of executive officials is all so common to the state and national constitutions that the defining features of the US Constitution become relatively unimportant. While counting terms can only provide so much evidence, looking at the overall sentiments of each constitution adds another dimension to this analysis.

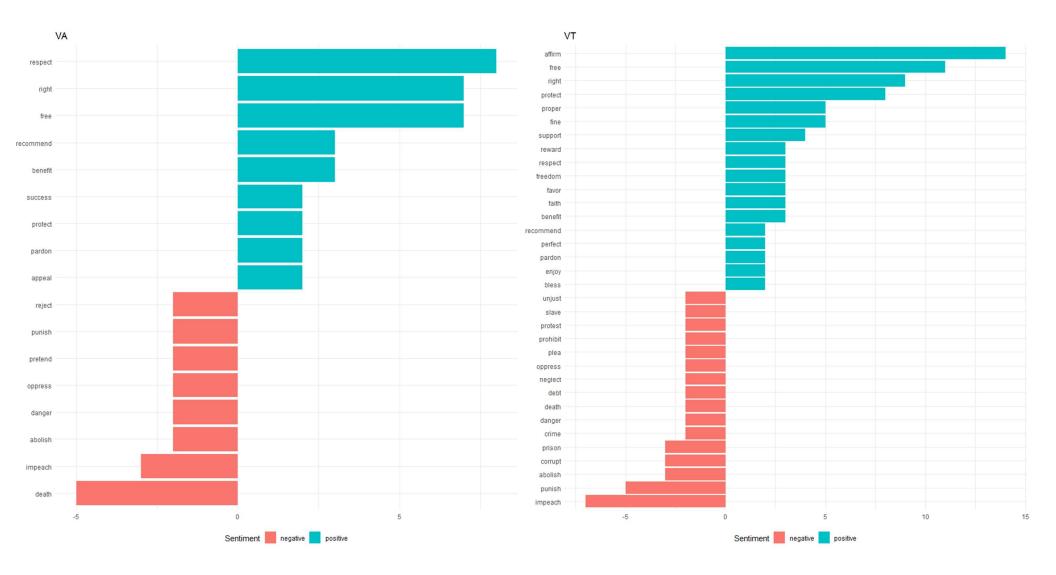
The goal of this section is to briefly define the similarities in each state constitution before moving on the differences outlined in the next section. The early American constitutions have a similar language, but they also have similar emotional connotations as well. The figures below display the sentiment analysis for each state and the US Constitution—omitting New Hampshire due to its brevity causing issues with the sentiment analysis algorithm. The longer the blue bars, the more frequently words with positive connotations are mentioned and the longer the red bars the more frequently words with negative connotations are mentioned. When framing constitutions, the authors could focus on punishment, law and order, and the total power of the government, or

they could connote emotions related to freedom, equality, and prosperity. Evident in the discussion above of the preambles of American constitutions, both the state and the federal constitutions appear as a mixture of optimism, with states ready for independence after the oppressive rule of the British Crown, and negativity, to ensure law and order and handle crime and corruption. States consistently use terms like "free" and "respect," but also use negative words as well. Constitutions regularly discuss "death", "danger", "debt", "crime", and "punishment." What is striking, however, is that each constitution is largely similar in its balance between positive and negative sentiments. The American constitutions are neither overwhelmingly positive nor negative. Tantamount to the analysis of this paper, the US Constitution's sentiment analysis is basically interchangeable with the sentiments expressed by other states. The same positive words, "respect", "free", and "protect" that are seen in the state constitutions appear in the federal constitution. One limitation of this analysis is that sentiment is defined as whether a word is categorized as positive or negative in a predetermined lexicon. The lexicon labels vice, as in vice president, as a negative term. Despite that shortcoming, visualizing the distribution of emotional words of American constitutions in this fashion reinforces the notion that all these constitutions share a common language and emotional connotations. The negative words written into the national constitution are no different than the negative words written into the state constitutions. The same is true of the distribution of positive words. The US Constitution is not a singular document in the terms of its emotional significance, as its overall sentiment analysis returns similar results as the counterpart state constitutions.









While it may seem unimportant to show how similar the language and emotional connotations of the state and national constitution are, these measures are the basis for creating categorizations of constitutions. Also importantly, showing how all American constitutions are written from a common source of language and emotional connotations undermines the claim of uniqueness for the federal constitution. The way that the framers of the national constitution thought and wrote about government is not unlike the way that the state framers created their constitutions, which in turn reflect many of the same priorities, terms, and emotional connotations of the colonial charters before them.

Classifying American Constitutions

With the language and sentiments of each constitution overviewed and the singularity of the US Constitution drawn into question, this analysis concludes by illustrating 4 categories of state constitutions. A rigid classification scheme becomes difficult when considering the numerous similarities as mentioned above. LDA tuning, a procedure that optimizes the number of types of documents, suggests that four classifications are appropriate. These classifications are largely intuitively understood and detailing each is the task of this section. The four classifications are: the Plantation states, the Commonwealths, the Federalist states, and the Religious Test states. LDA does not specifically define these groupings. Rather, the LDA results assign documents to a group then a reading of each constitution is required to find the most important factors that tie some constitutions together and set them apart from others. The classifications mentioned above are based on finding the strongest similarities between constitutions assigned to the same group. The results of the LDA analysis are shown in the table below. Since the US Constitution is assigned with 99% probability to the Federalist group, most of the focus of this section is on the Federalist states and how their constitutions are strikingly similar the federal Constitution.

CLASSIFICATION	STATES	KEY FEATURES
PLANTATION STATES	Rhode Island & Connecticut	Re-adopted colonial chartersColonial-style Governor
COMMONWEALTHS	Pennsylvania, Massachusetts, & Vermont	 Detailed description of local powers Less local autonomy Focus on the relationship between the people and the government
FEDERALIST STATES	United States, New York, & Maryland; to a lesser extent Virginia, New Hampshire, & North Carolina	 More flexibility for local government Focus on the relationship between branches of government Greater emphasis on protecting civil liberties
RELIGIOUS TEST STATES	South Carolina, Georgia, Delaware, & New Jersey	Requiring elected officials to be ProtestantEstablishing state religion

As has been argued above, the state constitutions, and the national constitution along with it, exhibit a high degree of homogeneity. Each document used a similar language, separated the government into different branches, similarly defined suffrage and electoral requirements, and were largely guided by the same views toward government as one another. Therefore, the differences between constitutions are subtle and related to the way in which the states organize and structure their governments.

Rhode Island and Connecticut are the two states that make up the Plantation category. While many states started as plantations, Rhode Island and Connecticut are the two states that did not design new constitutions during the founding period. Instead, both Rhode Island and Connecticut re-adopted their colonial charters upon statehood. Both documents discuss at greater lengths the economic enterprises that were being undertaken in 17th century America. For example, instead of enumerating rights of individuals, the Rhode Island colonial charter is concerned with

"businesse and affaires of the sayd Company" (Thorpe 1906). Accordingly, in place of lengthy and idealistic preambles, the Plantation constitutions have brief summations of their economic goals. Beyond the contextual similarities, both the Rhode Island and the Connecticut colonial charters have similar governing institutions. The Plantation style constitutions have elected governors, deputy governors, and 12 assistant governors. Free men can vote and there exists geographic representation in the form of towns and cities being empowered to elect their own representatives. Due to how the Plantation constitutions arose from colonial charters, supreme executive authority is ubiquitous and most governing powers are in the hands of the governor. Much of the legislative and the judicial powers are concentrated in the office of the governor. Further, punishment is largely in the hands of the governor. The legislatures were also far weaker under Plantation style governments than the other states. From the Connecticut colonial charter: "Freemen of the respective Towns, Cities, and Places for which they shall be elected or deputed, shall have a General Meeting or Assembly, then and there to consult and advise in and about the Affairs and Business of the said Company" (Thorpe 1906). The key terms are "advise" and "consult." The main governing and legislating powers were vested in the office of the governor and his assistants, and the General Assembly only existed to offer advice from time to time.

The Plantation constitutions read far more like a business' mission statement than a constitution, but these documents are still social contracts that bind members together and organize a political system. Perhaps another piece of evidence that shows how much influence previous political incorporations had on the US Constitution is the fact that the colonial charters still have several defining features of American Constitutional thought. One similarity is popularly elected geographic representatives constituting a legislative body to complement the governor. Though the legislature is weak, geographic representation was a strong aspect of the self-governance of the

Plantation states. Another similarity is a commitment to the freedom of religion. The Rhode Island charter illustrates this well: "noe person within the sayd colonye, at any tyme hereafter, shall bee any wise molested, punished, disquieted, or called in question, for any differences in opinione in matters of religion" (Thorpe 1906). The Plantation states further have a commitment to the rule of law that is also found in the US Constitution, as evidenced by this passage from the Rhode Island charter, "our letters patent shall be firme, good, effectuall and available in all things in the lawe, to all intents, constructions and purposes whatsoever, according to our true intent and meaning hereinbefore declared" (Thorpe 1906). Even the royal, and later state, governors were subjected to the rule of law and the provisions laid out in the charter. The carry-over institutions from the colonial period are not entirely alien to how political theorists discuss the US Constitution, but the Plantation constitutions are the furthest from the US Constitution in terms of the creation of a political system.

The second classification is the Commonwealths. The Commonwealths are Pennsylvania, Massachusetts, and Vermont. The term Commonwealth, adopted by these three states, as well as Virginia, which will be discussed later, relate to Hobbes and Locke's conception of a commonwealth as an independent political entity that is joined together to advance the common good. States, conversely, are simply an administrative division below a larger national government. The distinction is not in name alone, however. The Commonwealth states are defined by the way in which they ascribe limited power to local governments and the existence of an executive council. Commonwealths differentiate local subdivisions into boroughs, towns, cities, or townships, which have individual and different powers, unlike the catchall term municipality seen in the constitution of Maryland. The Commonwealths can have several townships within or adjacent to a larger municipality unlike the "states" form of government which usually have a far

stricter separation of powers system. These subdivisions are called townships, towns, and cities in Pennsylvania and towns, parishes and precincts in Massachusetts, but their powers are identical. The Commonwealths specifically write out the powers of these lower subdivisions and limit their autonomy. Local political power is heavily divided in the early Commonwealth states. The result of this decentralization of local governmental power means, on balance, more power for the central government. Wolman et al. (2008), in a modern analysis, finds that these three commonwealths all rank in the bottom 50% of states in terms of local autonomy. Maryland and New York, Federalist states, are in the top 10% of local government autonomy. The Wolman et al. (2008) measures are based on (1) importance of local government outputs, revenue, and expenditure in the state economy and intergovernmental system; (2) importance of local public employment in the State economy and intergovernmental system (3) local government structural and functional responsibilities and legal scope; (4) tax, spending and debt limits; (5) assessment limits; (6) unconstrained local revenue and (7) diversity of local revenue sources (Wolman et al. 2008).

The Commonwealths are far closer to a modern understanding of what American political systems look like than the Plantation states. This is exemplified in the sections of the Vermont Constitution on legislative power, "The supreme legislative power shall be vested in a House of Representatives of the freemen" executive power, "The supreme executive power shall be vested in a Governor, (or, in his absence, a Lieutenant-Governor) and Council;" and judicial power, "Courts of justice shall be maintained in every county in this State, and also in new counties when formed; which courts shall be open for the trial of all causes proper for their cognizance, and justice shall be therein impartially administered, without corruption, or unnecessary delay" (Thorpe 1906). This section reflects nearly verbatim the delineation of powers found in the Pennsylvania constitution. The familiar and far more defined three branches of government, not found in the

Plantation states, are seen in the Commonwealths. The key difference, however, is how executive power is explicitly dispersed between the governor, Deputy-Governor, and council. While the Plantation states have the strongest governors, the Commonwealths are among the weakest governors, as a council of elected officials share the duties of the executive branch.

It must be noted that Virginia labels itself a commonwealth, but, in terms of its governmental structure as defined in its original constitution, is inconsistent with the Commonwealths described here. Virginia does not decentralize local political power. Accordingly, Wolman et al. (2008) rank Virginia in the top 15 states for highest levels of local autonomy. The greater autonomy afforded to local governments is a key distinction not shared with the Commonwealths, pushing Virginia to be classified as a Federalist state rather than a Commonwealth. The Commonwealths have more in common than not with the US Constitution, but the decentralization of local power resulting in strong central governments and the sharing of executive power with popularly elected officials is unlike the powers of the federal government laid out in the American Constitution.

The third classification, called the Federalist states, is when the distinctions become more granular. These states are the federative democratic republics most closely related to the US Constitution, that have stricter federalist structures and demonstrate a commitment to civil liberties and civil rights beyond the standard seen in early state constitutions. The constitutions in this classification are those of Maryland, New York, and the United States, and, to a lesser extent, North Carolina, New Hampshire, and Virginia¹. Thach (1922) identifies the New York

¹ North Carolina, New Hampshire, and Virginia are assigned with quite low probabilities. Accordingly, those three states' constitutions are not as closely related as the US, Maryland, and New York constitutions are. See the **Appendix B** for the full LDA results.

Constitution's treatment of executive power as the framers' influence in creating the US Constitution, and the LDA model reaffirms this.

The Federalist states have high degrees of local autonomy (Wolman et al. 2008), similar to the autonomy given to states by the Federal government. The key to recognizing the higher degree of autonomy offered by the central authority to the subdivisions is the lack of mentions of county and municipality powers in the main bodies of these constitutions. The New York, Maryland, Virginia, North Carolina, and New Hampshire constitutions, in comparison to the Commonwealths, make very little mention about the role of local government. This provides local governments with the ability to better define their own powers. These states thus score highly on Wolman et al.'s (2008) scores of local autonomy. The US Constitution also rarely mentions the specific powers of its local subdivisions. The relative freedom of the US states to be laboratories of democracy is a key feature of the American political system. This idea, however, was not new to the framers as five state constitutions already had strong federal systems in place. The distinction between how local governmental power is enumerated is one key defining characteristic of Federalist states versus the other classifications, but there are other key distinctions as well.

Other defining characteristics of the Federalists states are the strong commitment to the separation of powers and the freedoms of speech. The framers of the Maryland Constitution write, "That the legislative, executive and judicial powers of government, ought to be forever separate and distinct from each other," about the separation of powers. They further state, "That freedom of speech and debates, or proceedings in the Legislature, ought not to be impeached in any other court or judicature" and "That every man hath a right to petition the Legislature, for the redress of grievances, in a peaceable and orderly manner" about freedom of speech and petition, respectively (Thorpe 1906). The way that Federalist states define geographic representation for the legislature

is clearly reflective of the way in which Congress is elected. The New York state constitution framers write, "This State as is now parcelled into counties be divided into four great districts...That the senators shall be elected by the freeholders of the said districts" (Thorpe 1906). New York created larger subdivisions to elect the upper chamber representatives from, as the US did. The lower chamber Representatives were then elected proportionally based on the population within the counties, like how the electoral mechanisms of US House of Representatives were designed. The Federalist states also have strong stances on emoluments as evidenced in the Maryland Constitution, which states that any person in office, "Will not receive, directly or indirectly at any time, any part of the profits of any office" (Thorpe 1906). Nearly all of the defining characteristics that the Straussians identify in the US Constitution are found in most state constitutions but are particularly evident in the New York and Maryland Constitutions.

Thach (1922) shows how the New York governor offered the template for the presidency, and similarities can even be found in the minutia of the New York state constitution. For example, the notion of a State of the Union address is found in the New York Constitution: "That it shall be the duty of the governor to inform the legislature, at every session, of the condition of the State" (Thorpe 1906). As this section shows, the Federalist state constitution had a far greater influence on the US Constitution than simply the design of the presidency. In sum, while all constitutions have a set of similar features, the US Constitution is most consistent with the Federalist constitutions exemplified by New York and Maryland. Clearly, the conception of executive power, federalism, and civil liberties that are found in the American Constitution and its Bill of Rights were key factors in several state constitutions that predated it. This seriously undermines the notion that the framers drew the Constitution from their minds and their libraries and supports the Thachian hypothesis that the framers borrowed elements from the state constitutions.

The final classification is the Religious Test states. These states are Georgia, South Carolina, New Jersey, and Delaware. The defining characteristic that ties these state constitutions together and sets them apart from the other states is a larger emphasis on religion. Further, each state has a religious requirement for office. Delaware has the least stringent requirement of the four states, only mandating that elected officials swear an oath that they, "profess faith in God the Father, and in Jesus Christ His only Son, and in the Holy Ghost, one God, blessed for evermore" and "acknowledge the holy scriptures of the Old and New Testament to be given by divine inspiration" (Thorpe 1906). New Jersey and Georgia similarly require elected officials to be of Protestant faith or else they are prohibited from holding office. South Carolina takes the religious test one step further and establishes a state religion in Christianity. The framers of the Constitution of South Carolina only guarantee the right to practice religion if a person believes, (1) "That there is one eternal God, and a future state of rewards and punishments;" (2) "That God is publicly to be worshipped"; (3) "That the Christian religion is the true religion", (4) "That the holy scriptures of the Old and New Testaments are of divine inspiration, and are the rule of faith and practice"; and (5) "That it is lawful and the duty of every man being thereunto called by those that govern, to bear witness to the truth." Each of these states, especially South Carolina, have a particularly strong emphasis on the Christian faith in their state constitution which sets them apart from the other classifications. These states' constitutions may share some features with other states, as all constitutions do, but the role of religion is more profoundly evident in these four states than in others.

The United States Constitution, in the same vein as Thach argues, is reflective of the New York and Maryland Federalist style constitutions. The New York and Maryland constitutions have strong executives, bicameral legislatures, three co-equal branches of government, Bills of Rights

intended to protect the people's natural rights, and autonomy for local subdivisions. These are central points that Straussians (Mansfield 1989, Diamond 1992, Eidelberg 1968, & Jaffa 2001) argue are defining features of the US Constitution. As the US Constitution was promoted by the federalists, it is not unexpected that the Federalist style constitutions would serve as a key inspiration for the framers. These constitutions were not an invention of the framers, but a synthesis of American constitutional design that took place in the preceding centuries of American colonization. Ultimately, we see that American constitutions all share a common language and sentiment; when introducing granularity and defining the distinct features of American constitutions, it becomes clear that several states adopted Federalist style constitutions that the US Constitution mirrors. Trying to understand the US Constitution by considering only the great political thinkers overlooks how American constitutional thought developed in the United States and the wealth of preceding constitutions and documents of the colonial era, which the framers could consider when deciding how to organize the nascent American republic.

DISCUSSION & CONCLUSION

The chief goal of this paper has been to present a contrasting view to the notion that the American national constitution was cut from whole cloth by genius men. While the framers were certainly aware of the great political thinkers of the Western canon, as Thach writes, "The truth is that the Fathers used the theorists as sources from which to draw arguments rather than specific conclusions" (171). There are certainly important differences in the features of the national constitution compared to the state constitutions. For example, the electoral college is a unique invention of the national framers. The design of the electoral college, however, is not the proposal of a great Western thinker, but a political compromise resulting from the power struggle to present a viable constitution for ratification. That political reality that the framers had to confront

reinforces the theory presented in this paper that the drafting of the American Constitution was motivated by practical necessity over theoretical purity.

The other primary goal of this paper is to urge political theorists to engage more with state constitutions and other early American political documents like the Albany Plan, the Articles of Confederation, and the various colonial charters. Taken together with the current US Constitution, these documents illustrate the different ways American political thinkers have sought to lay out the principals and ideals of American political thought. The state constitutions offer a glimpse into how constitutional thought changes over time and comparing the constitutions of states admitted in the 19th and 20th centuries to those of the original states could highlight this trajectory. The colonial charters offer a unique opportunity to study the political economy of early America and the relationship between colonists' attempts at self-governance amid the imperial structure of the colonial era.

Finally, the last goal of this paper was to, modestly, "bridge the gap" between political theory and more quantitative empirical political science. The text analysis methods developed by computer scientists and data scientists offer a new instrument for theorists to systematically study massive corpuses of political documents. The combination of close text analysis and text-as-data methods can open new insights into the heavily studied canonical texts of political philosophy. Text analysis methods can offer a comparison of the vocabulary and sentiments of different political thinkers, show how the word choice and arguments of thinkers change over their different texts, and help to create classifications of texts that may or may not reinforce the commonly recognized schools of thought in political theory.

The notion that the Constitution arose from the minds of political giants is an incorrect and reductive one, as the many state constitutions and colonial charters in place in 1787 illustrate the

commonalities of American Constitutionalism that did not originate with the federal constitution. The federal constitution reflects the language, sentiments, and political organization of the state constitutions that came before it. Early American Constitutions can be categorized as the Plantation states, the Commonwealths, the Federalist states, and the Religious Test states. Using these broad categorizations, it becomes clear that the United States is one of the federalist state constitutions most closely related to the constitutions of New York and Maryland. The federal constitution of the United States is not a singular document, but instead is a document forged from the constitutions that preceded its design.

References

Barber, James D. 1972. The Presidential Character. Pearson.

Beard, Charles Austin. 1913. An Economic Interpretation of the Constitution of the United States. New York: The Macmillan company.

Bing, Liu & Minqing Hu. 2004. "Mining and Summarizing Customer Reviews."

Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery & Data Mining (KDD-2004),

Dawson, J. L. 1974. "Suffix Removal for Word Conflation", *Bulletin of the Association for Literary and Linguistic Computing*, 2(3): 33–46

Diamond, M. 1992. *As far as Republican principles will admit: Essays by Martin Diamond*. Ed. William A. Schambra. Washington, DC: AEI.

Eidelberg, P. 1968. The philosophy of the American Constitution: A reinterpretation of the intentions of the founding fathers. New York: Free Press.

Frakes, W. B. 1984. Term Conflation for Information Retrieval. Cambridge University Press Hafer, M. A. & Weiss, S. F. 1974. "Word segmentation by letter successor varieties."

Information Processing & Management 10 (11/12), 371–386

Hamilton, "The Farmer Refuted," Papers, ed. Syrett, 1: 87.

Jaffa, H. 2001. Aristotle and Locke in the American founding. Claremont Review of Books.

Lutz, Donald. 1979. "The Theory of Consent in Early State Constitutions." Publius. 9 (2). 11-42.

Lutz, Donald. 1980. "From Covenant to Constitution in American Political Thought." *Publius*. 10 (4). 101-133.

Mansfield, H.C. Jr. 1989. *Taming the prince: The ambivalence of modern executive power*. Baltimore, MD: Johns Hopkins University Press.

Neustadt, Richard E. 1990. *Presidential Power and the Modern Presidents*. New York: Free Press.

Rajaraman, A.; Ullman, J.D. 2011. "Data Mining". Mining of Massive Datasets.1–17.

Slauter, Will. 2011. "Constructive Misreadings: Adams, Turgot, and the American State Constitutions." The Papers of the Bibliographical Society of America. 105 (1), 33-67.

Strauss, L. 1968. Liberalism: Ancient and Modern. New York: Basic Books.

- Thorpe, Francis Newton. 1906. The Federal and State Constitutions Colonial Charters, and Other Organic Laws of the States, Territories, and Colonies Now or Heretofore Forming the United States of America Compiled and Edited Under the Act of Congress of June 30, 1906 Washington, DC: Government Printing Office, 1909.
- Thach, C. 1922. *Creation of the Presidency, 1775-1789: Study in Constitutional History*. Baltimore, Johns Hopkins Press.
- Valdez D & Goodson P. 2022. "Neutral or Framed? A Sentiment Analysis of 2019 Abortion Laws." Sex Res Social Policy. 19 (3) 936-945
- West, T.G. 1991. "Leo Strauss and the American founding". Review of Politics 53: 157-72.
- Wilson, James. 1896. Works, ed. James D. Andrews Chicago: Callaghan. 1: 255-56.
- Wolman, Hal, et al. 2008. "Comparing Local Government Autonomy Across States." GWIPP Working Paper

Appendix A

This appendix lists the added stop words. The words are in stemmed form.

"baltimor", "section", "proclam", "third", "york", "vermont", "windsor", "pennsylvania", "doth", "trenton", "burlington", "isaac", "virginia", "wednesday", "rockingham", "strafford", "maryland", "hough", "georg", "delwar", "tuesday", "sussex", "delwar", "kent", "savannah", "camden", "glynn", "hampsir", "januari", "tuesdai", "jersey", "jersei", "august", "philadelphia", "april", "shore", "north", "southern", "carolina", "halifax", "wednesdai", "raleigh", "annapoli", "eastern", "mdcclxxx", "western", "day", "chatham", "burk", "saturdai", "strafford", "decemb", "saturday", "exet", "hampshir", "stratford", "cheshir", "grafton", "wherefor", "march", "thursday", "thursdai", "colden", "monday", "mondai", "friday", "fridai", "sunday", "sundai", "winthrop", "john", "mason", "samuel", "allyn", "talcott", "ogden", "clarke", "wells", "brewen", "charles", "mathew", "matthew", "richard", "henri", "england", "hawkins", "nathan", "daniel", "wyll", "wylly", "brunswick", "bruns", "wolcott", "wylli", "narraganset", "sec", "joseph", "east", "clark"

Appendix B

This appendix contains the full results of the LDA analysis. The first column specifies the state constitution, the second column specifies the grouping, and the third column is the probability that

constitution belongs to a specific grouping. Most of the documents are assigned 100% probability or 95% probability to one group.

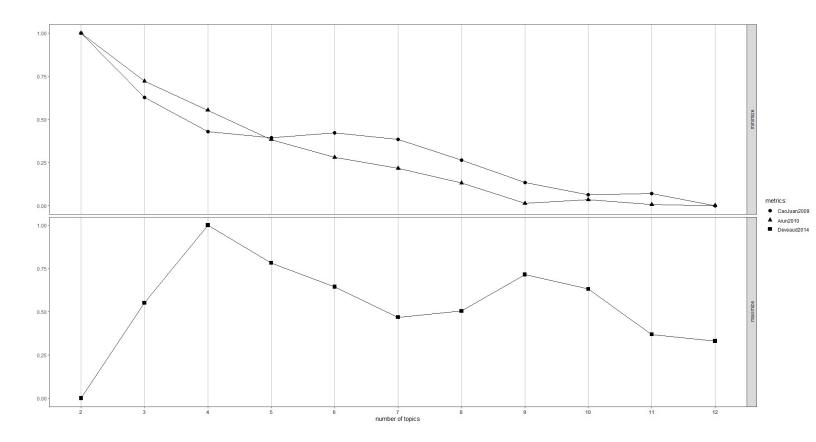
1 MD	1 1.00	23 US	3 0.00315
2 NY	1 1.00	24 NH	4 0.0000955
3 MA	3 1.00	25 NJ	4 0.0000377
4 VT	3 1.00	26 DE	3 0.0000295
5 PA	3 1.00	27 DE	1 0.0000295
6 RI	4 1.00	28 DE	4 0.0000295
7 GA	2 1.00	29 VA	4 0.0000285
8 SC	2 1.00	30 CT	3 0.0000261
9 CT	4 1.00	31 CT	2 0.0000261
10 DE	2 1.00	32 CT	1 0.0000261
11 US	1 0.997	33 NC	2 0.0000251
12 NJ	2 0.708	34 NC	4 0.0000251
13 NC	1 0.680	35 SC	3 0.0000241
14 NH	1 0.636	36 SC	1 0.0000241
15 VA	1 0.585	37 SC	4 0.0000241
16 NC	3 0.320	38 GA	4 0.0000224
17 NH	2 0.309	39 GA	1 0.0000224
18 VA	2 0.283	40 GA	3 0.0000224
19 NJ	1 0.248	41 US	4 0.0000221
20 VA	3 0.132	42 US	2 0.0000221
21 NH	3 0.0552	43 RI	1 0.0000176
22 NJ	3 0.0444	44 RI	2 0.0000176

45 PA	2 0.0000161	47 VT	2 0.0000152
46 PA	4 0.0000161	48 VT	4 0.0000152

Appendix C

This appendix contains the results of optimizing the number of topics for LDA analysis. Since LDA is a probabilistic machine learning model, there is always some degree of uncertainty in the results. Further, when running the final analysis, researchers must choose the specific number of topics to be used. This can be done with expert knowledge, or there are machine learning methods that can be used to select the optimal number of topics. This paper employs the machine learning approach. Setting the number of topics too high results in classifications that are far too broad. Setting the number of topics too low will result in poorly defined topics. The plot below shows the results of three tests to find the optimal number of topics.

We want to choose the number of topics when the benefit for adding a topic begins to decrease. In the top window, we want a minimum and in the bottom window we want the maximum. We do not necessarily want global extrema; we want the number of topics such that adding one more is not a great benefit. All three metrics suggest that 4 topics is the optimal number, so this paper utilizes four topics. The resulting groupings of constitutions made immediate sense as the defining characteristics of each were quite striking.



Appendix D

This Appendix includes the word clouds for each state constitution. The words are stemmed, but stop words are not removed.

Charter of Connecticut (1662)



Constitution of Delaware (1776)



Constitution of Georgia (1777)



Constitution of Maryland (1776)



Constitution of Massachusetts (1780)



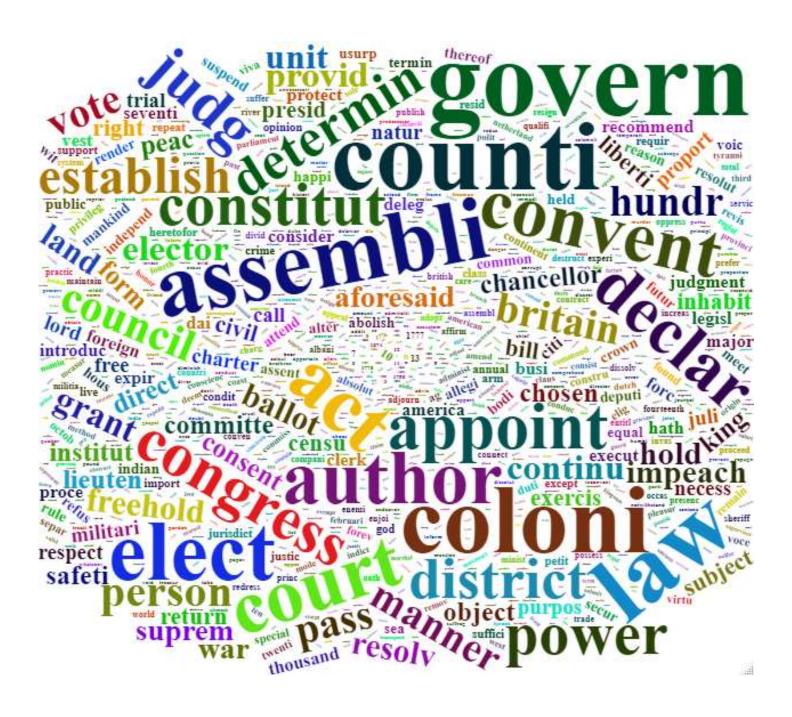
Constitution of New Hampshire (1776)



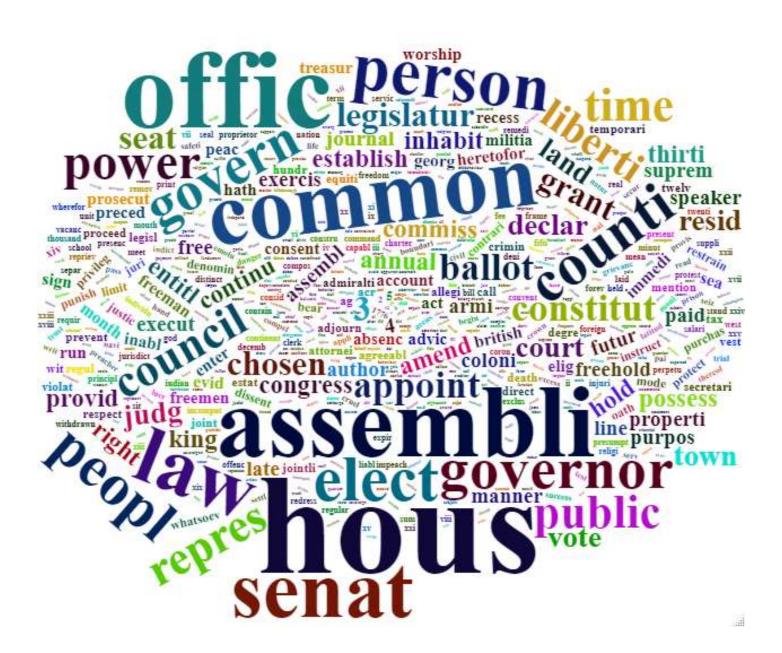
Constitution of New Jersey (1776)



Constitution of New York (1776)



Constitution of North Carolina (1776)



Constitution of Pennsylvania (1776)



Charter of Rhode Island and Providence Plantations (1663)





Constitution of Vermont (1786)





The Constitution of the United States (1789)

