

Measuring Rhetoric in Thucydides' Speeches*

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Abstract

To assess the potential utility of automated text methods in studies of political thought, this article revisits major topics in the scholarly literature on Thucydides' speeches: the distinction between speech & narrative text, the contrast between speeches given to Athenian versus Spartan audiences, and how the rhetorical styles of Pericles & Nicias differ. My analysis yields three insights. First, the language Thucydides uses in the speeches differs dramatically from the narrative text, and there is significant variation in the type of language used in the speeches themselves. Second, when speaking to different audiences, orators would tailor their speeches to reflect their audiences' underlying values. For Athenian audiences, emphasizing prospects for glory and other materials gains tended to be a successful rhetorical strategy. Focusing on the consequences of inaction resonated more with Spartan audiences. Finally, Pericles was not only more resolute than Nicias in his speeches, but he was also able to invoke a proto-nationalism to persuade the public to prioritize common interests over private ones. These results largely replicate the scholarly consensus about the speeches in Thucydides' *History of the Peloponnesian War*, and in doing so, they demonstrate the promise of automated text analysis for the study of rhetoric in classical philosophical texts.

Key words: Rhetoric, Speeches, Text Analysis, Thucydides, Peloponnesian War

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1 Introduction

Thucydides intended the *History of the Peloponnesian War* to be a “possession for all time,” hoping that it would not only provide an accurate description of past events but also serve as an aide for interpreting events in the future (1.1.22). In it, he includes a number of speeches – some that are meant to motivate and boost the morale of soldiers before heading into battle as well as many that are designed to persuade audiences to follow a speaker’s advice. These speeches give insight into the values and motivations behind the decision-making process at critical points throughout the Peloponnesian War. While the extent to which Thucydides authored these speeches himself (versus reported what the speakers said) is highly debated, analysis of these dialogues reveal much of what Thucydides has to say about the virtues and vices of democracy, the applicability of justice in interstate relations, and the role of power in politics more broadly. Indeed, these speeches have been one of the most extensively studied components of the entire text.¹

Existing analyses of Thucydides’ speeches tend to center around three major questions. First, to what extent did Thucydides take creative license in penning the speeches found in *The History* versus report as objectively as possible what speakers said (e.g. Collingwood 1946; Wilson 1982; Garrity 1998)? Second, what can be learned from analyzing the rhetoric used in the speeches about the causes of the war and the sources of different foreign policy decisions (e.g. Forde 1986; Ober 1993; Jaffe 2017)? And third, why was Pericles an effective orator, capable of controlling impulses of the Athenian masses, while Nicias frequently failed to be persuasive (e.g. Lateiner 1985)? There are different degrees of scholarly consensus on each of these questions. While scholars generally agree that the rhetoric employed in speeches are crucial for understanding the values that motivated Athenian and Spartan decision-making (e.g. Cogan 1981; Debnar 2001) and that Pericles was able to invoke a proto-nationalism in his speeches (e.g. Nielsen 1996; Roshwald 2006; Sammons 2016), there is still considerable debate over Thucydides’ authorship of the speeches themselves (e.g. Hendrick 1993; Greenwood 2015).

In parallel to these close textual readings of Thucydides, researchers have developed a wide range of automated methods for analyzing and processing large bodies of text (Grimmer & Stewart 2013). The most common use of these methods in political science is classifying documents into defined categories or according to some attribute of interest.² In other words,

¹For examples of analyses of the speeches in Thucydides, see Allison (1997), Arnold (1992), Badian (1992), Cogan (1981), Malcleod (1983), and Rood (1998).

²Note that these categories do not need to be predetermined by the researcher. Unsupervised methods help researchers discover potentially useful ways of categorizing the text, which can then be used to classify additional documents.

works employing automated text methods tend to use them to extract information from documents that they then use to learn about other aspects of political communication. For instance, scholars have examined when governments are likely to censor statements posted on social media (King et al. 2013), how the level of resolve in presidential speeches affect the escalation of international crises (McManus 2017), and the conditions under which politicians are likely to engage in credit-claiming versus ideological position-taking (Grimmer 2013).

Automated text methods have yet to cross over into political theory research.³ While these techniques are typically used on large collections of documents, they may also be useful to pair with close textual readings of smaller corpuses of philosophical texts. For instance, automated text methods may help scholars emphasize objective features of the text in their analyses, which can in turn bolster the interpretations they advance. Similarly, they may be used in exploratory analyses to discover aspects of political works that merit closer investigation. However, to assess what automated text methods can contribute to the study of political thought, we need to use them on texts that have received substantial scholarly attention in their own right.

In this article, I use dictionary methods, document dissimilarity measures, and separating word algorithms to revisit the questions raised in existing scholarship on Thucydides' speeches discussed above. There are three main results of this analysis. First, the language Thucydides uses in the speeches differs dramatically from the narrative text, and there is significant variation in the type of language used in the speeches themselves. Second, the rhetoric used in successful versus failed speeches reveal important motivations behind Athenian and Spartan foreign policy decisions. While Spartan audiences were more receptive to arguments about the consequences of their inaction, Athenian audiences prioritized prospects for glory and potential material gains. Finally, Pericles was more resolute in his speeches than Nicias, and he appealed to Athenian's common identity to persuade them to prioritize public interests over private ones. These results largely replicate the scholarly consensus on Thucydides' speeches, and in doing so, demonstrate the promise of automated text methods as a complement to close textual analysis in the study of classical political works.

The remainder of this paper is divided into five parts. In the next section, I describe the different automated text methods used in this study, as well as how I applied these techniques to Thucydides' *The History*. The third section documents how Thucydides' speeches

³There are a few notable exceptions, particularly with the use of automated methods to identify authorship of prominent political works. Mostellar and Wallace (1963), for instance, use dictionary methods to identify the authorship of the disputed Federalist Papers, while Reynolds and Saxonhouse (1995) employ similar methods to suggest Thomas Hobbes likely authored three of the discourses in *Horae subsecivae* (1620). Recent work by Blaydes, Grimmer, and Queen (2018) use automated text methods to study topics in political advice texts from Christian and Islamic traditions.

differ from the language he uses in narration. I show that Thucydides’ speeches vary dramatically—not only from the narrative, but also from one another. I then compare the rhetoric employed in persuasive speeches given to Athenian versus Spartan audiences in the fourth section. While speakers tailored their statements to resonate with each city-states’ underlying values, certain appeals were more effective than others. In the penultimate section, I examine the speeches of Pericles and Nicias to assess how granular automated text analyses can be while remaining useful. While automated methods are able to detect that Pericles was a more expressive speaker than Nicias, the analysis also reveals some of the limitations of using these methods without a deep understanding of the text itself. Finally, I conclude by summarizing the key findings and future directions for the use of automated text methods in the study of classical political texts.

2 Using Automated Text Methods to Analyze Thucydides’ Speeches

Automated text analysis is becoming increasingly popular in empirical political science. But while it permits the systematic study of political texts without tremendous costs, there are important pitfalls to these methods. It is not a substitute for close reading, and it discards a lot of information that may be useful for understanding an individual text’s nuances. However, while every quantitative model of language a computer uses is wrong, these simplified models can be useful (Grimmer & Stewart 2013). Scholars that are trained in close textual analysis may be skeptical of the methods I describe below, but I urge caution in dismissing these techniques before examining the results these methods reveal.

I first applied basic preprocessing techniques to Richard Crawley’s translation of *The History of the Peloponnesian War*.⁴ This preprocessing included discarding word order to create a simple list, or bag, of words. While it may be easy to think of sentences in which changing the order of the words fundamentally changes the meaning of a sentence, Hopkins and King (2010) show that these sentences are empirically rare. I also removed punctuation, capitalization, and very common words—called stop words—that convey little meaning.⁵ Finally, I use the Porter stemmer algorithm to reduce each word into a single root form.

⁴I scraped the contents from the MIT classics department website, which provides the translation at <http://classics.mit.edu/Thucydides/pelopwar.html>. While the translation of political texts present various problems and potential biases, Crawley’s translation is one of the most widely read and accepted. Future analyses should determine the extent to which automated text methods are sensitive to specific translations of political works.

⁵I use the list of stop words provided by the Journal of Machine Learning Research, which can be found at <http://jmlr.org/papers/volume5/lewis04a/a11-smart-stop-list/english.stop>.

After preprocessing, I segmented the text into the different speeches and the blocks of narrative. I do not include indirect speech in the sample of speeches, and I do not group speeches together by event. For example, I consider the speeches of the Corinthians and Corcyraens at Athens in Book I separately. I also exclude the Melian Dialogue from my analysis since it is the only direct speech where the speakers respond back and forth with one another. The speeches I include – with the exception of the Melian Dialogue – correspond with the list of speeches in Harding (1973).

I hand code each speech for several different attributes. I record the speaker and the audience for every speech, and I also label whether a speech is designed to persuade an audience to take a certain course of action or whether it is delivered to troops in order to boost morale before battle. For persuasive speeches, I also code whether the speech was successful in convincing audiences to follow the speaker’s advice. By hand coding these different attributes of the speeches, I will be able not only to evaluate the differences between the speeches and narrative text, but also to assess how the speeches compare with one another.

I use three methods to analyze the speeches and narrative in Thucydides’ *History*. First, I use dictionary methods to measure the overall “tone” of a given speech or block of narrative text. Dictionary techniques are relatively straightforward: the computer counts the number of “specialized” words that occur in a given text, and calculates their rate relative to the total number of words that appear. In the analysis that follows, I rely on eight different dictionaries containing specialized words of interest. I use the positive and negative words dictionaries provided by Neal Caren, as well as the aggression, anxiety, glory, instrumental behavior, moral imperative, and sadness word lists that comprise the regressive imagery dictionary by Colin Martindale.⁶ Using these dictionaries enables me to identify which parts of the text emphasize certain themes or emotions more than others.

Second, I calculate the Euclidean distance between different blocks of the text to measure these document’s relative dissimilarity. Thinking about distance in the context of text can be counterintuitive: after all, it is not obvious one can subtract “the apple is red” from “the dog has a red collar” to measure the distance between the two statements. Distance measures in text analysis approach this problem by assuming that documents that have similar words are more similar to each other overall. So, for instance, “the apple is red” and the “the dog has a red collar” would be considered more similar to each other than “the apple is red” and “the

⁶The positive word dictionary can be found at <http://www.unc.edu/ncaren/haphazard/positive.txt>, while the negative word dictionary can be found at <http://www.unc.edu/ncaren/haphazard/negative.txt>. The subcategories of Colin Marindale’s regressive imagery dictionary can be found at <http://provalisresearch.com/products/content-analysis-software/wordstat-dictionary/regressive-imagery-dictionary-by-colin-martindale-free>.

dog barked at a car.” There are limitations to this approach, since it is unable to account for similarity that results from synonyms or using words that we may think represent a similar class of objects.⁷ Moreover, there is no unit for measuring distance between documents, so the information is useful only when comparing the distance between one set of documents to the distance between another set of documents.

To avoid artificially decreasing the measured distance between documents resulting from the use of similar, but unimportant words, I include tf-idf weights.⁸ These weights identify words as being important if they occur frequently in a specific document, but are not common across all blocks of the text (Robertson 2004). So, this means that the co-occurrence words like “Athens” or “Sparta” that are likely to appear in most parts of the *The History* does not significantly decrease the measured distance between two blocks of the text.

Third, I use a standardized mean difference algorithm to identify words that are the most characteristic and unique to specific groupings of the text. To identify words that discriminate between comparison groups, the algorithm calculates the difference in mean use of each word between groups and standardizes this value by the standard error of that difference. The resulting values indicate the degree to which a word distinguishes groupings of text from one another. Words closer to a score of 0 are not very discriminating, while those with more extreme values are. In this way, the discriminating words algorithm enables us to determine *how* various parts of *The History* differ from one another, as opposed to simply assessing whether a significant difference exists.

3 How Speeches Differ From Narrative in *The History*

In writing *The History*, Thucydides sought to distinguish his method from his predecessors who covered the events of other great wars. His claimed superiority in method as his chronicles were written on the basis of fact, not literary embellishments (1.21.1). In the first lines of his *History*, Thucydides calls attention to the fact that he was writing of a contemporary war—one that he himself witnessed (1.1.1)—and later condemns his fellow men for too easily believing the orations of their ancestors without critical thought (1.20.1). He assures readers of the credibility of his narrative, based on painstakingly collected eye-witness accounts (1.21.1; 1.22.3). In concluding his statement of his methods, he derides “The absences of romance in my history will, I fear, detract somewhat from its interest; but if it be judged useful by those inquiries who desire an exact knowledge of the past as an aid to understanding of the future. . . I will be content” (1.22.4). Scholars of Thucydides’ work have challenged his

⁷For instance, these methods do not consider “dog” and “cat” to be similar, even though they are both common household pets.

⁸Tf-idf stands for “term frequency-inverse document frequency.”

claims that his work is devoid of literary embellishments, pointing out parallels between his methods and those of Herodotus in Homer (Forsdyke 2017). The speeches in *The History*, in particular, have been a subject of considerable debate. While it was understood that speeches appearing in earlier historical works were fictitious and included for literary and dramatic effects, Thucydides is more ambiguous about what he claims of his speeches. He writes:

“With reference to the speeches in this history, some were delivered before the war began, others while it was going on; some I heard myself, others I got from various quarters; it was in all cases difficult to carry them word for word in one’s memory, so my habit has been to make the speakers say what was in my opinion demanded of them by the various occasions, of course adhering as closely as possible to the general sense of what they really said” (1.22.1).

This passage has been a source of a contentious debate among Thucydides’ scholars. Many analyses were quick to point out the apparent contradiction in Thucydides’ statement of methods: he claims to be reporting—objectively—what happened, but he also admits to using his own judgement in composing the words he attributes to different speakers (e.g. Walbank 1967; Hornblower 1987). Some scholars see little controversy in these claims. The passage is simply acknowledging that the exact words and phrases of the speeches may not be entirely correct, but Thucydides is reporting the *content* of what speakers actual said (e.g. Hendrick 1993; Garrity 1998).⁹ Yet, others remain more skeptical. From close analyses of the original Greek syntax and vocabulary and through comparisons with other known orations of the time, these scholars suggest that Thucydides took a high degree of creative license in penning the speeches in *The History* (e.g. Collingwood 1946; Pritchard 1996). Works on this side of the debate portray Thucydides less as a “scientific historian” and more as a outraged “moralist” (Finley 1968).

Automated text methods are unlikely to offer “definitive” evidence to settle these debates. However, using these techniques can still be beneficial as they may reveal new ways think about how the speeches compare to Thucydides’ own narration of the events of the Peloponnesian War.

This analysis reveals two mains sets of results: first, relating to the *extent* to which speeches differ from narrative and second, relating to the *ways* in which they differ. Start-

⁹Hendrick (1993) portrays this as the paradox of any historical writing. If historical sources were independently complete and unmistakable in details, then there would not be a need for the history to be written. He writes, “The author of any speech [in *The History*] must be both Thucydides and someone else, as historical agent. The speeches, in other words, like other historical sources, are both the objective record and historical interpretation of the event” (17).

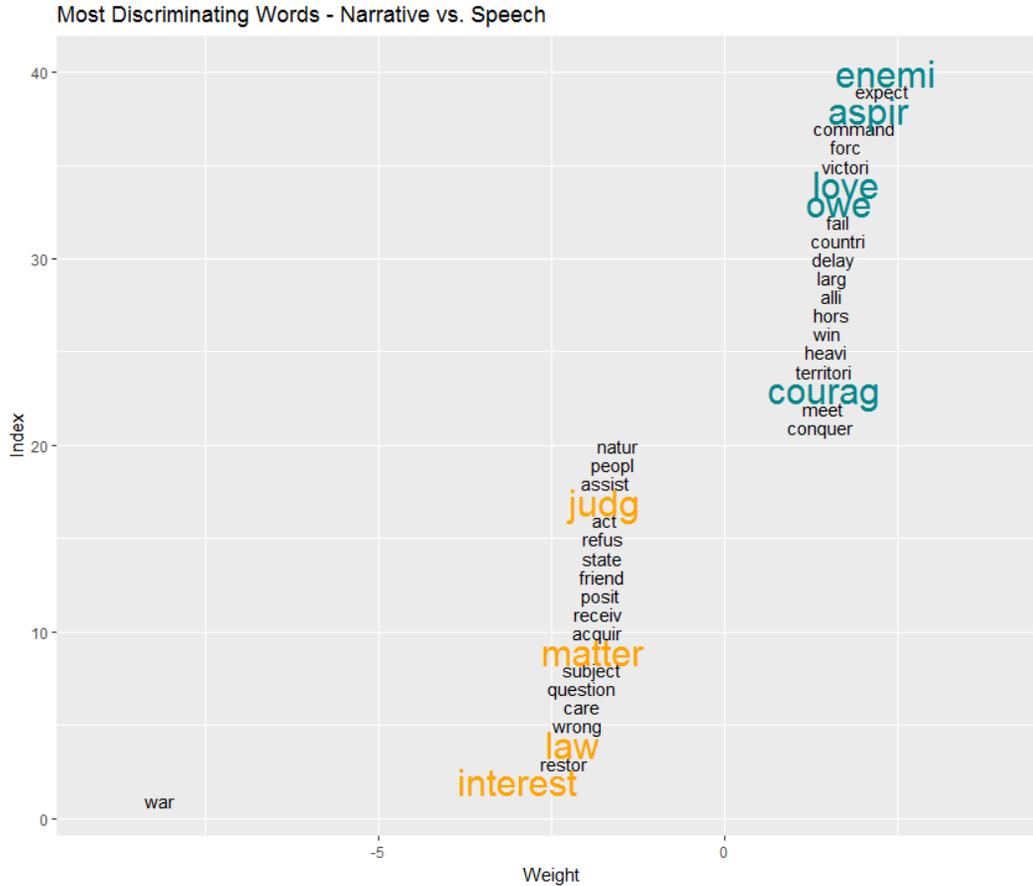


Figure 1: **Top Separating Words for Narrative versus Speech.** The plot above displays the 40 most distinguishing words between speeches and narrative in Thucydides’ *The History*. The words on the left side of the plot are those indicative of narrative, while the words on the right side of the plot are those indicative of speech.

ing with measures of relative document dissimilarity, I find that speeches vary significantly from the narrative text. Recall that there are no standardized units for measuring distance between text, so that it is the relative magnitude of these distance measures that are informative. I find that the average distance between speech and narrative in *The History* is approximately 24.5 units, which is a 68% increase over the average distance between blocks of narrative text (15 units). This suggests that Thucydides’ speeches are quite different from his narrative of the war, and in turn, indicates that Thucydides likely intended the speeches to play a different role in *The History* than his narration.

However, the analysis suggests that the speeches do not only vary significantly from the narrative, but also that they vary significantly from one another. In particular, distance measures suggest that the speeches are on average more different from one another than they are from the narrative text. While the average distance between speeches and narrative

is about 24.5 units, the average distance between the speeches themselves is 28.7 units. This variation suggests that the speeches are not simply vehicles for Thucydides' own opinions. As Wilson (1982) and Macleod (1983) point out, the occurrence of speeches that offer competing views makes it impossible to interpret the speeches as vehicles designed entirely for Thucydides to advance his own views of the best course of action.

The second set of findings deals more explicitly with *how* the speeches differed from Thucydides' narrative. In particular, the speeches rely on more evocative language. While Thucydides generally maintains a neutral tone in his description of the events of the war, the speeches have a clear dramatic quality and tend to play on the emotions of the audience. Figure 1 displays the words that most discriminate between the narrative and the speeches. The words on the left of the figure are more indicative of Thucydides' narrative, while the words on the right are those that are most distinctive of speeches. As Figure 1 illustrates, words like interest, law, matter, and judge are more indicative of narrative. But words like enemy, aspire, love, owe, and courage are associated with speeches.

Dictionary methods also underscore the prevalence of evocative language in speeches. Positive words and negative words occur 87% and 62% more frequently in speeches than in segments of the narrative next. Even more dramatically, anxiety words appear 150% more often in speeches. This use of expressive language suggests that the speeches contain a significant amount of rhetoric worth exploration, regardless of whether they reflect what the speakers said or if Thucydides "invented" them. As the above analysis suggests, a deeper exploration of the speeches is likely where one can learn the most about how intangible factors—like the pursuit of glory or revenge—motivated key decisions in the war.

4 Rhetoric, Persuasion, and a Tale of Two City-States

Despite ongoing debates about the degree of creative license Thucydides' employed in authoring the speeches in *The History*, scholars do agree that these speeches contain many insights about the virtues and vices of democracy (e.g. Orwin 1984; Ober 1993; Calabrese 2008), the applicability of justice to international relations (e.g. Cohen 1984; Heath 1990; Bagby 1994), and the pitfalls of imperialism (e.g. Bruell 1974; Forde 1986; Foster 2010). These speeches are especially useful for assessing the underlying values and motivations governing Athenian and Spartan decision-making at key parts of the war (e.g. Cogan 1981; Orwin 1986). As Debnar (2001) explains, "when audiences decide whether or not to follow speakers' advice, they base their decisions not only on rational calculations, but on what they feel—fear, ambition, greed, anger—and what they believe is most important, whether it is honor or revenge, safety or prestige" (1). If speakers customized their rhetoric to the

individual values of their targeted audiences, then we would expect differences in Athenian and Spartan to distinguish speeches from one another.

Athens and Sparta – the two primary audiences of the speeches presented in *The History* – varied both culturally and politically. The Spartans followed deeply conservative values. They scorned displays of luxury, disdained words unsupported by deeds, were wary of chance, and took pride in their restraint (Debnar 2001). These values even appeared in the manner in which Spartans speak. As Francis (1991-1993) illustrates, Spartans were encouraged not to argue or speculate, and the less said the better (200). The Athenians, on the other hand, valued long and grandiloquent language in the democratic assembly. Athenians embraced luxury and had little moral compunction about greed (Balot 2001). In many ways, these two city-states represented opposing ways of life.

In fact, Thucydides painted the Peloponnesian War as much as a competition between cultural and societal values as a competition between military powers. Towards the end of *The History*, he calls the Spartans the most “convenient” opponents for Athens, given their restraint and how it contrasted to the high energy and swiftness of the Athenians (8.96.5). Speakers in Thucydides’ *History* similarly acknowledged and sometimes called direct attention to the differences between the two city-states. Most strikingly, the Corinthians during their first speech at Sparta claimed:

“Besides, we consider that we have as good a right as anyone to point out a neighbor’s faults, particularly, when we contemplate the great contrast between the two national characters: a contrast which, as far as we can see you have little perception, having never yet considered what sort of antagonists you will encounter in the Athenians, how widely, how absolutely different from yourselves. The Athenians are addicted to innovation, and their designs are characterized by swiftness alike in conception and execution, you have a genius for keeping what you have got, accompanied by a total want of invention, and when forced to act you never go far enough” (1.70.1-2).

The Corinthians’ speech contains clear examples of the rhetoric designed to play on the values of a given audience. While the Corinthians berate aspects of Spartan character in order to motivate Sparta to action, they clearly took Spartan culture into account.

Automated text methods *do* detect the divergent characteristics of Athens and Sparta. While the average distance between speeches given to the city-states is about equal to the average distance within speeches given to the same city-state, dictionary methods and examining the most distinguishing words reveal important differences in the speeches given to Sparta versus Athens. In particular, speeches delivered to Spartan audiences tended to

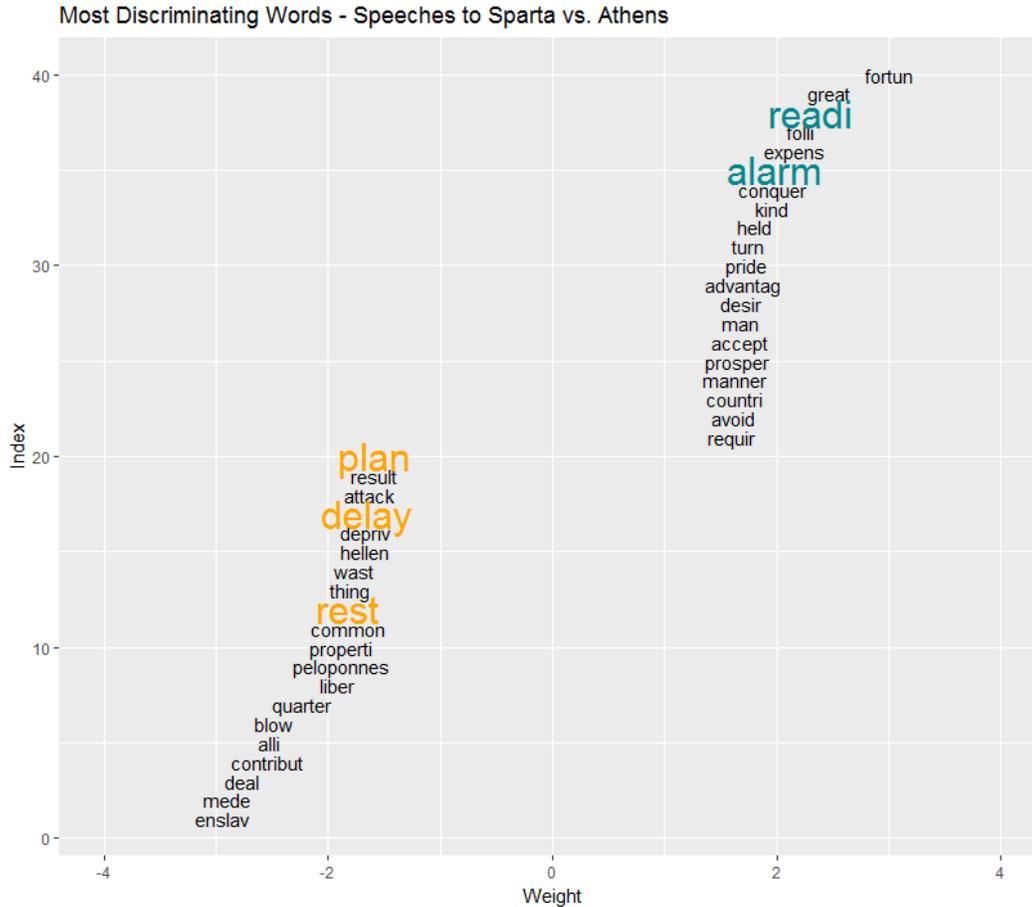


Figure 2: **Top Separating Words for Speeches to Sparta versus Speeches to Athens.** The words on the left side of the plot are those indicative of Sparta, while the words on the right side of the plot are those indicative of Athens.

emphasize restraint while those given to Athenian audiences emphasized action. Dictionary methods show that restraint words appeared 33% more often in speeches given to Sparta compared to those given to Athens. Separating word algorithms reveal similar results. Figure 2 displays the words that most discriminate between speeches delivered to Sparta and those given to Athens, with the words indicative of Sparta on the left and of Athens on the right. Some of the most distinguishing words for speeches to Sparta include rest, delay, and plan whereas the words most distinctive to Athenian speeches are ready and alarm. This contrast of action and restraint is consistent with the Corinthians' portrayal of the two city-states in Book 1.

These methods reveal other important differences between Athenian and Spartan values. Speakers frequently emphasized glory and material gain to Athenian audiences, but they emphasized the consequences of inaction to the Spartans. Figure 3 displays the results from

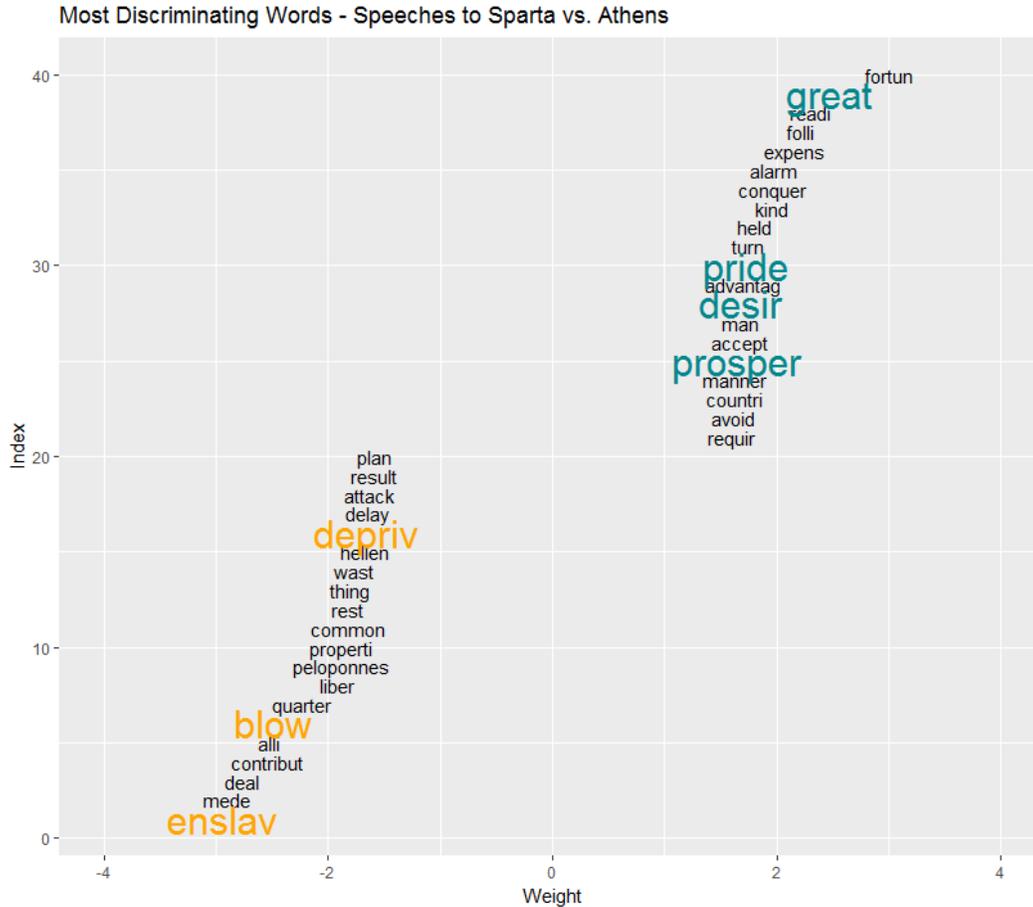


Figure 3: **Top Separating Words for Speeches to Sparta versus Speeches to Athens.** The words on the left side of the plot are those indicative of Sparta, while the words on the right side of the plot are those indicative of Athens. The words displayed are the same as those in Figure 2, but calls attention to words indicating differences in the cultural values of the two city-states.

the same separating word algorithm as Figure 2, but it highlights this new trend. Figure 3 shows that the word most distinctive of speeches to Sparta is *enslave*. By comparison, some of the words most distinctive of those to Athens were *great*, *pride*, *desire*, and *prosper*.¹⁰ Dictionary methods similarly show that Athenian speeches included glory words 82% more frequently than those targeting Spartan audiences. Speeches to the latter used aggression words 10% more. The apparent “greed” of the Athenian Assembly conforms to the Old Oligarch’s portrayal of the masses in “The Athenian Constitution,” where he argued that the Athenian masses leached off of the wealth of the elites.¹¹

¹⁰While “fortune” is the most distinguishing word for speeches given to Athens, in most cases, it was meant in the sense of “chance” or “luck,” instead of wealth.

¹¹Text from the Old Oligarch’s essay is available here: <http://courses.ttu.edu/gforsyth/oo.htm>.

We can get a better sense of the factors that motivated Athenian and Spartan decision-making by comparing speeches that succeeded in persuading audiences to take a speaker's desired course of action to those that failed. For Athens, the speeches that emphasized glory, interests, and taking action tended to be more successful. Dictionary methods show that successful speeches to Athenian audiences used words indicative of glory more than 100% more often than unsuccessful ones. Words such as action, resolute, and stakes strongly discriminate successful speeches to Athens from unsuccessful ones. Moreover, speeches with a negative tone frequently failed to persuade Athenian audiences. Unsuccessful speeches used "anxiety words" about 42% more often than successful ones. The resistance of Athenian audiences to negative tones, coupled with their susceptibility to arguments emphasizing glory, illustrates some of the unfounded optimism in Athenian decision-making that Thucydides scholars have previously highlighted (Chance 2012).

These dynamics contrast sharply with those found in successful and unsuccessful speeches given to Sparta. When speakers emphasized glory to Spartan audiences, they failed. In fact, successful speeches used "glory words" about 17% less often than unsuccessful ones. Moreover, Spartan audiences were wary of speakers that used chance in their arguments. Figure 4 shows the words that most discriminate failed versus successful speeches to Sparta. Words on the left are those most indicative of Failed speeches. As Figure 4 illustrates, words like chance, risk, and calculus were some of the words that most distinguished failed speeches from those that were successful. In other words, the elements of speeches that were successful in Athens were the very elements of unsuccessful speeches in Sparta.

Importantly, while many speakers emphasized restraint in their appeals to Spartan audiences, these speakers also tended to fail to persuade Spartans to take their desired course of action. Dictionary methods show that words indicative of restraint appeared 84% more often in unsuccessful speeches than in successful ones. Restraint was valued in Spartan culture, but audiences realized they needed to take action.

In fact, it was the fear of inaction that appeared to be the most successful in motivating Spartan audiences to take a speaker's desired course of action. Desmond (2006) highlights that successful speakers tended to condemn Spartan audiences for letting Athens gain so much power so quickly, playing on their audience's anxiety about the consequences of Athenian imperialism – a dynamic that automated text methods are able to detect. As Figure 4 illustrates, harm, injury, and blow were three of the most distinctive words of successful speeches to Sparta. Similarly, dictionary methods show that successful speeches used aggression words 69% and anxiety words 300% more often than those that failed.

The first speeches at Sparta in Book 1 illustrate how those emphasizing restraint were less persuasive than those that played on the anxiety of Spartan audiences about the consequences

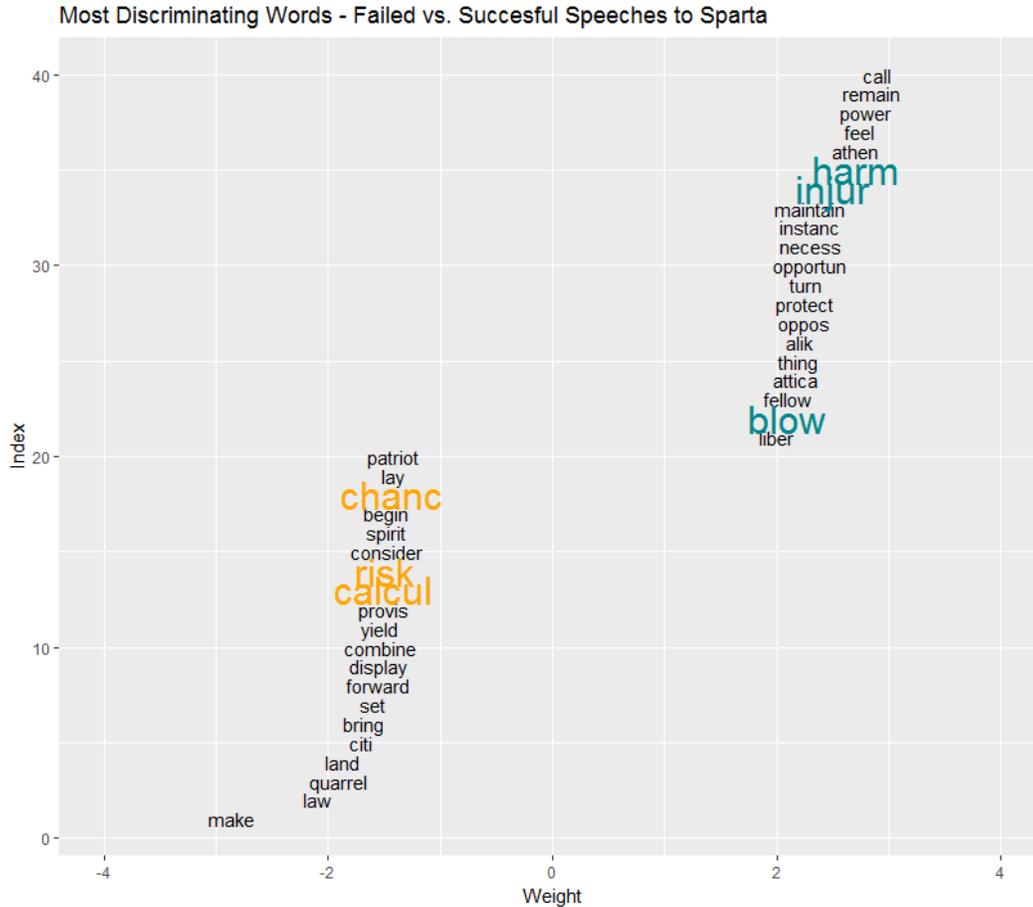


Figure 4: **Top Separating Words for Failed versus Successful Speeches to Sparta**
 The words on the left side of the plot are those indicative of failed speeches, while the words on the right side of the plot are those indicative of successful ones.

of inaction. Here, Thucydides reports three speeches: one by the Corinthians, who wanted Sparta to go to war with Athens now; another by King Archidamus, who wanted to hold off on declaring war in order to take more time to prepare; and a final speech by an Athenian envoy, who wanted the Spartans to enter negotiations with Athens instead. The passage discussed at the outset of this section highlighted the Corinthian’s rhetorical appeals. They drew sharp contrasts between Athenian and Spartan characters precisely to induce anxiety in Spartan audiences to motivate them towards war. In fact, the Corinthians went so far as to blame the Spartans for Athens’ rise and expansion of their empire, claiming that “the true author of the subjugation of a people is not so much the immediate agent, as the power which permits it while having the means to prevent it” (1.69.1). As readers of Thucydides know, these evocative claims from the Corinthians succeeded in convincing Spartan audiences to take action against Athens.

In their respective speeches, King Archidamus and the Athenians unsuccessfully appealed to Spartan values of restraint. The Athenians in particular argued that it would be unwise to rush into war without first pursuing negotiations, and the envoy even tried to portray their own empire as one built on moderation. They boldly proclaimed:

“We imagine that our moderation would be best demonstrated by the conduct of who should be placed in our position; but even our equity has very unreasonably subjected us to condemnation instead of approval. . . . None care to inquire why this reproach is not brought against other imperial powers, who treat their subjects with less moderation than we do But our subjects are so habituated to associate with us as equals. . . . [it] makes them forget to be grateful for being allowed to retain most of their possessions” (1.76.4-1.77.3).

The Athenians further admitted that their interests and honor were two of the primary motivations for their expansion, but they averred that none should fault them for acting on these motives. Others with the power to do so would do the same. Thus, this speech at Sparta illustrates the way speakers often attempted to tailor their appeals to the values of their targeted audience. However, in this case, it also shows that that vivid portrayals of the consequences of inaction and the fear they produced overrode Spartans’ base inclination for restraint and careful, deliberate action.

Overall then, automated text methods replicated many of the existing scholarly arguments about the rhetoric of speeches given to Athens and Sparta. These methods were able to identify not only the cultural cleavages between the two city-states, but also the differences in their underlying motivations in the war. In doing so, these results illustrate the potential utility of these methods for scholars studying the history of political thought to highlight objective features of the text in advancing their interpretations about a given text.

5 The Rhetorical Styles of Pericles and Nicias

Moving to an even more granular level of analysis, Thucydides scholars have devoted significant attention to the rhetorical styles of individual speakers (e.g. Lateiner 1985; Yunis 1991; Tsakmakis 2006). The contrasting styles of Pericles and Nicias have attracted particular interest. Thucydides exalted Pericles as a prudent and persuasive leader at the outset of the Peloponnesian War, and Nicias was his closest successor. But even though Nicias frequently urged the Athenian public to pursue Periclean policies, he failed to prevent the public from making disastrous decisions, like pursuing the Sicilian expedition.

Thucydides openly applauds Pericles for his rhetorical style and counsel. Unlike those

who would follow him, he was able to tame the passion and emotion of the Athenian public and convince them to make the “right” decisions in the war.¹² A particularly cogent example of Pericles’ persuasiveness was his ability to convince the Athenian public to abandon the country-side in a defensive strategy.¹³ While those who lived in the city were the most likely to attend the Assembly, most Athenians lived in the country. These people had to risk their property, their sacred hearth, and their shrines in agreeing to Pericles’ defensive strategy, and many lived in destitution after migrating to the city (2.16.1). Yet, Pericles was able to convince the majority to vote in his favor. He did so by portraying the defense of the city as a noble cause and by appealing to the Athenians’ “passion for revenge” (Ober 1985). Describing Pericles’ rhetorical abilities, Thucydides writes:

“Pericles indeed, by his rank, ability, and known integrity, was enabled to exercise independent control over the multitude—in short, to lead them instead of being led by them. . . . Whenever he saw them unreasonable and insolently elated, he would with a word reduce them to alarm; on the other hand, if they fell victims to panic, he could at once restore them to confidence” (2.65.9).

By contrast, scholars have identified Nicias as a much less capable and resolute leader (e.g. Lateiner 1985). Although he was quite popular with the Athenian public, his popularity resulted largely from catering to the people instead of leading them. Plutarch describes Nicias’ character as timid, nervous, and easily confused by the accusations of others. He does, however, admit that these qualities contributed to Nicias’ acceptance as a leader, noting that the public “feared men who scorn them but exalt men who feared them” (*Nicias* 2.4). Unlike Pericles, Nicias cared more about his private honor than public interest (Rawlings 2014).

What can automated text methods reveal about the rhetorical styles of Pericles and Nicias? At an initial inspection, these methods suggest the speeches of Pericles and Nicias are quite similar. Distance measures suggest that—while Pericles’ speeches are the most distinctive in *The History*—they resemble Nicias’ speeches more than those of any other leader. Pericles and Nicias emphasized instrumental behavior at about equal rates in their speeches, and they issued similar calls for restraint. In particular, dictionary methods suggests that words indicative of instrumental behavior occurred less than 5% more often in

¹²In his judgement of Pericles, Thucydides writes “. . . the correctness of his foresight concerning the war became better known after his death” (2.65.6). However, later scholars would challenge Thucydides’ assessments. Lunginbill (2011), for instance, argues that Pericles was uniquely responsible for Athen’s ill-fated entry into the war and devotes an entire book to documenting how Thucydides’ portrayal of Pericles essentially “rewrote” this history.

¹³Scholars also debate whether this strategy would have succeeded in the long run in the war. See de Wet (1969) for an argument suggesting this strategy could have won the war and Knight (1970) for an argument that it would have failed.

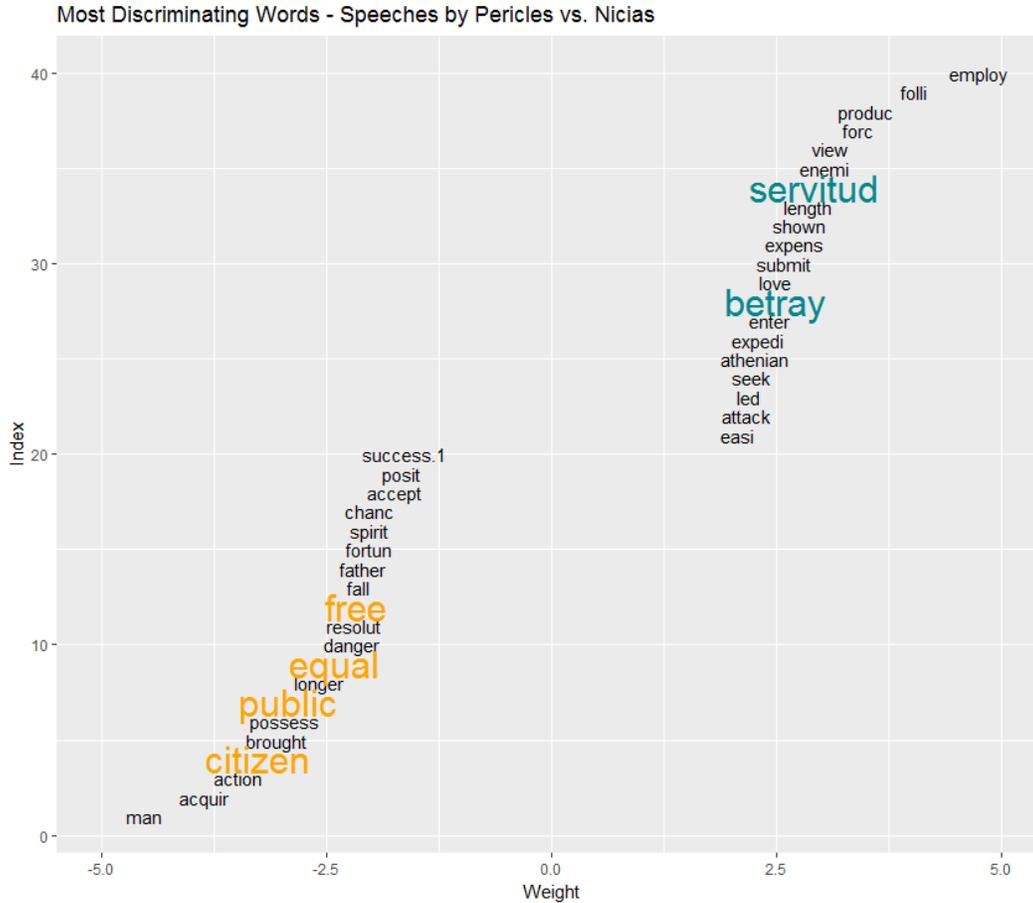


Figure 5: **Top Separating Words for the Speeches of Pericles versus those of Nicias**

The words on the left side of the plot are those indicative of Pericles' speeches, while the words on the right side of the plot are those indicative of Nicias' speeches.

Nicias' speeches, while restraint words occurred about 7% less often in Pericles' speeches. Pericles' speeches do appear to be *slightly* more emotive than Nicias' speeches: positive and negative words appeared about 12% and 19% more frequently in speeches by Pericles than in those by Nicias. However, compared to the dramatic differences in their ability to persuade the public to follow their policies, these discrepancies are relatively minor.

These methods instead suggest that the real divergence in the rhetorical styles of Pericles and Nicias lays in *how* they appealed to the values and emotions of the Athenian public. Unlike Nicias, Pericles sought to unify the public by appealing to a common, Athenian identity. He urged the people to subordinate their private interests in the name of the public good, and he portrayed doing so as glorious in and of itself. In essence, Pericles invoked a civic ideology (e.g. Nielsen 1996), or proto-nationalism (e.g. Roshwald 2006; Tziampiris 2015; Samons 2016), to persuade Athenian audiences to take his desired course of action.

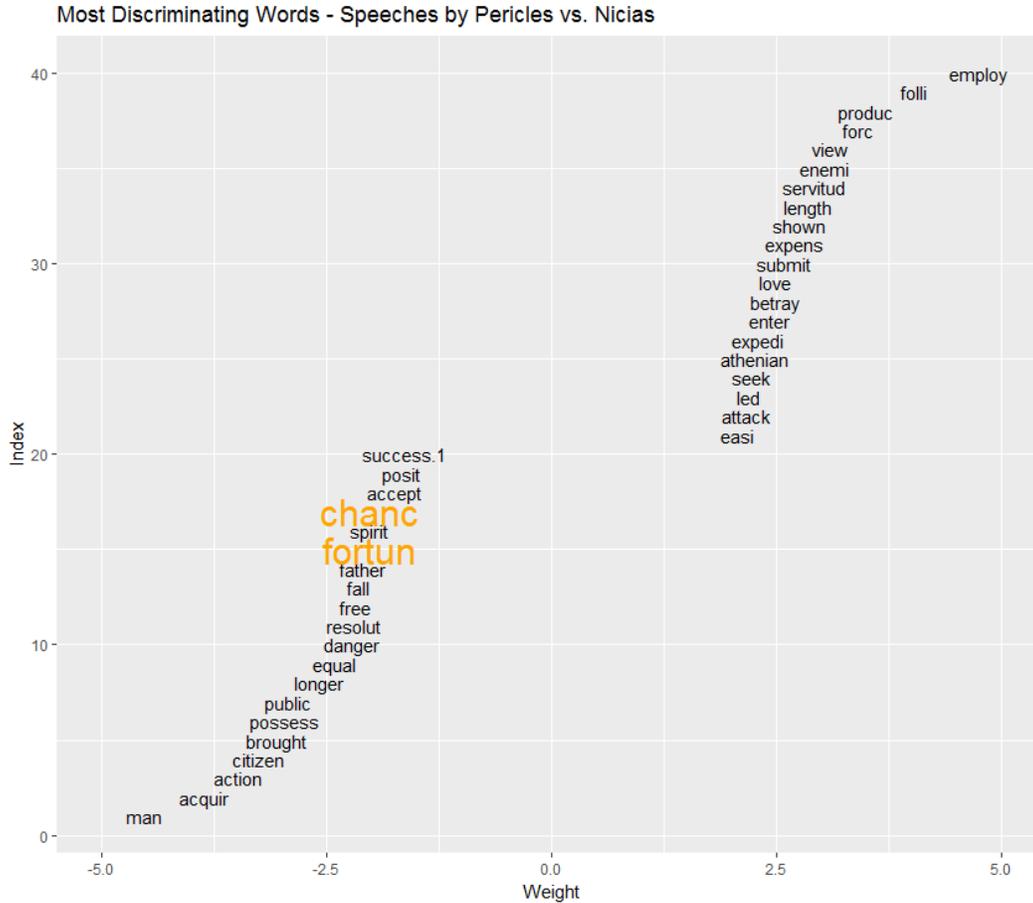


Figure 6: **Top Separating Words for the Speeches of Pericles versus those of Nicias**
 The words on the left side of the plot are those indicative of Pericles’ speeches, while the words on the right side of the plot are those indicative of Nicias’ speeches. This figure displays the same words as those in Figure 5, but highlights that chance and fortune are among the words most discriminating of Periclean speeches.

Pericles’ invocation of a common Athenian identity is evident in the results of the automated text analysis. Figure 5 displays the words that most differentiated Pericles’ and Nicias’ speeches. Words on the left are those most distinctive of the speeches given by Pericles, whereas the words on the right are those most distinctive of the speeches given by Nicias. Figure 5 illustrates that words like citizen and public are highly indicative of Periclean speeches. Similarly, words relating to freedom and equality—values prized highly among Athenians—appeared more frequently in Pericles’ statements. Pericles also tapped into the Athenian’s passion for glory. Dictionary methods suggest that “glory words” appeared 32% more often in the persuasive speeches of Pericles than those by Nicias.

By contrast, Nicias emphasized fear in his speeches—appeals that generally did not res-

onate with the Athenian public. Dictionary methods show that “anxiety words” appeared 33% more often in Nicias’ speeches than in those by Pericles. Nicias’ attempt to motivate Athens by fear would prove flimsy against the arguments of Alcibiades, who frequently appealed to Athenian character and the ambitious and energetic spirit that had won Athens its empire.

Automated text methods also reveal important dynamics relating to the resolve of Pericles and Nicias. Pericles’ speeches—despite being the most unique in the text—varied little to one another when compared to those of Nicias. The average distance between the speeches of Pericles was about 31.1 units, while the distance between Nicias’ speeches was about 51.1 units. This is consistent with the fact that Pericles reiterated similar messages time and again throughout the war. In fact, Pericles often contrasted his resolve with the weakness and whims of the people. “Resolute” was even one of the words that most distinguished Pericles speeches reported in Figure 5. Nicias, by comparison, wavered quite a lot. The words most distinguishing of his speeches do not portray much of a common theme. His lack of resolve can be seen in his handling of the Sicilian Expedition. Although he never abandoned his belief that the expedition was imprudent, he did accept the Assembly’s decision and even passed up the opportunity to reassert the need to recall the expedition in his letter back to Athens. Instead of making a compelling case for recall, he instead leaves the decision of whether to send more troops or suspend the expedition entirely in the hands of the Assembly.

Importantly, there is one aspect of the results of the automated text analyses that could be misleading to those unfamiliar with *The History* and underscores that these methods cannot be a substitute for reading. Figure 6 again portrays the most distinguishing words of Pericles’ and Nicias’ speeches, but it highlights that “fortune” and “chance” are some of the words most characteristic of Pericles’ speeches. At face value, this seems to suggest that the famous orator frequently invoked luck in his speeches in order to persuade audiences to follow his counsel, but this conclusion would be wrong. Pericles did not rely on the verisimilitude of fortune in his reasoning. Instead, these words appear frequently because Pericles actively advocated against basing any decision on chance (Edmunds 1975). In the opening lines of the first speech of Pericles presented in *The History*, Pericles explains that his counsel is necessary precisely because there were too many who were “forfeiting the credit of their wisdom” for the sake of reading into chance (1.40.1). Without reading the text closely, the appearance of words like fortune and chance in the set of distinguishing words for Pericles’ speeches may be misleading.

Indeed, scholars have pointed to the reliance on luck as one of the key differences between Nicias’ and Pericles’ leadership styles. Nicias often admitted that while intelligence and planning were important, good luck and fortune could matter more in determining the

outcome of any great decision (Edmunds 1975). An example of Nicias’ inclination towards chance can be found in his military harangue before a battle at Syracuse. He declared:

“But let the Athenians among you who have joined us in so many expeditions, remember the surprises of war, and with the hope that fortune will not always be against us, prepare to fight again in a manner worthy of the number which you see yourselves be” (7.61.3).

Just a few passages earlier, Thucydides even remarks that Nicias was “somewhat over-addicted to divination and practices of that kind” (7.50.4).

Taken together, the results presented above highlight both the promise and limitations of automated text methods in the study of political thought. The methods correctly identify that Pericles and Nicias advocated for similar policies and sought to restrain the impulses of the Athenian masses. However, Pericles was able to do so by tapping into a shared identity among the Athenians and using their passion for glory to exalt promoting public interests over private ones. Pericles was also resolute, reiterating similar messages in his speeches throughout *The History* and advocating directly against subordinating reason against the whims of chance in decision-making. However, this latter feature of Periclean speeches—that is, his take on chance—would not be obvious from inspecting the results of automated methods on their own. This highlights an important limitation of these methods: namely, that they are not a substitute for a close reading of political texts.

6 Conclusion

Despite being written over two millennia ago, students still turn to Thucydides’ *History* for insights about the ability to prevent war (e.g. Allison 2017), the pursuit of justice under anarchy (e.g. Cohen 1984; Heath 1990; Bagby 1994), and many other exigencies of politics (e.g. Harloe & Morley 2012). Many of these insights are found within the speeches that appear in *The History*, which have become one of the most studied aspects of this work. Scholars have interrogated the extent to which Thucydides’ invented these speeches to advance his own political philosophy (e.g. Collingwood 1946; Wilson 1982; Garrity 1998), what these speeches can reveal about the motivations behind key decisions in the war (e.g. Cogan 1981; Debbar 2001), and what the rhetoric of Athenian leaders can reveal about democratic deliberation (e.g. Ober 1993; Chance 2012). The conclusions drawn by these authors have come from intensive and rigorous close readings of *The History* and other classical Greek works.

In this article, I used automated text methods to revisit three topics around which much

of the scholarly analysis of Thucydides' speeches has centered. The analysis both brought new evidences to bear on these debates and highlighted the potential utility of automated text methods in the study of political thought. In particular, automated text methods not only detected key differences between speech and narrative in Thucydides' *The History*, but also replicated many scholarly insights into the variation within the speeches themselves. One dimension of variation was the cultural cleavages between Athenian and Spartan society. When speaking to these audiences, orators would try to tailor their speeches to appeal to each city-state's underlying values. Those speaking to Spartan Audiences, for instance, tended to emphasize restraint, while those speaking to Athenian audiences focused primarily on gain. Importantly, these methods underscored that the Spartans were primarily motivated by their fear of the consequences of inaction and that arguments that emphasized restraint—despite being prized culturally—tended to be unpersuasive.

The other source of variation in the speeches examined in this article were the rhetorical styles of particular leaders. Again, the results of this analysis underscore many insights from scholarly literature on Thucydides. Pericles was not only more resolute than Nicias in his speeches, but he was also able to invoke a proto-nationalism to persuade the public to prioritize common interests over private ones. However, the analysis of the speeches of Pericles and Nicias also revealed an important limitation of this method: namely, automated text methods are often unable to detect important nuances in language, particularly in small samples of text. Those unfamiliar with Thucydides' *The History* would likely misinterpret the high occurrence of words like “fortune” and “chance” in Pericles' speeches as indicating Pericles was prone to make decisions on these bases, but the opposite is true. The reason for the high occurrence was instead that Pericles frequently advocated *against* using chance to sway one's opinion.

Taken together, the results from this paper suggest scholars of political thought could benefit from using automated text methods in their analyses of philosophical texts. But these methods should be used as *complement* to close textual readings, not as a substitute. Automated text methods appear best suited for helping scholars highlight objective features of a text that they can use to bolster their interpretations, or for helping scholars explore different features of the text that warrant further investigation.

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