Rhetoric and Representation:
Exploring the Institutionalization of Presidential Speechwriting

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Abstract
This paper incorporates content analysis of almost 500 drafts of 70 presidential speeches gathered from the archives of all ten presidencies from Franklin Roosevelt to George H.W. Bush to measure the changes to drafts of presidential speeches as they move through the White House speech drafting and review process. Looking at the fluctuations in rhetorical scores may not reveal exactly what the presidency is thinking, but does reveal evidence of the White House’s attempt to balance the need for eloquence with strategically chosen words.
Almost four score years ago, the Brownlow Commission proclaimed that the president needed help. Since then, one of the fundamental questions hanging over the Executive Office of the President is how much the extra assistance actually helped presidents. Looking to presidential speech to take our measure is obvious since speeches are the most visible aspect of presidential leadership and define the presidency in the eyes of both scholars and average citizens.

The evolution of presidential speechwriting is a unique window into institutional politics of the White House for several reasons. First, speechwriting has become centrally located to the exercise of presidential power. Jeff Tulis described speechwriting as “an institutional locus of policy making in the White House, not merely an annex to policymaking” (1987, 185). While advising on the direction of policy has become increasingly specialized, segmented and scattered through the Executive Branch, almost every policy must be presented to the public and thus finds its way into the speechwriters’ office in the form of speech or formal message.

In addition, the perception that speeches are central to the power of the modern presidency means that the speechwriting process is important to those inside the White House. While George Edwards (2003) has raised legitimate doubts about the ability of presidential speech to move public opinion, there is little doubt that speeches are a primary measure that citizens and other politicians use to judge the stature of a

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president. As Bradley Patterson (1988) put it, “Speeches and statements are the testament of each presidency.” (198)

Most central to this research, the paper trail that the speechwriting process produces a rich data set because it requires that people in the White House commit their thoughts to paper at different points in time. Thus, while some of the ideas floating around the Executive branch may never be fully articulated or recorded, the nature of the speechwriting leaves the remnants of deliberation in folders full of written drafts as a proposed speech takes form and moves from office to office. This trail of drafts may give us the most complete intellectual and political evolution of the administration’s thinking allows and us to see differences between individuals and offices otherwise not recorded.

This study draws upon a variety of published memoirs, oral histories and original White House documents to help us understand the speechwriting process and its impact on presidential rhetoric. These traditional sources are complimented by the use of drafts of presidential speeches to construct a kind of crude rhetorical electroencephalograph designed to detect institutional fluctuations of the thinking within White House. Medical science uses electroencephalography (EEG) to track voltage fluctuations resulting from ionic current flows within the neurons of the brain by recording electrical activity along the scalp. Using this technique, researchers can learn what region of the brain is involved in different mental processes. In a similar fashion, this paper introduces the use of changes in the rhetoric of presidential speech drafts to demonstrate that speeches change significantly over the course of the process within the White House and that the presidency resembles Terry Moe’s description of “a maze of supporting expectations and relations” (1985, 241). In fact, while the different perspectives within the White House walls are often relatively subtle, the methods utilized here prove proficient at detecting differences in speech drafts that reveal a dynamic process at work within the gates of the White House.

This paper begins to explore the reasons behind the paradox of presidential speechwriting: why more speechwriters do not mean more great speeches. The competitions and conflicts recorded by these measures, complimented by the use of more traditional case studies, illuminate the challenges inherent in
institutionalizing speechwriting. Simply put, putting more people to work on a speech does not mean that more effort is put to good use.

**Studying speechwriting and clearance**

While presidential speeches have been the most visible component of president power for several decades, much less study has focused on their construction. Even as the media carefully parses every word, they show little interest in the writers who helped the president come up with those words. When it does receive attention, media coverage of the speechwriting process focuses more on the personalities of a few star speechwriters than on the broader process. Americans might have learned that Bush speechwriter Michael Gerson liked to draft speeches at a DC-area Starbucks or that Obama speechwriter Jon Favreau had dated actress Rashida Jones (who would star in *Parks and Recreation*, a television show that captured the essence of ineffective government), but citizens had little understanding how these men and others shaped the words that defined these two presidents in the public eye.

Scholars generally waited until the last decade to start asking questions about the process. Martin Medhurst, notes in the introduction of his edited volume *Presidential Speechwriting* (2003), “Unfortunately, there is more than a little misunderstanding about presidential speechwriting and its role in the creation and shaping of presidential discourse” (4). While his book does a great deal to highlight the importance of speechwriting, by its nature the edited volume does not produce one clear picture of the speechwriting process and its evolution. Michael Nelson and Russell Riley (2010) brought together a variety of interesting perspectives and focused on some key speeches in *The President’s Words*, the nature of the volume invites a more comprehensive and systematic study of speechwriting across administrations. Carol Gelderman’s *All the President’s Words* (1997) offers some provocative insights from the perspective of a professor of English. In 1984, Roderick Hart used content analysis of presidential rhetoric as a tool for understanding the pre-eminence of presidential speech in our political system. Hart’s study has advanced our understanding of the shape of presidential rhetoric but did not focus on its origins.
Books by Karen Hult and Charles Walcott have done more to help us understand the evolution of the process and its consequences. While their studies do not focus exclusively on the White House, they include specific chapters on speechwriting and confront the realities of a creative writing process trying to function within a structure that is both politicized and institutionalized. More recently, Justin Vaughn and José Villalobos (2006) looked at changes to veto announcements by George H. W. Bush. Their analysis found differences between the speechwriters and policy advisors, but their results were limited to one kind of speech under one president. In White House Ghosts (2008), Robert Schlesinger chronicled the work of presidential speechwriters since Roosevelt. While his illumination of the process is engaging, it is focused more on the people than the process and its impact on rhetoric.

The need to study presidential rhetoric goes beyond the response of the public because offices throughout the government pour over presidential comments searching for an endorsement of their office’s priorities (Matthew Eshbaugh-Soha, 2006). As Bradley Patterson (1988) eloquently puts it, “A slight verbal nuance could set hundreds of thousands applauding but may commit hundreds of millions in resources” (196). Drafts of presidential addresses are often the first time specific positions are committed to paper and circulated throughout the administration. In cases where it does not start the policy process, it sometimes compels a final decision. George W. Bush’s communications director Karen Hughes noted that speechwriting “forces the policy decisions to be finalized” (Max, 2001, A32). Ideas may be advocated by individuals and offices around DC, but they do not become the position of the government until uttered by the president.

The Rise of the Ghosts

Presidents have been enjoying the help of others since George Washington read an inaugural address drafted with the assistance of James Madison. However, ghostwriters did not move into the White House until Judson Welliver served as a “literary clerk” and helped Calvin Coolidge with his speeches. Welliver is widely regarded as the first presidential assistant who was focused on speechwriting and is celebrated by speechwriters today as the first of their species through periodic gatherings of the “Judson Welliver
Society” where they discuss their work. At the time, Welliver’s work remained secret and his pay was taken from the fund for the payment of chauffeurs and the upkeep of the garage. While early presidential speechwriters were not always hidden amongst the chauffeurs, they functioned as “ghostwriters” who initially were invisible to the public and only gradually emerged from the shadows as the need for help with presidential speeches became more accepted. The Nixon administration would be the first to have an office openly dedicated specifically to speechwriting and the staff today has grown to include numerous speechwriters, fact checkers, and support staff.

While presidential speechwriters have been relatively consistent fixture of the White House for almost a century, the circulation of speech drafts throughout the executive branch, a process often labeled “staffing,” has become more expansive and formalized since the 1970s. For example, during the Kennedy Administration, the distribution of speech drafts would vary from speech to speech with the President deliberately avoiding departments where he expected to encounter resistance. In a draft of his remarks for the annual Gridiron Club Dinner, Kennedy pointedly joked, “This speech has not been submitted to the State Department for clearance… so I have been asked to announce that these views are not necessarily theirs - - which is all right, since their views are not always mine” (Sorensen, 1962, 2).

The review process is not a routine clerical matter left to minor administration officials. While cabinet secretaries may leave the initial review of most speech drafts to assistants, the process often involves many of the most prominent figures in the executive branch battling over speech language. Ronald Reagan’s famous June 1987 speech at the Brandenburg Gate generated a great deal of debate within the administration with both Deputy National Security Advisor Colin Powell and Secretary of State George Shultz strongly objecting to versions of the draft that included the language urging “Mr. Gorbachev, tear down this wall!” Reagan would eventually approve the strong language telling his speechwriters with a smile, “The boys at State are going to kill me but it’s the right thing to do” (Robinson, 2003, 103).

Staffing would continue to grow in both the number of people involved in speechwriting and the number of speeches subjected to this process. By 1989, draft remarks for George H.W. Bush’s 1989
National Christmas Tree lighting ceremony were circulated 17 key officials in and around the White House. A White House Staffing Memorandum (1989) asked for “action” by eight individuals including Brent Scowcroft (National Security Council), Boyden Gray (White House Counsel), Fred McClure (head of Congressional Relations), and Roger Porter (Director of Policy Development). Nine others were given copies “FYI” including Chief of Staff John Sununu, Press Secretary Marlin Fitzwater, presidential image-maker Sig Rogich, Deputy Assistant to the President for Communications Chriss Winston, and Vice President Dan Quayle. Despite the ceremonial nature of the speech feedback reflected substantial policy considerations. National Security Advisor Brent Scowcroft suggested deleting the phrase “From the Atlantic to the Urals” from the speech’s claim of a “far better Christmas than Europe has ever known.” As Scowcroft noted in the margins, the phrase “Echoes Soviet contention regarding a ‘Common European house.’” Scowcroft also circled a reference to “Unconquerable people” and noted, “In fact, the Czechs have a history of yielding without a fight.”

The differences uncovered in the staffing process reveal a variety of tensions within the White House that can pull speech texts in different directions as the presidency strives for a balance of elegance and accuracy. For example, a member of Gerald Ford’s National Security Council (NSC) staff complained “the fact remains that if we do not break the continued absence of any reference to Africa in the President’s speeches, the adverse impact this creates in Africa will only increase” (Horan, 1975). Hal Horan, as a representative of the NSC, was not simply representing an institutional focus on national security focus of the agency, he also represented those within the administration who focused on Africa and wanted to make sure that the continent was not lost among the concerns about other regions. The language of George W. Bush’s speech to a joint session of Congress after the September 11 attacks was edited because the original draft compared Islamic extremists to the Nazis and Communists who had disappeared into “History’s graveyard of discarded lies.” The word “communist” was changed to “totalitarianism” to avoid offending China whose vote would be needed in the U. N. Security Council (Frum, 2003, 147). International constituencies even found their way into Reagan’s famous address at
Pointe du Hoc on the anniversary of the Normandy invasion. After being lobbied by the State department, Peggy Noonan added a reference to the Soviet Union’s role in defeating the Germans to the speech that honored the Rangers from U.S. forces. As she complained at the time, the added reference interfered with the flow of the speech: “It sounds like we stopped the speech dead to throw a fish to the bear” (Brinkley, 2005, 156).

Institutional perspectives shape rhetoric independent of specific policy goals. For example, the difference between the perspective of National Aeronautics and Space Administration (NASA) and the Kennedy speechwriters illustrates the divide between the particularized view of NASA and the broad vision required of the presidency. The draft prepared by NASA focused more on the power of their rockets than the potential of space exploration. One example of the agency’s suggestions about the capabilities of their hardware is an explanation of the power of the Saturn rocket that would propel America to the moon.

In the last 24 hours we have seen facilities now being created for the greatest and most complex exploration in man’s history. We have felt the ground shake and the air shattered by the testing of a SATURN C-1 booster rocket, many times as powerful as the ATLAS which launched John Glenn, generating power equivalent to 10,000 automobiles with their accelerators on the floor.

The technical details of the systems are a good example of the kind of expertise that agencies can contribute to the speechwriting process. This left the speechwriters to blend the description of technical capabilities of NASA’s equipment with the president’s need for an elegant theme of the potential of space exploration and a nation rising to the challenge.

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<td>Only a few hours ago, I stood on a little hill in Huntsville, Alabama, to watch the ground-testing of a Saturn booster rocket, seven hundred yards away. The power developed by the cluster of eight rocket engines, fire simultaneously, cannot be fully appreciated unless one is close enough to hear the deafening roar and feel the earth quake underfoot. This first-model Saturn, which generates 1,300,000 pounds of thrust - a force equal to 28 million horsepower - is the most powerful rocket yet revealed to the world. It generates power equivalent to 100,000 standard 1962 automobiles with their accelerators pressed to the floor. The technical details of the systems are a good example of the kind of expertise that agencies can contribute to the speechwriting process. This left the speechwriters to blend the description of technical capabilities of NASA’s equipment with the president’s need for an elegant theme of the potential of space exploration and a nation rising to the challenge.</td>
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Organized interest would find a way to bring their own brand of politics into the review process. Elizabeth Dole, head of Reagan’s Office of Public Liaison, was tasked with working with organized interests and asked to see a draft of the 1982 State of the Union address so that she could see how well the draft reached key constituencies. Dole (1982) wrote head speechwriter Aram Bakshian: “Since you are well aware of our mandate, I am sure you can appreciate my interest in having the opportunity to see one of our SOTUA drafts. From a constituency standpoint, it is critical that we have a solid acknowledgement of the importance of women, Hispanics, Blacks, and ethnics.”

Many of the battles are ideological. John Ehrlichman (1982) complained that in the writing of one of Nixon’s speeches on Vietnam “all the ideological factions of the White House staff—came creeping out of the bushes” (21). Some of Reagan’s speechwriters considered themselves the ideological heart of the White House and sought to protect their view of conservatism from the more moderate or pragmatic forces in the White House like Chief of Staff James Baker. The fight over words is often seen as a battle for the heart and soul of the administration and how the policies are framed can become almost as important as the policies themselves.

Rounding out the agendas within the White House is personal ambition. As one veteran of the White House observed, personal conflicts overlay the complex politics of the executive branch: “Amidst the vortex of controversy, personal ambitions would swirl” (Muir, 1992, 35). Putting it more colorfully, Reagan speechwriter Peggy Noonan complained about “cheap jockeying” and “sleazy backstabbing in the White House” (Muir, 1992, 33). The personal interest in presidential speech drafts goes beyond the thrill of hearing the president read your words since getting ideas into something as visible as a presidential speech is an ideal way of demonstrating influence. Complicating matters, many of people at work in the executive branch considers themselves both a great writer and keen political mind.

By the end of the staffing process, speeches have been drug through the Executive Office of the President and reviewed by a range of people their own institutional, ideological, and personal perspectives. The speechwriter’s task at that point becomes reassembling all the suggestions into a
coherent speech that fits the president’s speaking style. Incorporating this feedback requires a unique combination of literary art and negotiating skills as speechwriters try to incorporate conflicting advice from a large number of administration officials—most of whom outrank them. Michael Gerson, who was head speechwriter during George W. Bush’s first term, often told his fellow speechwriters that their jobs were “half-writing and half-diplomacy” (Wertheimer, 2006).

As the writers and the policy experts square off, all sides jealously guard their turf—with good cause. The speechwriters may produce better prose, but the policy makers know the subject area. Often outranked or outmaneuvered by cabinet secretaries, senior White House staff, friends of the president, and organized interests, the speechwriters may find it difficult to turn away suggestions that lack eloquence, undermine the flow of the speech, or make the speech too long. The ultimate fate of the speech rested in the pen of the president but salvaging a speech jumbled by a thousand edits is difficult for president who usually have limited speechwriting skills and time. Ronald Reagan could write a good speech but he seldom found the time to do so after the first few months of his presidency. Every presidents studied occasionally found themselves doing extensive editing on speeches. However, this almost always involved working with the basic structure provided through the speechwriting staff and presidents rarely find time to do major rewrites or redraft speeches from scratch. In the end, a speech might never recover from the process of reassembling soaring rhetoric after it’s been brought down to earth by so many factors.

The Paradox of speechwriting

The president faces a fundamental paradox of speechwriting. The more important the speech, the more need for great rhetoric. However, important speeches also need the elaborate vetting process that is most likely to beat the life out of a good speech. The rising expectations for speeches from the presidency on more and more issues demands that presidents get help with their speeches. There is the paradox that more help with speeches may not mean better speeches since rhetoric does not soar through committees. Clark Clifford and George Elsey spent hours working over the “Truman Doctrine” speech, “looking for
ways to make it sound more like Harry Truman and less like a committee product from State.” (Clifford 1991, 135) When Gerald Rafshoon (1978) took over as Director of Communications for Carter, the speechwriting staff urged him to do what he could to check the problem of “too many cooks.”

You know as well as I that no six people can write a decent speech, even though every one of them may be marvelously gifted and wise. Nonetheless, almost every speech that’s come out of here has been a committee product… I understand that it is essential to get ideas wherever possible, to circulate drafts, to make sure that all viewpoints have been considered. But some one person needs to be in charge of this situation—in charge of collecting ideas, registering complaints, and finally seeing that the agreed-upon policy is written down in a coherent and literate way… My suspicion is that the President thinks he is that person; he no longer has the time to be.

While the staffing process in the White House might dilute rhetoric, “speechwriting by committee” might not be solely responsible for the problem. Speechwriter Charles S. Murphy (1950, 1) warned Truman in a memo: “The mere fact of reducing remarks to writing and editing them takes away much from their spontaneity, even when they are written solely by the man who is going to delivery them.” Murphy went on to suggest: “More of the spontaneous nature is lost in delivery from text.”

William Safire (1975, 100) observed, “Nixon never wanted us to work in committee, not only because of his abhorrence of watered-down committee writing, but he wanted to case his speeches according to the “tilt,” as he put it, of his writers.” Ford speechwriter Robert Hartmann noted that Ford’s experience in Congress didn’t prepare him for the speaking demands of the presidency: “Great speeches are not written by committees. But that’s the way we do things in Congress and that was his school.” (Cannon, 1994, 92) Ford speechwriter Hartmann, Ford “did not see that words are for the purpose of making things happen.” Hartmann (1980, 34) reflected on the differences between the leading Congress and inspiring the nation:

His approach to a speech was that of a legislator; it required something on paper to spark its further development. You start with some kind of draft bill and then amend, delete, revise, substitute and perfect it into a considerably different, and more palatable, final product.

This is not only a time-consuming process, but a speech thus produced by committee ends up about as exciting and artistic as an Act of Congress.
It seems clear that the institutions that provide checks and balances and other safeguards can produce speeches that are more safe than inspiring. As Charles Maguire (1969, 10) mused about the process under Lyndon Johnson, “We had too many cooks and we spoiled a good deal of soup.”

**Data and Measures**

This study compliments the use of traditional case studies and interviews with a quantitative analysis of speech drafts from the ten administrations from Franklin Roosevelt through George H. W. Bush (materials from the presidencies of Bill Clinton and George W. Bush have not been opened to researchers) Speeches were selected for detailed analysis and a complete list of speeches utilized in this paper is included in Appendix A.

These cases do not reflect a random sample of speeches for several reasons. First, while having a random sample of all speeches from each administration might be desirable for the study of some hypotheses, such sampling is not possible. The production and retention of written drafts was inconsistent and drafts of some speeches are not available. This is especially common in early administrations before the process was institutionalized, laws were in place about ownership of White House materials, and photocopying easily allowed the creation of multiple copies of drafts. Some drafts were simply not saved while other drafts would be sacrificed to the process, their pages physically cut and pasted into a new version of the speech. The speeches that received more staff attention were more likely to be chosen for study since the White House produced and retained more drafts. Secondly, even if a random sample was possible, the time and expense required gathering, copying, and coding multiple drafts of enough speeches to provide a representative sample is not practical for a multi-administration study.

A random sample is not necessary here because my argument is not that the same institutional dynamic will emerge in the drafting of every speech, only that different perspectives reside in the White House. Instead, this study identifies and studies especially significant presidential speeches because those cases were more likely to engage the efforts of offices across the institution that is White House. At least
one State of the Union address was utilized as well because it represented the only other major policy address common to all presidents. Campaign speeches were deliberately excluded because they often used different sets of speechwriters and reviewers who work for an institution other than the presidency.

Multiple drafts of each of speech were either photocopied or digitally photographed from the respective presidential libraries or from Nixon Project in the National Archives. The drafts were then put into machine-readable form for analysis using DICTION. Because some drafts were often hand-written, included hand-written revisions, or were hard-to-read carbon copies, automated scanning was often not possible and most passages had to be manually typed. In some cases a single paper draft could yield two distinct drafts, in one form to reflect the original typed version created by the speechwriter with a second version that includes handwritten revisions and additions by the president or others in the White House. A total of 495 speech drafts including over 1.37 million words emerged from this process to form the data set used here.

The DICTION software used in this study was originally developed by Rod Hart for his 1984 book, Verbal Style and the Presidency, and has been refined in the almost 30 years since its creation. The DICTION software evaluates language by looking for the frequency of words from thirty-one different sets of words or “dictionaries.” Each dictionary (described in Appendix B) yields a semantic score based on the frequency of words from that dictionary. DICTION was chosen for this study because its broad examination of language and the prominence of Hart’s study makes its measure familiar to some scholars in the field.

While other software might have been utilized, the precise level of types of rhetoric is not key issue here. Rather, this study focuses on changes to rhetoric as it moves through the process. Further, political debates are extremely nuanced and no software or human coder will be able to fully grasp all the implications of political rhetoric across the many events and issues addressed here. For example, the Clinton White House spent its years after the Monica Lewinsky scandal trying to insure that no sexual
innuendo found its way into presidential speeches. These concerns dictated that the broadest approach to language be used.

To demonstrate what the resulting data for an individual speech looks like and to illustrate the need to refine the measures used, Figure 1 charts the levels of centrality (the DICTION variable reflecting substantive agreement on core values) on different drafts of Franklin Roosevelt’s famous “Arsenal of Democracy” speech. The figure shows that centrality does vary over the course of the drafting and revision process, with a large spike in the revisions suggested on draft two. The results paint an interesting picture of the speech’s development and look much like what we might expect. There is early experimentation with language before the speechwriters settled into the more balanced or cautious language that we would expect from the refinements of a staffing process.

While Figure 1 looks promising, the reader need some help evaluating the changes in speech drafts since it is unclear how much these changes in rhetorical scores reveal. For example, the jump from 4 to 8 on centrality tells us that words associated with centrality doubled with the revisions proposed to the
second draft, but it is hard to judge how significant a change of this magnitude is, especially in the context of presidential speeches. The DICTION software package proves especially useful here because it allows users to compare results from their data with results from pools (or “profiles”) of results from Hart’s research. Most relevant to this study, DICTION allows comparisons to results from the “public policy speeches” profile based on 615 policy speeches delivered by presidents from Harry Truman to Bill Clinton. This profile was chosen as a baseline for this study since it matches the kind of presidential addresses studied here. For each profile, DICTION reports a “normal range” that spans scores ±1 standard deviation of the mean of the scores from these 615 presidential speeches. Although this range was designed to evaluate whether the rhetoric in texts fall into what might be considered typical for each type of communication, the normal range is used here to provide a standard for evaluating changes across the different drafts of the same speech. For example, based upon the 615 presidential speeches in Hart’s DICTION database, the normal range for the centrality variable ranges 2.27 to 6.97. The difference between these two (4.7) can be used as a standard for the amount of variation in centrality normally found across different presidential speeches. This difference, labeled “normal variation,” is used as a foundation for a standard for evaluating the degree of change in rhetoric across drafts.

This use of the normal variation measure creates something similar to ANOVA (analysis of variance) technique that compares variation across different groups to variation within groups. Because DICTION’s variables have different ranges, the range of variation between drafts of each speech for each variable was divided by the normal variation for that specific variable. This created the percentage of normal variation measure that facilitates comparison of the changes across variables and speeches. On this scale, a score of 100% indicates that the drafts of a speech varied as much as different presidential speeches. For example, as we saw in Figure 1, the score for centrality ranged from a minimum of 1.86 to a maximum of 7.8 in drafts of Roosevelt’s “Arsenal of Democracy” speech. Thus, the speech has a draft range of 5.94. Dividing the draft range by the normal variation for centrality (4.7) yields a score of 126% for the percentage of normal variation score used in the rest of this paper. This means that drafts of this
speech varied on *centrality* more than the average variation on that variable across all presidential speeches. Measuring change between drafts of the same speech against differences between speeches from different presidents on wide range of issues sets a high standard for gauging the significance of observed differences. However, such a cautious approach to defining the significance of change makes finding positive findings more compelling.

This study does not use the results from all 31 variables based on DICTION’s dictionaries for two reasons. First, presenting the results from 31 variables would be cumbersome and render figures unreadable. Second, in order to further insure that the case selection behind this study or DICTION’s normal variation was not driving results, I constructed a second measure of normal variation based only on the seventy presidential speeches in my data base of speech drafts. Only those variables that performed consistently across both measures of normal variation were utilized here. Using only variables that were within ten percent of each other on the two measures yield ten variables: *Accomplishment, Centrality, Cognition, Collectives, Cooperation, Human Interest, Praise, Liberation, Self-Reference Temporal Terms,* and *Tenacity.* These scores produced some of the highest and lowest average measures of the 31 basic DICTION variables (as illustrated in Appendix B).

**Results**

Before we try to assess the impact of institutionalization looking at comparisons across presidencies, we need to determine what kind of changes to rhetoric occur in speechwriting to better understand the behavior of the rhetorical variables themselves. The average change across all speeches included in this study in percentage of normal variation is reported in Figure 2. The variables reflect a wide range of performance. *Self reference* is the most stable (45%) while *tenacity* (112%) and *cooperation* (105%) see the most change over the drafting process. The finding that the average difference between drafts of the same speech exceeds even slightly exceeded the difference in presidential policy speeches for several of these variables tells us that the speechwriting process often has a significant impact on the language of
speeches. Further, the different levels of variation that these results reveal that the software’s dictionaries are neither failing to pick up differences nor generating high variation scores based on minor changes.

**Figure 2: Average draft variation by rhetorical score**

Finding the largest shifts in *praise* and *cooperation* seems consistent with the kind of adjustments a White House would make in fine-tuning its message. *Cooperation* may be more sensitive to political strategies since that responds to changes in words related to getting along and working together as well as terms related to include more neutral interactions (like consolidate, mediate, alignment) and personal involvement (including teamwork, sharing, contribute). The degree of hyperbole often seems to be a consideration within the White House and *praise* may be well suited to detecting those concerns. *Praise* responds to how effusively presidents describe policy or people since it includes adjectives describing social qualities (dear, delightful, witty), physical qualities (mighty, handsome, beautiful), intellectual qualities (shrewd, bright, reasonable), entrepreneurial qualities (successful, conscientious, renowned), and moral qualities (faithful, good, noble). Both *cooperation* and *praise* may be responding to differences in
drafts between ideologues and pragmatists within the White House as ideologues seek to spell out the president’s position in terms of broad principles while pragmatists prefer more flexibility and negotiation.

The stability in *self reference* over the revision is expected since the kind of first person references tracked by this variable would be shaped by the personal speaking style of the president. Individuals in the White House might have different preferences on this kind of verbal style, but everyone involved in the speechwriting process understands the necessity of writing prose that is consistent with the president’s style.

The *accomplishment* variable might be relatively stable since it involves language related to the success and the completion of tasks or organizing and motivating human behavior. We would expect descriptions of accomplishment to be relatively stable unless the actual level of accomplishment changed dramatically. *Cognition* (terms related to questioning, learning, calculating and analyzing) and *centrality* (language relating to agreement on core values) both seem less likely to respond to ideological or tactical differences in the White House.

Also, the frequency of *temporal terms* (languages places the subject at specific time-interval) changes relatively little over the development of a single speech unless the broad framing of the message changes.

The levels of change found in *human interest* and *liberation* are more modest. DICTION’s *human interest* dictionary looks for personal pronouns as well as those that describe family members and relations (cousin, wife, grandchild, uncle), as well generic terms (friend, baby, human, persons) because concentrating on people and their activities gives rhetoric a friendly, humanizing quality. The fact that a variable without clear political elements scores nears 100 percent is somewhat surprising. However, it is consistent with the differences in presentation between speechwriters and others who like casting policies in very human terms and cabinet and policy advisors who often prefer a more technical, statistical description of problems. *Liberation* involves language describing the maximizing of individual’s choices and the rejection of social conventions. While a higher score might be expected relative to some of the
other variables, the percentage of normal variation of 96 percent suggests that there is almost as much
difference within each administration as there is across administrations.

Comparisons across speeches of the same president produce suggest that the methodology used here
is detecting rhetorical changes in the speeches consistent with we would expect. For example, Figure 3
shows the amount of change in rhetorical scores across the seven speeches from the Roosevelt
administration.

**Figure 3:  
Shifts in Rhetorical Variables as a Percentage of Normal Variation  
Franklin D. Roosevelt**

FDR’s speechwriting process usually produced relatively stable rhetoric. This is consistent with
expectations of early administrations when presidents worked with fewer people and were more
personally involved at all stages of speech preparation. However FDR’s address defending his “court
packing” plan reveals dramatically higher levels of changes than the other address. Most remarkably,
language related to DICTION’s *accomplishment* variable shifted 368% of the normal range over the
course of the drafting process. Because the *accomplishment* dictionary looks for words related to
expansion (grow, increase, generate, construction) and general functionality (handling, strengthen,
succeed) as well as programmatic language (agenda, enacted, working, leadership) the high scores on the
court packing speech seem logical as the Roosevelt and his staff grappled with how to frame the need to change the Supreme Court. Roosevelt’s court packing speech generated scores above 100 percent on six of the ten variables, including very high levels of change for tenacity (257 percent) and cognition (237 percent). These high scores are consistent with the high level of internal debate over the plan reported in various memoirs, suggesting that DICTION can successfully discriminate between cases with internal consensus and those cases that generate major policy disagreements within the White House.

Presidency scholars will have a natural interest how these shifts differed across administrations. Figure 4 charts the average percent of normal variation across the speeches studied for both the ten selected variables and the average for all 31 basic DICTION variables. While comparisons across presidencies are perilous because of questions resulting from the selection of cases, the data illustrates some differences certain to inspire speculation.

Most obviously, the Johnson administration has the highest level of change in speech drafts. This is consistent with accounts of Johnson’s speechwriting process that paint a picture of it being one of the
most erratic of modern presidents. This was the product of Johnson’s administrative style and his general lack of interest in speech drafts. Specifically, the high levels variation reported likely begin with the fact that the drafts analyzed often come from different sources, reflecting Johnson’s habit of encouraging competing speech drafts from around the White House. In some cases, two or three people would be working independently on speech drafts—often unaware of the role of others. This was compounded by Johnson’s obsession with secrecy that sometimes resulted in speechwriters working on drafts that would never be seriously considered because the speechwriters did not know the speech’s real policy or political goal. The most famous example of his secrecy is the drafting of the March 1968 address in which, after discussing the Vietnam War, Johnson announced at the end of the speech that he would not be seeking reelection. Most of the speechwriters were not aware of Johnson’s decision until the day before the speech and some received only a few hours notice. Some of the Johnson results may also be the product of the transitional nature of the early days of the administration and the lingering philosophical and political battles between Kennedy and Johnson loyalists within the administration.

The results for the Johnson administration are especially interesting when compared to those his predecessor. Kennedy’s speech drafts process remained consistent given the strong role that Ted Sorensen enjoyed in speech preparation. Sorensen was both a gifted speechwriter and a trusted policy advisor who knew Kennedy’s policy preferences as well as his rhetorical style. Equally important, Sorensen had enough influence in the White House to defend speech drafts from all but the most serious challenges coming from policy advisors.

The high scores for Truman may reflect the personality of the President more directly. One of the contributions of Truman’s staff was to try to make sure that the President’s fiery temper did not find its way into his speeches. Clark Clifford’s rise to prominence began with his ability to gracefully tame Truman’s more excited speech drafts without alienating his boss. For example, when Truman became frustrated with the railroad strike he drafted a speech to Congress calling them “weak-kneed” and urging them to take dramatic action: “Let’s give the country back to the people. Let’s… hang a few traitors and
make our country safe for democracy. Come on, boys, let’s do the job.” (Frantz and McKean, 1995, p. 48). In this case, the speechwriting’s staff role in refining the president himself is clear.

Figure 4 gives an overview picture of speechwriting over the six decades included in the quantitative analysis. The picture is decidedly mixed. On one hand, the turbulence seen under Truman and Johnson seem to be eliminated by the institutionalization. At the same time, the institutionalized process seen that began Nixon and/or Ford presidencies are not the calmest years. The Kennedy process still stands out a remarkably smooth process. The cozy speechwriting process left largely in the hands of Ted Sorensen and Kennedy produced a remarkably calm process.

The case for institutionalism is not as clear as we might like. The first issue is deciding when speechwriting was institutionalized in the White House. While the Nixon White House put speechwriters on the organizational chart we can feel safe focusing on the Ford administration because the agreement by many in the field that by the time Ford came to office the White House was institutionalized. In their article, Ragsdale and Theis (1997) apply Samuel Huntington’s definition of an institution to describe emergence of the presidency as an institution in the 1970s. According to Samuel Huntington (1968, 12), institutionalization is the process through which an organization “acquires value and stability.” In their study of the development of the White House, Hult and Walcott (2004) determine that a structure is institutionalized when it persists over at least two presidencies. Using either the Nixon or Ford presidencies as the start of institutionalized speechwriting makes little difference in the analysis since the two yield similar score. In fact, scores since the Nixon years have varied remarkably little. While speechwriting processes since Nixon have exhibited less rhetorical volatility than Truman or Johnson, they have not produced a process as rhetorical calm at the Kennedy speechwriting process. This may be exactly what we should expect. On one hand, the institutionalization of the process may have discouraged some of the chaos of the Johnson process or rhetorical tantrums of a Harry Truman. Presidents and speechwriters both may have embraced the moderation that will be imposed on them from the very beginning. On the other hand, the institutionalized speechwriting process will likely never produce the
very high levels of stability that resulted from the relatively intimate partnership between Kennedy and Ted Sorensen. Bringing more people in the process may temper some rhetoric, but it inherently brings some level of conflict into the process.

At the same time, the results here may offer some indictment of relying on stability of rhetorical scores in judging the process. For example, the rhetoric in Jimmy Carter’s process is slightly higher than Reagan’s White House, even though few people would argue that Carter’s process yielded more elegant speeches. In fact, it may be that experimentation is inherent in the best speechwriting processes—even though every new idea will not survive the process.

**Discussion**

While the use of content analysis to analyze speech drafts is new, the results presented here yield results that are consistent with more traditional case studies. The evidence presented here suggests that institutionalization has had an impact on the amount of change in the process. Whether the institutionalization of White House speechwriting has unleashed or suffocated the creative process in speechwriting is a question left to another time and another set of standards. However, the changes to the process seem clear.

Presidential rhetoric today enters a hostile environment and the Internet with its wild packs of bloggers and commentors assures that every sentence will be scoured with the most hostile intent with the resulting spin rapidly transmitted around the world. Such an environment is not friendly to the fragile beauty of eloquence. Reagan speechwriter Peggy Noonan (1990, 76) complained that the process of staffing a speech within the White House was “like sending a beautiful newborn fawn out into the jagged wilderness where the grosser animals would pierce its tender flesh and render mortal wounds,” but we might consider the possibility that the process within the White House keeps weak speeches from going out into the world until they are strong enough to face the political wilderness.
In a memo to President Truman, speechwriter Charles Murphy (1950, 1) warned that presidential addresses “are of such importance as policy pronouncements that they have to be carefully checked and revised from many angles, and delivered from a prepared text.” Murphy’s observation should be a warning to those who want to jump to the conclusion that the collective nature of the speechwriting process in the modern White House is responsible for whatever critics think ails presidential rhetoric. If presidential speeches must be so carefully examined in so many ways, it is difficult to imagine eloquence surviving so much scrutiny and so many expectations, whether the speech is edited by one hand or one hundred. Presidential speech has become inherently complicated. On one hand, its creation is rhetorical nature and should be inspiriting and elegant. At the same time, the White House is a representative institution that brings together a broad range of bureaucratic, ideological, and other concerns. Balancing these demands may ultimately prove more essential than lofty rhetorical goals.

Where have all the great speeches gone? While it is possible that great rhetoric has been consumed by an institution/machine better suited to producing safe speeches than great speeches. We must also acknowledge that not all presidential speeches have been great. While we remember that FDR assured us that December 7 was a day that would live in infamy, we tend to forget that the rest of the speech was rather bland and forgettable.
References


Appendix A
Speeches

Franklin Roosevelt
Inaugural Address, March 3, 1933
Inaugural Address, January 20, 1937
1937 State of the Union Address, January 6, 1937
Fireside Chat #14, September 3, 1937
Court Packing Radio, March 9, 1937
Arsenal of Democracy, December 29, 1940
The Four Freedoms, January 6, 1941
Fireside Chat 19, February 23, 1947

Richard Nixon
Silent Majority, November 3, 1969
State of the Union Address, January 22, 1970
State of the Union, January 22, 1971
University of Nebraska, January 14 1971
Inaugural Address, January 20, 1973
Watergate Address to the Nation, August 15 1973
Resignation, August 8, 1974

Harry Truman
Baylor University, March 6, 1947
Truman Doctrine, March 12, 1947
Princeton University, June 17, 1947
Inaugural Address, January 20, 1949
1950 State of the Union, January 4, 1950
Address to Special Session, July 27, 1948
Farewell Address, January 15, 1949

Gerald Ford
Swearing in, August 9, 1974
Address to Congress, August 12, 1974
Nixon pardon, September 8, 1974
University of Pennsylvania, May 18, 1975
Energy address, May 27, 1975
State of the Union, January 12, 1976
Independence Hall, July 4, 1976

Dwight Eisenhower
Inaugural address, January 20, 1953
Atoms for Peace, December 8, 1953
State of the Union Address, January 7, 1954
Columbia University Commencement, May 31, 1954
Address to the UN, June 20, 1965
Inaugural address, January 20, 1957
Farewell Address, January 15, 1961

Jimmy Carter
Inaugural address, January 20, 1977
Fireside Chat, February 2, 1977
State of the Union Address, January 19, 1978
State of the Union Address, January 25, 1979
Malaise speech, July 17, 1979
Dedication of the John F. Kennedy Library, October 20, 1979
Farewell address, January 14, 1981

John F. Kennedy
Inaugural address, January 20, 1961
National Association of Manufacturers, December 6, 1961
State of the Union Address, January 11, 1962
Commencement address at Yale, June 11, 1962
Independence Hall, July 4, 1962
Rice University, September 12, 1962
National Address on Desegregation of the University of Mississippi, September 30, 1962

Ronald Reagan
Joint Session of Congress April 28, 1981
State of the Union Address, January 26, 1982
National Association of Evangelicals, March 8, 1983
Pointe du Hoc, June 6, 1984
Second Inaugural Address, January 21, 1985
Berlin Wall, June 12, 1987
Farewell Address, January 11, 1989

Lyndon Johnson
Address to Joint Session, November 27 1963
University of Michigan, May 22 1964
State of the Union, January 4 1965
Johns Hopkins University, April 7 1965
State of the Union, January 10, 1967
War on Poverty, May 8 1967
Address to the Nation, March 31, 1968

George H. W. Bush
Texas A&M, May 12, 1989
Boston University, May 21, 1989
National Drug Policy, September 15, 1989
State of the Union Address, January 31, 1990
Joint Session of Congress, September 11, 1990
Pearl Harbor, December 7, 1991
Los Angeles Riots, May 8, 1992
Appendix B

DICTION Dictionary and Score Descriptions

*ACCOMPLISHMENT: Terms that express completion of tasks (establish, finish, influence, proceed) and organized human behavior (motivated, influence, leader, manage). Includes capitalistic terms (buy, produce, sell), words related to expansion (grow, increase, generate, construction) and general functionality (handling, strengthen, succeed) and programmatic language (agenda, enacted, working, leadership).

AGGRESSION: Words that highlight competition and forceful action. This includes physical energy (blast, crash, collide), domination (conquest, attacking, dictatorships, violation), words associated with personal triumph (mastered, rambunctious, pushy), excess human energy (prod, poke, pound, shove), disassembly (dismantle, demolish, overturn, veto) and resistance (prevent, reduce, defend, curbed) are included.

AMBIVALENCE: Words expressing hesitation or uncertainty, implying a speaker’s inability or unwillingness to commit to the verbalization being made. Included are hedges (allegedly, perhaps, might), statements of inexactness (almost, approximate, vague, somewhere) and confusion (baffled, puzzling, hesitate). Also included are words of restrained possibility (could, would) and mystery (dilemma, guess, suppose, seems).

BLAME: Terms designating social inappropriateness (mean, naive, sloppy, stupid) as well as downright evil (fascist, blood-thirsty, repugnant, malicious) compose this dictionary. In addition, adjectives describing unfortunate circumstances (bankrupt, rash, morbid, embarrassing) or unplanned vicissitudes (weary, nervous, painful, detrimental) are included. The dictionary also contains outright denigrations: cruel, illegitimate, offensive, and misery.

*CENTRALITY: Terms denoting institutional regularities and/or substantive agreement on core values. Included are indigenous terms (native, basic, innate) and designations of legitimacy (orthodox, decorum, constitutional, ratified), systematicity (paradigm, bureaucratic, ritualistic), and typicality (standardized, matter-of-fact, regularity). Also included are terms of congruence (conformity, mandate, unanimous), predictability (expected, continuity, reliable), and universality (womankind, perennial, landmarks).

*COGNITIVE TERMS: Words referring to cerebral processes, both functional and imaginative. Included are modes of discovery (learn, deliberate, consider, compare) and domains of study (biology, psychology, logic, economics). The dictionary includes mental challenges (question, forget, re-examine, paradoxes), institutional learning practices (graduation, teaching, classrooms), as well as three forms of intellection: intuitional (invent, perceive, speculate, interpret), rationalistic (estimate, examine, reasonable, strategies), and calculative (diagnose, analyze, software, fact-finding).

*COLLECTIVES: Singular nouns connoting plurality that function to decrease specificity. These words reflect a dependence on categorical modes of thought. Included are social groupings crowd, choir, team, humanity), task groups (army, congress, legislature, staff) and geographical entities (county, world, kingdom, republic).

COMMUNICATION: Terms referring to social interaction, both face-to-face (listen, interview, read, speak) and mediated (film, videotape, telephone, e-mail). The dictionary includes both modes of inter course (translate, quote, scripts, broadcast) and moods of intercourse (chat, declare, flatter, demand). Other terms refer to social actors (reporter, spokesperson, advocates, preacher) and a variety of social purposes (hint, rebuke, respond, persuade).

COMPLEXITY: A simple measure of the average number of characters-per-word in a given input file. Based on the idea that convoluted phrasings can make ideas abstract and implications unclear.

CONCRETENESS: A large dictionary possessing no thematic unity other than tangibility and materiality. Included are sociological units (peasants, African-Americans, Catholics), occupational groups (carpenter, manufacturer, policewoman), and political alignments (Communists, congressman, Europeans). Also incorporated are physical structures (courthouse, temple, store), forms of diversion (television, football, cd-rom), terms of accountancy (mortgage, wages, finances), and modes of transportation (airplane, ship, bicycle). In addition, the dictionary includes body parts (stomach, eyes, lips), articles of clothing (slacks, pants, shirt), household animals (cat, insects, horse) and foodstuffs (wine, grain, sugar), and general elements of nature (oil, silk, sand).

*COOPERATION: Terms designating behavioral interactions among people that often result in a group product. Included are designations of formal work relations (unions, schoolmates, caucus) and informal associations (chum, partner, cronies) to more intimate interactions (sisterhood, friendship, comrade). Also included are neutral interactions (consolidate, mediate, alignment), job-related tasks (network, detente, exchange), personal involvement (teamwork, sharing, contribute), and self-denial (public-spirited, care-taking, self-sacrifice).

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DENIAL: A dictionary consisting of standard negative contractions (aren’t, shouldn’t, don’t), negative functions words (nor, not, nay), and terms designating null sets (nothing, nobody, none).

DIVERSITY: Words describing individuals or groups of individuals differing from the norm. Such distinctiveness may be comparatively neutral (inconsistent, contrasting, non-conformist) but it can also be positive (exceptional, unique, individualistic) and negative (illegitimate, rabble-rouser, extremist). Functionally, heterogeneity may be an asset (far-flung, dispersed, diffuse) or a liability (factionalism, deviancy, quirky) as can its characterizations: rare vs. queer, variety vs. jumble, distinctive vs. disobedient.

EMBELLISHMENT: A selective ratio of adjectives to verbs. Embellishment is calculated according to the following formula: 

\[ \text{Embellishment} = \frac{\text{Praise} + \text{Blame} + 1}{\text{Present Concern} + \text{Past Concern} + 1} \]

EXCLUSION: A dictionary describing the sources and effects of social isolation. Such seclusion can be phrased passively (displaced, sequestered) as well as positively (self-contained, self-sufficient) and negatively (outlaws, repudiated). Moreover, it can result from voluntary forces (secede, privacy) and involuntary forces (ostracize, forsake, discriminate) and from both personality factors (small-mindedness, loneliness) and political factors (right-wingers, nihilism). Exclusion is often a dialectical concept: hermit vs. derelict, refugee vs. pariah, discard vs. spurn.

FAMILIARITY: Consists of a selected number words that are the most common words in the English language. Included are common prepositions (across, over, through), demonstrative pronouns (this, that) and interrogative pronouns (who, what), and a variety of particles, conjunctions and connectives (a, for, so).

HARDSHIP: This dictionary contains natural disasters (earthquake, starvation, tornado, pollution), hostile actions (killers, bankruptcy, enemies, vices) and censurable human behavior (infidelity, despot, betrayal). It also includes unsavory political outcomes (injustice, slavery, exploitation, rebellion) as well as normal human fears (grief, unemployment, died, bankruptcy, enemy).

HUMAN INTEREST: Includes standard personal pronouns (he, his, ourselves, them), family members and relations (cousin, wife, grandchild, uncle), and generic terms (friend, baby, human, persons) because concentrating on people and their activities gives rhetoric a life-like quality.

INSISTENCE: A measure of the repetition of key terms that may indicate a preference for presented a limited or ordered view. All words occurring three or more times that function as nouns or noun-derived adjectives are identified and the following calculation performed: 

\[ \text{Insistence} = \frac{\text{Number of Eligible Words} \times \text{Sum of their Occurrences}}{10} \]

INSPIRATION: Abstract virtues deserving of universal respect. Most of the terms in this dictionary are nouns isolating desirable moral qualities (faith, honesty, self-sacrifice, virtue) as well as attractive personal qualities (courage, dedication, wisdom, mercy). Social and political ideals are also included: patriotism, success, education, and justice.

LEVELING: A dictionary of words that build a sense of completeness and assurance used by ignoring individual differences. Included are totaling terms (everybody, anyone, each, fully), adverbs of permanence (always, completely, inevitably, consistently), and resolute adjectives (unconditional, consummate, absolute, open-and-shut).

LIBERATION: Terms describing the maximizing of individual choice (autonomous, open-minded, options) and the rejection of social conventions (unencumbered, radical, released). Liberation is motivated by both personality factors (eccentric, impetuous, flighty) and political forces (suffrage, liberty, freedom, emancipation) and may produce dramatic outcomes (exodus, riotous, deliverance) or subdued effects (loosen, disentangle, outpouring). Liberatory terms admit to rival characterizations: exemption vs. loophole, elope vs. abscond, uninhibited vs. outlandish.

MOTION: Terms connoting human movement (bustle, job, lurch, leap), physical processes (circulate, momentum, revolve, twist), journeys (barnstorm, jaunt, wandering, travels), speed (nimble, zip), and modes of transit (ride, fly, glide, swim).

NUMERICAL TERMS: Any sum, date, or product specifying the facts in a given case. The presumption is that these term hyper-specify a claim and detracting from its universality.

PASSIVITY: Words ranging from neutrality to inactivity. Includes terms of compliance (allow, tame), docility (submit, contented), and cessation (arrested, refrain, yielding). This dictionary also contains references to inertness (backward, immobile, inhibit), disinterest (unconcerned, nonchalant, stoic), and tranquility (quietly, sleepy).

PAST CONCERN: The past-tense forms of the verbs contained in the Present Concern dictionary.

PRAISE: Affirmations of some person, group, or abstract entity. Included are adjectives describing important social qualities (dear, delightful, witty), physical qualities (mighty, handsome, beautiful), intellectual qualities (shrewd, bright, reasonable), entrepreneurial qualities (successful, conscientious, renowned), and moral qualities (faithful, good, noble).

PRESENT CONCERN: This dictionary includes a selective list of present-tense verbs and is not topic-specific. This score points to general physical activity (cough, taste, sing, take), social operations (canvass, touch, govern, meet), and task-performance (make, cook, print, paint).
RAPPORT: This dictionary describes attitudinal similarities among groups of people. Included are terms of affinity (congenial, camaraderie, companion), assent (approve, vouched, warrants), deference (tolerant, willing, permission), and id entity (equivalent, resemble, consensus).

SATISFACTION: Terms associated with positive affective states (cheerful, passionate, happiness), with moments of undiminished joy (thanks, smile, welcome) and pleasurable diversion (excited, fun, lucky), or with moments of triumph (celebrating, pride, auspicious).

SELF-REFERENCE: All first-person references. This dictionary track how often the locus of action appears to be the speaker and not in the world at large.

SPATIAL AWARENESS: Terms referring to geographical entities and physical distances. Included are general geographical terms (abroad, elbow-room, local, outdoors) as well as references to specific locations such as nations. Also included are politically defined locations (county, fatherland, municipality, ward), points on the compass (east, southwest), terms of scale (kilometer, map, spacious), and other references to geographic terms (latitude, coastal, border, snowbelt). This dictionary also measure as well as quality (vacant, out-of-the-way, disoriented) and change (pilgrimage, migrated, frontier) in geography.

*TEMPORAL AWARENESS:* Terms that fix a person, idea, or event within a specific time-interval, thereby signaling a concern for concrete and practical matters. The dictionary designates literal time (century, instant, mid-morning) as well as metaphorical designations (lingering, seniority, nowadays), calendrical terms (autumn, year-round, weekend), elliptical terms (spontaneously, postpone, transitional), and judgmental terms (premature, obsolete, punctual).

*TENACITY:* These verbs that connote confidence and totality. This dictionary analyzes all uses of the verb “to be” (is, am, will, shall), three definitive verb forms (has, must, do) and their variants, as well as all associated contraction.

VARIETY: This measure divides the number of different words in a passage by the passage’s total words. A high score reflects an avoidance of overstatement and a preference for precise statements.
Appendix C

Average draft variation by rhetorical score