Working Paper

Emotion and Reason in Political Language

Author(s):
Gennaro, Gloria; Ash, Elliott

Publication Date:
2021-02

Permanent Link:
https://doi.org/10.3929/ethz-b-000468192

Rights / License:
In Copyright - Non-Commercial Use Permitted

This page was generated automatically upon download from the ETH Zurich Research Collection. For more information please consult the Terms of use.
Center for Law & Economics
Working Paper Series

Number 02/2021

Emotion and Reason in Political Language

Gloria Gennaro
Elliott Ash

February 2021

All Center for Law & Economics Working Papers are available at
lawecon.ethz.ch/research/workingpapers.html
Emotion and Reason in Political Language*

Gloria Gennaro† Elliott Ash‡

February 2021

Abstract

We use computational linguistics techniques to study the use of emotion and reason in political discourse. Our new measure of emotionality in language combines lexicons for affective and cognitive processes, as well as word embeddings, to construct a dimension in language space between emotion and reason. After validating the method against human annotations, we apply it to scale 6 million speeches in the U.S. Congressional Record for the years 1858 through 2014. Intuitively, emotionality spikes during time of war and is highest for patriotism-related topics. In the time series, emotionality was relatively low and stable in the earlier years but increased significantly starting in the late 1970s. Comparing Members of Congress to their colleagues, we find that emotionality is higher for Democrats, for women, for ethnic/religious minorities, and for those with relatively extreme policy preferences (either left-wing or right-wing) as measured by roll call votes.

Key Words: Political Rhetoric, Word Embeddings, Emotions, U.S. Congress

Word Count: 10 331

*We thank the ETH Decision Science Lab and hundreds of anonymous human annotators for their contributions to the human validation of the method. We wish to acknowledge helpful feedback from Scott de Marchi, Benjamin Enke, Lanny Martin, Massimo Morelli, Elias Papaioannou, Jon Slapin, Arthur Spirling, Piero Stanig, Joshua Tucker and various discussants and seminar participants at the NYU SMaPP Meeting, the RPW at University of Zurich, the Zurich Text as Data Workshop 2019, PaCSS 2019, EuroCSS 2019, Warwick CAGE Conference on Language in Social Science 2019, and EPSA 2020 for very useful discussions.

†ETH Zurich, Immigration Policy Lab. email: gloria.gennaro@gess.ethz.ch

‡ETH Zurich, Center for Law Economics. email: ashe@ethz.ch
“An emotional speaker always makes his audience feel with him, even when there is nothing in his arguments; which is why many speakers try to overwhelm their audience by mere noise.”

– Aristotle

“In politics, when reason and emotion collide, emotion invariably wins.”

– Drew Westen

1 Introduction

In his treatise on *Rhetoric*, Aristotle suggests that persuasion can be achieved through either logical argumentation or emotional arousal in the audience; success depends on selecting the most appropriate strategy for the given context. Cultivated by these early ideas, the classic dichotomy between emotions and affect (*pathos*) on the one side and rationality and cognition (*logos*), on the other has informed all realms of social sciences, from social psychology (LeDoux, 1998) to political philosophy (Elster, 1999). In the day-to-day of practical political discourse, politicians resort to a mix of emotion and reason and search for the right balance between these two elements.

The extent to which politicians engage with this trade-off, and what institutional, political, and psychological factors underlie their choices, is largely unknown. Providing empirical evidence on these questions has been difficult due to the lack of a reproducible, validated and scalable measure of emotionality in political language. In this paper, we propose a measure that satisfies these requirements, and we extensively validate it against human judgement. We then use it for a variegated description of how politicians in U.S. Congress have used emotion in their rhetoric over the last 150 years.

Our approach builds on recently developed computational linguistics tools, which represent semantic dimensions in language as geometric dimensions in a vector space. The algorithm for this purpose, word embedding, transforms words and phrases to vectors, where
similar words tend to co-locate and directions in the space (dimensions) correspond to semantically meaningful concepts (Collobert and Weston 2008; Mikolov et al. 2013; Pennington et al. 2014). Our goal is to construct a dimension in this space corresponding to reason at one pole and emotion on the other. To this end, we take validated lexicons for emotion and cognition and construct the poles as the average vectors for these semantically coherent word groups. The relative emotionality of a word is the proximity to the affective pole, relative to the cognitive pole. In turn, the emotionality of a document is the proximity of the averaged vector across each document’s constituent words. We compute emotionality measures for 6 million floor speeches reported in the U.S. Congressional Record for the years 1858 through 2014.

Our measure of emotionality in political language convincingly survives a rigorous sequence of validation steps (Quinn et al. 2010; Goet 2019). First, we qualitatively inspect the words and sentences that are most associated with the ends of the emotion-cognition spectrum. The inspected examples are intuitive and satisfying. Second, we undertake a substantial human validation effort and ask human annotators to assess the relative emotionality of thousands of ranked sentence pairs. The ranking provided by our preferred measure agrees with human judgment over 90% of the time. Importantly, the measure provides a valid emotion ranking for the whole history of the Congressional Record back to the 1850s, meaning we can make valid empirical comparisons over long time frames.

We link emotionality scores to contextual information on speeches and members of Congress to provide a rich description of how this dimension of language matters in Congress. The long time series of the measure since 1858 reveals that emotional expression spikes in time of war. In addition, we find a significant increase in emotionality since the late 1970s, coinciding with the introduction of CSPAN, after which Congressional floor debates were televised. We show using a corpus of non-political documents that emotionality in broader society decreases over time, meaning that the upward trend is specific to politics.

The broad trends in emotional speech are common to most topics observed in Congressional discourse. To show this, we use an unsupervised topic model to identify in our corpus broad issues such as economy and society, patriotism and procedure. We find, intuitively, that patriotism, foreign policy, and social issues are discussed with most emotion, while pro-
procedure, fiscal policy, and federal organization are discussed with the least emotion. Within the realm of economic policy, issues related to taxation and redistribution have increased the most in emotionality in recent years (especially for Republicans), coincident with the post-Reagan increase in economic inequality.

Emotionality varies across politicians’ personal characteristics and institutional factors. We find that Democrats, women, and racial/religious minorities tend to use more emotive language than Republican, male, white protestants serving in the same chamber and year. Even after adjusting for these individual characteristics with politician fixed effects, we find robust evidence that members of Congress use more emotional language when in the opposition party (rather than majority party). Moreover, emotionality is strongly related to partisan polarization. Politicians with intermediate DW-NOMINATE scores [Poole and Rosenthal 2001] display relatively low emotionality, while politicians on both left and right extremes use the most emotion. All these relations are roughly constant historically and hold across topics.

With these descriptive results, we can see some interesting shapes forming in the empirical picture of how U.S. politicians use emotional rhetoric. First, emotion appears in situations of disempowerment, not only when politicians are members of the minority party, but also when they are members of disadvantaged minority groups – gender, ethnicity, and religion. Second, politicians respond to conflict, such as class inequality or ideological polarization, with more emotion. Third and finally, media technology (e.g. television) appears to play a role in amplifying these rousing factors. Each of these findings point to promising avenues for future substantive research in political science.

2 Relation to Literature

This section situates our paper in the literature. First, we show how our approach to measuring emotionality adds to the set of previous methods contributions. Second, we discuss how the substantive findings relate to those made in previous work.
2.1 Methods

While prominent in the political theory tradition, the emotion-cognition dimension of language has not been systematically and empirically explored in the political domain. Hence, this paper’s contribution is mainly methodological, in its new approach to measuring emotion and reason in political language. This section compares our approach to that in previous work measuring emotional valence in political text.

There is a recent and active literature using lexicon-based approaches to analyze the emotional content of political documents. Primarily, this literature has looked at positive and negative sentiment in text, as measured by counts over dictionaries of positively and negatively toned words (e.g. Kosmidis et al., 2019). To extrapolate these lexicons more effectively to the political domain, the most recent papers have used word embedding models to expand the dictionaries to larger lists of positive and negative words (Rheault et al., 2016, e.g.). Substantively, these papers have produced evidence that positive-negative sentiment in political speech responds to economic conditions (Rheault et al., 2016), decreases with ideological divisions (Kosmidis et al., 2019), and is related to the gender identity of the speaker (Hargrave and Blumenau, 2020).

The first and perhaps central difference between our paper and this literature is that we measure emotionality rather than sentiment. Specifically, we seek to measure the intensity of emotional expression, relative to non-emotional or logical argument, rather than the relative positive versus negative tone in text. Dietrich et al. (2019) offer the closest analogue, using audio data rather than text. In that paper, vocal pitch and volume are used to show patterns in the emotional intensity of U.S. Congress speeches. However, since audio recordings of speeches are only available for recent years, Dietrich et al.’s measurements cannot be made for more historical time periods.

The second, more technical distinction of our paper is in how the relevant language dimension is measured. As described in detail below, we exploit the geometric properties of the word embedding space to map out a continuous scale between emotion and cognition dimensions in text. This geometric approach has some key advantages over pure dictionary-based methods. Intuitively, the continuous scale is better at capturing more subtle linguistic cues implied by full sentences, rather than relying on the blunt, sparse, explicit, and inten-
tional placement of emotion-laden words. As shown in Caliskan et al. (2017) and Ash et al. (2019), word embedding dimensions tend to reveal more implicit attitudes than word counts. Thus the embedding-based measure addresses the critique by Dietrich et al. (2019) that word choices are strategically controlled cheap talk that do not reveal motives. Substantively, this approach has been used to identify class and gender stereotypes in language, that reflect cultural dimensions in the broader society (Garg et al., 2018; Kozlowski et al., 2019; Ash et al., 2019). Rodman (2020) uses embedding geometry to track evolving meanings of political concepts in U.S. newspapers. The geometric approach has not been used to map out the emotion-cognition dimension, however.

Third, we undertake a rigorous validation of our method, consistent with increasing standards in empirical work using text data (Quinn et al., 2010; Grimmer and Stewart, 2013; Goet, 2019; Rodriguez and Spirling, 2020; Osnabrügge et al., 2021). In our case, that means careful qualitative inspection of the outputs, and more importantly, with systematic validation against human judgment. We further compare the relative performance of commonly used emotionality measures, to show that our embedding-based scale substantially increases accuracy in terms of replicating human judgments.

Fourth, we empirically distinguish the measurement of emotionality from other important aspects of language that are likely to be confounded with shifts in emotional expression, and from domains other than politics. In particular, we show that our measure of emotionality in politics is distinct from the political topics chosen (Quinn et al., 2010), from positive and negative sentiment (e.g. Rheault et al., 2016), from changes in the sophistication of political language (e.g. Benoit et al., 2019), and from emotionality trends in the broader society (Morin and Acerbi, 2017). This allows us to safely attribute the observed results to dynamics that are specific to emotion in political language.

Fifth, we explicitly tackle the possibility of inconsistent measurement over time. This key issue concerns all studies that look at time trends in language (e.g. Rodman, 2020), yet it is rarely addressed. Inconsistency may come, for example, from the use of modern seed dictionaries to evaluate dimensions of language in the past. We show through our validation process that our measure consistently replicates human judgement over the full time period, back to the 1850s. We further show that our broad trends are similar when the measure
is adjusted for emotionality scores from a parallel non-political corpus reflecting language choices in broader society.

### 2.2 Substantive Findings

The literature in political science and political economy shows a growing interest in the long-run evolution of rhetoric in parliaments. The emerging theme is that of increasingly polarized language, accompanied by a general simplification. Upward trends in divisive language around party lines in U.S. Congress have been repeatedly replicated (Jensen et al., 2012; Gentzkow et al., 2019; Rheault et al., 2019), with comparable trends also seen in U.K. Parliament (Peterson and Spirling, 2018; Goet, 2019). Meanwhile, the linguistic sophistication of political speeches has decreased over time (Lim, 2002; Benoit et al., 2019), and confidence among politicians has increased (Jordan et al., 2019). We add an important piece to this picture by observing that the secular trends in polarization, simplification, and confidence have been accompanied by more intense expression of emotion. All of these trends can be understood as a coherent shift towards a rhetoric that addresses voters more than fellow politicians.

Looking to the mechanisms underlying trends in rhetoric, divisiveness and sophistication in political language have been shown to respond to electoral cycles (Ash et al., 2017; Bischof and Senninger, 2018) and to the broader structure of incentives introduced by the electoral rules (Spirling, 2016; Lin and Osnabrügge, 2018; Osnabrügge et al., 2021). Political rhetoric adapts to contingent needs, such as to exalt positive economic results (Rheault et al., 2016), and to express gravity in moments of national grief (De Castella et al., 2009). Individuals and groups can also use rhetoric to blend into the institutional culture (Hargrave and Blumenau, 2020), or to push their policy priorities (Dietrich et al., 2019). Consistent with these findings, we find coherent descriptive evidence that a politician’s emotional rhetoric responds to prevailing political opportunities and conditions, including party control, personal identity, and ideological polarization.

Finally, this work has important implications for the larger field of emotions and political persuasion (e.g. Ansolabehere and Iyengar, 1997; Lau et al., 2007; Brooks and Geer, 2007). The use of emotions in persuasion (from campaigning to agenda setting) has increasingly
gained the attention of scholars who are interested in the formation of attitudes and opinions (Marcus, 2000; Iyengar et al., 2019). It has been shown that eliciting enthusiasm and anxiety through electoral campaigns affects political participation, vigilance, and information acquisition (e.g. Sullivan and Masters, 1988; Marcus and MacKuen, 1993; Marcus et al., 2000; Brader, 2005; Valentino et al., 2011). Emotional framing can inform voters’ opinions on policy issues (Gross, 2008; Brader et al., 2008; Renshon et al., 2015), can be used strategically to target specific subgroups in the wider audience of voters (Gault and Sabini, 2000; Loewen et al., 2017), and can serve to communicate major consensual values (Jerit, 2004). Emotional speech is more likely to be reported by traditional media (Bennett, 2016), as well as social media (Brady et al., 2017). Our findings offer an historical perspective to complement the insights of this large and active literature.

3 Measuring Emotion and Reason in Text

This section outlines the approach to measuring dimensions of emotion and reason in unstructured text. First we describe our source lexicons for identifying the dimensions, then outline the application to U.S. Congressional speeches.\footnote{Appendix B.4 outlines how we measure sentiment and its relation to emotionality.}

3.1 Lexicons for Emotion and Cognition

We aim to measure emotionality and cognitionality in political speech. To build lexicons of emotive and cognitive words, we start with Linguistic Inquiry and Word Count (LIWC), a leading set of categorized lexicons validated by linguistic psychologists (Pennebaker et al., 2015). LIWC researchers have collected coherent sets of words, word stems, and idiomatic expressions that map onto various structural, cognitive, and emotional components of language.

From LIWC we take two lexicons. First, to get at reasoning we use the “Cognitive Processing” lexicon, consisting of 799 words, phrases, and wildcard expressions. This lexicon embraces concepts of insight, causation, discrepancy, certainty, inhibition, inclusion, and exclusion. Second, to get at emotion we use the “Affective Processing” lexicon, comprising...
1,445 tokens, phrases, and wildcard expressions. This lexicon refers to emotions, both positive (joy, gratitude) and negative (anxiety, anger, sadness).

We reviewed the raw LIWC dictionaries to make them more suitable to analysis of Congressional speeches. First, we exclude non-verbal expressions (e.g. emojis), punctuation, digits, and multi-word expressions. We applied the remaining wildcard expressions to WordNet’s list of English words and filtered the lists by part of speech (noun, adjective, verb).\footnote{This procedure eliminates 185 words from the dictionary of cognitive language, and 293 words from the dictionary of affective language.}

We examined the resulting output and excluded false positive matches (such as ”admir*” matching to “admiral”). To partially automate the process of discovering false positives, we computed the cosine distance in embedding space from each word to the centroid of the associated lexicon using spaCy’s pre-trained GloVe model \cite{Pennington2014} and then excluded the most dissimilar words. This procedure excludes words that do not fit well semantically into the group of affective words).\footnote{We qualitatively tuned this threshold and settled on removing the top quartile of words in terms of cosine distance. This procedure eliminates 279 words from the dictionary of cognitive language and 536 words from the dictionary of affective language. Appendix \ref{app:excluded_words} lists all the excluded words.}

Finally, we stemmed the remaining words using the snowball stemmer. At the end of the process, we have a list of stemmed nouns, verbs, and adjectives representing affective processing (848 tokens) and cognitive processing (359 tokens). Appendix \ref{app:final_dictionaries} provides the two final dictionaries and the frequency of each dictionary word in the corpus.

\subsection{3.2 Scaling Congressional Speeches by Emotion and Cognition}

Our empirical corpus comprises digitized transcripts of the universe of speeches in the U.S. House and Senate between 1858 and 2014 \((N = 9,799,375\) speeches). This constitutes the whole corpus of speeches available from the \textit{U.S. Congressional Record}, after removing those speeches that contain readings of pieces of legislation.\footnote{We identify those by the presence of list identifiers, e.g. (a), (b).}

Each speech in the corpus is first segmented into sentences. To extract the most informative tokens, we tag parts of speech and take only nouns, adjectives, and verbs. Punctuation, capitalization, digits, and stopwords (including names for states, cities, months, politicians and procedural words) are removed. Tokens are stemmed using the Snowball stemmer. After
filtering out rare stems (those occurring in less than 10 speeches), we have 63,334 token types left in the vocabulary. The pre-processing steps are detailed in Appendix A.1.

To map the semantics of congressional language, we train a Word2Vec model on the corpus of all speeches (Mikolov et al., 2013). Word2Vec is a popular word embedding model which embeds words in a relatively low-dimensional vector space. Semantically similar words that are used in similar language contexts tend to co-locate in the space. For our purposes, the important feature of word vectors is that directions in the space correspond to semantic dimensions of language (e.g., emotion and cognition dimensions). We use the implementation from the Python package gensim, with 300 dimensions and an eight-word context window, and we train the model for 10 epochs. Rodriguez and Spirling (2020) show that results produced from word embeddings are generally robust to those choices.

Using the word vectors we now produce document vector representations for each congressional speech. We follow the method for embedding sentences and short documents from Arora et al. (2016). A speech \( i \) is a list of words indexed by \( w \) with corresponding vectors \( \vec{w} \).

The document vector for speech \( i \) is computed as

\[
\vec{d}_i = \frac{1}{|i|} \sum_{w \in i} \frac{\alpha f(w)}{\alpha + \vec{w}}
\]

where \( |i| \) is the number of tokens in the speech, \( f(w) \) is the relative frequency of word \( w \) in the corpus, and \( \alpha = 0.001 \) is a smoothing parameter. This expression gives the centroid (average) of the vectors of the words, weighted by smoothed inverse frequency. This aggregation metric serves to up-weight relatively rare words, which tend to be more informative about a speech’s distinctive content.

Meanwhile, we use our lexicons from above to construct two “poles” in the semantic space of the Congressional Record, representing the concepts for emotion and cognition. Formally, these poles are the respective (SIF-weighted) vector centroids for the affective and cognitive lexicons, calculated as in Equation 1. Let these vectors be represented by \( \vec{A} \) and \( \vec{C} \), respectively.

\(^5\)We also experiment with unweighted document vectors for the emotion and cognition centroids, and for speeches. Results are robust to those changes, although the resulting measure do not validate as well against human judgement (Appendix Table A1).
Now we have the ingredients for scaling texts along the emotion and cognition dimensions. Our measure for the emotionality of speech $i$ is

$$Y_i = \frac{\text{sim}(\vec{d}_i, \vec{A}) + 1}{\text{sim}(\vec{d}_i, \vec{C}) + 1}$$

(2)

where $\text{sim}(a, b)$ gives the cosine similarity between vectors $a$ and $b$. The addition of one in the numerator and denominator is for smoothing outliers. An increase in $Y_i$ indicates a shift towards the emotion pole and away from the cognition pole.

For robustness, we calculate two alternative measures of emotionality in speeches, based on different metrics as proposed in the literature. First, we take an alternative geometric approach, based on Kozlowski et al. (2019) and Ash et al. (2019), that first isolates a singular emotion-to-cognition dimension in the embedding space as the vector difference $\vec{AC} = \vec{A} - \vec{C}$. Then the emotion score for document $i$ is the cosine similarity to this differenced vector, $\text{sim}(\vec{d}_i, \vec{AC})$. We find that this measure provides a very similar ranking to our baseline measure, and that it obtains similar performance in the human validation. The correlation coefficient between this measure and our main score is 0.95 in our full sample of speeches. Unsurprisingly, then, our empirical results are robust to using this measure instead (Appendix A.6).

Second, as a more standard lexicon-based measure of emotionality, we use the number of words in a document from the emotion and cognition lexicons. The counts for each word are weighted by the inverse document frequency, to up-weight more distinctive words. Then the measure is the smoothed ratio of the weighted emotion word count over the weighted cognition word count. The count-based measure turns out to produce a quite different ranking of speeches, with a correlation coefficient of 0.15 with our baseline measure in the full dataset. The measure performs much worse in the human validation. Still, many of our central results hold when using the count-based measure (Appendix A.5).
4 Validation

This section reports our multiple validation exercises (as in Quinn et al., 2010; Goet., 2019; Osnabrügge et al., 2021). First, we show qualitative evidence that our approach captures distinctive semantic dimensions that correspond to emotion and cognition. Second, we compare our measure to human judgements about the emotionality of short speech segments. The pairwise rankings provided by our embedding-based measure agree with human rankings over 90% of the time, much higher than that for a more standard count-based measure.

4.1 Qualitative Evaluation of the Semantic Dimensions

We first ask: Do the vector dimensions underlying our measure capture qualitatively coherent and distinctive semantic dimensions in language? A simple test for semantic validity is to inspect the language associated with the geometric poles for cognitive and emotional language. For each word in the vocabulary outside the lexicon, we compute the relative similarity to the cognitive and emotive poles. This gives a ranking of the words along a single cognitive-to-emotive dimension.

Figure 1 shows clouds for the words that are closest to the cognitive (panel a) and emotive (panel b) centroids, where larger word size indicates closer proximity to the centroid. The word clouds illustrate the clear, intuitive, and distinct flavors of language captured by each linguistic pole. Cognitive language includes logical concepts such as conjecture, discernment, and contradiction. The emotional dimension includes emotive actions such as cringe, terrify, and exclaim.

To evaluate these dimensions of language in context, we next inspect prototypical speech snippets that correspond to the emotional and cognitional poles. After sampling speeches from the top and the bottom of the distribution, we then sample the most emotive and cognitive sentences within those speeches, for a qualitative analysis.

Tables 1 and 2 provide lists of example sentences for the most emotional and most cognitive speeches, respectively. Consistent with the word clouds, there is a clear differential in the tone, following intuitive language for logic and emotion. For example, the emotion sen-

---

6Specifically, we select speeches that fall within the 1st and 99th percentiles for the score distribution. We then exact 10 random sentences among the highest and lowest scoring sentences within the sample.
sentences feature tributes to colleagues and to veterans, while the cognitive sentence include dry enumerations of policy details. In Appendix C.1 we provide additional samples of the most emotional and cognitive sentences for each decade between 1858 and 2014. Qualitatively, our method is facially valid across all decades.

A potential question with our measure is that it might capture positive and negative sentiment, as opposed to cognition and emotion. Hence, we would like to demonstrate that emotionality is a separable dimension of language from sentiment. For this purpose, we construct positive and negative sentiment dimensions in our embedding space using our centroid method, with positive and negative seed lexicons taken from Demszky et al. (2019) (see Appendix B.4 for details). We can then assess whether emotionality and sentiment dimensions work independently.

First, we inspect the $2\times2$ semantic context around four centroids in our embedding space: cognitive-positive, cognitive-negative, emotive-positive and emotive-negative. Figure 2 shows word clouds for the closest vectors to these four poles, revealing intuitive and distinctive words in each of these groups. The cognitive dimension has both positive tone (discern, knowledge, insight) and negative tone (contradict, vague, irrelevant). For emotion, the positive (serene, smile, thrill) and negative (frighten, disgust, sicken) are even more divergent.

Similarly, in our dataset of speeches, emotionality and sentiment are separable. Appendix Figure A4 provides a scatter plot of speeches across the two dimensions and shows they are only weakly positively correlated. The $R^2$ from regressing emotionality on sentiment is just 0.011.

### 4.2 Validation with Human Judgment

This subsection reports the results of a human annotation task to assess the validity of our score in capturing emotion and cognition in language (e.g. Lowe and Benoit, 2013).

The task is as follows. Coders are provided with pairs of sentences extracted from the corpus. For each pair, they are asked which sentence is more emotional and which sentence is more cognitive. In particular, the coder is provided with three options: (i) sentence A is

---

7Appendix Tables A2 and A3 show additional examples where we have excluded any sentences containing a word from the lexicons. These sentences are still clearly and intuitively related to emotion and logic, respectively, yet they would be missed by a lexicon-based approach.
more emotional[cognitive] than sentence B, (ii) sentence B is more emotional[cognitive] than sentence A, and (iii) the sentences are equivalent or I don’t understand one or both of the sentences. No additional information is provided about where the snippets come from.

In the baseline validation check, sentence pairs are constructed as follows. We start by selecting the 5,000 most and least emotional speeches for each decade. From those speeches, we extract and score all the sentences. Finally, we randomly pair sentences that come from the top and bottom 5% of the score distribution. Pairs are always formed from sentences that come from the same decade, and all decades are roughly equally represented in the set of annotated snippets.

The annotators are Amazon Mechanical Turk workers born in the USA and whose primary language is English. Each coder is asked to code 10 sentence pairs (20 sentences). To assess inter-coder reliability, each pair of sentences is annotated by two different coders. In addition, each coder took a simple English comprehension test, which asked them to correctly separate a set of unambiguously emotion and cognition words into two groups.

We obtain 1,714 annotations in total. The coders chose option iii (could not understand the snippets or judge the relative emotionality) for only 3.5% of the sentence pairs. These pairs are not considered for the computed accuracy statistics.

Table Panel A reports the results for the main validation exercise. The top row (“Overall”) shows the statistics for the full sample of annotated pairs. In the full sample of annotations (columns 1-3), our score agrees with human judgement 87% of the time. When we restrict to the sample of coders who passed the English comprehension test (columns 4-6), our score agrees with human judgement 92% of the time. If, alternatively, we restrict to annotated pairs where both assigned coders agree on the ranking (columns 7-9), accuracy reaches 93%.

In subsequent rows, we report analogous statistics when subsetting the pairs by the decade when they were spoken in Congress, starting from the first decade, i.e. 1858-1868, up until the sixteenth (incomplete) decade, i.e. 2008-2014. Importantly, there are no significant drops in the accuracy of our score in earlier decades. This temporal validation addresses a

---

8 These words are, for emotion: Love, Afraid, Glad, Disgust, Joy. For cognition: Consequence, Therefore, Discern, Obvious, Contradiction.
major concern with our method, that it relies on recently developed seed dictionaries that use modern understandings of emotional and cognitive language. Nonetheless, our final score produces a time-consistent measure of emotionality, and therefore we can produce meaningful long-run historical analyses.

In Panel B, we compare the performance in human validation for the two alternative measures of emotionality, described above in the methods section. First, the geometric measure $Sim \overrightarrow{AC}$ refers to the cosine similarity between each document vector $\vec{d}$ and the cognition-to-emotion dimension $\overrightarrow{AC}$, as done in Kozlowski et al. (2019). This vector-distance alternative obtains very similar accuracy to our baseline measure in the human validation task. Second, Word Count refers to the count-based measure giving the ratio of emotion words to cognition words. The performance for the count-based measure is much worse than the embedding-based measures and comparable to random guessing.

Appendix A.4 provides some additional results on the human annotation validation. Appendix Table A1 reports a set of complementary assessments using alternative sentencing pairing procedures based on variants of the emotionality measure. In addition, we show that for randomly paired sentences, the embedding-based ranking tends to agree more with human judgement when the measured divergence between sentence pairs increases.

5 Empirical Analysis

This section reports results on how emotionality varies across a number of dimensions. To this purpose, we link the speeches to information on Members of Congress from the CQ Press Congress Collection. We further complement these data with scores from the the DW-NOMINATE project. We first explore whether emotional expression varies over time and across topics. Then, we show that members of the minority party resort systematically to more emotional rhetoric. The use of emotional language also differs across individual politician’s characteristics, such as their gender, race and religion, and is positively correlated with ideological extremism.
5.1 Emotionality over Time

An initial descriptive question is how the relative use of emotion and reason has shifted over time. We use the long temporal range of our data to show the evolution of emotive language since the start of our data in 1858. These results add to other recent work looking at evolution of party polarization in congressional speeches over this period (Gentzkow et al., 2019). Outside politics, Garg et al. (2018) use word embeddings to analyze the evolution of gender and ethnic stereotypes since 1910.

Our main descriptive results for emotionality over time are reported in Figure 3. The two time series show the average emotion score of speeches by year in the House of Representatives and in the Senate. Overall, we observe a generally increasing trend towards higher emotionality in political language, punctuated by some sudden spikes.

First let’s consider the spikes in emotion in light of the intuition that political leaders express more emotions at pivotal moments in history (e.g. De Castella et al., 2009). In our data, the first observed spike in the use of emotional language appears around the Civil War and its immediate aftermath (1861 to 1866). Two more major spikes occur in 1917 and 1939. These two years correspond to the entry of the United States into World War I (with President Wilson’s declaration of war against Germany being approved by the Congress), and the beginning of World War II (with Germany’s invasion of Poland). The presence of higher emotionality during these events is intuitive and adds credibility about the behavior of the measure.

Next, consider the broader trends. Emotionality makes a slow but steady increase up until the 1950s, then drops a bit in the early 1970s, and then starts a more rapid increase starting in the late 1970s which continues until the present. This striking pattern is seen for both chambers. The trend break is especially salient for the House of Representatives and is followed with some delay by the Senate. This trend is quite different from the one for text polarization observed by Gentzkow et al. (2019), who find an increase starting in the mid 1990s.

Do these trends reflect real changes in the expression of emotion in Congress? One concern is that these trends reflect changes in language generally, rather than changes in the political sphere. To check for this possibility, Appendix B.7 provides a comparison trend
in emotionality for a more general historical corpus: Google Books. Emotional language in Google Books actually declines up until the 1980s, after which it shows a small rebound (Appendix Figure A8). Thus, the trends we see in Congressional speeches appear to be specific to politics. Appendix Figure A9 shows that we can normalize the congressional measures by the general-corpus emotionality and the qualitative trends are unchanged.

Given that these trends are indeed politics-specific, that makes the trend break in the late 1970s especially salient. An intriguing possible explanation is the introduction of C-SPAN, a public television network for Congress that started broadcasting from the House in 1979 and from the Senate in 1986. Zooming in on this time period, we note that the first Congress elected after the founding of C-SPAN takes office in 1977. This is the precise timing of the trend break in emotional language. It could be that when television comes online in Congress, that provides a new benefit and incentive for politicians to use emotional language – to influence voters. Consistent with this idea, previous work in political science has shown the effectiveness of emotional appeals in that objective (Gross 2008; Brader et al. 2008; Renshon et al. 2015; Loewen et al. 2017). In Appendix B.5 we can rule out that the shift is due to changes in the readability or simplicity of language. Further investigation of how CSPAN influences congressional rhetoric is an exciting avenue for future work.

5.2 Emotionality and Topics

Our second descriptive analysis is to look at how emotive-cognitive content for congressional debates varies by topic. Indeed, emotional variation may be driven by the selection of different topics over time, and therefore that politicians talk more about emotionally charged issues in recent years. Alternatively, politicians may have changed their rhetoric style while keeping the topics unchanged.

9 This trend in emotional expression is similar to that estimated by Morin and Acerbi (2017), who also use Google Books but focus on fiction. They write: "Our data confirm that the decrease in emotionality in English-speaking literature is no artefact of the Google Books corpus, and that it pre-dates the twentieth century, plausibly beginning in the early nineteenth century". Acerbi et al. (2013) find similar results.

10 Note that the decreasing trend in Google Books also addresses another potential issue with our measure: that it is built with LIWC, a dictionary based on contemporary language as of 2015. On top of the consistent rates of human validation across decades (Table 3), this confirms again that our measure is not just picking up increasing use of the language used in LIWC; if that were the case, we would also see a similar increase in Google Books.
To understand the relationship between emotionality and topics, we apply an unsupervised topic model (latent dirichlet allocation, see e.g. Blei (2012)) to our full processed corpus, with speeches treated as documents. To get at non-emotive dimensions in language, we drop from the vocabulary all words in our emotive-cognitive lexicon. We assume 128 topics and learn distributions over topics for each document and distributions over words for each topic. We then assign speeches to the most likely topic based on the constituent words.

Appendix Table A8 lists the topics learned by the LDA model and the most representative words for each topic. Overall, the quality is good and 119 of the 128 topics are recognizable as a coherent topic. For ease of interpretation, we inspected the individual topics and aggregated them into eleven larger categories. Appendix Figure A12 shows the historical proportions of these topic categories in congressional speeches over time. Speeches concerning procedural aspects of decision-making comprise the largest single category. The share of procedural speeches shrinks slightly over time, mostly in favor of speeches on social issues and speeches that hinge upon a national narrative, historical heritage, or patriotism. Given the proportional importance of procedure, Appendix Figure A14 shows robustness of our main time series results to dropping procedural speeches.

To show topic-level variation in emotional expression, we residualize out time fixed effects (to adjust for the secular trends from the previous subsection) and then compute the average topic-specific emotionality. Figure 4 plots this variation for the eleven topic categories. Each bar reports, for each topic, the average deviation from the Congress-term mean over the full period of the dataset.

The ranking of topics along the emotionality dimension makes intuitive sense. The most emotional category corresponds to National Narrative. This is a "patriotism" topic: Speeches include references to American history, heritage, values, as well as to the sacrifice of American soldiers. Second, the Foreign Policy category includes highly emotive speeches on human right violations and the Cold War threat. The ranking of Social Issues (e.g. crime, abortion), Party Politics, and Immigration as emotional is similarly sensible. On the other side of the spectrum, it is not surprising that speeches referring to internal Procedure, Governance (government organization), and Fiscal Policy tend to rank low and to use more cognitive

---

11See Appendix Figure A13 for the time series of topic shares after excluding procedural speeches.
language. For the rankings of all 128 individual topics, see Appendix Figure A11.

Next we explore the time series in emotionality by topic. As illustrated in Figure 5, speeches about Procedure are the least emotionally charged and their low level remains constant over time. National Narrative scores the highest throughout the period, and follows the general increasing trend. Recalling the discussion above on the emotive trend break in the late 1970s in concert with the arrival of CSPAN, it is notable that Economy and Society have the steepest relative increases starting at that point in history. It makes sense that when the public becomes a more salient audience, congressmen start speaking more emotionally about topics of general interest.

Figure 6 focuses in on speeches from the larger category of Economy and shows the breakdown by the three main components: Fiscal, Monetary and Economic (Regulatory) Policy. In the earlier decades, there was a persistent emotive ranking from regulatory policy to monetary policy to fiscal policy. Around the 96th Congress (late 1970s), however, the trend break for Fiscal Policy is most intense. By the 102nd Congress (1991-1992), fiscal policy had become the most emotionally charged topic among economic issues. An intriguing feature of this time period is that it coincides with the Reaganite transformation of fiscal policy and the associated shifts in income and wealth inequality. In light of the evidence that economic inequality increases political polarization (Garand 2010; McCarty et al. 2016), it makes sense that divisive issues related to redistribution have become more emotionally charged. In the analysis below, we confirm that more extreme policy positions are associated with higher use of emotional language.

Next, we consider partisan differences in emotional expression across topics. Using the measures adjusted for time variation from Figure 4, we compute the ratio of Republican emotionality to Democrat emotionality by topic since 1970 for the policy-oriented topics. The ranking of topics on this statistic is reported in Figure 7. First, and perhaps most strikingly, fiscal policy is the most Republican-slanted topic in its emotional content, with the Republican score being 2.5 times larger than the Democrat score. In light of the time series evidence just discussed, this partisan differential suggests how Republicans use emotional rhetoric to defend inequality-increasing fiscal policies. In comparison, most other topics are quite similar across parties in emotive content. The exceptions are two Democrat-slanted
topics: social issues, which makes sense in light of Democrats’ defense of civil rights and women’s rights, and economic policy, a topic that is focused on regulation of corporate misbehavior. Thus emotionality helps capture partisan differences in policy priorities.

5.3 Emotionality and Politician Characteristics

So far we have looked at the broad temporal, topical, and partisan factors explaining emotion and reason in U.S. legislative politics. The next question is: Are there observable individual characteristics of Congress members who tend to use more emotional language? For example, members from demographic groups that are underrepresented in Congress are typically associated to distinctive policy position and representation choices (e.g. Swers, 2002; Tate, 2018). In this section, we explore whether members of underrepresented groups are also more likely to use emotional language.

Using data on politician demographics, we estimate OLS regressions with speech-level emotionality as the outcome. The regressions include chamber-year fixed effects to adjust for any chamber-level time-varying factors influencing rhetorical choices, and standard errors are clustered by politician to allow for serial correlation in the error term by politician across speeches and over time. We also include fixed effects for topics, in order to identify the distinctive effect of personal characteristics from topic choice. The explanatory variables in this regression include indicator variables for party, gender, race, and religion.

Table 4 reports the results. Column 1 shows that Democrat members of Congress use on average more emotional language than their Republican colleagues serving in the same chamber and year. In column 2, we show that females tend to use more emotional language compared to males. Column 3 extends this result and shows more emotions for historically disadvantaged minorities in Congress (blacks and hispanics), relative to whites. In column 4, we look at religious minorities in Congress and find that religious minorities (Catholics and Jews) use more emotional language than Protestants. When these factors are taken together in a single regression (column 5), they are all independently important. Moreover, these differences are not driven by differential selection of more emotive topics (column 6).

Appendix Table A5 reproduces the main results with additional controls, and shows that these relationships are roughly constant over time. To provide additional visual support for
these estimates, Appendix Figure A10 shows the time series of emotionality by gender and race. The differences in the use of emotional language across demographic groups is constant over time.

5.4 Emotionality and Opposition Status

In this section we explore whether U.S. politicians resort to emotionality more when they are in the opposition. As discussed in Green (2015) and Lee (2016), minority-party politicians are engaged in crafting a national message to accrue electoral gains in upcoming campaigns. Emotional language can be used to communicate large and consensual values (Jerit, 2004), and it is more likely to be reported by traditional and social media (Bennett, 2016; Brady et al., 2017). We hence expect that politicians use more emotional language when they are in the minority party.

As initial visual evidence on this point, Figure 8 plots the average level of emotionality by politician party in the House of Representatives. The background color indicates the party with majority control of the chamber. We see that overall, Democrats and Republicans do not differ in their use of emotional language. However, members of the minority party are systematically more emotional than members of the majority party, a striking trend that we see consistently flip as the party in control flips. In the long term of Democrat control in the second half of the 20th century, Republicans consistently used more emotional language. In turn, after Republicans retook the house in 1994, Democrats were more emotive. Throughout the time series, changes in House majorities correspond to changes in relative emotionality in the two parties.

To probe the statistical significance and robustness of this relationship, Appendix Table A6 reports estimates from a series of ordinary least squares regressions for the effect of opposition status on the emotion score, for both the House and the Senate. The regressions include chamber-year fixed effects and standard errors are clustered by politician. These results confirm that the dynamic relation noted in Figure 8 is statistically significant when looking at both chambers. Including politician fixed effects reveals that the same politician uses more emotional appeals when her party is in a minority position, relative to her personal average level. The table also shows that results are not driven by the choice of different topics,
for example due to mechanical differences in responsibility for procedural functions.

5.5 Emotionality and Polarization

To delve further into the role of emotional rhetoric in political division, we next explore its relation to ideological policy choices. Previous work has shown that ideological extremists use dissent with their own party to appeal to extreme voters ([Kirkland and Slapin] 2018). Extremism can also be associated with simpler sentences and longer speeches ([Slapin and Kirkland] 2020). We test whether Members of Congress that are more ideologically polarized are also more likely to use emotional rhetoric.

We measure ideological extremism using DW-NOMINATE, a standard measure constructed from roll call votes. Figure 9 plots the emotion score against DW-NOMINATE, which summarizes the tendency of a congressman to vote with Republicans vs with Democrats. The plot reveals a striking U-shaped relationship: congressmen with more extreme ideological positions (either left or right) tend to use more emotionally charged language in their floor speeches.

To test for statistical significance, we estimate OLS regressions with the squared DW-NOMINATE score for each politician-year as the main independent variable. This variable takes larger values for more extreme roll call voting, on either side of the left-right spectrum. We include chamber-year fixed effects, to compare more and less extreme members of Congress, serving in the same chamber and year. We also add topic fixed effects to hold constant the selection of topics.

Table 5 reports the results. There is a significant and positive relationship between ideological voting and emotionality (column 1), even after controlling for topic selection (column 2). The correlation holds when controlling for demographic characteristics and, in particular, for political party (column 3) and underrepresented group membership (columns 4 and 5). Appendix Table A7 shows robustness of these results when including controls for sentiment, speech length, and minority status. We show that the effect is not driven by topic-specific trends in rhetoric. However, the result goes away when including politician fixed effects, indicating that the emotion-polarization link is driven by selection of more ideologically extreme individuals into more emotive rhetoric, rather than within-politician
shifts over time.

6 Conclusion

This paper has provided an analysis of emotion and reason in the language of U.S. Members of Congress. We produced a new measure of emotive speech, which combines dictionary methods with word embeddings to look at the relative use of affective and cognitive language. We then analyzed how that measure evolves over time, varies across individuals, and changes in response to electoral and media pressures.

These results add to the literature in political science on the determinants of political communication. First, we find that emotionality has been increasing over time in Congress while it has been decreasing in the broader culture. The steep increase since the introduction of CSPAN speaks to the importance of media technology in the strategic value of emotional rhetoric.

Second, we produce a series of results on how emotional rhetoric is related to power imbalance. Increasing wealth inequality is associated with increasingly emotional discussions of fiscal issues. Emotionality is higher for less empowered political minorities: women, hispanics, blacks, jews, and catholics. The status of being in the minority party and therefore having less power over policy increases emotional language.

Third and somewhat related, we find evidence for emotions as a response for conflict. They increase during wars. Income inequality, which as already mentioned increases emotions on fiscal issues, is an ingredient for class conflict over redistribution. And finally, we find strong evidence that the more divisive and ideologically polarized members of Congress tend to use more emotional rhetoric.

The new measurement approach and initial descriptive results set the table for a rich spread of further empirical studies. First, further research is needed to understand the role of television in increasing emotional rhetoric. This work could go beyond the introduction of C-SPAN, and in particular could focus on partisan cable news (e.g. [Clinton and Enamorado, 2014] Arceneaux et al., 2016 [Martin and Yurukoglu, 2017]). Such an investigation should consider how electoral incentives interact with new visibility obtained through television to
influence rhetorical choices of politicians.

Second, another open question concerns the relation between emotionality and polarization. As affective polarization in the electorate is on the rise in the U.S and Europe alike (Iyengar et al., 2019), more attention should be devoted to understand the possible feedback loops between polarization and emotive speech in parliaments.

Beyond these substantive avenues, the new emotionality metric could itself be a useful tool to be applied in other empirical contexts. In Congress, analyzing committee debates would be a natural next step to delve deeper into congressional dynamics; measuring emotional expression in newsletters that congressmen send to their constituents would provide for interesting insights into linkages between a politician and her constituency. Outside of politics, news articles or television transcripts would be perfect candidates to provide evidence on how expressed emotion is used for different persuasive and professional purposes.

Finally, our methodology may inform experimental studies of how emotionality in political language influences voters. Using the emotion metric combined with generative language models, it is possible to identify or generate comparable political arguments that differ in their use of emotive language. Causal analysis of how emotions influence voters is needed to validate the mechanism of emotional rhetoric as a strategic response to voter preferences.
References


Hargrave, L. and Blumenau, J. (2020). The declining importance of gender stereotypes for politicians’ style in the uk.


He represented his constituents—the workers, the families, the disadvantaged—and made them proud with his tireless efforts at the statehouse in Topeka.

I thank the gentleman from Arizona, and I assure this House that if the Members would visit the Navajo Reservation, would visit the Navajos in their homes, and see the progress that has taken place, they would be proud of the Congress, they would be proud of the Indian Service, and they would be proud of democracy at work.

His strong and helping hand has always been ready to help a neighboring Oklahoman or a cause close to Oklahoma’s heart and interest, and the Oklahoma delegation is deeply grateful for this neighborly spirit on the part of Mr RAYBURN.

I went to speak today at the Health Security Express, those folks who have come cross-country fighting every single day and talking about health care, making it real for people.

Dear Senator LANGER: Let us congratulate you on your appeal to President Truman In behalf of the starving children and old folks of Germany and Austria.

We know he and his lovely wife, Marilyn, are pleased that the need for his services has passed and that they can enjoy their freedom to travel and visit their children, grandchildren and friends again.

Although tears will fall, we will be so grateful to continue to see you even as I speak, walking lightly in front of us.

Officer Wortham lived and died for these folks, for his friends and his neighbors and his countrymen.

So I rise, Mr Speaker, to note this anniversary of 25 years of service of Nancy D’Alesandro Pelosi, from the State of Maryland, the very proud State of Maryland, to have a daughter like Nancy, and a State that is proud of its citizen servant, Nancy Pelosi.

I am proud to be able to number the the steelworkers among my friends, and I take pleasure in having this opportunity to pay tribute to this great and dedicated union.

Random sample of 10 sentences from the top 1% most emotional sentences, extracted from the top 5000 most emotional documents in the corpus.
I again emphasize that the pending proposed legislation merely represents guidelines for the executive branch to follow prior to the submission of project proposals for consideration by the Congress.

Speaker, I rise to seek a clarification from the manager of the bill regarding the agreement reached by conferees on the procedure for future appropriation requests for Indian irrigation projects.

This amendment contains technical fixes which include a clarification in the weighing provision of the bill and correction of the placement of language addressing observer coverage.

The Senate and House Committees on Government Operations received explanatory statements on these proposed disposals from the GSA several months after the authorizing act and the requirement for the submission of the outlines of the proposed sales to the committees had expired.

In agreeing to waive consideration of S 2009, the Foreign Affairs Committee does not waive any jurisdiction that it has over provisions in that bill, or the right to seek to participate in any conference on that bill, should one occur.

Speaker, I am making the point of order for the express purpose of preventing the consideration of the bill, inasmuch as the public law to which I have referred says that it shall not be in order for either House to consider a bill which contains such a provision.

Mr PILLION Mr Speaker, I ask unanimous consent to revise and extend my remarks and include the text of the bill I have introduced, an explanation of its provisions, and a summary explanation of the criteria contained in the bill.

I make the inquiry merely for clarification: Is it in order for a Senator to propose, even by unanimous consent, the amending of a resolution not then before the Senate for consideration?

The House conferees have agreed to modifications and clarifications of the House amendments which I believe render the bill acceptable as an interim measure pending a complete review of the Bank’s activities and authority. The rule waives all points of order against consideration of the amendments for failure to comply with the provisions of clause 2 of rule 21, which, as I stated earlier, prohibits unauthorized appropriations and legislative provisions in general appropriation bills.

Random sample of 10 sentences from the top 1% most logical sentences, extracted from the top 5000 most logical documents in the corpus.
Table 3: Human Validation

<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Restricted Sample</th>
<th>Restricted Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>Accuracy</td>
<td>Blank</td>
<td>Sample</td>
</tr>
<tr>
<td>Overall</td>
<td>0.874</td>
<td>0.035</td>
<td>1714</td>
</tr>
<tr>
<td>Decade 1</td>
<td>0.842</td>
<td>0.056</td>
<td>72</td>
</tr>
<tr>
<td>Decade 2</td>
<td>0.853</td>
<td>0.062</td>
<td>96</td>
</tr>
<tr>
<td>Decade 3</td>
<td>0.912</td>
<td>0.026</td>
<td>78</td>
</tr>
<tr>
<td>Decade 4</td>
<td>0.812</td>
<td>0.067</td>
<td>90</td>
</tr>
<tr>
<td>Decade 5</td>
<td>0.836</td>
<td>0.081</td>
<td>62</td>
</tr>
<tr>
<td>Decade 6</td>
<td>0.859</td>
<td>0.083</td>
<td>72</td>
</tr>
<tr>
<td>Decade 7</td>
<td>0.856</td>
<td>0.069</td>
<td>130</td>
</tr>
<tr>
<td>Decade 8</td>
<td>0.915</td>
<td>0.008</td>
<td>128</td>
</tr>
<tr>
<td>Decade 9</td>
<td>0.876</td>
<td>0.025</td>
<td>118</td>
</tr>
<tr>
<td>Decade 10</td>
<td>0.957</td>
<td>0.009</td>
<td>114</td>
</tr>
<tr>
<td>Decade 11</td>
<td>0.873</td>
<td>0</td>
<td>126</td>
</tr>
<tr>
<td>Decade 12</td>
<td>0.889</td>
<td>0.029</td>
<td>140</td>
</tr>
<tr>
<td>Decade 13</td>
<td>0.827</td>
<td>0.024</td>
<td>124</td>
</tr>
<tr>
<td>Decade 14</td>
<td>0.869</td>
<td>0.022</td>
<td>134</td>
</tr>
<tr>
<td>Decade 15</td>
<td>0.843</td>
<td>0.061</td>
<td>114</td>
</tr>
<tr>
<td>Decade 16</td>
<td>0.931</td>
<td>0</td>
<td>116</td>
</tr>
</tbody>
</table>

Panel B: Alternative Measures

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sim $\tilde{AC}$</td>
<td>0.856</td>
<td>0.031</td>
</tr>
<tr>
<td>Word Count</td>
<td>0.508</td>
<td>0.142</td>
</tr>
</tbody>
</table>

Notes. This table reports the results of the human validation. Panel A reports the main analysis with pairs formed by sentences with high and low emotionality scores. Panel B reports results from alternative measures. Full Sample indicates the full set of annotated sentences. Restricted Sample - English Comprehension indicates a sample including only responses from coders who passed the English comprehension test. Restricted Sample - Consistent Coding indicates a sample including only responses consistently coded by two independent coders. Accuracy indicates the share of correct guesses over all guesses. Blank indicates the share of questions left blank over the total number of questions. Sample is the number of sentences in the sample.
<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrat</td>
<td>0.027***</td>
<td></td>
<td></td>
<td></td>
<td>0.015***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td></td>
<td></td>
<td></td>
<td>[0.004]</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>0.268***</td>
<td></td>
<td></td>
<td>0.251***</td>
<td>0.156***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.016]</td>
<td></td>
<td></td>
<td>[0.016]</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td>0.168***</td>
<td></td>
<td></td>
<td>0.151***</td>
<td>0.085***</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.026]</td>
<td></td>
<td></td>
<td>[0.026]</td>
<td>[0.016]</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td>0.109***</td>
<td></td>
<td></td>
<td>0.093***</td>
<td>0.051**</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.034]</td>
<td></td>
<td></td>
<td>[0.034]</td>
<td>[0.022]</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.039</td>
<td>-0.072*</td>
<td>-0.091***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.038]</td>
<td>[0.041]</td>
<td>[0.025]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td></td>
<td>0.043***</td>
<td>0.036***</td>
<td>0.015**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.010]</td>
<td>[0.010]</td>
<td>[0.006]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewish</td>
<td></td>
<td>0.053***</td>
<td>0.055***</td>
<td>-0.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.017]</td>
<td>[0.016]</td>
<td>[0.011]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Chamber-Year FE | Y      | Y      | Y      | Y      | Y      | Y      |
| Topic FE        |        |        |        |        |        |        |
| Observations    | 5,593,863 | 5,593,863 | 5,593,863 | 5,593,863 | 5,593,863 | 5,593,863 |
| R-squared       | 0.05   | 0.05   | 0.05   | 0.05   | 0.05   | 0.37   |

Notes. Each column shows the OLS regression of the standardized emotionality score in a given speech on individual politician characteristics. The sample is composed of all speeches pronounced by Democrat and Republican Members of Congress between 1858 and 2014. All specifications include chamber-year fixed effects. Column 6 also include topic fixed effects. Standard errors are clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.
Table 5: Emotionality and Ideological Roll Call Voting

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$(DW_{nom1})^2$</td>
<td>0.122***</td>
<td>0.133***</td>
<td>0.141***</td>
<td>0.142***</td>
<td>0.131***</td>
</tr>
<tr>
<td></td>
<td>[0.020]</td>
<td>[0.013]</td>
<td>[0.013]</td>
<td>[0.013]</td>
<td>[0.014]</td>
</tr>
<tr>
<td>Democrat</td>
<td>0.026***</td>
<td>0.022***</td>
<td>0.018***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.163***</td>
<td>0.158***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.010]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.067***</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.017]</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
<td></td>
<td>0.043*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.024]</td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td></td>
<td></td>
<td>-0.094***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.025]</td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td></td>
<td></td>
<td></td>
<td>0.017***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.006]</td>
<td></td>
</tr>
<tr>
<td>Jewish</td>
<td></td>
<td></td>
<td></td>
<td>0.001</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.010]</td>
<td></td>
</tr>
<tr>
<td>Chamber-Year FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Topic FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>5,533,119</td>
<td>5,533,119</td>
<td>5,533,119</td>
<td>5,533,119</td>
<td>5,533,119</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.05</td>
<td>0.37</td>
<td>0.37</td>
<td>0.37</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Notes. Each column shows the OLS regression of the standardized emotionality score in a given speech on the DW nominate 1st dimension (squared) for the politician-year. The sample is composed of all speeches pronounced by Democrat and Republican Members of Congress, between 1858 and 2014. All columns include chamber-year fixed effects. Columns 2 to 5 also include topic fixed effects. Standard errors are clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.
Figures

Figure 1: Semantic Poles for Emotionality and Cognitionality

(a) Cognitive Language  (b) Emotional Language

Each wordcloud reports the dictionary words that are closest to the respective centroid. (a) describes the cognitive centroid; (b) describes the emotional centroid. Size denotes closeness to the respective centroid. Distance is normalized to the maximum distance by dictionary.

Figure 2: Semantic Poles for Emotionality, Cognitionality and Sentiment

(a) Cognitive Positive Language  (b) Emotional Positive Language

(c) Cognitive Negative Language  (d) Emotional Negative Language

Each wordcloud reports the dictionary words that are closest to the respective centroid. (a) describes the cognitive-positive centroid; (b) describes the emotional-positive centroid; (c) describes the cognitive-negative centroid; (d) describes the emotional-negative centroid. Size denotes closeness to the respective centroid. Distance is normalized to the maximum distance by dictionary.
Figure 3: Emotionality in U.S. Congress by Chamber, 1858-2014

Time series of emotionality in the Senate (red) and the House of Representatives (green).
Figure 4: Emotionality by Topic

Average emotionality by topic, 1900-2014. The emotionality score is demeaned by the average level of emotionality in each Congress number.
Figure 5: Emotionality by Topic Over Time

Time series of emotionality by topic, 1900-2014. Topic Other is excluded.
Figure 6: EMOTIONALITY OVER TIME BY ECONOMIC TOPIC

Time series of emotionality by topic, 1900-2014. Focus on the component of the Economy topic, i.e. Fiscal Policy, Monetary Policy and Economic Policy.
Figure 7: Partisan Differences in Emotionality by Topic

Ratio of average emotionality by topic, 1970-2014, for Republicans over Democrats. The emotionality score is demeaned by the average level of emotionality in each Congress number. We include only policy topics. Procedure, Tribute, Party Politics, National Narrative, Governance and Other are excluded.
Time series of emotionality in the House of Representatives for Democrats (blue) and Republicans (red), 1900-2014. Blue and red areas indicate Democratic majorities in the House of Representatives.
The horizontal axis reports the DW Nominate Score, dimension 1; the vertical axis reports the average emotionality score by bin.
A. Additional Material on Methods

A.1 Text Pre-processing

We report here the pre-processing steps to obtain the document vectors: (1) Remove punctuation, (2) Remove capitalization, (3) Tokenize, (4) Remove digits, (5) Remove words with less than three letters, (6) Assign parts of speech to words, and keep only Adjectives, Verbs, and Nouns, (7) Stemming (Snowball Stemmer), (8) Remove stopwords.

The model is trained on the full set of sentences obtained by splitting the documents in the corpus. The above-mentioned steps are applied to the sentences, and the final corpus is then used as an input to the word embedding model.

A.2 List of Stopwords


A.3 Dictionaries for Sentiment

We start from two short dictionaries used by Demszky et al. (2019) for positive and negative language.
Positive: donat, heart, thought, strength

Negative: hatr, hate, griev, grief, wrong

We exclude the word “solidar” from the original positive dictionary, because in our embedding model it is strongly related to Solidarity, the Polish trade union movement. Most related words to “solidar” are indeed “polish”, “ukranian” and “lithuanian”. The words “love” and “vless” are also excluded as they are not part of the model vocabulary. We enlarge those dictionaries by including the 10 closest words in our model lexicon. We stem them and eliminate those stems that appear in our emotion or cognition dictionaries. The final unique stems are used to construct our positive and negative dictionaries.

Positive: almighti, benedict, bequest, bit, bosom, bounteou, capabl, charit, chariti, comrad, contribut, donor, etern, fortun, frankli, gift, gladden, god, inmost, moment, moral, nonprofit, philanthrop, prestig, pulsat, resili, solac, solicit, son, soul, spiritu, statur, subscript, superpow, tenderest, thee, thing, throb, touch, wonder

Negative: animos, bigot, bigotri, despic, detest, fanatic, heartach, heartbroken, heinou, inconsol, intoler, mistak, mistaken, racism, racist, sadden, someth, strife, vile

A.4 Additional Results from Human Annotations

Table A1 reports an additional assessment of our measure using annotations from alternative sentencing pairing procedures, and measure specifications.

Panel A report the results of different sentence selection strategies, holding fix our measure. In Selection 1, we extract a random sample of sentences from speeches, we exclude sentences with a lot of procedural language, we find their emotional score and randomly pair sentences that come from the top and bottom 1% of the score distribution. In Selection 2, we follow the same procedure without excluding procedural sentences. In Selection 3, we extract a random sample of sentences from speeches, we exclude sentences with a lot of procedural language, we find their emotional score and randomly pair sentences that come from the top and bottom 5% of the score distribution. In Selection 4, we follow the same procedure...
without excluding procedural sentences. All results are consistent with the finding in the
main table. \[3\]

In Panel B, sentences are selected fully randomly. With this pairing process, sentences
in the pair may or may not significantly differ in emotionally. We explore this by comparing
sentence pairs that diverge more along the metric score, indexed in standard deviations of the
metric. When two sentences do not differ in emotionality very much (i.e. the score difference
is between 0 and 1 standard deviation), then coders’ guess is barely better than random. As
the measured divergence between sentence pairs increases, the measured ranking tends to
agree more with the human-judged ranking.

In Panel C, we explore how variations in how the measure is constructed affect its per-
formance. Our main measure is constructed starting form SIF-weighted centroids, that for
the emotional and cognitive poles in the embedding space, and equally weighted document
vectors. In Measure 1, we use unweighted centroids. In Measure 2 both centroids and docu-
ment vectors are unweighted. Results are robust to these variations, even though our main
strategy seems to better approximate human judgement.

A.5 Alternative measure of emotionality: Tf-Idf

This appendix provides results with a more traditional dictionary-based specification for
measuring emotive language. Specifically, for each speech and each dictionary, we calculate
the sum of the frequency of dictionary words. The final score is the ratio between the affect
and the cognitive score:

\[ Y_i = \frac{1 + \sum\limits_{w \in (i \cap A)} f(w)}{1 + \sum\limits_{w \in (i \cap C)} f(w)} \]

Where A is the dictionary of affective words, C is the dictionary of cognitive words, and \( i \cap A \)
and \( i \cap C \) indicate sets of words in speech \( i \) that belong to dictionary A or C. \( f \) is the tf-idf
frequency of word \( w \) calculated on the whole corpus. We test the validity of this measure
against human judgment in Table 3 and indicate it as Word Count. Figure A1 shows that the
trends in emotionality detected with this measure are very consistent with our main analysis.
Table A1: Human Validation - Additional Results

<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Restricted Sample English Comprehension</th>
<th>Restricted Sample Consistent Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Accuracy</td>
<td>(2) Blank</td>
<td>Sample</td>
</tr>
<tr>
<td>Selection 1</td>
<td>0.812</td>
<td>0.052</td>
<td>400</td>
</tr>
<tr>
<td>Selection 2</td>
<td>0.776</td>
<td>0.068</td>
<td>380</td>
</tr>
<tr>
<td>Selection 3</td>
<td>0.799</td>
<td>0.05</td>
<td>360</td>
</tr>
<tr>
<td>Selection 4</td>
<td>0.751</td>
<td>0.075</td>
<td>400</td>
</tr>
</tbody>
</table>

Panel A: Different Sentence Selection

Panel B: Random Sentences

Panel C: Measure Variations

Notes. This table reports the results of the human validation with random sentence pairs. Full Sample indicates the full set of annotated sentences. Restricted Sample - English Comprehension indicates a sample including only responses from coders who passed the English comprehension test. Restricted Sample - Consistent Coding indicates a sample including only responses consistently coded by two independent coders. Accuracy indicates the share of correct guesses over all guesses. Blank indicates the share of questions left blank over the total number of questions. Sample is the number of sentences in the sample.

A.6 Alternative measure of emotionality: Vector Distance

This appendix provides results with a measure of emotionality using the method by Kozlowski et al. (2019). Specifically, starting from our affect and cognition centroid, we take their difference to elicit the affect-cognition dimension. The final score for each document is the cosine similarity between the normalized document vector and the normalized affect-cognition dimension vector:

\[ Y_i = \frac{\vec{d}_i (\vec{A} - \vec{C})}{||\vec{d}_i|| ||\vec{A} - \vec{C}||} \]

Where \( \vec{d} \) is the document vector, \( \vec{A} \) is the centroid of the affect dictionary, \( \vec{C} \) is the centroid of the cognition dictionary, and \( || \cdot || \) indicates the norm. We test the validity of this measure against human judgement in Table B, indicated as Sim \( \vec{A} \vec{C} \). Figure A2 shows that the trends
Figure A1: Emotionality in U.S. Congress, 1858-2014

Time series of emotionality in Congress. The score for each speech is the ratio between the sum of Tf-Idf values for affect words over cognitive words contained in the speech.

The scores in emotionality detected with this measure are very consistent with our main analysis.
Figure A2: Emotionality in U.S. Congress, 1858-2009
Time series of emotionality in Congress. The score for each speech is the cosine similarity between the A-C vector and each document vector.
B Additional Results

B.1 Example Sentences not Containing Lexicon Words

I could go on and on and say the same thing about West Virginia’s coal miners, steel workers, loggers, and chemical plant workers all of whom are truly the hardest working, finest people you ever spend time with.

I know the eyes and ears of Minnesotans and South Dakota and North Dakota residents have been watching and they thank you as well.

Officer Wortham lived and died for these folks, for his friends and his neighbors and his countrymen.

Madam Speaker, this past weekend we remembered the brave men and women who have sacrificed so much for this Nation.

No matter how we say it, the Sky Tavern Junior Ski Program in northern Nevada deserves our special recognition and congratulations.

Every weekend Ruthie and I travel around my district and often meet amazing people, individuals who are truly dedicated to being the backbone of our community.

President, I am delighted to join my colleagues in paying this highly deserved tribute to a great friend and neighbor, MARGARET SMITH.

When the parade of October 15 comes and Mr Aristide is hoisted to shoulders of his countrymen and there is a great parade and celebration, something will be lacking in that country, and something that we have created will exist in that country.

When I go home today and I meet those folks that I represent, the people who are not going to get one iota of a tax break on relief, the people in my district currently are probably the hardest working folks, senior citizens, that have paid their way, that have given us the riches that we have in this country.

And generally the crowds that come to those events are older folks, senior citizens especially in Florida, veterans of many wars.

<table>
<thead>
<tr>
<th>Table A2: MOST AFFECTIVE SENTENCES WITHOUT DICTIONARY WORDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Random sample of 10 sentences from the top 1% most emotional sentences, extracted from the top 5000 most emotional documents in the corpus. All sentences with dictionary words are excluded.</td>
</tr>
</tbody>
</table>
I would ask the Senator from Wyoming if he shares my view that it was the intention of the conferees that funds be released under this provision only in the discretion of the Attorney General, and that the criteria contained within the provision are intended only to determine when States and localities may request such funds.

The conferees accepted the 4-year extension proposed by the Senate, with the maximum annual authorization retained at $5 million.

The amendment, as further modified, is as follows: "Provided, That any reprogramming submission under this General Provision shall be referred concurrently to the House and Senate Committees on Appropriations, the Senate Committee on Energy and Natural Resources, and the House Committee on Interior and Insular Affairs; Provided further, That such reprogramming submissions shall be submitted to the aforementioned Committees at least thirty days prior to implementation of such reprogramming proposals."

The distinguished chairman of the subcommittee, Senator ABDNOR, has already outlined the aggregate total for the bill, but I believe that they bear some repeating.

The conferees recommend an appropriation of $14,653,000 for the Office of Technology Assessment and a new personnel ceiling of 139.

Finally, the amendment provides that the Secretary of the Treasury may not implement the provisions of the act unless he is satisfied that the selection process was conducted in accordance with these criteria.

This criteria outlines that before the President imposes, expands, or extends export controls under this section, he shall submit to Congress a report, and one, two, three, four, five different stipulations.

Speaker, I would call the gentleman’s attention to page 3 of the joint resolution now before the House, and address his attention to line 11 and the words, as follows: "Provided, That no provision which is included in an appropriation Act enumerated in this subsection and the independent offices appropriation bill is enumerated in this subsection but which was not included in the applicable appropriation Act for 1967 and this provision relating to section 204 was not applicable to 1967 as I understand which by its terms is applicable to more than one appropriation, fund, or authority shall be applicable to any appropriation, fund, or authority provided in this joint resolution unless such provision shall have been included in identical form in such bill as enacted by both the House and Senate."

It comes in on page 16, line 2, after the words ""District of Columbia, "" and proposes to strike out the period and insert a comma and the words ""and data related to proposed appropriations incorporated in the annual budget transmitted by the President."

Now, the criteria and procedures set forth in such final proposal shall take effect at the end of the first period of 60 calendar days of continuous session of the Congress after the date of submission unless either the Senate or the House adopts a resolution during such period stating that it does not approve such final proposal.

---

**Table A3: Most Cognitive Sentences without Dictionary Words**

Random sample of 10 sentences from the top 1% most logical sentences, extracted from the top 5000 most logical documents in the corpus. All sentences with dictionary words are excluded.
B.2 Most Emotional Members of Congress

We consider Members of Congress who have pronounced at least 10 speeches since 2009. Table A4 reports, for each Chamber, the ten politicians that are associated with highest and lowest average emotionality from 2009 to 2014.

Table A4: Most Emotional and Cognitive Members of Congress

<table>
<thead>
<tr>
<th>House</th>
<th>Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>State</strong></td>
</tr>
<tr>
<td>Nancy PELOSI</td>
<td>CA</td>
</tr>
<tr>
<td>Walter JONES</td>
<td>NC</td>
</tr>
<tr>
<td>Robin KELLY</td>
<td>IL</td>
</tr>
<tr>
<td>Joyce BEATTY</td>
<td>OH</td>
</tr>
<tr>
<td>Roger WILLIAMS</td>
<td>TX</td>
</tr>
<tr>
<td>Edward WHITFIELD</td>
<td>KY</td>
</tr>
<tr>
<td>Robert ADERHOLT</td>
<td>AL</td>
</tr>
<tr>
<td>Melissa BEAN</td>
<td>IL</td>
</tr>
<tr>
<td>Justin AMASH</td>
<td>MI</td>
</tr>
<tr>
<td>Frederick BOUCHER</td>
<td>VA</td>
</tr>
</tbody>
</table>

B.3 Emotionality by State

We collapse our dataset on emotionality by speech at the State level, for two different time periods (1958-2008, 2009-2014). Figure A3 reports the relative use of emotionality across States for the two time periods.

B.4 Emotionality and Sentiment

We further seek to investigate the relation between emotionality and sentiment, by distinguishing positive versus negative sentiment. For this purpose, we made analogous lexicons, starting with the seed lexicons from Demszky et al. (2019), which have 7 positive words and 5 negative words. We then enlarge those dictionaries to include, for each dictionary word, the 10 most similar words in our lexicon. The complete word lists are available in Appendix A.3. Let $\vec{P}$ and $\vec{N}$ be the centroids of the positive and negative dictionaries respectively. The measure of sentiment for each document $i$ is the ratio between its cosine similarity with the positive pole and the negative pole:
Figure A3: Emotionality in U.S. Congress by State, 1858-2008 and 2009-2014
Aggregate score of emotionality in U.S. Congress by State for historical (1858-2008) and recent periods (2009-2014).

\[ S_i = \frac{\text{sim}(\vec{d}_i, \vec{P}) + 1}{\text{sim}(\vec{d}_i, \vec{N}) + 1} \]

Figure A4 shows the joint distribution of emotionality and sentiment across speeches. There is no stark preponderance of positive or negative sentiment for different levels of emotionality. This suggests that emotionality and sentiment are two distinct dimensions in our corpus. Hence, the affect-cognitive dimension is capturing a distinct feature of language.

To explore the role of sentiment within our emotion and cognition dictionaries, we classify each word in the two dictionaries into a positive or negative sentiment subset. We do that by computing the sentiment score for each word in our dictionary, and assigning the label of the closer centroid. Hence, we divide our initial dictionaries into four subsets, and we construct centroids for the positive-emotive words (\( \vec{A}_+ \)), negative-emotive words (\( \vec{A}_- \)), positive-cognitive words (\( \vec{C}_+ \)), and negative-cognitive words (\( \vec{C}_- \)). As an indication for what semantic dimensions are encoded, Figure 2 shows clouds for the non-dictionary words in our lexicon that are closest to the centroids: positive-cognitive, positive-emotive, negative-cognitive, and negative-emotive, respectively. Word size indicate closeness to the centroid. The word clouds illustrate the clear, intuitive, and distinct flavors of language at each lin-
guistic pole.

Figure A4: EMOTIONALITY AND SENTIMENT IN U.S. CONGRESS, 1858-2014
Joint distribution of Emotionality and Sentiment in U.S. Congress.

B.5 Readability over Time

In this section we explore how readability or simplicity of Congress speeches has evolved over time. For each speech, we calculate the average sentence length (including all tokens). Analogously, we calculate average word length at the speech level. We then take yearly averages of the speech-level averages and plot them over time.

In Figure A5, we plot the evolution of average sentence length over time. In Figure A6, we plot the evolution of average word length over time. Both measures are normalized with
respect to their maximum value. The two measures reveal that there is no clear pattern in language complexity over time.

Figure A5: Readability in U.S. Congress, 1858-2014
Time series of readability as average sentence length in U.S. Congress.

B.6 Full Time Series

In this section, we report the full aggregated time series for emotionality in Congress (Figure A7). In the rest of the Appendix, we present analysis of robustness on this main Figure.

B.7 Emotionality Time Series in Google Books Corpus

In this section, we account for possible time variations in the level of emotionality in the English language. We calculate our emotionality score on the corpus of Google books unigrams, and average the score by year. Figure A8 shows that emotionality has on average declined in that corpus.

We further normalize our main score by the metrics constructed on Google unigrams. If changes in the language drive our results, then the trend should disappear once we plot the
normalized score. This does not seem to be the case, as of Figure A9.

B.8 Emotionality by Individual Characteristics

Table A5 reports additional robustness checks on Table 4. It also includes estimates for restricted time periods, in columns 3 to 5. This last estimates reveal that there is no substantive change in the correlation between individual characteristics and emotionality over time. The same is confirmed by the time series in Figure A10.

B.9 Emotionality by Detailed Topics

B.10 Prevalence of Topics over time

We report the relative prevalence of broad topic categories in Congress speeches over time. Figure A12 reports the proportion across all topics. Figure A13 looks at the relative proportion of topics, after eliminating the procedural speeches.
Figure A7: EMOTIONALITY IN U.S. CONGRESS, 1858-2014
Time series of emotionality in U.S. Congress, global average.

**B.11 Main Time Series without Procedure**

Figure A14 reports the main time series after excluding procedural speeches, as identified by the Procedure topic. The time trends are not affected by this robustness check.

**B.12 Emotionality and Opposition**

Table A6 reports the regression estimates on how emotionality varies by opposition status.

**B.13 Emotionality and Ideology**

Table A7 reports additional robustness checks that refer to Table 5 in the main text.
Figure A8: Emotionality in Google Books
Time Series of emotionality in Google unigrams, 1900-2009. The score is calculated for each year, over all available unigrams.

Figure A9: Normalized Emotionality in U.S. Congress, 1900-2009
Time Series of emotionality in Congress. The score is normalized by the yearly average emotionality score in Google unigrams.
### Table A5: Emotionality and Individual Features - Additional Controls

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrat</td>
<td>0.015***</td>
<td>0.015***</td>
<td>-0.022***</td>
<td>0.017***</td>
<td>0.097***</td>
</tr>
<tr>
<td></td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.010]</td>
</tr>
<tr>
<td>Female</td>
<td>0.157***</td>
<td>0.156***</td>
<td>0.092***</td>
<td>0.185***</td>
<td>0.107***</td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.010]</td>
<td>[0.017]</td>
<td>[0.017]</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Black</td>
<td>0.085***</td>
<td>0.086***</td>
<td>0.068***</td>
<td>0.029*</td>
<td>0.085***</td>
</tr>
<tr>
<td></td>
<td>[0.016]</td>
<td>[0.016]</td>
<td>[0.025]</td>
<td>[0.017]</td>
<td>[0.026]</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.051**</td>
<td>0.051**</td>
<td>0.091**</td>
<td>0.051**</td>
<td>0.028</td>
</tr>
<tr>
<td></td>
<td>[0.022]</td>
<td>[0.022]</td>
<td>[0.040]</td>
<td>[0.024]</td>
<td>[0.032]</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.091***</td>
<td>-0.093***</td>
<td>-0.064**</td>
<td>-0.094**</td>
<td>-0.124***</td>
</tr>
<tr>
<td></td>
<td>[0.025]</td>
<td>[0.025]</td>
<td>[0.029]</td>
<td>[0.038]</td>
<td>[0.039]</td>
</tr>
<tr>
<td>Catholic</td>
<td>0.015**</td>
<td>0.015**</td>
<td>0.046***</td>
<td>0.012</td>
<td>-0.010</td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.009]</td>
<td>[0.009]</td>
<td>[0.012]</td>
</tr>
<tr>
<td>Jewish</td>
<td>-0.000</td>
<td>0.000</td>
<td>0.007</td>
<td>-0.030*</td>
<td>0.014</td>
</tr>
<tr>
<td></td>
<td>[0.011]</td>
<td>[0.011]</td>
<td>[0.017]</td>
<td>[0.016]</td>
<td>[0.018]</td>
</tr>
<tr>
<td>Speech Length</td>
<td>-0.004***</td>
<td>-0.005***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.001]</td>
<td>[0.001]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentiment</td>
<td></td>
<td></td>
<td></td>
<td>0.118***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.008]</td>
<td></td>
</tr>
<tr>
<td>Chamber-Year FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Topics FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Observations</td>
<td>5,593,863</td>
<td>5,593,863</td>
<td>1,857,507</td>
<td>1,908,925</td>
<td>776,515</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.37</td>
<td>0.37</td>
<td>0.32</td>
<td>0.36</td>
<td>0.51</td>
</tr>
</tbody>
</table>

**Notes.** Each column shows the OLS regression of the standardized emotionality score in a given speech on individual politician characteristics. The sample is composed of all speeches pronounced by Democrat or Republican Members of Congress between 1858 and 2014 in columns 1 and 2, and in the indicated time periods in columns 3 to 5. All specifications include chamber-year and topic fixed effects. Standard errors are clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.
Figure A10: Emotionality in U.S. Congress by Gender and Race, 1914-2014
Time series of emotionality in U.S. Congress by gender (male vs. female) and race (white vs. non-white).

Table A6: Emotionality and Opposition

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposition</td>
<td>0.112***</td>
<td>0.067***</td>
<td>0.020***</td>
<td>0.020***</td>
<td>0.020***</td>
<td>0.020***</td>
</tr>
<tr>
<td></td>
<td>[0.005]</td>
<td>[0.003]</td>
<td>[0.007]</td>
<td>[0.007]</td>
<td>[0.007]</td>
<td>[0.007]</td>
</tr>
<tr>
<td>Divided Government</td>
<td>0.001</td>
<td>0.001</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.007]</td>
<td>[0.007]</td>
<td>[0.007]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of Speech</td>
<td></td>
<td>-0.007***</td>
<td>-0.008***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>[0.001]</td>
<td>[0.001]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentiment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.172***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[0.007]</td>
<td></td>
</tr>
<tr>
<td>Chamber-Year FE</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Topics FE</td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Speaker FE</td>
<td></td>
<td></td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.05</td>
<td>0.37</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
<td>0.41</td>
</tr>
</tbody>
</table>

Notes. Each column shows the OLS regression of the standardized emotionality score in a given speech on opposition status. The sample is composed of speeches pronounced by Democrat and Republican Members of Congress, between 1858 and 2014. Opposition is a dummy equal to one if the speech is given by a member of the party representing the minority in a given chamber and year. Standard errors are clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.
Figure A11: Emotionality by Topic
Emotionality by Topic, for detailed topics, 1900-2014
Figure A12: Prevalence of Topics in U.S. Congress, 1900-2014
Prevalence by Broad Topic Categories in the U.S. Congress.

Figure A13: Prevalence of Topics in U.S. Congress w/o Procedure Topic, 1900-2014
Prevalence by Broad Topic Categories in the U.S. Congress, excluding procedural speeches.
Figure A14: Emotionality in U.S. Congress w/o Procedure Topic, 1858-2014
Time series of emotionality in the Senate (red) and the House of Representatives (green),
excluding procedural speeches.
Table A7: Emotionality and Ideology - Additional Controls

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(DWnom1)$^2$</td>
<td>0.127***</td>
<td>0.320</td>
<td>0.129***</td>
<td>0.133***</td>
<td>0.135***</td>
</tr>
<tr>
<td></td>
<td>[0.013]</td>
<td>[0.253]</td>
<td>[0.014]</td>
<td>[0.014]</td>
<td>[0.013]</td>
</tr>
<tr>
<td>Democrat</td>
<td>0.018***</td>
<td>0.018***</td>
<td>0.044***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.004]</td>
<td>[0.004]</td>
<td>[0.004]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.158***</td>
<td>0.157***</td>
<td>0.147***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.010]</td>
<td>[0.010]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0.067***</td>
<td>0.068***</td>
<td>0.046***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.017]</td>
<td>[0.017]</td>
<td>[0.017]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.044*</td>
<td>0.044*</td>
<td>0.031</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.024]</td>
<td>[0.024]</td>
<td>[0.024]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>-0.094***</td>
<td>-0.096***</td>
<td>-0.095***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.025]</td>
<td>[0.025]</td>
<td>[0.026]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catholic</td>
<td>0.017***</td>
<td>0.017***</td>
<td>0.016***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.006]</td>
<td>[0.006]</td>
<td>[0.006]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jewish</td>
<td>0.001</td>
<td>0.002</td>
<td>-0.002</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.010]</td>
<td>[0.011]</td>
<td>[0.010]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech Length (log)</td>
<td>-0.004***</td>
<td>-0.005***</td>
<td>-0.005***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.001]</td>
<td>[0.001]</td>
<td>[0.001]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sentiment</td>
<td>0.121***</td>
<td>0.127***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[0.008]</td>
<td>[0.008]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Chamber-Year FE     | Y          | Y          | Y          | Y          | Y          |
Topic FE            | Y          | Y          | Y          | Y          | Y          |
Chamber-Year X Topic FE | Y          |          |            |            |            |
Speaker FE          | Y          | Y          | Y          | Y          |            |

Observations        | 5,531,995  | 5,532,655  | 5,533,119  | 5,533,119  | 5,533,119  |
R-squared            | 0.40       | 0.41       | 0.37       | 0.37       | 0.37       |

Notes. Each column shows the OLS regression of the standardized emotionality score in a given speech on the (absolute value of the) DW nominate score for the politician. The sample is composed of all speeches pronounced by Democrat or Republican Members of Congress, between 1858 and 2015. DW nominate 1 is the absolute value of the DW nominate score, first dimension. DW nominate 2 is the absolute value of the DW nominate score, second dimension. All specifications include chamber-year fixed effects, length of speech and dummies for sentiment quintiles. Columns 1, 2 and 4 also include politician fixed effects. Standard errors are clustered at the politician level. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.
C Online Appendix: Available Upon Request

C.1 Most emotional and cognitive sentences by decade

In the next table, we report some prototypical speech snippets that correspond to the emotional and cognitional poles, for each decade in our corpus. Analogously to Tables 1 and 2, we select the 10000 most emotional speeches and the 10000 most cognitive speeches by decade. We then extract 10 random sentences among the 5% highest and lowest scoring sentences within the sample. Again, there is a clear differential in the tone, following intuitive language for logic and emotion across all decades.
The State of New Hampshire may look upon this day and these names we celebrate as her pride and special glory.

He knows what I mean, and he knows whether they have endeavored in vain to satisfy their people, the people among whom they lived and who are their constituents, that out of it would come a safer and better order of things, in which men could entertain whatever convictions they pleased and utter them with impunity at the South and in Mississippi as they can in Massachusetts, and he who puts a straw across the path of the humblest voter in Massachusetts will have the whole power of her judicial and her executive officers visited upon him to the utmost.

The mountains round about the home of his youth were not more firmly fixed in their abiding place than the faith in God and His law which came to him with his first breath; and their sides were not more rugged or hard to climb than the path along which his early footsteps were led.

We are not only cursed by the want of troops, but we are cursed in another way in those Territories.

Although is body is overscarred with wounds received while defending the flag of his adopted country, yet this dismissal is the deepest wound of all inflicted upon that gallant and noble officer.

That day has passed, at least it is so in this country, and to their honor be it said, to the Catholics and Baptists of the United States the glory is due to them having been the first two denominations the Baptists a little in the lead to establish on this continent full, unqualified religious freedom.

Eliza Pinkston’s husband was killed in the dead hour of night by a democratic band of marauders and her child was taken from her arms and butchered.

It is a question of endurance, as it was announced, and if it becomes necessary we can divide into squads and fight you just as well as the whole can fight you, and we honestly believe we can endure with you, and we propose at least to try it.

And that was the terrible fellow whowasthere in the wonderful uniform awing the black voters and frightening them from exercising their constitutional privileges I Thus passes away the glory of that calico uniform.

Capital hero achieves a heartless victory over the debtor and the laborer, and the suffering which this victory may bring to countless firesides may sooner or later provoke retaliation.

Of course if this can be disposed of without debate, I have no objection to any suggestion which may be made; but if it is proposed to have a debate there on what is called " civil-service reform, " I think we have not time for that.

It is in these words: From the facts thus presented, it clearly appears that the bill Which was a bill covering all these claimsthat the bill under consideration is not necessary to remedy any default of the old continental congress, nor is it necessary to supply any sort of omission upon the part of the United States.

That may be true, not from anything reported by the Committee on Roads and Canals; but nevertheless here is the rule, by which it appears there is express provision made for the consideration by the Committee on Railways and Canals of all matters touching the improvement of the navigation of rivers.

I make the point of order on that that it proposes to instruct the conferees to change what the two Houses have agreed to.

But since the amendment in no wayaffects the money objects of the bill, the Chair prefers to sustain the point of order on the ground that the amendment is not in his judgment a provision that tends to retrench expenditure, while it must be a provision that the gentleman from New York introduces forthe purpose of effecting a new regulation or a change of existing law.

That is reported from the Committee on the Revision of the Laws with the unanimous sanction of that committee.

I will read the sentence: And no Department or officer of the Government shall, during said fiscal year, make any contract or incur any liability for the future payment of money under any of the provisions of title 26 of the Revised Statutes of the United States an.

I only ask now for the decision of the Chair whether it is not in order to proceed with the consideration of this bill under the rules of the House and under the precedents which have been established.

The motion was agreed to; and the Senate, as in Committee of the Whole, resumed the consideration of the bill to authorize the construction of a narrow-gauge railroad from Bismarck to the Black Hills.

We have stricken out, it will be observed, the appropriation of $1,000 and inserted $500, and we have added: And for the purpose of limiting the appropriations, the head of each Department shall report to Congress, at the beginning of the next session of CongressWhich is only about four months off the condition of the several libraries in his Department, the number of volumes in each, and duplicates in all, and a plan for consolidating the same, so that hereafter there shall be but one library in each Department, and the amount of annual appropriation necessary to maintain said departmental library.
The Secretary of the Interior will hear the case ex parte; these men will have the ablest lawyers in the country, they will be down here besieging the Department, the atmosphere around them will be all in favor of this wealthy corporation, and what can the poor homesteader up in Michigan do to defend himself against such a conglomeration?

We have not realized the suffering of those who have bought our wheat and our corn, what sacrifices they have made to pay for them.

I recollect a celebrated orator stated it was impossible to convey an adequate conception of the horrors of war unless you described a single case, that of a family, for instance, where the mother and her lovely daughters lived in happiness and apparent safety.

I desire to say that the president, the cashier, and the directors of the Cleveland bank referred to are among the ablest, richest, and best men of both political parties in the northern part of the State.

If his company was reduced in battle to the number of twenty, he might be proud then of the prowess of those men who met with misfortune; but when they are reduced by desertion; or when they are reduced because of a refusal on the part of Congress to fill up those fragments of companies and regiments, then he is not proud.

Is a man who left the Army a perfectly healthy man who is perfectly able as a clerk or stenographer or anything else to make a handsome living, because he has been disabled by the kick of a horse or anything else in the last few years to get a pension?

I simply desire to say this: There are many captains’ widows drawing much larger pay than is proposed to be given to this lady.

Your magnificent docks, lining your Atlantic coast from New York to Galveston, would rot to the water’s edge and your once vast carrying trade—alas, no longer vast, but dwindled under Republican rule to that of a fifth-rate power—would be eaten up by the barnacles of the ocean, every vessel of it.

Each one became a political emissary among the negroes who were hired by the whites, or living on rented patches of their plantations; the struggle of each was to get twenty-five little negroes together and obtain a petition from their fathers or mothers to the school board for the erection of a school-house, and his appointment as their preceptor; for it must be remembered from reading Mr. C. Briide’s evidence that the law gave an absolute right to the parents of each twenty-five negro children, no matter whether they paid a dollar of tax or not, no matter though they might be living on another man’s place and only there for a limited time, to have a school-house furnished and a schoolmaster appointed for their accommodation.

I repeat what I said to-day, and I do it under the solemnity of the position I hold on this floor, that ladies of the highest respectability, ladies of real accomplishments, ladies who have enjoyed wealth and luxury in life, who are now strong and active and ready to work, have come to me in the Marble room of the Senate Chamber, with the blanch of hunger on their faces, asking for opportunity to have a school-house furnished and a schoolmaster appointed for their accommodation.

I move that the Senate proceed to the consideration of what is called the anticontraction bill. The motion was agreed to; and the Senate, as in Committee of the Whole, resumed the consideration of the bill to provide against the contraction of the currency, and for other purposes.

President, the precise condition of the bill now is this: the Senate has voted for the retention of the provision recommended by the Senate Committee on Pensions extending a pension to all who need it.
From a military prison he went forth to the struggle of life, without education and without resources, amid a people prostrated by a great defeat in war and impoverished by its desolating consequences.

These are gotten out by the one-gallused, poor, barefooted men in the mountains.

They fell on each other’s necks—they embraced and wept.

How is the mighty fallen, the strong staff broken and the beautiful rod!

The Secretary read as follows: Ignoring his inferiority of official rank, which, according to established rules the world over was below that of minister resident, between a consulgeneral and charge d’affaires, with the utmost effort of will controlling my outraged sensibilities, while suffering a terrible affliction at the recent sad drowning of a gifted and beloved daughter, I endured this insolent treatment after thirteen years of service as United States minister, without a stain ever before attempted to be made on my official honor or my fidelity to American prestige and to American interests, never during my seventy-three years of life having lifted my voice, my hand, or my rifle against the flag of this American Republic.

We are told that since the flood the legislature of the great Empire State of the South—and it is a great Empire State, of which its citizens are justly proud and of which the citizens of the whole country are proud—we are told that the legislature of Texas has assembled, and we are informed by another gentleman that $5,000 has been appropriated by that body for the relief of the identical sufferers.

There has been a struggle all the time against all banks of issue by a large part of our people, and a struggle between the advocates of State banks and those of national banks.

It is no time for boasting when we are mourning for our dead.

President, within a few years past I have seen it often suggested by way of criticism that it was a waste of time and an improper interruption of our public duties to pause long enough in our daily toil to say farewell in fitting terms over the graves of our fallen comrades.

From the beginning to the sad ending of his public career he held without one wavering moment not only the confidence, but the affection of the people among whom he lived, for whom he labored, and beside whose departed loved ones he has been laid to sleep until the gray dawn of another morning, when those that sleep shall awake, and awake, as he believed, to another, a higher, and a better life.

The Secretary read as follows: Resolved, That the Committee on Finance be, and they are hereby, directed to prepare a comparative statement of the customs laws from 1890 to 1897, inclusive, together with official statistics and official data relating thereto; and the provisions of the Senate resolution of March 19, 1897, are hereby continued in force for this purpose.

I ask that the Committee on Appropriations be discharged from its further consideration, and that all the papers be referred to the Committee on Territories, in order that that committee, in any bill for the admission of the Territory of Utah into the Union as a State, may make provision for its reimbursement.

Now, in Rule XXVI, clause 2, we find the further provision that The second and fourth Mondays in each month shall, when claimed by the Committee on the District of Columbia, be set apart for the consideration of such business as may be presented by said committee.

Resolved by the Senate requesting the Secretary of War to furnish revised estimate of survey of the Back Creek route, etc.

The Chair has referred to a decision which covers exactly the question now under consideration, where an amendment was offered which, while proposing!

The amendment simply proposes to strike out the provision for a new office which this bill proposes to create.

On amendments numbered 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, and 112: Makes certain necessary verbal corrections proposed by the Senate in the text of the provision to apportion the Territory of Oklahoma and appropriates $1,000 for the expenses of such apportionment.

Unless it be a bill requiring its first consideration in the Committee of the Whole House on the state of the Union, and the Speaker has ruled that this amendment itself requires its consideration in such committee, therefore the bill is here for no other purpose than for reference to an appropriate standing committee of the House by the Speaker, and after he has indicated the proper reference, then it is in order to move its reference to another committee.

On amendment numbered 180: Appropriates $150,000, as proposed by the Senate, for the Nicaragua Canal survey; and On amendment numbered 190: Inserts the provision proposed by the Senate authorizing the Joint Committee on Printing to have prepared plans for additions to the Government Printing Office.

In addition to that extensive provision in the amendment, according to the text already read by the Clerk, it is not germane to this bill and especially to the section under consideration, and therefore is out of order.
At this camp 20,000 troopers visited and patronized it.

No harder fighting was done during the siege than was done by the men from the American ships of war, and no armed force from any foreign nation exhibited greater courage, steadfastness, bravery, and devotion than did the American marines and blue jackets during those trying days.

Success attended his every footstep, and his people applauded and rewarded his steady advance.

In other words, the volunteers fought in 33 per cent more actions alone than the regulars fought in alone.

I should like to know, in his experience on the District of Columbia Committee, of which he is an old and influential member, if he has not sometimes seen these street car companies looking one way and walking another?

Now, while we are all interested in having the naval parade of the ships of our fleet that have gone to the Pacific, in the harbor of San Francisco, as great and magnificent as may be, I am unwilling, even for so great and commendable a purpose, to do that which I think is in violation of the Constitution of my country and the rights of the citizens of the country and put the power in the hands of the head of a Department to make a crime and have that power become transferable and migratory at the will of the President.

For the past twelve months the country has been regaled with an exhaustive and learned argument as to whether or not the President of the United States had the right to discharge a lot of kinkyheaded niggers from the army, who, in a drunken riot, shot up a helpless and defenseless people.

As we stood there and heard the beautiful ritual of the Episcopal Church read among the flowers that filled the large hall of the mansion, sent by many friends, we knew that we were attending officially the obsequies of a character who in his own home received the most precious tribute that can be given to a man.

I did not know this matter was coming up until a minute ago, but I take this special opportunity to call attention to it because of one circumstance which may probably be thought to indicate an indifference on our part to the memory of Lafayette and a chill in our gratitude toward that beloved benefactor.

His ship was wrecked in port, and he had only attained the reward of his well-deserved promotion when the summons came to prepare for that change which must come to all the living.
Their tariff law, carried into effect, then ruined our industries, put thousands of workingmen out of work, and so destroyed the market for what the farmer had to sell.

Military discipline may compel the lads of the Navy to sing this song, but no power on earth can compel a free people, as we claim to be, to sing it.

Nor loses faith in man; but does his best. Nor ever mourns over his humbler lot. But with a smile and words of hope, gives zest to every toiler; he alone is great, Who by life heroic conquers fate.

When the generations yet unborn will behold it they will recall the fact that the martyred President sprung from the loins of an humble farmer and frontiersman; that he rose to the highest office within the gift of a mighty and free people; that he illustrates the wonderful possibilities of American citizenship; that he preserved the American Union; that his clear judgment and patriotic purposes brought order out of chaos; and that a grateful and reunited country, desiring to honor his memory, has erected this magnificent memorial to Abraham Lincoln in token of the love, the gratitude, and the veneration with which its citizens regard one of the greatest of all mankind.

Behold a contrast that throws light upon the Idle host of England's unemployed, marching despondently through streets whose shop windows are crowded with wares of German work.

If this exposition is in San Francisco, Japan will be its nearest neighbor; we should expect her to exhibit and attend there largely, and I would like to know whether you can give any assurances that toward this splendid, powerful people the temper of California will change, and that as the Nation's guests they will be treated with that friendly and respectful spirit they deserve.

Look, again you may behold it exemplified on farm and field, where men in sun and storm toil on through the long days that they may gain a livelihood for those they love.

I command you to mark my illustration: Senators, I choose your boy or your brother, and he works for a living; he is a clerk in a store, depending upon his salary to educate his boy or to send his little girl to school, struggling to pay his rent and maintain his family; or he works in the factory or in the mill; he is a toiler living week by week, and without that week's allowance can not maintain his family.

An old farmer was very proud of his pack of dogs, and among them he had a greyhound.

I want Secretary Redfield to know that we in Chicago, at least, do not approve of his attitude during the time that this investigation was being made by him, and if we had our way we would ask for his resignation from the Cabinet on account of the insulting attitude he assumed toward the people who had wives, daughters, brothers, and sisters lying dead on the decks 1916.

On the 2d of March a year ago, in the consideration of bills then pending, the conference committee agreed to the provision exactly in the shape in which this joint resolution presents it.

The information has already been compiled by the Chief of Engineers, who has furnished it to some of us, including the chairman of the Committee on Appropriations, for the purpose outlined by the gentleman from New York.

There is no other apportionment known to the Constitution except that according to the census or enumeration; and of course the proposed amendment would be construed together with the other provisions of the Constitution.

The motion was agreed to, and the Senate, as in Committee of the Whole, resumed the consideration of the bill to create a court of commerce and to amend the act entitled "An act to regulate commerce," approved February 4, 1887, as heretofore amended, and for other purposes.

The motion was agreed to, and the Senate, as in Committee of the Whole, resumed the consideration of the bill to create a court of commerce and to amend the act entitled "An act to regulate commerce," approved February 4, 1887, as heretofore amended, and for other purposes.

I take it for granted, the chairman will agree that the House ought to have in the report of the committee sufficient data to know what changes would be made in the Revised Statutes.

I understand, that it is proposed to reinsert that provision.

I understood from the argument of the gentleman from Illinois himself that he did not contend that his amendment was germane to the proposition pending before the House, but contends that it is germane because the proposition pending in the house amends a certain existing statute, and the amendment that he proposes amends or adds to that statute additional provisions to those proposed in the pending bill.

I would not object to a provision that would authorize the modification of these contracts, but I do not believe that because these two instances can be singled out it is therefore a justification for the enactment of this provision.

Accordingly the committee rose; and the Speaker having resumed the chair, Mr ADAIR, Chairman of the Committee of the Whole House on the state of the Union, reported that that , committee, having had under consideration the bill relating to the assessment for taxation of real estate in the District of Columbia, -and for other purposes, had directed him to report back the same to the House with sundry amendments, with the recommendation that the amendments be agreed to and that the bill as amended do pass.
Anteus became a mighty giant and wrestler of Libya.

And, in addition to that, we paid for the food that those servants consumed during the period we x-were at the Hotel de Crillon.

We have made it a principle of the race in the old country and here for all time in the past, and I hope for all time in the future, that we shall not constantly burden the people with taxes permanently in order to be ready for war whenever war should break out, but that when war should break out we would spur ourselves to the very utmost to meet it with the energy of a great people and the intensity of a great struggling folk called to the struggle by patriotism and by a love of liberty and by a love of civilization.

I have seen there gangs of shackled prisoners, followed by men with rifles or; clubs to keep them in line, gazed at by every passer-by.

I submit to the Senators on the other side of this Chamber that while they are holding up legislation looking to the benefit of our soldiers who won the war, while they are blocking legislation looking to proper compensation for our boys, they might at least permit this road building to go on, because in this way they can express their appreciation of and gratitude to the great rank and file of our people who gave their sons to fight and die for our country.

It is true that when we get fortunes exceeding $100, 000, 000 the continual increase of those fortunes in the hands of one or two individuals is a menace to our social fabric; no one can deny it; and if those large fortunes are divided, either through an estate tax or through previous division, as is suggested by the Senator from New York, it will be a good thing for the public welfare, however they may be divided, and, as the Senator from Ohio suggests, for the family as well.

In truth he was Strong in argument, was a tireless worker and loved a fight.

They recovered the lost fields of France; they revived the courage of the Allies; they won for posterity a fight that had been lost, and they saved for humanity the ideals of a liberty-loving people.

Your bill would have a wonderful moral effect, if it became a law, which would easily be seen by the thousands and thousands of Germans who would flock to get their papers and who would thus swell the ranks of Uncle Sam's best and most useful citizens.

It just happened that this dinner was the first anniversary of the conception of a movement led by him to turn over to the starving children of Belgium the fund which the club had for the erection of a new clubhouse and which Col.

It carries the same provision, and even a broader provision, than the Langley bill carried.

This is what the Chair thinks: The rule providing that "no request by a Senator for unanimous consent for the taking of a final vote on a specified date upon the passage of a bill or resolution shall be submitted to the Senate for agreement thereunto until, upon a roll call ordered for the purpose by the presiding officer, it shall be disclosed that a quorum of the Senate is present," when a proposed unanimous consent agreement is presented The Senator from Colorado. If I understand him, suggests to the Senator from Idaho that the amendment which was agreed to in the place where the Senator from Idaho suggested it be inserted should be transposed so as to follow the word "support," in line 5, and thus modify the whole provision.

The question is on agreeing to the amendment proposed by the gentleman from Pennsylvania. After the word "containing, " in line 5 on page 2, I move to insert the words " amendments proposing, " and after the word "-containing, " at the end of line 6, insert the same words, " amendments proposing, " so that it will read: The Committee on Appropriations shall not report any appropriation bill containing amendments proposing new or general legislation, and if an appropriation bill is reported to the Senate containing amendments proposing new or general legislation a point of order may -be made against the billAnd so forth.

The Secretary of the Interior has declared the project to be feasible, and -in the justification for the estimates submitted by the Indian Bureau the assistant commissioner -stated that it was possible to save about $50, 000 by the purchase of a canal heretofore constructed; all of which is set 'forth in the hearings at.

There is considerable doubt in the mind of the Chair, in the absence of exact information, as to just what the effect of this amendment would be, whether it would really extend to some new purposes the use of the funds already appropriated or not; but even if it would, it seems to the Chair that that does not bring it within the prohibition of the rule that no amendment of the Senate providing for an appropriation upon any bill other than a general appropriation bill shall be agreed to by the House managers without express authority.

Here is a proposition consisting of a number of paragraphs, all preceded by certain general provisions "in time of war, " "or of national emergency arising prior to March 1, 1918, " "to be determined by the President by proclamation, " the President is hereby authorized and empowered, " in addition to all other existing provisions of law.

At the end of the amendment offered by Mr MCKELLAIB, It is proposed to insert the following proviso: Provided, The foregoing shall not apply to any contract executed in compliance with all statutory requirements.

Speaker, I move that the House resolve itself into the Committee of the Whole House on the state of the Union for the further consideration of the bill making provision for the Fourteenth and subsequent decennial censuses.
Although their hearts were bleeding, the coup d’

de grace was given when a few days before the arrival of Colonel Lindbergh at

Port-au-Prince an American officer with a squad of gendarmes descended upon “le Cercle Belleau,” the leading club of that city,

and sealed it under orders of the Government.

There is something that makes folk smile, whether they are wont to smile or not.

For every chuckle of delight which dulls the conscience of the conspirators who hoard this and other similarly ill-gotten wealth there

results the degradation, poverty, and death of countless millions of outraged men, women, and children.

One of the most humiliating things I have observed in many a day is the spectacle of the ex-service men, the brave boys who fought

in the last war, going about the country with their Government certificates in their hands begging the banks to loan them some

money on them.

Yet you are putting in the bread line American citizens and feeding jobs to people who openly and publicly walk your streets and

state that they are against your Government; that they would like to assassinate the President; that they would like to destroy our

form of government.

Where is the man who can send his little child, his little girl or little boy, on a little errand out to the little corner store or over to

a neighbor’s house who does not sit with fear until that little child returns?

The President said something like this: My fellow countrymen, I want to congratulate the American people on the uniform prosperity

we have all enjoyed since this administration came into power.

The four large hunting clubs which control thousands of acres of the finest hunting preserves in the county are widely known, since

their membership rolls include some of the wealthiest men in America.

No one would have believed that mighty Rome, with her invincible legions, the proud mistress of the world—no, one would have

believed that mighty Rome could ever be destroyed.

Chairman, ladies and gentlemen of the committee, I am intensely gratified that questions relating to the national defense are not

partisan.

But in the administration of this act there are certain major questions, such as whether a certificate of convenience and necessity

should be issued to the carrier who applies for it, or whether a certificate once issued should, under circumstances arising, be

canceled, or some change made in the certificate; also questions of rates, fares, and charges, and other questions enumerated in

section 8, that have to be referred to the joint board; questions of consolidations, mergers, and acquisitions of control.

Accordingly the committee rose; and the Speaker having resumed the chair, Mr. LEHLBACH, Chairman of the Committee of the

Whole House on the state of the Union, having under consideration the bill to amend an act entitled “An act to provide for the

consolidation of national banking associations,” approved November 7, 1918; to amend section 5136 as amended, section 5137, ...
It may be that they will fight among themselves, but it was because of a fight among themselves in Europe that we were drawn into it.

It is a disgrace and an outrage that this country of ours, with an overabundance of foodstuffs, should permit millions of our own people to continue to be undernourished and hungry.

We are over here on a clean shore, by ourselves, looking after our own business, and trying to feed our millions of hungry people, trying to clothe our millions of ragged and starving people.

So let us have a roll call, and those who vote with shame may vote with shame, and we who vote with pride and joy and exultation will record our votes in that fashion, too.

He declared that he rejoiced to be rid of the "greatest plague in the country.

It was a remarkable tribute of love and affection by Louisianans to their slain leader.

The name of Josie Siessly, helpless and dependent daughter of John Siessly, late of Company B, Forty-fourth Regiment Indiana Volunteer Infantry, and pay her a pension at the rate of $20 per month.

There are none so blind as those who will not see; and I feel ashamed, thrice ashamed, for the people who seem to be deliberately strangling a great industry.

The $25,000,000 involved in this bill, combined with the funds of the Red Cross, is not half enough to meet the emergency and to fulfill the duty that we owe to the hungry men, women, and children of the land.

There are idle, starving men in your cities who now watch the rural carriers because they are the Government employees.

Under the provisions of that amendment, if adopted, the purpose that I have outlined will be carried into effect.

On page 74, after the sum "$40,150", in line 14, it is proposed to insert the following: Provided, That the Commission may procure supplies and services without regard to section 3709 of the Revised Statutes, when the aggregate amount involved does not exceed $50: Provided further, That a statement of expenditures from this appropriation shall be reported to Congress in the annual Budget.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr O'CONNOR of New York, Chairman of the Whole House on the state of the Union, reported that that Committee, having had under consideration the joint resolution making appropriations for relief purposes, had directed him to report the same back to the House with sundry amendments, with the recommendation that the amendments be agreed to and that the bill as amended do pass.

Accordingly the committee rose; and the Speaker having resumed the chair, Mr MICHENER, Chairman of the Committee of the Whole House on the state of the Union, having had under consideration the bill making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1932, and for other purposes, reported that that committee had directed him to report the bill to the House with an amendment, with the recommendation that the amendment be agreed to and that the bill as amended do pass.

The motion was agreed to, and the Senate proceeded to the consideration of the bill to provide additional revenue for the District of Columbia, and for other purposes, which had been reported from the Committee on the District of Columbia with amendments.

Under this provision of the bill now under consideration, authority is given the President to use that money "for the purposes of this act.

Another clarification the amendment proposes is to make it conclusive that the decision of the National Labor Board, rendered in May of last year, establishing the rate of pay and the working conditions for pilots, shall be continued after the 1-year limitation that was included in that decision.

If the Chair understands correctly, the Senator from Arkansas requests that the other provisions of the joint resolution be passed over and that the Senate immediately proceed to the consideration of section 6 and that the vote on section 6 and on all amendments proposed thereto be taken at not later than 5 o'clock p.

In answer to the Senator's question, I will say that the joint resolution now under consideration says: That to continue to provide relief, and work relief on useful public projects, as authorized in the Emergency Relief Appropriation Act of 1937, and subject to all the provisions thereof, there is hereby appropriated $250,000,000.

The provision to which the Senator refers being an original provision in the bill, an amendment could not be offered to it until after the committee amendments had been disposed of.
Agriculture to further carry out the provisions of such section 32 and subject to all provisions of law relating to the expenditure

On page 81, after line 23, it is proposed to insert the following: Disposal of surplus commodities: To enable the Secretary of

Am I to understand that after the amendments are submitted, the Senator from Arizona proposes to refer the bill and all the

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr BARNES, Chairman of the Committee of the Whole House on the state of the Union, reported that that Committee, having had under consideration the bill to amend the Interstate Commerce Act, as amended, by extending its application to additional types of carriers and transportation and modifying certain provisions thereof, and for other purposes, had come to no resolution thereon.

Am I to understand that after the amendments are submitted, the Senator from Arizona proposes to refer the bill and all the proposed amendments to the committee for consideration?

On page 81, after line 23, it is proposed to insert the following: Disposal of surplus commodities: To enable the Secretary of Agriculture to further carry out the provisions of such section 32 and subject to all provisions of law relating to the expenditure of funds appropriated by such section, $46,949,756, together with the budgetary reserves of the appropriations made for carrying out the provisions of such section during the fiscal years 1941 and 1942.

Accordingly the Committee rose; and the Speaker having resumed the chair, Mr JONES of Texas, Chairman of the Committee of the Whole House on the state of the Union, reported that that Committee having had under consideration the bill to amend the Interstate Commerce Act, as amended, by extending its application to additional types of carriers and transportation and modifying certain provisions thereof, and for other purposes, had come to no resolution thereon.

In view of the foregoing I strongly urge that the provision for meeting emergencies and contingencies in the Budget programs of corporations included in H R.
In fact, my brother is very seriously considering getting rid of the very decent house in which he is living, because it is killing both him and his wife in their attempt to keep up the payments.

The folks in his district should be proud to have such a far-seeing businessman in Congress representing them.

I stood on the floor of the Senate and pleaded, in the same manner in which the able Senator from Kansas is now pleading, for aid to the individual who had seen all his personal property swept away, his buildings ruined and wrecked, and who could not get one penny of relief except through the National Red Cross or through the generosity of persons who were willing to make donations.

He grew up in a neighborhood where he intimately knew from early childhood friends and neighbors of many nationalities and in this teeming atmosphere of a big city, he developed his great passion for finding effective means to help improve the living standards and general welfare of the many plain working people and those who came here from foreign shores to take up permanent residence and become citizens of our beloved country.

I know I express the feelings of untold millions of Texans and people from other States when I wish our beloved Speaker great happiness in public service and personal life on this day and all the days to come.

I broke bread with them in the morning and later heard them lift their voices in song before the statue of their national hero and ours, Gen.

In some countries of the earth, especially one, good men and women are afraid to cry out in their agony, and in their despair, and in their poverty, and in their oppression because of secret police who may be standing in the crowd.

Therefore Mr Speaker, we should welcome many more Jarecki’s on our beloved free and independent shores.

DEAR SIR: I would like to congratulate you

DEAR SENATOR MORSE: I am writing this to commend you on your terrific fight to bring grab.

President, the young lady to whom I have referred, and whom the Senate has greeted, deserves commendation for the growth of good public relations between the United States and other countries of the world.
Roger Maris, a North Dakotan, of whom we are all proud, hit two home runs today.

Fifty thousand people waited 3 hours for the President’s cavalcade, delayed by large crowds and rains, to cheer the President to the echo time after time.

Today, while millions of Americans are visiting our military installations and attending the parades of our fighting men and weapons, our hearts swell with pride in the glorious traditions of our country’s Armed Forces and their vital contributions to protecting liberty and justice throughout the free world.

"Today the free world is grateful to see a proud Philippine Republic facing its future with courage and confidence.

President, I am deeply grateful to the able and distinguished senior Senator from Alabama for his kind remarks; and I am certain that his grandparents were among the great number of fine North Carolinians who helped materially to raise the standards of Alabama to those of North Carolina when they removed from North Carolina to Alabama.

Our friends and our allies with whom we have fought shoulder to shoulder in the last World War, and the war before that as well.

They have big cities and the big cities are fighting.

If we, as Americans in a free society, enjoy the privileges of liberty today, we owe a debt of gratitude to the Armenian people.

In Breathitt County down there in eastern Kentucky, we had no draft law whatever in operation during World War I because the Kentucky mountaineers of that county heard there was a big war in progress, then came pouring out of the deep hollows and rolling off of the rough hillsides to volunteer their services to this beloved country in its time of need.

Fight, fight, fight.

For the purpose of obtaining a clarification in respect to the bill, may I ask the Senator from Rhode Island whether there is any intention, in respect to the proposed legislation, that what the Senate is doing today is inconsistent with the Trade Agreements Act or with the trade development assistance bill which is now pending in the Congress?

Is this not required because the 15-percent criteria is an objective standard, while compactness and contiguity are subjective?

We have been assured by the CAA that this particular operation conforms with the criteria as the criteria was adjusted for the purpose of adaptation to this particular matter.

While many Federal grants have explicit statutory provisions spelling out in detail how the funds are to be allotted to the State and local governments, some still permit a portion or all of the funds to be disbursed at the discretion of the program Administrator.

Further, the bill provides that if the claimant does not meet the criteria outlined in the bill he will not be paid and the amounts remaining after the settlement of valid claims will revert to the U.S.

A suggestion was advanced, incidentally by me, in the conference, and discussed, to accept the Senate provision on grant agreements with the provision that the Administrator must submit to the House and Senate Committees on Appropriations a list of projects to receive Federal grants, with such commitments to become final, if not disapproved, within 60 days by either committee.

This provision in the House bill which goes to all water resources research within the Federal establishment was considered by our committee as one of the most important provisions in the bill.

Accordingly, the Committee rose; and the Speaker having resumed the chair, Mr FASCELL, Chairman of the Committee of the Whole House on the State of the Union, reported that that Committee, having had under consideration the bill making appropriations for the Departments of State, Justice, and Commerce, the Judiciary, and related agencies for the fiscal year ending June 30, 1966, and for other purposes, had directed him to report the bill back to the House with an amendment, with the recommendation that the amendment be agreed to and that the bill as amended do pass.

Speaker, I ask unanimous consent to take from the Speaker’s table the bill to amend the Communications Act of 1934, as amended, in order to expedite and improve the administrative process by authorizing the Federal Communications Commission to delegate functions in adjudicatory cases, repealing the review staff provisions, and revising related provisions, insist on the House amendments and agree to the conference asked by the Senate.

After further study of this matter, the committee may however recommend the advisability of statutory clarification notwithstanding this helpful decision.
Amid the grief of a saddened people, the Courage Crusade was born.

Mr Lewis was a familiar figure to Alexandrians as, in his later and retired years, he would sit in the enclosed porch on the Washington Street side of the house and watch each year the annual Washington’s Birthday parade on February 22.

As a fellow Member who was privileged to serve with Congressman BOB EVERETT for the past 6 years, I am proud to pay this final tribute to his memory and to extend to his mother and other members of his family my heartfelt sympathy.

It all reminds me of the war story about the proud parents who were watching their draftee son in the Army parade and the mother says: Look people.

Under the rules I cannot mention people in the gallery, but on this occasion how splendid it would be if all of us would rise and show our affection to Mr and Mrs Petinaud.

He especially enjoyed his visits with his daughter in North Carolina and often expressed to those in the Alabama delegation his hopes.

One young lady, a resident of a city within our district and presently a senior at a fine woman’s college in Virginia said, “Mr FLYNT, we have been watching the television showing the protest in Washington and I wanted to call and tell you that there are some of us who are not protesting and that we believe in our country and support our President and the action of the House of Representatives in backing him up last week.

On December 10, which was Phil Hart’s birthday, I traveled to the Sleeping Bear Dunes National Lakeshore in northern Michigan a national park of incomparable beauty, for which Senator Hart worked so hard and wished to be remembered and I was privileged to participate in the dedication of the visitors’ center in his name.

These men will be walking their beat; 170 of them would be privates, and they will be out walking their beats, they will be In the various office buildings, and different places, so they will not need quarters per se.

I must admit, it made me long for the day when all the people of the United States will again feel that they can stand and let all the world know that we are proud of our country and that we are willing to wear our love for it right on our sleeve and in our hearts.

President, I have read with great interest the statement of the conferees on S 1736, specifically with respect to their construction of the language of section 10 I would appreciate a clarification of the extent of jurisdiction which the conferees contemplate for the National Park Service as to provisions for information and interpretation facilities at the Kennedy Center.

Also there was provision for a Joint Committee on Congressional Operations which would specifically study improvements in automatic data processing.

Your conferees are aware of opposition expressed by some Members of the Senate to this provision and thorough consideration was given to their views.

There being no objection, the Senate proceeded to consider the concurrent resolution, which had been reported from the Committee on Public Works with an amendment to strike out all after the resolving clause and insert: That the Secretary of Transportation shall apportion $1,000,000 of the sums authorized to be apportioned for fiscal year 1974 for immediate expenditure on the National System of Interstate and Defense Highways, using the apportionment factors contained in Revised Table 5, House Report Number 92-1443.

There is no provision for altering a scale of assessments between the 3-year assessment periods unless it is clear that there have been substantial changes in relative capacities to pay.

Under these circumstances, we have agreed that legislative proposals to revise the congressional budget process could best be referred to our two committees jointly, with the proviso that if one committee orders the bill reported, the other must report within 30 calendar days of continuous session or be automatically discharged.

Then it further states that where a Senate amendment proposes legislation the same principle holds true-citing Cannon’s precedents, volume 4, paragraphs 3836 and succeeding provisions.

Plans are to be submitted within 3 years prior to the decennial census and are to conform to criteria established by the Secretary who, in turn, will have authority to require changes in any plans he determines are not in compliance with this criteria.

This includes $42 billion in expiring legislation which is proposed for extension and requires renewal, and $10 billion in new legislation proposed for later transmittal.
Remembering forces us to think of the hearts which once beat high with hope, of young lives snuffed out well before their time, of fields not planted, of homes not built, of children not born.

I pray to God to be with her, and protect her, and give her the spirit to be the good Samaritan, her "mission impossible" always to be possible, with pride of victory to stand on the name of her ancestors, "the Fighting Lady.

I knew him in his hour of deepest sorrow when he lost his wife in a tragic fire and his many friends throughout Alabama were pleased when some years later he married Maryon.

I had the pleasure of joining the 76,000 others at Giants' stadium to watch the championship game on Sunday.

One could always count on Mr Allen for that response that came from the heart and reached out to others less fortunate.

The crowds cheered; they backed the firetruck out.

My deepest sympathy is extended to Dr Lee's two daughters, Mrs Edward R King, and Mrs Hildred Phillips; son, Mr Roy DeMent Lee; brother, Mr David Frank Lee; and five grandchildren and eight great-grandchildren.

It was therefore sad to witness the terrible injury that Joe suffered this past Monday night during the nationally televised game against the New York Giants.

My heart goes out to his wife, Helen, his daughter, Daphne Mahon Holt, and his three grandchildren.

So, at this joyous season of the year—doubly joyous for us who are looking forward to a short respite from our daily rounds—my hat is off in a salute of gratitude to that fine group of men and women who stand beside and behind us as we do the people's business.
Speaker, this week the House of Representatives mourns the loss of one of the finest individuals to ever serve in the Congress.

But what we have been trying to do in this 104th Congress to make this place accountable to those working families that are way back on the West Coast of California and make some sense to the men and women, the moms and dads, that are trying to make it in this very hard economy.

As our friends and loved ones suffer in the oppressive heat in Saudi Arabia, willing to sacrifice their lives to defend our proud Nation, the words to this song ring very true.

He was talking about folks coming together at the PTA, the little league, the ethnic clubs, the sports groups, the folks that work the Habitat for Humanity crowd, all these different organizations out there doing things, giving to the community, giving to others, being creative, the Rotary, the Lions, the religious organizations.

The death and sacrifice of veterans who fought in World War II has bought our Nation 50 years of freedom.

While serving here in the House, Charlie Hayes fought fiercely to protect American Jobs and was active in the fight to increase Federal funds for schools, to increase funds for public works and to protect the rights of ordinary workers.

Their child will be born without its father, but will soon understand that dad was a hero.

I went home this weekend and toured the town of Fritch, the town that was devastated by a tornado that destroyed and damaged over 50 percent of the homes in that small rural town.

But this is a day when I am very proud of my big mouth and I am very proud of the results that we have seen, because the Republicans kept fiddling while the average working American got burned.

Mr Speaker, I serve on the Committee on Veterans’ Affairs, and I watched many Members from the other side of the aisle wave the flag, and talk about being in the parades, and how much they love veterans.

Second, the committees added an explicit requirement that any proposed renewal of the withdrawal be preceded by an analysis of environmental impacts.

I ask unanimous consent that a letter of transmittal requesting consideration of the legislation and a section-by-section analysis explaining its purpose be printed in the RECORD.

This en bloc amendment would, very briefly, do the following: First, strike provisions in the declaration of purpose dealing with “best value” procurement and defense-related professional and technical services; Second, strike sections in the bill which would require amendments to the Federal acquisition regulations and which relate directly to acquisition and procurement policy; Third, clarify that measures taken by the Secretary of Defense to ensure that the availability of reliable sources of critical weapon system components are similar to measures authorized by the new DPA section 107 created the bill, and that such actions be taken in conjunction with existing authorities in title 10 of the United States Code; Fourth, drop reporting requirements dealing with projected capacity and potential prospects for the use of alternative and renewable sources of energy for defense mobilization and Industrial preparedness; Fifth, clarify that any regulations developed to carry out the provisions of this act be consistent with the Federal acquisition regulation; Sixth, strike a provision of the bill which would require that acquisition policies mandated by this act be incorporated as part of the Federal acquisition regulation within 270 days. Given other changes made in this amendment, this provision is no longer necessary; and, Seventh, modify the offset policy provision of the bill to make it a freestanding statement of congressional policy that the Federal Government should not engage directly in offset arrangement made in connection with sale of defense goods or services to foreign governments.

Originally, we followed GAO’s recommendation, and provided funds for a pilot test and independent evaluation of the project.

For the information of my colleagues and for the historic record, I would like at this time to outline the history of Bonneville’s Self Financing Act and describe each of the five major issues which were resolved between OMB and Bonneville along with the one item for which additional legislative clarification has been provided: Mr President, in 1974 Congress enacted the Federal Columbia River Transmission System Act, which gave BPA additional authority to carry out its functions in a business-like and financially flexible manner.

The Navy is currently involved in a feasibility study that certainly meet the criteria outlined in this provision.

Speaker, I ask unanimous consent to take from the Speaker’s table the Senate bill to revise and clarify the authority of the Administrator of General Services relating to the acquisition and management of certain property in the city of New York and ask for its immediate consideration.

Under the Community Reinvestment Act, such evaluations each include the following: First the banking agency’s conclusions for each assessment factor identified in the regulations; second the facts and data supporting such conclusions; and third the institution’s rating and a statement describing the basis for the rating.

As a senior member of the Appropriations Committee I was particularly concerned with the precise nature of the authority delegated to the President, and worked very hard along with my staff to ensure that the definitions were clear and unambiguous.

For major final rules, GAO shall provide within 15 days to the appropriate committee an assessment of the agency’s compliance with the regulatory flexibility, unfunded mandates, and cost-benefit analyses performed by the agency.
He leaves a legacy: a grateful community—a wife—five children.

It is a tragedy that we are putting these old junkers out right now that will not work and we are trying to say that this is the only way we are going to protect our kids and families in America?

It is a fight so that at the end of the day Roberto Cortes has a chance, and his mom and dad can focus on this little boy’s life and that daily struggle, not a struggle with the health insurance companies.

This small town girl was a big time celebrity.

I am proud of our east Texans who worked day and night in the recovery effort.

We are proud to do it, proud to take the risks associated with that hard work—building a port system, the greatest in the North American Continent, and building commerce that allows every State and every parish and every county in America to flourish.

I salute Colonel Paul Underwood, a true American hero, and his family and all those who have fought and died and suffered loss in the name of freedom.

And so to all those who fought, we owe an enormous debt of gratitude.

Yet we are trying to pull them out on the eve of elections when we may restore hope and dignity to people who are our neighbors.

They are defending the principles of democracy and security on which this country was founded, and we salute their tireless mission.

The expiration of the interim agreement has made the role of the Yukon Salmon Panel unclear.

I do concur with the Senator from Wisconsin on his comments and concerns about the organic data collection and analysis provisions in the Agriculture portion of this omnibus appropriations bill.

Based on information from SBA, CBO estimates that implementing those provisions would cost about $3 million per year, subject to the availability of appropriated funds.

" As you know, the bill includes provisions within the jurisdiction of the Committee on Government Reform including Section 2 of the bill regarding federal agency data breach notification amendments under the Federal Information Security Management Act , the chairman of the Health Subcommittee of the Committee on Veterans’ Affairs.

This amendment would delete a requirement in the bill 10942 0c that any waiver or deviation from a test and evaluation master plan be approved by the director of operational test and evaluation.

None of the funds made available by this Act may be used to implement Bureau of Land Management regulations on Recordable Disclaimers of Interest in Land 2477 right-of-way or to issue a non-binding determination pursuant to the Secretary of the Interior’s Memorandum to Assistant Secretaries dated March 22, 2006, revoking the Department of the Interior’s previous Interim Departmental Policy on Revised Statute 2477 Grant of Right-of-Way for Public Highways.

President, if I may inquire of the Senator, for clarification purposes on her amendment, the amendment, as I understand it, on sales tax deductibility—what is the cost of that amendment?

000 +6, 527, 000, 000 Revised Allocation General purpose discretionary 541.

Speaker, I ask unanimous consent that the Committee on Ways and Means be discharged from further consideration of the bill to amend the Internal Revenue Code of 1986 to allow for the expansion of areas designated as renewal communities based on 2000 census data, and ask for its immediate consideration in the House.
President, Veterans Day 2013 gives us an opportunity to set aside our day-to-day worries and celebrate the men and women who have served in the United States Armed Forces.

Then, one by one, the kids—four kids: John, Paul, Sarah, and Ruthie—stood up and gave tributes.

Instead of asking billionaires to sacrifice once it asks more than 2 million middle class civil servants to pay more again.

I visited with her husband and her children, and I know that family is proud to serve their country.

While many of us who represent States on the east coast planned to spend our final week of our August work period traveling our State, touring factories, stopping by schools, and visiting military bases, Mother Nature had other plans.

President Obama said: As fathers, we need to be involved in our children’s lives not just when it’s convenient or easy and not just when they’re doing well—but when it’s difficult and thankless, and they’re struggling.

Again, the people of Louisiana should be extremely proud to have someone who is a fighter, who gave every drop she had of public service for her State and never forgot where she come from.

So today, as we name this post office on behalf of our fallen heroes from Missouri, hopefully we will take time to reflect about the many from Missouri who will not have something named after them but should never be forgotten for their sacrifice and their contribution to the freedoms we enjoy.

The day that I saw her last in the hospital, what we spent our time on was Boey and I walking down the halls with Boey trying to cheer up the other youngsters who were at the hospital.

Nevertheless, I believe it is important to come to the floor as the chairman of the Armed Services Committee to express the view that Congress has a right to expect the administration will faithfully implement all the provisions of the National Defense Authorization Act of 2008—not just the ones the President happens to agree with.

This revision represents an adjustment to certain House committee budget allocations, aggregates, and other appropriate levels for the purposes of sections 302 and 311 of the Congressional Budget Act of 1974, as amended, and in response to consideration of the bill H R.

I am, therefore, most appreciative of your decision to forego consideration of the bill so that it may move expeditiously to the House floor.

Although CBO has not completed a comprehensive review of S 3297, we have previously prepared cost estimates for numerous pieces of legislation that are similar or identical to most of the major provisions in this bill.

I do want to emphasize that I agree with Senator Shelby that those Federal employees should be required to file in the same timeframes as Members of Congress and their staffs, and that certainly those reports should be accessible online.

It requires the Director of the Office of Management and Budget, in consultation with EPA’s Chief Financial Officer, the Comptroller General of GAO, and CBO, to determine whether this bill authorizes the appropriation of funds to implement its provisions and, if so, whether this bill reduces an existing authorization of appropriations by an offsetting amount.

The intent of the amendment is that, since the Government Accountability Office has set a broad range of actions that they recommend in a very general sense, we wanted to provide the flexibility to NASA and to the other agencies—although this amendment only covers NASA—to develop guidelines for the sharing of data that comply broadly with those guidelines set down by the GAO.

I ask unanimous consent that the Committee on the Judiciary be discharged from further consideration of S 202, the Accountability Through Electronic Verification Act; that the Senate proceed to the immediate consideration of the measure; I ask further that the bill be considered read a third time and passed and that the motion to reconsider be made and laid upon the table, with no intervening action or debate.

First, the bill does not include a specific authorization for EPA to implement the bill’s provisions.

Not later than the end of the 1-week period beginning on the date of the enactment of this Act, the Board of Governors of the Federal Reserve System shall submit a report to the Congress certifying whether or not the implementation of necessary regulations under those provisions affected by the amendments made by section 2 and section 3 of this Act is feasible by December 1, 2009.
C.2 Dictionary word count

We report there the affect dictionary words with their count in the corpus:

**Affect:**

- support (1765047), import (1421018), like (1327182), great (1195251), agre (1147658), care (1018579), help (945406), concern (834363), thank (746428), opportun (662106), defens (647623), polit (560160), interest (511530), critic (358826), credit (355314), favor (344079), open (330082), give (312834), person (297694), valu (295900), fight (273278), encourag (255137), fail (254356), relief (244541), argument (234996), attack (231244), will (231176), difficult (231129), greater (230193), trust (226411), wrong (223848), pleas (222760), lost (215665), suprem (207407), unfortun (203479), danger (199621), lose (194573), engag (191979), privileg (191819), intellig (190802), success (190361), threat (186035), suffer (185778), promis (182905), abus (182144), play (181085), profit (174714), vital (174202), reject (169572), kill (168554), defend (159789), proud (159078), poor (154155), damag (148873), bad (148753), honor (146456), glad (141824), fear (136374), greatest (136084), victim (135533), advantag (135199), safe (134334), defeat (130341), argu (130344), sever (128463), treat (124171), failur (123622), miss (122448), avoid (121928), troubl (121900), violenc (121348), strengthen (119151), disast (118716), enjoy (117240), terrorist (111688), good (109358), threaten (108020), terror (107324), incent (106251), struggl (105775), difficulti (104814), ignor (104205), excel (103453), courag (102785), challeng (102261), kid (99418), strength (98544), impress (97810), disagre (95952), harm (91428), devot (88804), serious (88754), unfair (88488), confront (86689), destruct (86051), enemi (85332), admir (77310), wors (74520), valuabl (73759), fair (73611), satifi (72106), honest (70920), tough (70552), succeed (69997), fought (69269), offens (68820), content (68702), punish (68400), worri (65355), protest (62446), warn (64097), overwhelm (64089), aggress (63755), disagr (63586), terribl (61448), sincer (61327), abandon (60605), murder (60448), tragic (59329), merit (59214), tragedi (58912), pleasur (58213), devast (57772), depress (56700), disturb (56535), pain (55826), advers (55070), condemn (54635), attract (51450), popular (50942), innoc (50843), war (50425), disappoint (50302), worst (50260), healthi (48862), love (48782), desper (48629), afraid (48468), grate (48378), outrag (47022), compliment (46774), vulner (46677), interrupt (46502), deprav (45922), blame (45716), risk (45344), vigor (45282), wealth (45169), reliev (44176), violent (43694), frustrat (43596), surpris (43575), sad (43517), stress (43366), assault (43173), sorri (42816), peac (42782), disadvantag (42761), reward (42558), complain (42335), sick (42300), domin (41938), grave (40907), weak (40900), stronger (40565), delight (39503),
fault (39362), hate (39085), burden (38567), sentiment (38175), weaken (37681), digniti (37615), evil (37361), guilti (36316), wealthi (36060), neglect (35986), decent (35784), toler (35764), distress (35528), satisfactori (35360), hero (35051), beauti (35011), hostil (34712), exhaust (34489), warm (34274), offend (34163), discourag (33914), entertain (33769), bless (33244), prejudic (33059), amaz (32943), easier (32502), emot (31403), prais (30202), ok (30145), alarm (30122), anxiou (30027), shock (29800), dump (29643), wellb (29464), virtu (29380), liberti (29224), gratitud (28627), resign (28519), benefici (28417), isol (28292), intellectu (28030), excit (27787), faith (27608), lower (27571), readi (27568), brutal (27507), shame (27255), passion (26543), reluct (26475), ridicul (25868), eas (25491), freedom (25099), hurt (24944), tortur (24775), safer (24712), broke (24568), talent (23686), splendid (23622), needi (23074), worthwhil (23060), rape (23060), embarrass (22947), preciou (22521), tear (22283), compass (21813), poison (20967), magnific (20657), strongest (20485), below (19986), cri (19967), harass (19817), contemp (19658), satisfact (19646), denial (19554), strain (19353), intimid (19219), fatal (19141), loyalti (18916), agreeabl (18693), battl (18526), comfort (18460), aw (18372), ruin (17750), fool (17566), fine (17320), upset (17169), repress (17056), bitter (16814), mess (16653), honesti (16306), battlefield (16275), bother (16242), bold (16149), resent (16094), happi (16009), horribl (15788), horror (15595), tension (15368), cruel (15290), contradict (15230), cherish (15078), harsh (14975), enthusiasm (14853), insult (14715), poorest (14689), scare (14677), treasur (14550), optimist (14255), foolish (14242), meritior (14233), gratifi (14021), sorrow (14009), ineffect (13994), frighten (13949), adversari (13852), mourn (13735), forbid (13722), cynic (13512), useless (13492), welcom (13397), enthusiast (13214), mourn (13206), viciou (13122), heaven (13082), disgrac (13003), humor (12817), steal (12814), burdensom (12691), tender (12672), deceit (12564), degrad (12390), crush (12234), heroin (11999), reassur (11973), smile (11779), dwell (11700), appal (11516), delic (11422), rigid (11335), superior (11014), hair (10791), generos (10623), hell (10610), compassion (10424), arrog (10296), helpless (10133), cheer (10094), mad (10043), anger (10041), selfish (9995), keen (9943), laugh (9880), incompet (9873), killer (9865), temper (9857), relax (9781), inferior (9657), angril (9639), heal (9612), glori (9609), startl (9591), inhibit (9570), unsaf (9567), gratious (9443), unhappi (9412), worship (9349), optim (9260), terrif (9197), despair (9160), cheat (9053), shake (8855), grievanc (8853), worsen (8834), anxieti (8804), gentl (8801), sin (8790), nightmar (8509), immor (8443), miseri (8414), heartfelt (8279), vain (8187), unsucess (8136), doom (8134), dare (8075), dislik (8069), agit (8034), calm (8023), uncontrol (7867), beaten (7827), dread (7800), grief (7792), panic (7781), stun (7665), joke (7623), poorer (7321), aggressor (7298), trauma (7244), phoni (7191), wrongdoing (7133), turmoil (7097), rage (7058), adventur (7030), fantasi (7010),
freaki (8), weepi (7), dumpi (6), melancholia (6), perv (6), annoi (5), twitchi (4), melanchol (3), contented (3), brilliant (2), obsession (2), okai (2), fuck (2), destroi (1), smilei (1), dismai (1), decai (1), sucki (1), flirti (1), carefre (0), fucktard (0), cry (0), shitless (0), hoorai (0), asshol (0), fucker (0), shy (0), bitchi (0)

We report there the cognition dictionary words with their count in the corpus:

**Cognition:** think (2222390), want (1933090), need (1858735), question (1765467), know (1761052), believ (1294547), fact (1278946), resolut (1204296), reason (870024), understand (860049), effect (829068), consid (802972), chang (800344), purpos (794236), make (755361), allow (741097), product (738070), recogn (722642), result (685842), control (675044), distinguish (672218), respons (669281), statement (649465), inform (628884), differ (616581), refer (610822), possibl (562677), necessari (530297), wish (526819), relat (501840), decis (472838), produc (451383), complet (424154), forc (412664), base (404946), feel (402103), answer (401872), attend (400132), commit (395928), correct (384906), permit (376290), entir (375123), determin (374160), appear (356010), caus (346302), enact (331139), opinion (297820), basi (294977), expect (293868), specif (293688), figur (289222), origin (287684), mean (279407), sens (278234), mind (272393), intend (271231), idea (257984), decid (253226), probabil (245846), tempor (245800), opposit (241951), intent (238770), evid (237275), rememb (227813), known (227430), depend (223248), initi (220738), essenti (203642), absolut (195930), realiz (184770), assum (182188), conclus (180207), sourc (178772), chanc (176736), potenti (165574), examin (163038), independ (162858), altern (160714), guarant (158224), explain (157495), separ (157117), suppos (155994), reflect (155682), solut (155141), therefor (153316), approxim (153140), reconsid (152094), awar (150328), lack (148360), conclu (147358), knowledg (135247), consequ (135203), notic (134641), co (134457), find (130911), learn (129408), fundament (125855), memor (125222), comprehens (123900), definit (123806), recal (121730), appar (120181), except (119867), sort (118103), enabl (117326), knew (115074), inquiri (113517), justifi (112215), outstand (112129), solv (110669), admit (110174), prefer (109665), prove (109630), option (109237), adjust (108298), wherea (106107), lead (106051), led (106022), influenc (105120), recogni (100592), choos (99132), understood (98323), interpret (97950), convinc (95973), factor (95157), imposs (93453), identifi (92723), analysi (86745), deduct (84541), compel (84538), defin (80636), sought (80527), complex (79829), belief (77852), imagin (76409), distinct (74160), confus (71847), acknowledg (70748), accur (66839), pick (66365), precis (65464), compli (65285), explan (64995), guess (63745), secret (63732), obviou (63621), evalu (63367), exclus (62630),
C.3 Excluded dictionary words

The following words have been excluded from the dictionary on affect:

battlement, challengeable, helpful, treasury, struggler, achene, vitalism, amortize, sentimentalize, neatest, benefice, harmfulness, murderess, amortization, harasser, missing, smuggling, credits, successful, radiance, strengthening, blamelessness, active, killingly, harmonium, honours, grand, shakeout, excellent, destroyer, graced, acheson, aggression, fave, murderee, screamer, gracile, disgustedly, victimizer, original, insecurely, rapeseed, amorphous, funnest, weaponry, shakedown, grossing, reliever, witchlike, free, popularize, beautify, petrify, charity, strengtheners, depressor, luv, entertainer, smh, supporter, meritocratic, frendliest, kissinger, loneliest, dumpling, sceptically, award, nagi, improving, honorarium, feudatory, elegance, devotional, messiest, sharing, besties, lowest, naga, pettier, molestation, shockable, complimentary, teaser, fucks, guiltiest, winnebago, weapon, painfulness, pessimistically, bonus, freesia, dreadlock, fantasist, exhaust, agreed, shakiness, thanx, approval, exhaustible, faultfinding, richest, yum, faulty, bestie, merrimack, averse, smilax, snobbishly, warmest, trusty, supremacism, bitchery, violate, graves, strainer, nurturance, puka, successfully, dreadnought, excellence, super, interested, exhaustive, terrorization, humor, approve, best, easement, ready, harmonica, defendant, damaged, harmonics, wimpie, play, winning, approver, sexy, divinatory, approved, ha, nagoya, treasurer, lovers, fav, merrimack, special, diving, warred, violator, superbug, playing, screwtop, triumphal, louse, weirds, grossed, engagement, degradation, freestanding, demote, grosser, wealthiest, panicle, powerless, impressionist, graverobber, helpfulness, cheat, miser, fantasia, honorree, bereave, harmonizer, battlemented, shakespeare, moronity, energy, amorality, profit, lovingness, shared, dumps, comedienne, agitator, morone, villainness, diviner, emptier, winnipeg, virtuoso, inhibit, useful, impoliteness, favorite, popularizer, screwdriver, defect, sunk, weaponize, nast, loss, enthusiast, gloomier, neater, flexible, profiteer, pest, prickie, peacekeeper, braided, easy, share, defectively, champagne, supported, outwitting, entertainment, dominatriz, gratis, solemnize, hugger, values, played, relaxation, vitalize, wrongful, bastardy, faille, partygoer, impressive, magnification, adventure, wellness, safest, joylessly, irritant, demotion, amoralist, save, disgustingness, benefits, adorable, impossibly, thrilling, flatterer, adventuressness, pesto, adorned, comedian, intellectualization, traumatology, bestest, impressionism, creditworthiness, rancidity, livelong, relaxant, bastardize, tranquilizer, supports, crude, humorist, approving, boreas, inhibitor, antagonist, discouragingly, sunniest, pityriasis, raper, security, plays, easygoingness, interrupt, merrymaking, low, damage, suprematist, nagano, benefic, huggins, dummy, pukka, safety, supporting, miserliness, fabulous, whorehouse, stammerer, contemptibly, emptiest, fighter, lower, killable, pesticide, nagasaki, graveestone, excel, profitless, gloriosa, graveness, honoring, offenses, pressurize, passionflower, festival, champion, flexibly, smuggle, rigidity, teaspoon, win, honorific, braves, stealth, pettiest, prickliness, gloomiest, heartbreaker, screw, aggress, fired, prize, trusted, teasdale, harmonically, prickling, beneficiary, freestone, suprematism, troubleshooter, gravel, disappointedly, riskily, stuns, harmonic, tranquilly, valued, gorgeous, thx, magnifico, aok, dissatisfy, credit, humorlessly, hazard, dorking, pestle, please, lossy, securely, argus, feudalism, champain, joyride, poisoning, jogstick, destruct, suprema, agreement, yummy, creditworthy, harmonization, creditor, shares, energizer, winner, blameworthiness, dumpster, misses, sunny, value, violation, helps, cutest, gravemarker, diss, adventureress, shakers, lamer, champ, destroyable, vulnerability, murderousness, disturber, radian, panicle, admiralty, comedy, fame, meritoriously, interrupter, improved, party, adventurer, neglectfully, superb, inhibitory, warmer, supremacist, cut, glamorize, divination, admiral, funnies, acheron, populism, riskiness, improvement, secure, winnings, dishonorably, kildeer, agreeableness, kissimmee, amora, wins, fatality, magnificat, delicatessen, vomiter, petrification, screwup, elegant, popular, enjoyer, freedman, bastardization,
defendable, thnx, moocher, vitalist, thanks, shamefulness, winnow, witching, boreal, screwball, depressurize, shockley, champlain, prizefighter, fatigues, darlingtonia, energizing, charitable, welcome, won, support, defender, guiltier, oks, graver, easiest, alarm, glamorization, nasturtium, stressor, smuggler, dignifies, benefit, depressant, finest, flunky, madder, joyce, destroyed, killfish, lossless, gravelly, defeated, pressure, repressor, funner, gratings, battleship, beneficially, smiler, freestyle, popularization, feud, teashop, shamefacedly, flexibility, proudly, hazardous, okay's, demotic, handsomest, punishingly, tragedian, shakespearean, pisser, nurfuran, complaint, warner, relaxer, battlefront, okayed, weaponless, yay, shaker, messier, ty, easel, laughton, honorary, aggresses, defective, aggressed, dump, weeper, weepiness, ignorable, poisoner, pleased, damages, championship, optimally, grinner, relaxin, amorously, punishable, fab, inhibition, sweets, defectiveness, grandee, peacekeeping, trusts, maddest, unimpressively, credited, graven

The following words have been excluded from the dictionary on cognition:
### C.4 List of Topics in Speeches

In Table A8 we report all the topics produced by the LDA model and our categorization in macro categories.

<table>
<thead>
<tr>
<th>Topic 1</th>
<th>Topic 2</th>
<th>Topic 3</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Foreign Affairs</td>
<td>Foreign Policy</td>
<td>Human Rights</td>
<td>soviet peopl human world govern nation africa russian democraci genocid intern countri continu today europ polit jew regim african polish</td>
</tr>
<tr>
<td>1 Economy</td>
<td>Fiscal Policy</td>
<td>Taxes</td>
<td>tax incom revenu pay taxpay relief earn code rais propos financ taxat exempt repeal middl estat individu famili benefit penalti</td>
</tr>
<tr>
<td>2 Procedure</td>
<td>Procedure</td>
<td>1</td>
<td>record print order unanim object consent presid follow remark text statement excerpt rial materi extend explain address mate copi relat</td>
</tr>
<tr>
<td>3 National Narrative National Narrative</td>
<td>1</td>
<td>great men world life countri peopl histori mind time human spirit god heart alway charact natur common true becom stand</td>
<td></td>
</tr>
<tr>
<td>4 Procedure</td>
<td>Procedure</td>
<td>2</td>
<td>presid distinguish leader suggest absenc guish quorum distin time understand discuss yesterday matter moment remark indic comment sug respect prepar</td>
</tr>
<tr>
<td>5 Foreign Affairs Foreign Policy</td>
<td>Trade</td>
<td>cent import tariff duti sugar product produc countri ton manufactur textil rate domest mine quota materi wool made market artic</td>
<td></td>
</tr>
<tr>
<td>6 Economy</td>
<td>Fiscal Policy</td>
<td>Expenditure</td>
<td>increas amount total reduc estim number figur reduc addit expenditur larg year decreas excess result creas annual actual net compar</td>
</tr>
<tr>
<td>7 Society</td>
<td>Social Issues</td>
<td>Tobacco Litigation</td>
<td>claim fee action damag tobacco liabil patent file compens class injuri suit lawsuit caus settlement smoke litig legal result limit</td>
</tr>
<tr>
<td>8 Procedure</td>
<td>Procedure</td>
<td>3</td>
<td>object consent unanim pro request tempor proceed calendar clerk order unani mous pore consid tem unanimous-cons bloc unan immedi imous</td>
</tr>
<tr>
<td>9 Governance</td>
<td>Governance</td>
<td>Constitution Issues</td>
<td>constitut govern principel exercis bodi flag declar execut constitu author sttitut respect claus express preec found repres opinion duti fundament</td>
</tr>
<tr>
<td>10 Economy</td>
<td>Economic Policy</td>
<td>Mortgages</td>
<td>financ financ interest mortgag market lend borrow make feder rate rent consum asset insur capit save term lender transact time</td>
</tr>
<tr>
<td>11 National Narrative National Narrative</td>
<td>2</td>
<td>peopl pass american put stop today wrong back happen noth fail end bad fact creat tri lose simpli collegu middl</td>
<td></td>
</tr>
<tr>
<td>12 Procedure</td>
<td>Procedure</td>
<td>4</td>
<td>matter subject discuss opinion instanc cours great desir view proper fact attent judgment present regard possibl entir measur feel practic</td>
</tr>
<tr>
<td>13 National Narrative National Narrative</td>
<td>3</td>
<td>american america peopl today countri citizen nation world amer ican opportun stand futur histori believ great repres dream import ica</td>
<td></td>
</tr>
<tr>
<td>14 Economy</td>
<td>Economic Policy</td>
<td>Food Safety</td>
<td>food consum product milk meat nutrit anim fda import make time label lunch safeti inspect meal eat hunger feed approv</td>
</tr>
<tr>
<td>15 Economy</td>
<td>Economic Policy</td>
<td>Transport</td>
<td>ship air vessel coast navi port oper aircraft airport guard aviat plane naval airlin sea flight fli merchant transport fleet</td>
</tr>
<tr>
<td>16</td>
<td>National Narrative</td>
<td>National Narrative</td>
<td>4</td>
</tr>
<tr>
<td>17</td>
<td>Society</td>
<td>Social Issues</td>
<td>Education</td>
</tr>
<tr>
<td>18</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>19</td>
<td>Governance</td>
<td>Governance</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>Economy</td>
<td>Monetary Policy</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>National Narrative</td>
<td>National Narrative</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>Procedure</td>
<td>Procedure</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>Governance</td>
<td>Governance</td>
<td>2</td>
</tr>
<tr>
<td>24</td>
<td>Procedure</td>
<td>Procedure</td>
<td>6</td>
</tr>
<tr>
<td>25</td>
<td>Procedure</td>
<td>Procedure</td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>Party Politics</td>
<td>Party Politics</td>
<td>Bipartisanship</td>
</tr>
<tr>
<td>27</td>
<td>Procedure</td>
<td>Procedure</td>
<td>8</td>
</tr>
<tr>
<td>28</td>
<td>Procedure</td>
<td>Procedure</td>
<td>9</td>
</tr>
</tbody>
</table>
| 29 | Procedure | Procedure | 10 | hear subcommitte commit mitte tee meet testimoni held full wit affair testifi matter conduct room rank schedul staff jurisdict ju-
diciari |
| 30 | Party Politics | Party Politics | Bipartisanship | support import ensur improv address critic goal today legis current continu creat access step includ bipartisan col-leagu opportun increas resourc |
| 31 | Procedure | Procedure | | question answer rais understand discuss matter inquiri parliamen-tari put suggest decid involv desir gentl cours glad moment mind opinion doubt |
| 32 | Society | Social Issues | Nature Conservation | area manag resource conserv nation acr tribe natur wildlif na-
tiv recreat speci preserv public fisheri feder servic includ develop coastal |
| 33 | Foreign Affairs | Foreign Policy | Europe | presid nation europ nato militari alli troop arm secur conflict support sanction u.n commit action u.s world interest european polici |
| 34 | Society | Social Issues | Environment | environment wast clean air environ pollut epa qualiti public health act dispos climat emiss effect problem chemic control sourc drink |
back told night time turn peopl run watch anoth pictur left head
walk big room ago thing eye put happen

hour morn minit tomorrow clock order adjourn recess stand
leader debat proceed p.m time night today complet a.m finish presid

court suprem appeal judg trial jurisdic judici juri order legal
proceed statut action procedur review judgment defend decid held civil

budget spend year billion deficit balanc fiscal debt trillion reduct
reduc outlay surplus increas propos congression revenu prioriti
tax futur

vote yea nay announc present follow absent clerk aye pair quorum
record order result noe electron rolcal necessarili demand ill

legisl pass measur introduc enact piec today legi consid passag
bodi lation leg legisla import islat repres action sponsor cosponsor

nuclear weapon missil soviet arm capabl stratag system secur de-
deploy develop treati base chemic militari russian world presid bomb
bomber

civil

talk thing peopl happen realli someth tri back put mayb make
fact everybodi actual differ big bit understand somebodi idea

nuclear weapon missil soviet arm capabl stratag system secur de-
deploy develop treati base chemic militari russian world presid bomb
bomber

nation histori american histor cultur great librari celebr contribut
today year anniversari world puerto preserv heritag recogn museum
event memori

presid veto vice presi send messag offic desk sign vice-presid presi-
denti execut overt act behalf line-item eisenhow mes immed chief
ident

fact belie reason argument oppos posit made view argu true op-
posit favor simpli feel suggest make matter respect opinion state-
ment

letter receiv record list congression request follow date document
copi repres statement write begin indic end sign hon offic written

artid news press editori paper newspap record speech publish
presid entitl time book recent quot follow journal attent remark
written

drug abus prevent problem youth treatment year alcohol nation
substanc effect traffick enforc addict narcot relat colombia control
illeg support

fuel electr util renew effici year sourc develop nuclear atom produc
altern wind light make technolog vehicl ethanol solar reactor

support colleagu urg rise today join import opposit commend
cosponsor col leagu oppos sponsor deserv believ express simpli
port bipartisan

foreign u.s countri world intern nation polici import american
develop relat domest abroad econom india oversea global promot
eign interest

serv great servic year colleagu alway repres miss bodi privileg
respect tribut distinguish join dedic public career devot leader
abil
53 Society Social Issues Health Policy health care medic hospit servic patient doctor nurs mental phys-
cian access qualitill treatment system clinic medicin practic pro-
fection facil

54 Procedure Procedure 15 provis limit requir appli includ restrict effect exempt permit exist
prohibit specif howev chang remov subject elimin prefer repeal
relat

55 Miscellaneous3 problem face solv situat concern address today prob tri lem find
fact approach believ time difficult caus abl crisi feel

56 Foreign Affairs Foreign Policy Communism communist fact tion attempt critic action danger destroy commun-
ism caus govern propaganda so-cal protest charg activ hoover
press mind tri

57 Procedure Procedure 16 confer sen report ator confere ate pass presid part ferenc matter
enc adopt insist bodi accept version respect action posit

58 Foreign Affairs Foreign Policy Intelligence inform intellig secur internet data access author requir secret re-
port collect comput activ electron govern privaci director includ
communic act

59 Governance Governance Investigations general investig attorney charg evid counsel conduct offic offici
alleg fact fraud wit matter violat special testimoni agent made
statement

60 Governance Governance Studies report studi recommend submit consid made direct mitte port fa-
vor refer follow recom relat complet find accompani conclus prepar
examin

61 Society Social Issues Health Policy medicar senior drug benefit prescript care pay medicaid citizen
year part beneficiari make coverag health afford percent program
save today

62 Procedure Procedure 17 agreement negoti reach compromis presid enter disput parti fi-
nal compact settlement concern repres time approv make interest
open action accept

63 Economy Economic Policy Contracting contract account manag base requir general contractor procur
oper bid perform gao audit close depart make govern competit
tract result

64 Foreign Affairs Foreign Policy Treaties treati territori great canal govern british britain germani presid
made part relat declar ratifi present oblig nation zone tion

65 Economy Economic Policy Corporations compani corpor invest competit stock capit market firm privat
oper interest larg share antitrust make investor pani compet mon-
opol creat

66 Miscellaneous4 ber tion mem ment col impor leagu tant ple dif caus oppor tuniti
ter peo num iti dis gress tional

67 Procedure Procedure 17 lie tile desir proposit to-day tie applaus made mir men laughter
pass present refer sir question charg favor order attent

68 Society Social Issues Insurance plan insur coverag cover benefit individu employ option group of-
fer health employe make afford requir particip polici includ privat
part

69 Economy Economic Policy Lending pay paid payment debt interest bankruptcti charg make receiv time
amount rate month card oblig collect due treasuri expens made

70 Economy Monetary Policy 2 percent rate increas year averag cent higher high percentag sinc
reduc statist compar number creas half rais total declin incom

71 Economy Economic Policy Infrastructure project construct engin dam corp develop author harbor complet
improv reclam navig irrig plan control survey feet great interest
benefit
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
<th>Subsection</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>72</td>
<td>Governance</td>
<td>Federal</td>
<td>feder govern privat local gov ernment fed eral public sector ment mandat share government offici citizen creat individu direct bu reaucraci</td>
</tr>
<tr>
<td>73</td>
<td>Governance</td>
<td>Organization</td>
<td>depart execut offic govern ment function affair partment head chief divis reorgan oper general offici direct posit matter activ relat</td>
</tr>
<tr>
<td>74</td>
<td>Society</td>
<td>Social Issues</td>
<td>Sports</td>
</tr>
<tr>
<td>75</td>
<td>Foreign Affairs</td>
<td>Military Interventions</td>
<td>iraq troop secur iraqi afghanistan presid nation iran militari world middl support u.s american saddam peopl govern countri continu hussein</td>
</tr>
<tr>
<td>76</td>
<td>Economy</td>
<td>Fiscal Policy</td>
<td>2</td>
</tr>
<tr>
<td>77</td>
<td>Procedure</td>
<td>Procedure</td>
<td>18</td>
</tr>
<tr>
<td>78</td>
<td>Miscellaneous</td>
<td>5</td>
<td>year month time ago period end continu sinc past begin term extend longer number extens anoth pass half began date</td>
</tr>
<tr>
<td>79</td>
<td>Procedure</td>
<td>Procedure</td>
<td>19</td>
</tr>
<tr>
<td>80</td>
<td>Procedure</td>
<td>Procedure</td>
<td>20</td>
</tr>
<tr>
<td>81</td>
<td>Economy</td>
<td>Fiscal Policy</td>
<td>Quantities</td>
</tr>
<tr>
<td>82</td>
<td>Foreign Affairs</td>
<td>Military Policy</td>
<td>militari armi servic men arm navi general corp serv command guard duti personnel air civilian volunt offic activ chief combat</td>
</tr>
<tr>
<td>83</td>
<td>Procedure</td>
<td>Procedure</td>
<td>amend propos adopt offer substitut ment consid modifi pend natur origin accept reject modif order add pose pro stitut submit</td>
</tr>
<tr>
<td>84</td>
<td>Procedure</td>
<td>Procedure</td>
<td>act h.r legisl pass author extend extens enact provis passag consid waiver urg waiv origin includ measur reauthor addit expir</td>
</tr>
<tr>
<td>85</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Construction</td>
</tr>
<tr>
<td>86</td>
<td>Governance</td>
<td>Governance Public Service</td>
<td>servic offic employe salarri mail civil postal general class receiv serv posit duti compens perform postmast pay ice personnel ploye</td>
</tr>
<tr>
<td>87</td>
<td>Economy</td>
<td>Fiscal Policy</td>
<td>avail appropri author act expens fund amount made includ fis cial oper necessari oblig expend exceed remain year activ depart public</td>
</tr>
<tr>
<td>88</td>
<td>Society</td>
<td>Social Issues</td>
<td>Social Benefits</td>
</tr>
<tr>
<td>89</td>
<td>National Narrative</td>
<td>Soldiers’ Sacrifice</td>
<td>life famili death son today father memori rememb wife serv lost men year women heart mother countri sacrifi world great</td>
</tr>
<tr>
<td>90</td>
<td>National Narrative</td>
<td>Miscellaneous</td>
<td>thing give anyth put tri someth els noth find thought cours belief matter anyon happen feel perhap situat mind told</td>
</tr>
<tr>
<td>91</td>
<td>Procedure</td>
<td>Procedure</td>
<td>requir regul safeti mine act regulatori feder enforc compli review mandat licens effect complianc violat procedur action oper permit impos</td>
</tr>
<tr>
<td>Page</td>
<td>Section</td>
<td>Subsection</td>
<td>Topic</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>92</td>
<td>Economy</td>
<td>Policy</td>
<td>Oil and Gas</td>
</tr>
<tr>
<td>93</td>
<td>Economy</td>
<td>Policy</td>
<td>Emergency and Relief</td>
</tr>
<tr>
<td>94</td>
<td>Society</td>
<td>Social Issues</td>
<td>Discrimination</td>
</tr>
<tr>
<td>95</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>Society</td>
<td>Social Issues</td>
<td>Law and Order</td>
</tr>
<tr>
<td>97</td>
<td>Foreign Affairs</td>
<td>Foreign Policy</td>
<td>Summits</td>
</tr>
<tr>
<td>98</td>
<td>Society</td>
<td>Immigration</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>Economy</td>
<td>Policy</td>
<td>Local Development</td>
</tr>
<tr>
<td>100</td>
<td>Governance</td>
<td>Governance</td>
<td>Judiciary</td>
</tr>
<tr>
<td>101</td>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>Society</td>
<td>Social Issues</td>
<td>Elderly</td>
</tr>
<tr>
<td>104</td>
<td>Society</td>
<td>Social Issues</td>
<td>Public Assistance</td>
</tr>
<tr>
<td>105</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>Economy</td>
<td>Fiscal Policy</td>
<td>Subsidies</td>
</tr>
<tr>
<td>107</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Transport</td>
</tr>
<tr>
<td>108</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>109</td>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>Society</td>
<td>Social Issues</td>
<td>Women’s Health</td>
</tr>
<tr>
<td>111</td>
<td>Governance</td>
<td>Governance</td>
<td>Lobbying</td>
</tr>
<tr>
<td>112</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Section</td>
<td>Subsection</td>
<td>Topic</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
<td>------------</td>
<td>-------</td>
</tr>
<tr>
<td>113</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Growth and Recession</td>
</tr>
<tr>
<td>114</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>115</td>
<td>Foreign Affairs</td>
<td>Foreign Policy</td>
<td>Aid</td>
</tr>
<tr>
<td>116</td>
<td>Governance</td>
<td>Governance</td>
<td>Elections</td>
</tr>
<tr>
<td>117</td>
<td>Economy</td>
<td>Fiscal Policy</td>
<td></td>
</tr>
<tr>
<td>118</td>
<td>Foreign Affairs</td>
<td>Foreign Policy</td>
<td>Military Interventions</td>
</tr>
<tr>
<td>119</td>
<td>Governance</td>
<td>Governance</td>
<td>Elections</td>
</tr>
<tr>
<td>120</td>
<td>Society</td>
<td>Social Issues</td>
<td>Income Support</td>
</tr>
<tr>
<td>121</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Agriculture</td>
</tr>
<tr>
<td>122</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Technology and Science</td>
</tr>
<tr>
<td>123</td>
<td>Party Politics</td>
<td>Tribute</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Telecoms</td>
</tr>
<tr>
<td>125</td>
<td>Economy</td>
<td>Economic Policy</td>
<td>Workers</td>
</tr>
<tr>
<td>126</td>
<td>Procedure</td>
<td>Procedure</td>
<td></td>
</tr>
<tr>
<td>127</td>
<td>Society</td>
<td>Social Issues</td>
<td>Gun Control</td>
</tr>
</tbody>
</table>