

# Do Politics Stop at the Water's Edge? Evidence from Twitter Discussions on Afghanistan Withdrawal

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## **Abstract**

In the wake of President Joe Biden's 2021 decision to withdraw troops from Afghanistan, public opinion showed sharp divisions. Utilizing a dataset of 123,341 tweets and leveraging advanced ideology estimation methods and structural topic modeling, this article explores the underpinnings of divergent viewpoints from 32,831 unique users. While policy-specific positions were deeply polarized, with conservatives focusing on mismanagement issues and liberals on the protracted nature of the war, shared values like women's rights and humanitarian concerns transcended these divisions. Additionally, the study finds an emotional convergence between ideological groups when engaging in similar topics. This research contributes to the broader discourse on foreign policy polarization by highlighting not just what divides us, but also what unites us at the emotional and value-based levels.

In April 2021, President Joe Biden signaled a watershed moment in American foreign policy by announcing the withdrawal of all U.S. military forces from Afghanistan by September. Despite the U.S. intelligence community’s projection of a six-month timeline for the Afghan government’s collapse, the Taliban seized control of Kabul and most of the country within weeks. The rapid takeover led to a chaotic and hurried exit by American troops, leaving numerous Afghan allies in jeopardy and failing to meet the initial objectives of the prolonged military engagement.

This abrupt end to a two-decade-long military involvement drew mixed reactions from political figures in the United States. Senator Richard J. Durbin, a Democrat, endorsed President Biden’s decision as a tough but necessary move, asserting that it would prevent the handover of America’s longest-running war to another president (Edmondson 2021). On the contrary, Republican leaders like Senator Mitch McConnell criticized the chaotic withdrawal, claiming it tarnished America’s international reputation (Edmondson 2021).

These divergent viewpoints were not confined to political offices; they echoed loudly in the public domain as well. The conversation surrounding the withdrawal reverberated far beyond the halls of Congress and the White House, spilling over into the digital arena of public discourse. Social media platforms, particularly Twitter, became a hotbed of intense debate and emotional expression. As images and videos of Afghan citizens clinging to U.S. military aircraft circulated online, I estimate that approximately 16.5 million tweets were posted on the subject from May 1 to mid-November 2021<sup>1</sup>. Interestingly, public opinion mirrored the ideological divisions observed among political elites. According to a Pew poll conducted in August 2021, 54% of American adults expressed support for the U.S.’s decision to withdraw its troops, whereas 42% opposed it (Green and Doherty 2021). This split largely fell along partisan lines: A majority of Democrats lauded the move as prudent, while most Republicans criticized it as misguided. This mix of polarization and consensus within the public sphere invites the question: Does the common adage ‘politics stops at the water’s edge’ hold true in contemporary American discourse on foreign policy?

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<sup>1</sup>This figure was calculated using the count tweet parameters via Twitter REST API v2, and only includes English-language tweets posted globally about the Afghanistan withdrawal. For a temporal breakdown of tweet counts, see Appendix Figure A1.

Such variances in public opinion on the Afghanistan withdrawal can be viewed as a case study for broader foreign policy considerations. The scholarly literature offers conflicting evidence regarding the extent of polarization in foreign policy matters. My hypothesis posits that the degree of polarization intensifies when considering specific policy initiatives but substantially diminishes in the realm of foundational *values*. For instance, while Americans may find themselves at odds over the execution of a specific foreign policy, they tend to find common ground on issues like women’s rights and humanitarian aid, irrespective of their partisan affiliations.

To empirically evaluate these complexities of public opinion and ideological underpinnings, I commenced with the aggregation of tweets that discussed the United States’ withdrawal from Afghanistan. After removing bot-generated and spam accounts to ensure data integrity, I estimated users’ ideological leanings. Leveraging these variables as covariates, I employed unsupervised structural topic modeling in conjunction with sentiment analysis on a dataset comprising 32,831 unique Twitter users. This multi-faceted approach allowed me to investigate how ideology influenced the themes discussed and how sentiments relate to topics and ideologies.

## 1 Theoretical Landscape in Public Opinion Research

The term polarization is commonly understood to imply a “division into two sharply contrasting groups” (*Oxford English Dictionary* 2000). In political science, however, the term takes on a more nuanced meaning, rooted in spatial theory. Within this framework, policy preferences are arrayed on a continuum ranging from left to right: “For parties to be polarized, they must be far apart on policy issues, and the party members must be tightly clustered around the party mean” (Poole and H. L. Rosenthal 2011, p.105). Put another way, polarization manifests in a political landscape when members of parties not only cluster more tightly around distinct ideological points but also when these clustered points move away from each other. This conception transcends mere partisan differentiation and requires more than mere divisions into competitive “long coalitions” vying for elected

positions (Aldrich 1995, p.32).

This does not mean that the polarization only has to be among the political elites. Rather, it manifests in variegated ways at both the party and mass-public levels. These two dimensions—party-level and mass-public polarization—do not necessarily exhibit concomitant trends. For instance, despite the highly divisive nature of the civil rights movement of the 1960s and the Vietnam War, these issues did not engender conspicuous schisms between Republicans and Democrats (Hetherington 2009). Similarly, the issue of slavery, prior to the dissolution of the Whig Party and the subsequent establishment of the Republican Party, was a focal point of societal contention but was not delineated along partisan lines. In this historical context, eminent figures from both prevailing political factions were principally occupied with mitigating this fraught issue (Sundquist 2011).

Continuing this thread, societal polarization should not be seen as merely an echo of elite polarization. Initial studies primarily scrutinized whether societal divisions were largely confined to a narrow, politically engaged cohort, notably activists (Abramowitz 2010; Fiorina and Abrams 2012). However, more recent scholarship emphasizes the reciprocity between societal and elite-level polarization—a relationship that becomes all the more relevant given the long-term, incontrovertible increase in polarization across both spheres.

A point of consensus among researchers studying polarization is the palpable escalation of political polarization in the United States - both on elite and public level, particularly since the 1970s (Hetherington 2009; Jacobson 2010; Layman, Carsey, and Horowitz 2006; Poole and H. Rosenthal 1984; Stonecash, Brewer, and Mariani 2019; Theriault 2008). This longitudinal trend exhibits little to no evidence of reversal, compelling scholars to acknowledge a transformation from a low-polarization system to one of markedly high polarization (Pierson and Schickler 2020, p.38). The steady increase is most concretely visible in party identification and how people place political parties in the ideological spectrum. More Americans expressed a considerable difference between the Democratic Party and the Republican Party than in the past (Hetherington 2001). On specific issues, today, more participants in surveys place the Republican Party to the right of the

Democratic Party than in previous decades (Levendusky 2009).

Foreign policy polarization, however, merits a separate analytical lens due to its distinct set of governing dynamics. Two factors chiefly contribute to this uniqueness. First, foreign policy matters frequently occupy a subordinate position on the public’s list of priorities (Doherty et al. (2022)), rendering most individuals ‘rationally ignorant’ of these topics (Lupia et al. 1998). This tendency is exacerbated by the fact that foreign policy issues are often perceived as having minimal impact on daily life (Guisinger 2009). Second, foreign policy decisions involve a heightened level of informational asymmetry between the public, legislators, and even among government branches (Baum and Groeling 2010). Consequently, the scholarly debates surrounding foreign policy polarization diverge notably from those focused on domestic polarization. The conceptual frameworks guiding understanding in this domain can be categorized into three principal models: elite cue-taking, the ‘rally around the flag’ effect, and vertical models. Subsequent sections will elaborate upon each of these paradigms.

## **1.1 Elite cue-taking models**

The elite cue-taking models are among the most discussed frameworks in foreign-policy polarization literature. These models argue that the general populace, lacking in-depth knowledge of foreign policy, often form their opinions based on cues from political elites they trust (Berinsky 2009; Guisinger and Saunders 2017). While elite cue-taking is a common concept in political behavior research, exemplified by works such as Zaller and R (1992) and Lenz (2013), it gains particular relevance in the context of foreign-policy polarization. This is due to the remoteness of many international events from everyday life (Rosenau 1961) and the informational asymmetries that exist between elites and the general populace (Colaresi 2007). In the U.S. context, foreign policy often involves distant interventions or events that Americans are largely uninformed about and do not experience firsthand (Kertzer 2013).

According to this framework, citizens shape their opinions by heeding the guidance of politicians they trust. This leads to public unity when Democratic and Republican

leaders find common ground on foreign policy matters. A notable example is the Cold War era, during which both parties endorsed liberal internationalism, thereby fostering public consensus (Gowa 1998). Conversely, when political elites diverge in their views, the public also becomes polarized, as evidenced by the Iraq intervention (Baum and Groeling 2010).

The elite cue-taking framework can effectively explain short-term changes in public opinion, as seen in the reversal of partisan attitudes towards Russia from 2015 to 2017 due to shifts in elite opinions. However, the models have limitations. For instance, there have been numerous cases where the public did not align with political elites on foreign policy issues (Page and Bouton 2008). A case in point is the 2014 Israel-Palestine conflict, where despite a united front among D.C. politicians in defense of Israel, public opinion remained divided Kertzer and Zeitsoff (2017). The elite cue-taking models also struggle to account for strong public opinion when there is no clear elite preference serving as a cue (Kertzer 2018).

## **1.2 Rally Around the Flag Models**

A second line of argument on how foreign-policy opinions are formed pertains to the ‘rally around the flag’ effect, inspired by Arthur Vandenberg’s query—does ‘politics stop at the water’s edge?’ This set of theories posits that external threats compel the public to rally behind the president to safeguard national interests (Mueller 1971). Research in this area mainly scrutinizes two facets: the public’s responsiveness to perceived international threats and their inclination to support leaders and their policies during such crises (Mueller 1971; Lee 1977; Baum 2002). There is some empirical evidence supporting these claims. For example, President Jimmy Carter’s public approval ratings surged by 26% in the wake of the 1979 Iranian Hostage Crisis (Callaghan and Virtanen 1993). Similarly, President George Bush’s approval ratings soared by about 35% immediately after the September 11 attacks (Hetherington and Nelson 2003). British leaders have also seen significant boosts in popularity following military interventions, as demonstrated by the 1991 Gulf War and the 2003 Iraq War (Lai and Reiter 2005).

Diverse theoretical underpinnings have been advanced to elucidate the ‘rally around the flag’ phenomenon, and they predominantly converge on the role of informational structures during international crises. For instance, Brody (1991) posits that in a crisis, oppositional voices tend to wane, at least for a while, thereby temporarily aligning even opposition legislators with the president’s stance. Contrasting this, Kaufmann (2004) attributes the rally effect to the media landscape, arguing that the ‘marketplace of ideas’ fails during crises. Furthering this perspective, Groeling and Baum (2008) emphasizes how media amplifies praise from the opposition rather than focusing on the absence of initial criticisms.

Non-informational theories that adopt a more grassroots perspective also try to account for the mechanism behind this effect. These include cognitive theories that highlight emotional underpinnings for shaping political behavior (Mercer 2010), as well as patriotism-centric arguments that propose public unity around leaders as symbols of national cohesion (Mueller 1973; Lee 1977). Moreover, classical conflict scholarship posits that external threats engender stronger intra-group cohesion (Stein 1976; Coser 1956). Independent of the underlying mechanism, leaders, cognizant of the political gains, may opt for international interventions to showcase their competence (Haynes 2017).

While the ‘rally around the flag’ effect is effective in accounting for sudden shifts in public sentiment during international crises, it falls short in offering a comprehensive framework for understanding the *long-term trends* in foreign-policy opinion formation. During such crises, one can note a transient surge in approval ratings for leaders, which is often followed by a gradual waning of public enthusiasm (Fletcher, Bastedo, and Hove 2009). This decline in popularity is particularly evident when military endeavors fail to produce early signs of success (Gelpi, Feaver, and Reifler 2009). In summary, the ‘rally around the flag’ paradigm proves useful for analyzing short-term changes in public opinion but its limited scope inhibits its utility as an overarching theory for foreign-policy opinion formation.

### 1.3 Vertical Models

The final class of arguments in which my hypothesis is integrated belongs to multidimensional models of foreign policy polarization. These models serve as a bridge between the top-down emphasis on the influence of political elites and media coverage, and the bottom-up focus on individual psychological processes in shaping foreign policy opinions. In doing so, vertical models offer a more comprehensive framework, capturing the multi-faceted nature of public opinion formation by acknowledging both elite cues and psychological dispositions (Kertzer 2018).

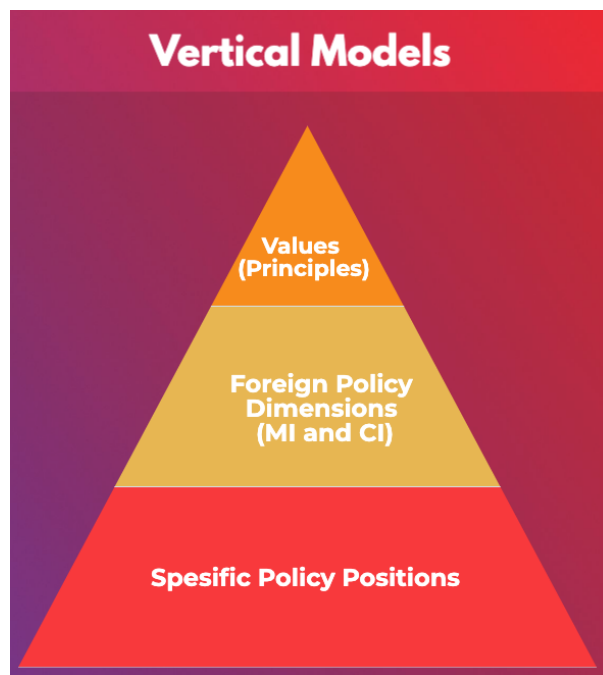


Figure 1: The Vertical Model of Foreign Policy Opinions

In foreign-policy discussions, the political spectrum is often initially conceptualized as a unidimensional continuum, ranging from isolationism to internationalism. Isolationism reflects a preference for limited foreign engagement and a focus on domestic affairs, whereas internationalism involves a proactive stance toward global involvement. However, such a unidimensional perspective has been critiqued for its oversimplification by scholars in the field of public opinion (Holsti 1979). In a more nuanced framework proposed by Wittkopf (1990) and Holsti (2004), at least one additional dimension enriches this basic continuum. This two-dimensional model includes an axis for militant internationalism (MI), indicative



of hawkish positions advocating the use of force in international crises. A second axis, known as cooperative internationalism (CI), measures willingness to collaborate with international organizations like the UN or NATO. These axes are not strictly independent but are orthogonal, allowing for diverse combinations of high or low scores across both dimensions.

The vertical hierarchy model, initially proposed by Kertzer, Powers, et al. (2014) and subsequently extended by Rathbun et al. (2016), utilizes this two-dimensional space of militant and cooperative internationalism. It goes further by integrating these dimensions into a broader hierarchical structure to elucidate foreign policy preferences. As illustrated in Figure 1, at the base of this hierarchy lie specific policy attitudes, underpinned by middle-layer orientations such as MI and CI. The apex of this hierarchy is occupied by moral foundations that inform these orientations at the lower levels (Hurwitz and Peffley 1987). For instance, Kertzer, Powers, et al. (2014) found through survey data that conservative moral values are predominantly associated with militant internationalism, while universal values tend to align with cooperative internationalism. The principles at the top may come from non-foreign-policy areas as well: These can be moral values Kertzer, Powers, et al. (2014) or personal principles Rathbun et al. (2016). Hence, the vertical model implies that in the absence of elite cues from political figures, people can still establish a foreign-policy position based on their values.

Building on this framework, the vertical model often relegates principles to a mediating role. These principles shape specific policy positions through intermediate orientations such as cooperative or militant internationalism. However, evidence from Twitter discussions suggests a more direct role for principles and values in public discourse on foreign policy. This observation leads us to question whether polarization also occurs around these principles, contrary to the expectations set by the vertical model. I propose that while the vertical model predicts divergence based on values - because they are the ultimate determinants of divergence in specific policies-, such divergence in values is not stark as the model suggests. Specifically, I posit that conservatives and liberals converge on principles like women's rights in Afghanistan or the ensuing immigration crisis, despite

ideological differences; but the divergence of opinions appears as we move forward from principles to specific policy positions. Questions surrounding the effectiveness of the Biden administration’s policies in Afghanistan or the implications of Trump’s 2020 Doha deal serve as specific policy issues around which we expect heightened polarization.

Finally, the hypothesis carries significant implications for the role of principles in public opinion formation. It suggests that even if people align on core principles, they can still diverge substantially on specific foreign policy issues due to their ideological stances. Thus, the findings indicate that values and principles are not necessarily the predominant factors in shaping foreign policy opinions.

## 2 Data and Methodology

The primary dataset for text analysis encompasses tweets posted from May 1, 2021, to January 7, 2022. Initial search parameters were defined by examining a random sample of 100 tweets, as well as major news about the Afghanistan withdrawal after May 2021. Keywords such as Afghanistan, Taliban, Ashraf Ghani, Kabul, and Pashtun were identified based on the frequency of their appearance in these sources. To expand this list, semantically similar terms were sourced using GloVe, an unsupervised vector presentation algorithm rooted in word co-occurrence statistics (Pennington, Socher, and Manning 2014). Its pre-trained mechanism allows researchers to explore the semantically closer words in the word vector space. Then, the tweets were extracted using Twitter’s REST API v2 via twarc2 (Summers et al. 2022), with three criteria in place: the tweet had to contain at least one keyword, originate in the United States, and be in English.<sup>2</sup> The final dataset comprises 123,341 tweets from 32,831 users. Since the ideology estimation method is based on the users’ following decisions, I also extracted the user data for those in the primary dataset. If, for example, a user is in the primary dataset because she posted a tweet on the withdrawal, I extracted user information for all the people she follows to determine her ideological position.

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<sup>2</sup>The focus on U.S. tweets was due to the impracticality of ideology estimation for a large number of users, given Twitter’s rate limits. The decision was made to use a sub-sample of tweets that were definitively from the U.S. and in English.

Before advancing to further analysis, it was necessary to exclude bot accounts from the dataset to minimize bias and data disruption. The prevalence of bot accounts, which can be programmed to interact and post automatically on social media (K.-C. Yang, Ferrara, and Menczer 2022; Luceri et al. 2019), poses a significant challenge, especially in the realm of political science (Wirth, Menchen-Trevino, and Moore 2019). As a result, bot accounts funded by political campaigners could easily lead researchers to reach conclusions that are simply not there. To address this issue, I investigated how bot accounts are linked to ideology, and then excluded them from the dataset before applying topic modeling. Botometer v4 was employed for bot identification. This supervised machine learning classifier examines over 1,000 features across six categories: user profile, friends, network, content, language, and sentiment (Sayyadiharikandeh et al. 2020; Varol et al. 2017). Each account receives a score between zero and one, with higher scores indicating a higher likelihood of being a bot. Individual accounts in the primary dataset were assessed for their bot scores, and those with scores exceeding a 0.43 threshold—determined to maximize accuracy by the algorithm’s developers—were removed (Varol et al. 2017).

I then generated an ideal point score for each account using a previously validated computational model created by Barberá (2015), which exploits Twitter users’ social networks to infer latent political preferences. This method is akin to estimating ideology based on a roll-call vote. Instead of using votes, Barberá (2015) utilizes data from Twitter users’ friends. The procedure is based on the homophily assumption: Because of the informational costs, people on Twitter are more inclined to follow others who hold similar ideological positions. Since users have only limited time to absorb new information, when they decide to follow someone, they also decide not to follow alternate information sources as an opportunity cost (Barberá and Rivero 2015). Following users with opposing ideologies might also cause cognitive dissonance if the information they supply is incompatible with one’s own ideological background (Iyengar and Hahn 2009). Because of these trade-offs, people follow political accounts with similar ideological stances.

The original ideology estimation method for Twitter users relies on the Bayesian spatial following model (Barberá and Rivero 2015). This method has been validated through

real-world party affiliation data and campaign donation records, boasting an overall accuracy rate of over 90%. Due to the extensive computational demands of Bayesian spatial model iterations, Barberá (2015) introduced an alternative: a multidimensional scaling technique grounded in correspondence analysis. I opted for this latter approach, as it yields comparable results without the computational burden.

The ideology estimation approach also incorporates random effects at both the user and elite levels. At the user level, a parameter is added for political interest, measured by the number of political elites a user follows. Following a large number of political accounts could indicate activism rather than ideological alignment. At the elite level, the model considers a user’s popularity. For instance, if a political elite like Barack Obama has millions of followers, it is more likely attributable to their widespread popularity rather than followers’ ideological proximity. The model, updated last in August 2020, had been executed on a dataset comprising approximately 64 million U.S. users (Barberá and Rivero 2015).

In the first step of the ideology estimation process, I extracted the list of Twitter accounts followed by each user in the dataset. Then, by matching these lists with pre-calculated ideology scores assigned to elites—such as politicians, news outlets, and think tanks—I ascertained the ideological leanings of each user on a liberal-conservative axis. The resulting ideology scores follow a normal distribution centered around zero, with a standard deviation of one, and range from -2.5 (very liberal) to 2.5 (very conservative). Users who did not follow any elite political accounts were excluded from the analysis. Figure 2 illustrates the resultant distribution of ideology among tweets and users. Notably, although the number of conservative and liberal individuals tweeting about the Afghanistan pullout was roughly equal, conservatives were more vocal, contributing to 62% of the total tweets and comprising 55% of unique authors. Further geographical distribution of these tweets and users across the United States can be found in Appendix Figure A2.

Having established the ideological leanings of Twitter users involved in the conversations about the Afghanistan pullout, the next question arises: Do people from different ideological backgrounds express themselves differently when discussing the same subtopics?

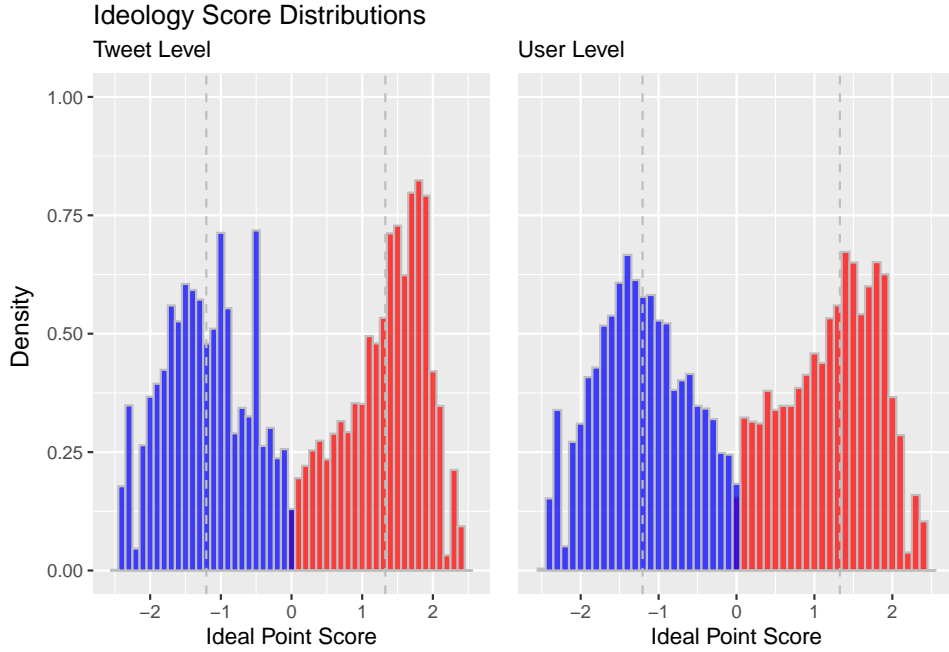


Figure 2: Scores below 0 (liberals) are shown in blue, and scores above 0 (conservatives) were highlighted by red. Mean scores for each group is shown by the dotted lines.

While conservatives and liberals may engage in dialogue about global values within the same thematic area, their perspectives and emotional tones can potentially differ. To explore this, I employed the Valence Aware Dictionary and sEntiment Reasoner (VADER) for sentiment analysis (Hutto and Gilbert 2014). VADER is particularly suited for analyzing short and informal texts like tweets and has shown robust performance in capturing sentiments in political contexts (Elbagir and J. Yang 2019; Endsuy 2021).

The innovation in VADER lies in its two-stage lexicon development process, which includes crowd-sourced coding of informal vocabulary and an aggregation of multiple coders' assessments. Moreover, VADER transcends the conventional 'bag of words' model by incorporating a set of syntactic rules. For instance, it factors in exclamation marks as multipliers for sentiments that are consistent in direction, and sentences in all caps are given more intense sentiment scores. The tool also accounts for modifying phrases such as 'but' and 'however,' which can change the overall tone of a tweet (Hutto and Gilbert 2014).

VADER employs its lexicon to produce a weighted sum of word scores, normalizing the result into a compound sentiment score for each tweet that ranges from -1 to 1.

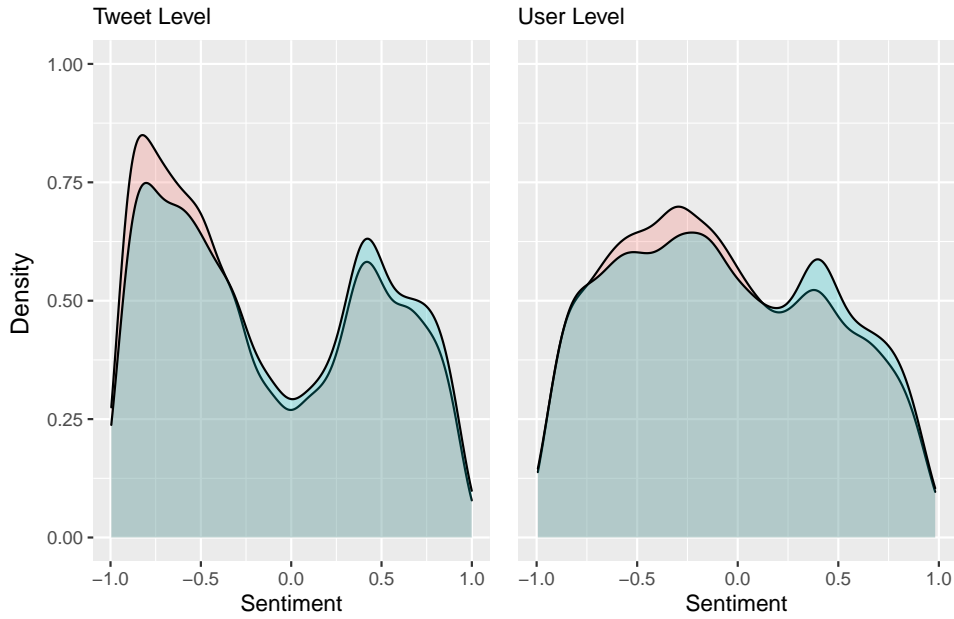


Figure 3: Sentiment Distributions by Ideology. On average, conservative users sent more negative tweets on the Afghanistan withdrawal as illustrated by the red area.

Positive sentiments yield higher scores, whereas lower scores indicate negative sentiment. I implemented VADER on both raw and preprocessed text, removing mentions and links and applying lemmatization. The algorithm yielded similar results for both cleaned and raw datasets; hence, I opted to use the raw data. This decision allows VADER to analyze elements like capitalization and punctuation, which are often eliminated through lemmatization. Figure 3 illustrates the distribution of sentiments by ideology, both at the tweet and user level, where the user-level sentiment is the average sentiment score of the user’s tweets. While sentiment does not serve as a proxy for political stance (Bestvater and Monroe forthcoming), it can nonetheless shed light on whether individuals of different ideological backgrounds react similarly to a given subject.

After developing the key variables of ideal point scores and sentiment scores, I turn to Structural Topic Modeling (STM) to probe the nuanced subtopics discussed within the broader Afghanistan withdrawal issue across Twitter’s ideological circles. STM employs a probabilistic Bayesian estimation method to unveil latent topics in a text corpus. This unsupervised method leverages statistical reasoning to gauge the likelihood of specific keywords and concepts co-occurring, thereby extracting meaningful topics.

This approach advances beyond the well-known Latent Dirichlet Allocation (LDA) topic modeling algorithm in significant ways. Although LDA probabilistically categorizes both topics within documents and the constituent words of those topics, it carries several limitations (Roberts et al. 2014). First, LDA presumes topics within a document to be mutually independent—neglecting potential interconnections between them. Second, it assumes the lexical content within a topic remains constant across all documents. Lastly, LDA relies solely on textual data for topic determination, forgoing external contextual information that could enrich the analysis.

STM addresses these limitations by allowing for the incorporation of contextual variables into its prior distributions, thereby enhancing both topic prevalence and content estimation. It is particularly useful for analyzing short documents like tweets (Tvinnereim and Fløttum 2015; Curry and Fix 2019). Further, STM facilitates the use of metadata as predictors, empowering researchers to employ regression models to estimate how much of each document is dedicated to a specific topic.

For the model’s covariates, I included time (month), state, author’s follower count, tweet count, and ideology score. A limitation of structural topic modeling is the need to pre-determine the number of topics. To address this, I conducted multiple runs with topic numbers ranging from 4 to 81, using metrics such as held-out likelihood, residuals, semantic coherence, and exclusivity for evaluation. The optimal topic count was identified as 16, further detailed in Appendix Figures A3, A4, A5. After running the model with 16 topics, the top ten were labeled based on the most probable words and representative tweets<sup>3</sup>, as illustrated in Table 1. These topics mostly demonstrated clear semantic coherence, which is elaborated in Appendix Figure A6 with a thorough comparison based on topics’ exclusivity and semantic coherence scores. Initial analysis revealed that the most discussed issues were pleas for support in Afghanistan, scrutiny of the Biden administration, and debates over the U.S. military’s effectiveness after twenty years. More details and examples are available in Appendix Table 3. After creating all necessary variables, I regressed sentiments and ideal point scores on topic proportions.

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<sup>3</sup>For the most probable words for each topic, see Appendix Figure A7.

Table 1: Labels and Examples for the Top 10 Topics

Topic Num	Topic Name	Topic Prob.	Most Prob. Terms	Tweet Example
6	Pray & Call for Help for Afghan Ppl	0.137	peopl want can know need think help	If we out here saying pray for Afghanistan, let's really pray pray pray!!!!Like really pray to God and ask Him that He move in ways that restore and protect those in suffering, those mourning, those in difficulty! God cares, God hears,God knows!Ask! Seek!Knock! He's there!
8	Biden's Handling of the Withdrawal	0.094	biden presid joe administr via blame call	The Biden administration is blaming President Trump for Afghanistan. I blame the Obama, Bush and Biden administration for the problems at the border and Afghanistan. Own up to your demented self Biden.
12	Military Failure	0.086	countri militari back fight forc give much	@LindseyGrahamSC Think of this. Pedo Joe has singlehandedly given the Taliban a well trained and equipped army, a well trained and equipped Air Force and a giant well equipped air base. He's a Lefty Loon Grifter's dream!
10	Fighting in Historical Context	0.081	year just time last got first watch	Well, compare to the last 20 years. What's even crazier is that we watched the USSR invade Afghanistan, stay there for 9 years, then leave. Then we did something pretty damn similar. And we were involved in the USSR in Afghanistan, just funding the opposition. Same ole shit.
13	News on Attacks	0.075	one say kill airport afghan soldier news	Open SmartNews and read ""Two 'high profile' ISIS targets in Afghanistan killed in US drone strike, Pentagon says"" here: <a href="https://t.co/o4IVIWTKKu">https://t.co/o4IVIWTKKu</a> \nTo read it on the web, tap here: <a href="https://t.co/cyfdluVTYO">https://t.co/cyfdluVTYO</a>
2	Abandoned American allies by POTUS	0.068	american potus mani still behind alli citizen	@POTUS Day 34 for the Americans U left behind in Afghanistan for the Taliban terrorist butchers. 38 CA school kids still there! #TalibanJoe #BidenDisaster
11	Plans on Withdrawal of Troops	0.065	troop withdraw even thing plan talk pull	America withdraws its troops and suddenly ya'll are okay with continuing to spend trillions of dollars to keep troops in Afghanistan and continue American imperialism.
3	US Security	0.061	take make govern state good look nation	@FroghWazhma Military government, close down all non security institutions, spend more budget on security. Let @AmrullahSaleh2 to take control of the Gov %100. Eradication of Taliban first step from gov jails. %100 control over media, like Qatar.
4	Afghan Women	0.052	now right women support world children seem	@RepMaxineWaters Hey big mouth! Haven't heard a peep from your so-called care for protecting women, for the women and girls of Afghanistan. Girls raped and tortured and married to older men. Women beaten and subjugated to men. Torture! AND, you care about horses.
9	Afghan Refugees	0.046	will come refuge famili work today servic	Love love love my football club: "Around 150 Afghan refugees treated to free tickets for Watford cup match" <a href="https://t.co/1IeoAuJsCz">https://t.co/1IeoAuJsCz</a>

Finally, I also investigated the correlation between tweet sentiments and user ideology. Using ideal point scores of users as the outcome variable and the sentiment scores as the main predictor, I run four different models, as shown in Table 2. The first two used Ordinary Least Squares (OLS) for continuous sentiment scores, while the third and fourth utilized logistic regression with ideology recoded as binary (liberal and conservative). Variable controls were differently set across these models.



### 3 Discussion

The findings of this study can be categorized into two areas. The initial part of the discussion will delve into the variances in topics based on ideological leanings and sentiment. The latter part will examine the relationships between sentiment scores and ideological standpoints when topics are not considered.

To examine the potential for political polarization in Twitter activity along ideological dimensions, a regression of document content based on topic proportions was conducted, controlling for several variables. These results are depicted in Figure 4. According to theories such as those proposed by Baum and Potter (2019) and Kupchan and Trubowitz (2007), significant divergences in topic discourse should be expected if Twitter exacerbates polarization or if foreign policy debates mirror domestic political divisions. Nonetheless, Figure 4 reveals only minor variations in the distribution of topics by ideology for the bulk of subjects, especially when it comes to universal values such as women’s rights or Afghan refugees. Despite this general trend, a few topics stand out as being more polarizing. For instance, conservative voices were notably focused on the abandonment of Afghan allies and criticism of the Biden administration’s actions. Liberals, conversely, tended to emphasize the long duration of the war. These results suggest that the ideological differences indeed stop at the water’s edge for the most part, but issues related to *partisanship* are still carried over.

The empirical evidence from Twitter discussions offers a nuanced perspective, challenging the foundational assumptions of the vertical models. Contrary to the model’s suggestion that divergences in high-level principles or values are the primary drivers of polarization in policy positions, my analysis reveals a different pattern. Specifically, the minimal polarization observed around principles such as women’s rights or the treatment of Afghan refugees suggests a broad ideological convergence at the level of fundamental values. This convergence indicates that, at least in the realm of public discourse on foreign policy, polarization stems not from fundamental values, but from specific policy decisions and their implementation. Such findings imply that the vertical model may oversimplify the relationship between values and policy positions, overlooking the complexities of how

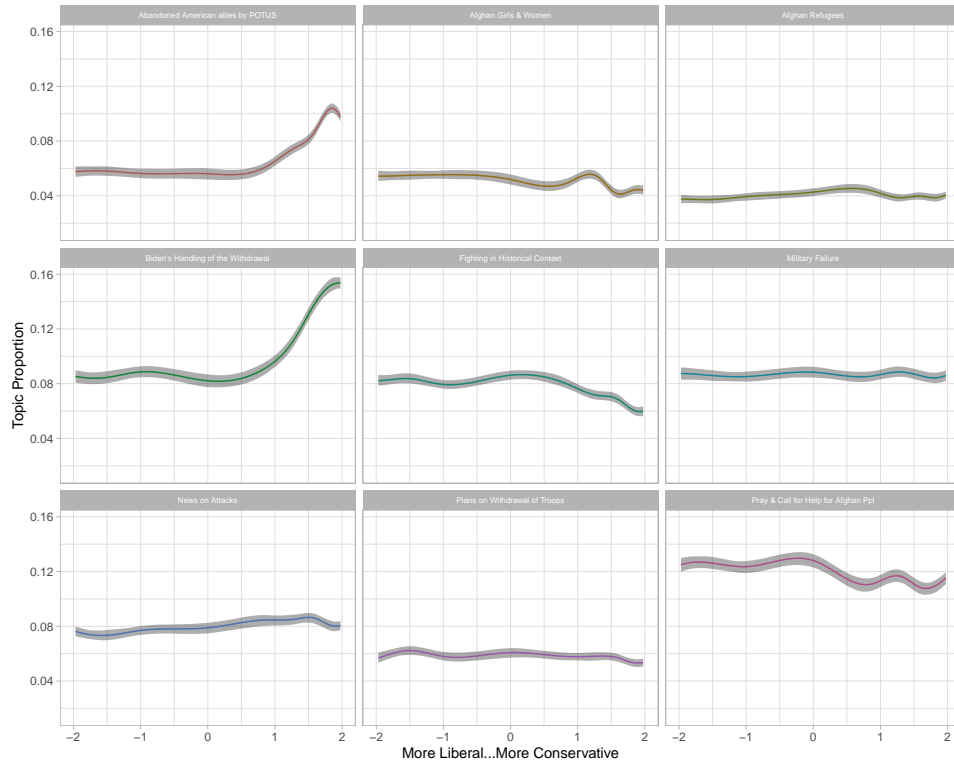


Figure 4: Regression estimates for the most prevalent ten topics of ideal point scores. 95 percent confidence intervals are shown by the dark areas around the lines.

people navigate between these layers of decision-making. The tendency for polarization to intensify around concrete policy issues underscores the importance of differentiating between high-level values and the nuances of policy debates. This distinction challenges the vertical model's premise and suggests a need to reevaluate the way we conceptualize the interplay between values, and policy positions in the context of political polarization.

While the same topical arenas may see contributions from diverse ideological standpoints, the nature of these contributions can differ significantly. To delve deeper into this, I also examined how tweet sentiments estimate topic proportions. The goal here is to explore the degree of sentiment similarity when conservatives and liberals engage in the *same* topics. I evaluated how successful sentiments were in estimating the topics. Figure 5 reveals that topics with a humanitarian focus, such as calls for help for Afghans and discussions around the future of Afghan women, elicited a predominantly positive sentiment. In contrast, topics aimed at assigning blame, like Biden's handling of the situation or the abandonment of American allies, generated a more negative sentiment. However, most topics clustered around the center, which suggests that they did not serve

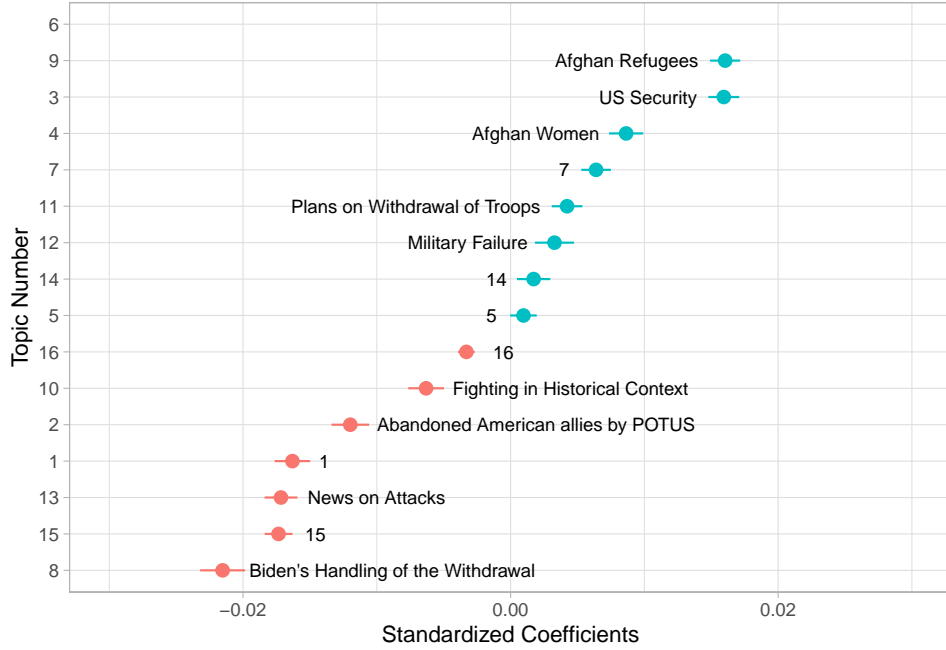


Figure 5: Sentiments were recoded into positive and negative categories prior to model execution. These recoded sentiments were then regressed against the topic proportions for each respective topic. Positive coefficients are highlighted in blue.

as significant predictors of sentiment. This clustering indicates that, when conservative and liberal users engage in dialogues on the same issue, their emotional tones largely converge.

After investigating how ideology and sentiment estimate topic proportions, the discussion now turns to the association between the first two. Can ideology be predicted with sentiments? As demonstrated by Table 2 and the linear relationship in Figure 6, sentiment is negatively correlated with ideological points—being conservative correlated with a higher likelihood of expressing negative sentiment. In the context of the Afghanistan withdrawal, this correlation is perhaps expected, given that conservative voices were predominantly critical of the Biden administration’s handling of the process.

## 4 Conclusion

The 2021 decision to withdraw U.S. military forces from Afghanistan served as a unique focal point for examining foreign policy attitudes within the democratic framework. This study analyzed 123,341 tweets to understand how American ideological subgroups

Table 2:

	Dependent Variables							
	Ideology (Cont.)		Ideology (Conservative=1)		Ideology (Cont.; No Bots)		Ideology (Conservative=1; No Bots)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>OLS</i>		<i>logistic</i>		<i>OLS</i>		<i>logistic</i>	
Sentiment Score	-0.105 (0.018)	-0.094 (0.018)	-0.101 (0.027)	-0.095 (0.028)	-0.095 (0.019)	-0.096 (0.019)	-0.089 (0.028)	-0.103 (0.029)
Bot Score		0.405 (0.051)		0.717 (0.082)				
Avg. Like Count (Log)		-0.072 (0.015)		-0.102 (0.024)		-0.079 (0.016)		-0.112 (0.024)
Follower Count (Log)		0.017 (0.009)		0.041 (0.015)		0.022 (0.010)		0.053 (0.016)
Tweet Count (Log)		-0.114 (0.007)		-0.181 (0.012)		-0.131 (0.008)		-0.205 (0.012)
Author Verified		0.248 (0.054)		0.651 (0.087)		0.250 (0.055)		0.660 (0.090)
Avg. Retweet Count (Log)		0.066 (0.029)		0.097 (0.045)		0.077 (0.030)		0.112 (0.046)
Avg. Quote Count (Log)		0.072 (0.055)		0.139 (0.089)		0.087 (0.057)		0.169 (0.093)
Avg. Reply Count (Log)		0.041 (0.026)		0.053 (0.041)		0.046 (0.027)		0.059 (0.042)
Following Count (Log)		-0.017 (0.013)		-0.024 (0.020)		-0.030 (0.013)		-0.045 (0.021)
Constant	0.141 (0.009)	1.068 (0.068)	0.226 (0.014)	1.585 (0.108)	0.109 (0.010)	1.310 (0.070)	0.179 (0.015)	1.936 (0.110)
Observations	20,835	20,782	20,835	20,782	19,078	19,078	19,078	19,078
Log Likelihood			-14,293.390	-13,911.940			-13,137.610	-12,872.900
Akaike Inf. Crit.			28,590.780	27,845.890			26,279.220	25,765.790
Residual Std. Error	1.347 (df = 20833)	1.327 (df = 20771)			1.346 (df = 19076)	1.328 (df = 19068)		
F Statistic	33.640 (df = 1; 20833)	70.029 (df = 10; 20771)			24.945 (df = 1; 19076)	59.480 (df = 9; 19068)		

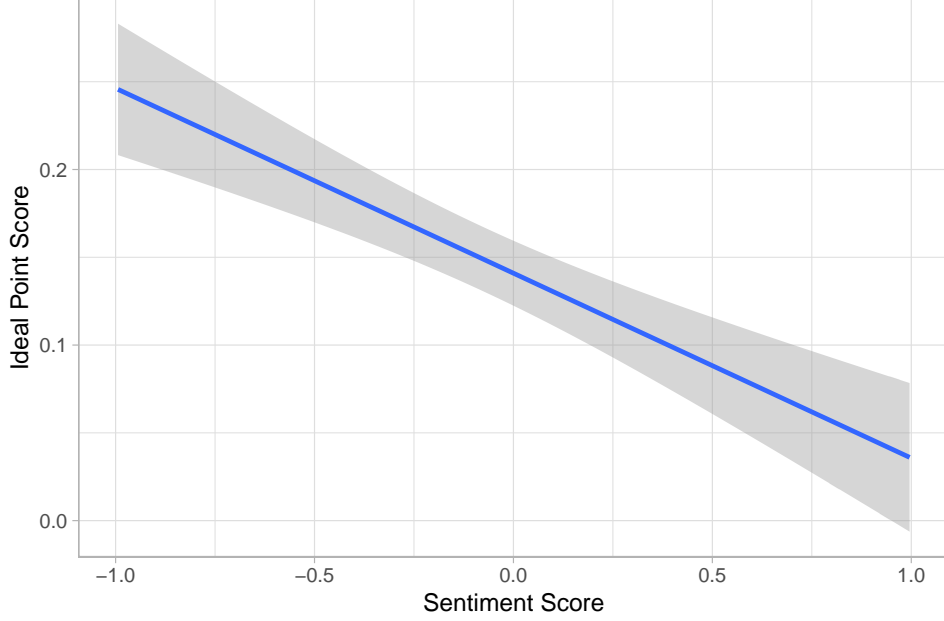


Figure 6: Change of Sentiment Scores by Ideology. Higher ideal point scores refer to more conservatism.

respond to foreign policy shifts, thereby offering insights that could be generalized to other democratic contexts.

Contrary to the notion that ‘politics stops at the water’s edge,’ the findings indicate a distinct polarization when it comes to specific foreign policy actions. Indeed, the withdrawal drew different reactions from conservatives and liberals, both among political elites and within the broader public sphere. However, this polarization seems to recede when the conversation shifts from policy specifics to underlying values. This suggests that while the American populace may be deeply divided on how foreign policy should be implemented, there is a common set of values that transcends partisan lines.

The present study is not without its limitations. While Twitter users may not directly map onto the broader American populace (Hargittai 2020), the study assumes that the biases introduced by self-selection into online communities are likely to be similar across conservative and liberal groups. In other words, if there are biases in who chooses to engage in political discourse on Twitter, those biases are expected to influence conservatives and liberals in similar ways. This allows for a more internally consistent comparative analysis when evaluating the behaviors and attitudes of these distinct ideological communities. The study also avoided making strong causal inferences since they are notoriously difficult

to do in any analysis based on natural language processing (Feder et al. 2021).

While this research was confined to the American political landscape, its insights into the dynamics of ideology and public sentiment on foreign policy decisions lay the groundwork for future studies in a broader comparative politics context. This study adds nuance to our understanding of how public opinion in democratic societies may both shape and be shaped by foreign policy, even when the focus is not on immediate policy implications.

## References

- Abramowitz, Alan (Jan. 2010). *The Disappearing Center: Engaged Citizens, Polarization, and American Democracy*. Yale University Press. ISBN: 978-0-300-16288-2.
- Aldrich, John H. (June 1995). *Why Parties?: The Origin and Transformation of Political Parties in America*. University of Chicago Press. ISBN: 978-0-226-01272-8.
- Barberá, Pablo (2015). “Birds of the Same Feather Tweet Together: Bayesian Ideal Point Estimation Using Twitter Data”. In: *Political analysis* 23.1, pp. 76–91.
- Barberá, Pablo and Gonzalo Rivero (Dec. 2015). “Understanding the Political Representativeness of Twitter Users”. In: *Social Science Computer Review* 33.6, pp. 712–729. ISSN: 0894-4393. DOI: 10.1177/0894439314558836. (Visited on 02/18/2022).
- Baum, Matthew A. (June 2002). “The Constituent Foundations of the Rally-Round-the-Flag Phenomenon”. In: *International Studies Quarterly* 46.2, pp. 263–298. ISSN: 0020-8833. DOI: 10.1111/1468-2478.00232. (Visited on 07/27/2022).
- Baum, Matthew A. and Tim Groeling (July 2010). “Reality Asserts Itself: Public Opinion on Iraq and the Elasticity of Reality”. In: *International Organization* 64.3, pp. 443–479. ISSN: 1531-5088, 0020-8183. DOI: 10.1017/S0020818310000172. (Visited on 02/18/2022).
- Baum, Matthew A. and Philip B. K. Potter (Apr. 2019). “Media, Public Opinion, and Foreign Policy in the Age of Social Media”. In: *The Journal of Politics* 81.2, pp. 747–756. ISSN: 0022-3816, 1468-2508. DOI: 10.1086/702233. (Visited on 02/18/2022).
- Berinsky, Adam J. (Oct. 2009). *In Time of War: Understanding American Public Opinion from World War II to Iraq*. University of Chicago Press. ISBN: 978-0-226-04346-3. DOI: 10.7208/9780226043463. (Visited on 07/27/2022).
- Bestvater, Samuel E and Burt L Monroe (forthcoming). “Sentiment Is Not Stance: Target-Aware Opinion Classification for Political Text Analysis”. In: *Political Analysis*, p. 24.
- Brody, Richard (June 1991). *Assessing the President: The Media, Elite Opinion, and Public Support*. Stanford University Press. ISBN: 978-0-8047-7987-6.
- Callaghan, Karen J. and Simo Virtanen (Aug. 1993). “Revised Models of the ”Rally Phenomenon”: The Case of the Carter Presidency”. In: *The Journal of Politics* 55.3, pp. 756–764. ISSN: 0022-3816. DOI: 10.2307/2131999. (Visited on 07/27/2022).

- Colaresi, Michael (Jan. 2007). “The Benefit of the Doubt: Testing an Informational Theory of the Rally Effect”. In: *International Organization* 61.1, pp. 99–143. ISSN: 1531-5088, 0020-8183. DOI: 10.1017/S0020818307070038. (Visited on 02/18/2022).
- Coser, Lewis (1956). “The Functions of Social Conflict”. In: *Glencoe, Illinois*.
- Curry, Todd A. and Michael P. Fix (Oct. 2019). “May It Please the Twittiverse: The Use of Twitter by State High Court Judges”. In: *Journal of Information Technology & Politics* 16.4, pp. 379–393. ISSN: 1933-1681. DOI: 10.1080/19331681.2019.1657048. (Visited on 03/14/2022).
- Doherty, Carroll et al. (Feb. 2022). *Public’s Top Priority for 2022: Strengthening the Nation’s Economy*. Tech. rep. (Visited on 02/17/2022).
- Edmondson, Catie (Aug. 2021). “Lawmakers Unite in Bipartisan Fury Over Afghanistan Withdrawal”. In: *The New York Times*. ISSN: 0362-4331.
- Elbagir, Shihab and Jing Yang (2019). “Twitter Sentiment Analysis Using Natural Language Toolkit and VADER Sentiment”. In: *Proceedings of the International Multi-Conference of Engineers and Computer Scientists*, p. 5.
- Endsuy, Ria Devina (Jan. 2021). “Sentiment Analysis between VADER and EDA for the US Presidential Election 2020 on Twitter Datasets”. In: *Journal of Applied Data Sciences* 2.1, pp. 08–18. DOI: 10.47738/jads.v2i1.17. (Visited on 02/20/2022).
- Feder, Amir et al. (Sept. 2021). “Causal Inference in Natural Language Processing: Estimation, Prediction, Interpretation and Beyond”. In: (visited on 02/20/2022).
- Fiorina, Morris P. and Samuel J. Abrams (Nov. 2012). *Disconnect: The Breakdown of Representation in American Politics*. University of Oklahoma Press. ISBN: 978-0-8061-8478-4.
- Fletcher, Joseph F., Heather Bastedo, and Jennifer Hove (Dec. 2009). “Losing Heart: Declining Support and the Political Marketing of the Afghanistan Mission”. In: *Canadian Journal of Political Science/Revue canadienne de science politique* 42.4, pp. 911–937. ISSN: 1744-9324, 0008-4239. DOI: 10.1017/S0008423909990667. (Visited on 07/27/2022).
- Gelpi, Christopher, Peter D. Feaver, and Jason Reifler (Feb. 2009). *Paying the Human Costs of War: American Public Opinion and Casualties in Military Conflicts*. Princeton



- University Press. ISBN: 978-1-4008-3009-1. DOI: 10.1515/9781400830091. (Visited on 07/27/2022).
- Gowa, Joanne (1998). “Politics at the Waters Edge: Parties”. In: *Voters, and the Use of Force*.
- Green, Ted Van and Carroll Doherty (2021). *Majority of U.S. Public Favors Afghanistan Troop Withdrawal; Biden Criticized for His Handling of Situation*.
- Groeling, Tim and Matthew A. Baum (Oct. 2008). “Crossing the Water’s Edge: Elite Rhetoric, Media Coverage, and the Rally-Round-the-Flag Phenomenon”. In: *The Journal of Politics* 70.4, pp. 1065–1085. ISSN: 0022-3816. DOI: 10.1017/S0022381608081061. (Visited on 07/27/2022).
- Guisinger, Alexandra (July 2009). “Determining Trade Policy: Do Voters Hold Politicians Accountable?” In: *International Organization* 63.3, pp. 533–557. ISSN: 1531-5088, 0020-8183. DOI: 10.1017/S0020818309090183. (Visited on 07/27/2022).
- Guisinger, Alexandra and Elizabeth N. Saunders (2017). “Mapping the Boundaries of Elite Cues: How Elites Shape Mass Opinion across International Issues”. In: *International Studies Quarterly*.
- Hargittai, Eszter (Feb. 2020). “Potential Biases in Big Data: Omitted Voices on Social Media”. In: *Social Science Computer Review* 38.1, pp. 10–24. ISSN: 0894-4393. DOI: 10.1177/0894439318788322. (Visited on 02/17/2022).
- Haynes, Kyle (July 2017). “Diversionary Conflict: Demonizing Enemies or Demonstrating Competence?” In: *Conflict Management and Peace Science* 34.4, pp. 337–358. ISSN: 0738-8942. DOI: 10.1177/0738894215593723. (Visited on 07/27/2022).
- Hetherington, Marc J. (Sept. 2001). “Resurgent Mass Partisanship: The Role of Elite Polarization”. In: *American Political Science Review* 95.3, pp. 619–631. ISSN: 0003-0554, 1537-5943. DOI: 10.1017/S0003055401003045. (Visited on 07/27/2022).
- (Apr. 2009). “Review Article: Putting Polarization in Perspective”. In: *British Journal of Political Science* 39.2, pp. 413–448. ISSN: 1469-2112, 0007-1234. DOI: 10.1017/S0007123408000501. (Visited on 02/17/2022).

- Hetherington, Marc J. and Michael Nelson (Jan. 2003). “Anatomy of a Rally Effect: George W. Bush and the War on Terrorism”. In: *PS: Political Science & Politics* 36.1, pp. 37–42. ISSN: 1537-5935, 1049-0965. DOI: 10.1017/S1049096503001665. (Visited on 07/27/2022).
- Holsti, Ole R. (Sept. 1979). “The Three-Headed Eagle: The United States and System Change”. In: *International Studies Quarterly* 23.3, pp. 339–359. ISSN: 0020-8833. DOI: 10.2307/2600172. (Visited on 07/27/2022).
- (June 2004). *Public Opinion and American Foreign Policy, Revised Edition*. University of Michigan Press. ISBN: 978-0-472-03011-8.
- Hurwitz, Jon and Mark Peffley (Dec. 1987). “How Are Foreign Policy Attitudes Structured? A Hierarchical Model”. In: *American Political Science Review* 81.4, pp. 1099–1120. ISSN: 0003-0554, 1537-5943. DOI: 10.2307/1962580. (Visited on 07/27/2022).
- Hutto, C. and Eric Gilbert (May 2014). “VADER: A Parsimonious Rule-Based Model for Sentiment Analysis of Social Media Text”. In: *Proceedings of the International AAAI Conference on Web and Social Media* 8.1, pp. 216–225. ISSN: 2334-0770. (Visited on 02/20/2022).
- Iyengar, Shanto and Kyu S Hahn (Mar. 2009). “Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use”. In: *Journal of Communication* 59.1, pp. 19–39. ISSN: 0021-9916. DOI: 10.1111/j.1460-2466.2008.01402.x. (Visited on 03/10/2022).
- Jacobson, Gary C. (Dec. 2010). “A Tale of Two Wars: Public Opinion on the U.S. Military Interventions in Afghanistan and Iraq: Jacobson / A TALE OF TWO WARS”. In: *Presidential Studies Quarterly* 40.4, pp. 585–610. ISSN: 03604918. DOI: 10.1111/j.1741-5705.2010.03802.x. (Visited on 02/17/2022).
- Johannesson, Mikael Poul (May 2021). *Mikajoh/Stmprinter*. (Visited on 03/15/2022).
- Kaufmann, Chaim (2004). “Threat Inflation and the Failure of the Marketplace of Ideas: The Selling of the Iraq War”. In: *International Security* 29.1, pp. 5–48. ISSN: 0162-2889. JSTOR: 4137546. (Visited on 07/27/2022).

- Kearney, Michael W. (2021). “Conservatives and Twitter Bots”. In: *Conservative Political Communication: How Right-Wing Media and Messaging (Re) Made American Politics*, pp. 155–165.
- Kertzer, Joshua D. (Jan. 2013). “Making Sense of Isolationism: Foreign Policy Mood as a Multilevel Phenomenon”. In: *The Journal of Politics* 75.1, pp. 225–240. ISSN: 0022-3816. DOI: 10.1017/S0022381612000989. (Visited on 07/27/2022).
- (2018). “Public Opinion and Foreign Policy”. In: *Oxford bibliographies in international relations*. New York: Oxford University Press. Retrieved from doi: <https://doi.org/10.1093/obo/9780199743292-0244>.
- Kertzer, Joshua D., Kathleen E. Powers, et al. (July 2014). “Moral Support: How Moral Values Shape Foreign Policy Attitudes”. In: *The Journal of Politics* 76.3, pp. 825–840. ISSN: 0022-3816. DOI: 10.1017/S0022381614000073. (Visited on 07/27/2022).
- Kertzer, Joshua D. and Thomas Zeitzoff (2017). “A Bottom-Up Theory of Public Opinion about Foreign Policy”. In: *American Journal of Political Science* 61.3, pp. 543–558. ISSN: 1540-5907. DOI: 10.1111/ajps.12314. (Visited on 07/27/2022).
- Kupchan, Charles A. and Peter L. Trubowitz (Oct. 2007). “Dead Center: The Demise of Liberal Internationalism in the United States”. In: *International Security* 32.2, pp. 7–44. ISSN: 0162-2889. DOI: 10.1162/isec.2007.32.2.7. (Visited on 02/18/2022).
- Lai, Brian and Dan Reiter (June 2005). “Rally ‘Round the Union Jack? Public Opinion and the Use of Force in the United Kingdom, 1948–2001”. In: *International Studies Quarterly* 49.2, pp. 255–272. ISSN: 0020-8833. DOI: 10.1111/j.0020-8833.2005.00344.x. (Visited on 07/27/2022).
- Layman, Geoffrey C., Thomas M. Carsey, and Juliana Menasce Horowitz (2006). “Party Polarization in American Politics: Characteristics, Causes, and Consequences”. In: *Annu. Rev. Polit. Sci.* 9, pp. 83–110.
- Lee, Jong R. (1977). “Rallying around the Flag: Foreign Policy Events and Presidential Popularity”. In: *Presidential Studies Quarterly* 7.4, pp. 252–256. ISSN: 0360-4918. JSTOR: 27547364. (Visited on 07/27/2022).

- Lenz, Gabriel S. (Jan. 2013). *Follow the Leader?: How Voters Respond to Politicians' Policies and Performance*. University of Chicago Press. ISBN: 978-0-226-47215-7.
- Levendusky, Matthew S. (2009). *The Partisan Sort*. University of Chicago Press.
- Luceri, Luca et al. (May 2019). “Red Bots Do It Better: Comparative Analysis of Social Bot Partisan Behavior”. In: *Companion Proceedings of The 2019 World Wide Web Conference*. WWW '19. New York, NY, USA: Association for Computing Machinery, pp. 1007–1012. ISBN: 978-1-4503-6675-5. DOI: 10.1145/3308560.3316735. (Visited on 02/18/2022).
- Lupia, Professor of Political Science Arthur et al. (Mar. 1998). *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* Cambridge University Press. ISBN: 978-0-521-58593-4.
- Mercer, Jonathan (Jan. 2010). “Emotional Beliefs”. In: *International Organization* 64.1, pp. 1–31. ISSN: 1531-5088, 0020-8183. DOI: 10.1017/S0020818309990221. (Visited on 07/27/2022).
- Mueller, John E. (June 1971). “Trends in Popular Support for the Wars in Korea and Vietnam 1”. In: *American Political Science Review* 65.2, pp. 358–375. ISSN: 0003-0554, 1537-5943. DOI: 10.2307/1954454. (Visited on 02/18/2022).
- (1973). *War, Presidents, and Public Opinion*. New York: Wiley.
- Oxford English Dictionary* (2000). Oxford, UK.
- Page, Benjamin I. and Marshall M. Bouton (Sept. 2008). *The Foreign Policy Disconnect: What Americans Want from Our Leaders but Don't Get*. University of Chicago Press. ISBN: 978-0-226-64459-2.
- Pennington, Jeffrey, Richard Socher, and Christopher Manning (Oct. 2014). “GloVe: Global Vectors for Word Representation”. In: *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Doha, Qatar: Association for Computational Linguistics, pp. 1532–1543. DOI: 10.3115/v1/D14-1162. (Visited on 02/18/2022).

- Pierson, Paul and Eric Schickler (2020). “Madison’s Constitution Under Stress: A Developmental Analysis of Political Polarization”. In: *Annual Review of Political Science* 23.1, pp. 37–58. DOI: 10.1146/annurev-polisci-050718-033629. (Visited on 02/16/2022).
- Poole, Keith T. and Howard Rosenthal (Nov. 1984). “The Polarization of American Politics”. In: *The Journal of Politics* 46.4, pp. 1061–1079. ISSN: 0022-3816. DOI: 10.2307/2131242. (Visited on 02/18/2022).
- Poole, Keith T. and Howard L. Rosenthal (2011). “Ideology and Congress, Vol. 1”. In: *Abingdon: Transaction*.
- Rathbun, Brian C. et al. (Mar. 2016). “Taking Foreign Policy Personally: Personal Values and Foreign Policy Attitudes”. In: *International Studies Quarterly* 60.1, pp. 124–137. ISSN: 0020-8833. DOI: 10.1093/isq/sqv012. (Visited on 07/27/2022).
- Roberts, Margaret E. et al. (2014). “Structural Topic Models for Open-Ended Survey Responses”. In: *American Journal of Political Science* 58.4, pp. 1064–1082. ISSN: 1540-5907. DOI: 10.1111/ajps.12103. (Visited on 02/20/2022).
- Rosenau, James N. (1961). *Public Opinion and Foreign Policy: An Operational Formulation*. Vol. 35. Random House.
- Sayyadiharikandeh, Mohsen et al. (Oct. 2020). “Detection of Novel Social Bots by Ensembles of Specialized Classifiers”. In: *Proceedings of the 29th ACM International Conference on Information & Knowledge Management*. CIKM ’20. New York, NY, USA: Association for Computing Machinery, pp. 2725–2732. ISBN: 978-1-4503-6859-9. DOI: 10.1145/3340531.3412698. (Visited on 02/18/2022).
- Stein, Arthur A. (Mar. 1976). “Conflict and Cohesion: A Review of the Literature”. In: *Journal of Conflict Resolution* 20.1, pp. 143–172. ISSN: 0022-0027. DOI: 10.1177/00220277602000106. (Visited on 07/27/2022).
- Stonecash, Jeffrey M., Mark D. Brewer, and Mack D. Mariani (June 2019). *Diverging Parties: Social Change, Realignment, and Party Polarization*. New York: Routledge. ISBN: 978-0-429-50096-1. DOI: 10.4324/9780429500961.
- Summers, Ed et al. (Feb. 2022). *DocNow/Twarc: V2.9.4*. Zenodo. DOI: 10.5281/zenodo.6257767.

- Sundquist, James L. (Oct. 2011). *Dynamics of the Party System: Alignment and Re-alignment of Political Parties in the United States*. Brookings Institution Press. ISBN: 978-0-8157-2318-9.
- Theriault, Sean M. (2008). *Party Polarization in Congress*. Cambridge: Cambridge University Press. ISBN: 978-0-521-88893-6. DOI: 10.1017/CBO9780511790652. (Visited on 02/18/2022).
- Tvinnereim, Endre and Kjersti Fløttum (Aug. 2015). “Explaining Topic Prevalence in Answers to Open-Ended Survey Questions about Climate Change”. In: *Nature Climate Change* 5.8, pp. 744–747. ISSN: 1758-6798. DOI: 10.1038/nclimate2663. (Visited on 03/14/2022).
- Varol, Onur et al. (May 2017). “Online Human-Bot Interactions: Detection, Estimation, and Characterization”. In: *Proceedings of the International AAAI Conference on Web and Social Media* 11.1, pp. 280–289. ISSN: 2334-0770. (Visited on 02/18/2022).
- Wirth, Kurt, Ericka Menchen-Trevino, and Ryan T. Moore (July 2019). “Bots By Topic: Exploring Differences in Bot Activity by Conversation Topic”. In: *Proceedings of the 10th International Conference on Social Media and Society*. SMSociety ’19. New York, NY, USA: Association for Computing Machinery, pp. 77–82. ISBN: 978-1-4503-6651-9. DOI: 10.1145/3328529.3328547. (Visited on 02/18/2022).
- Wittkopf, Eugene R. (1990). *Faces of Internationalism: Public Opinion and American Foreign Policy*. Duke University Press. ISBN: 978-0-8223-1070-9.
- Yang, Kai-Cheng, Emilio Ferrara, and Filippo Menczer (Jan. 2022). “Botometer 101: Social Bot Practicum for Computational Social Scientists”. In: *arXiv:2201.01608 [cs]*. arXiv: 2201.01608 [cs]. (Visited on 02/18/2022).
- Zaller, John R. and Zaller John R (Aug. 1992). *The Nature and Origins of Mass Opinion*. Cambridge University Press. ISBN: 978-0-521-40786-1.

## 5 Appendix

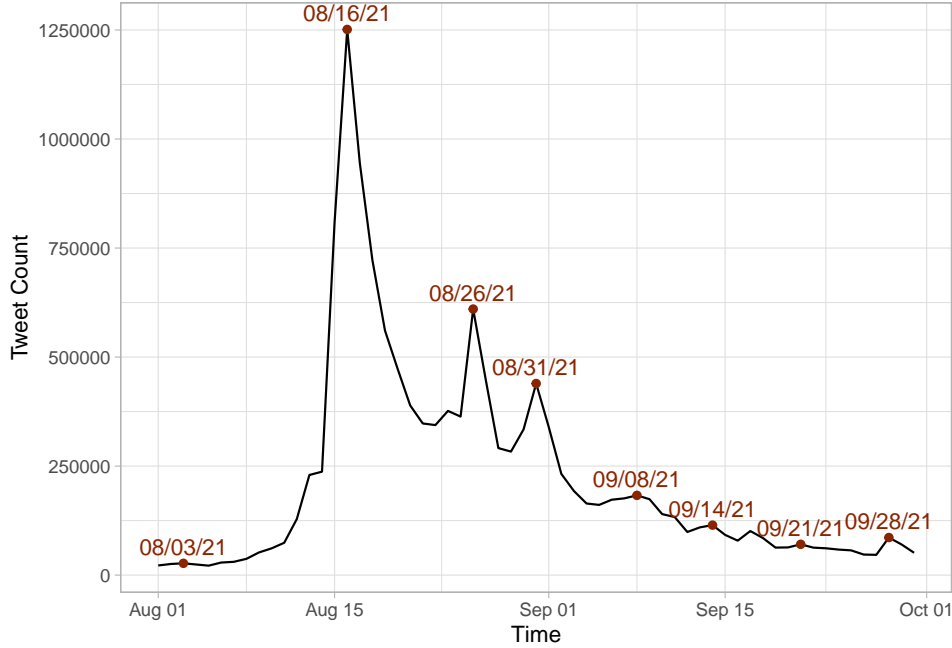


Figure A1: Tweet counts on Afghanistan withdrawal by month. Only months from August 1, 2021 to October 1, 2021 are included here as the count levels for the remaining months are low. Dates in red show the important break-points.

### 5.1 Examining Bot Behavior and Ideological Correlations

I first used Botometer version 4 to identify and remove bot accounts from my main analysis. After excluding these bots, I also conducted a separate examination to understand their behavior and to explore how these bots correlate with the ideological scores of users. Approximately 14% of tweets related to the Afghanistan withdrawal and 8% percentage of users were inauthentic, suggesting that even foreign policy debates are susceptible to manipulation by bot accounts. Concerning the ideological distribution of these bot accounts, 37% were identified as liberal while 63% were categorized as conservative; as illustrated by Figure 5.1 A strong association was found between higher ideology scores—indicating a conservative stance—and the likelihood of a Twitter account being a bot, as detailed in Table 2. These findings corroborate the research conducted by the developer of the R package `tweetbotornot` (Kearney 2021), which also identified

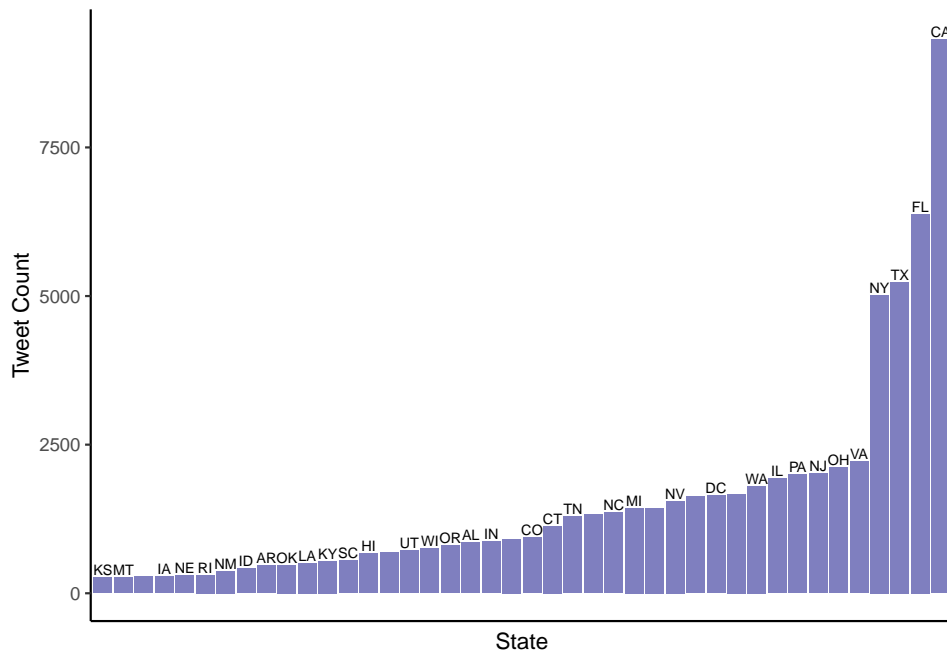
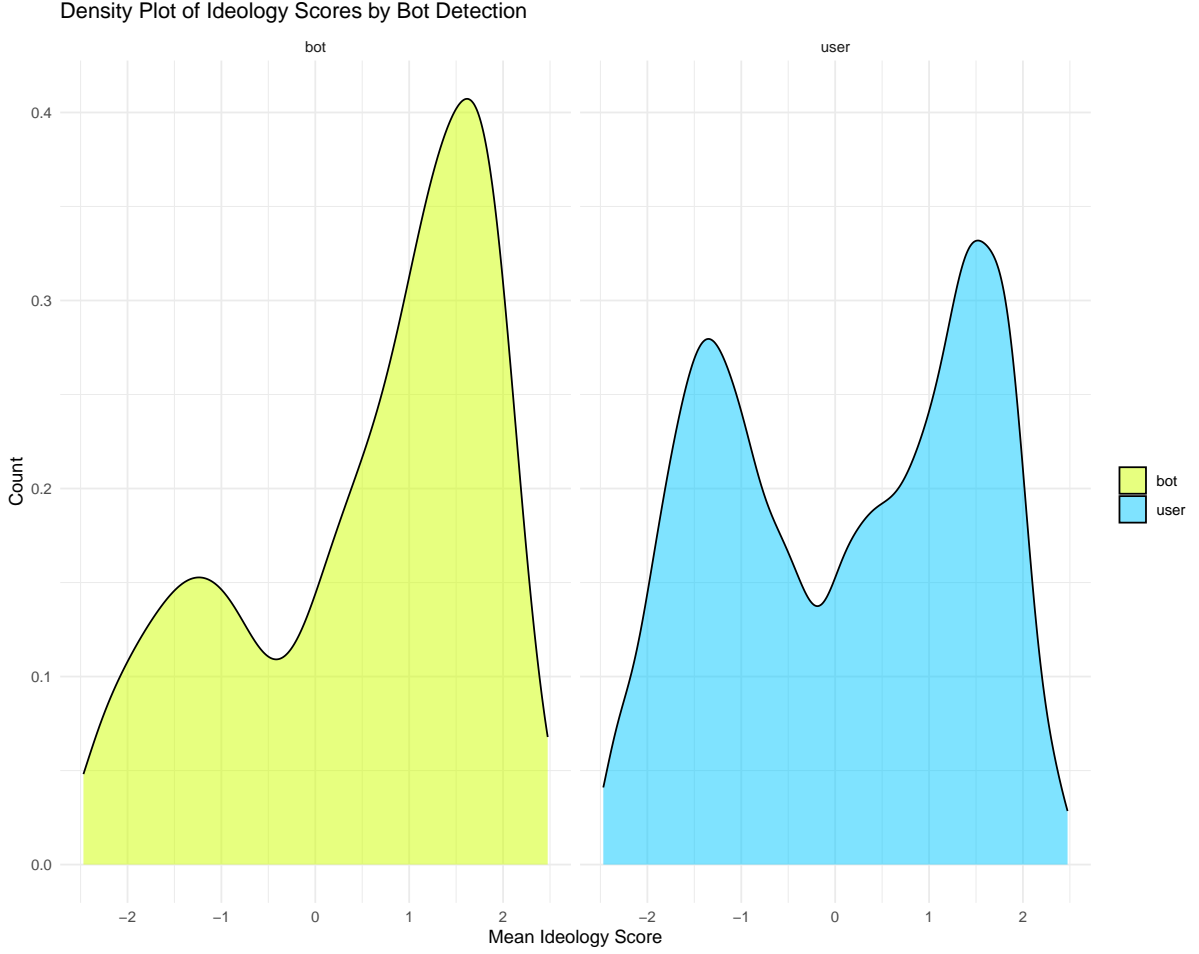


Figure A2: Tweet Counts by State. While California sent the most tweets on Afghanistan withdrawal by far, some states did not really engage in the issue.

conservatism as a significant predictor of bot activity on Twitter in other political discussions in the US.





## 5.2 Model Selection for Structural Topic Modeling

In topic modeling, the most critical hyperparameter when running a model is the number of topics,  $k$ . Hence, we would want to compare models with different values of  $k$  and choose the most optimal number. Figure A3 shows the diagnostics with the number of topics from 4 to 81. Here, I aim to maximize held-out likelihood while minimizing the residuals. Models with  $k$  higher than 40 have quite low held-out likelihood; therefore, I disregard any number above 40. We would also want to achieve higher semantic coherence, but it is relatively easier to do so with low  $k$ . Hence, as suggested by Roberts et al. (2014), I also take exclusivity into account. Figure A4 provides a closer look at the trade-off between semantic coherence and exclusivity. After visually inspecting this trade-off, I determined that the optimal number of topics is around 16 because semantic coherence is substantially stronger at that point, and exclusivity is not as high as it is at other

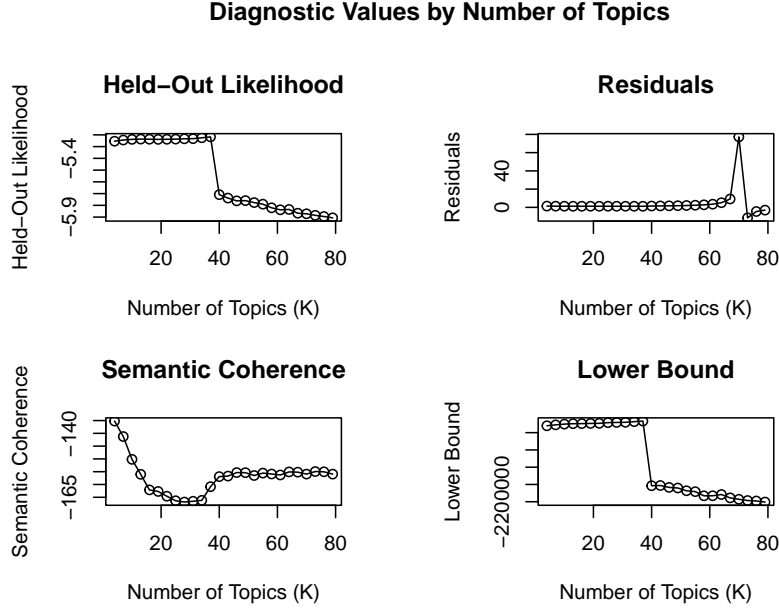


Figure A3: Model diagnostics by number of topics.

numbers.

After choosing the  $k$  to be 16, I evaluated multiple model runs based on different initialization settings to see if the model performance changes considerably based on the initial values. I utilized the `many_models` function in `stmprinter` package to accomplish this (Johannesson 2021), which took 66.3 hours on American University’s 24-core high-performance computer with an average memory use of 17GB. I found no significant differences in exclusivity and semantic coherence scores across models based on their initial priors, as shown in Figure A5. Therefore, instead of using randomly selected initialization numbers, I proceeded with the spectral initialization as suggested by Roberts et al. (2014) with 16 topics. The model converged in 49 iterations.

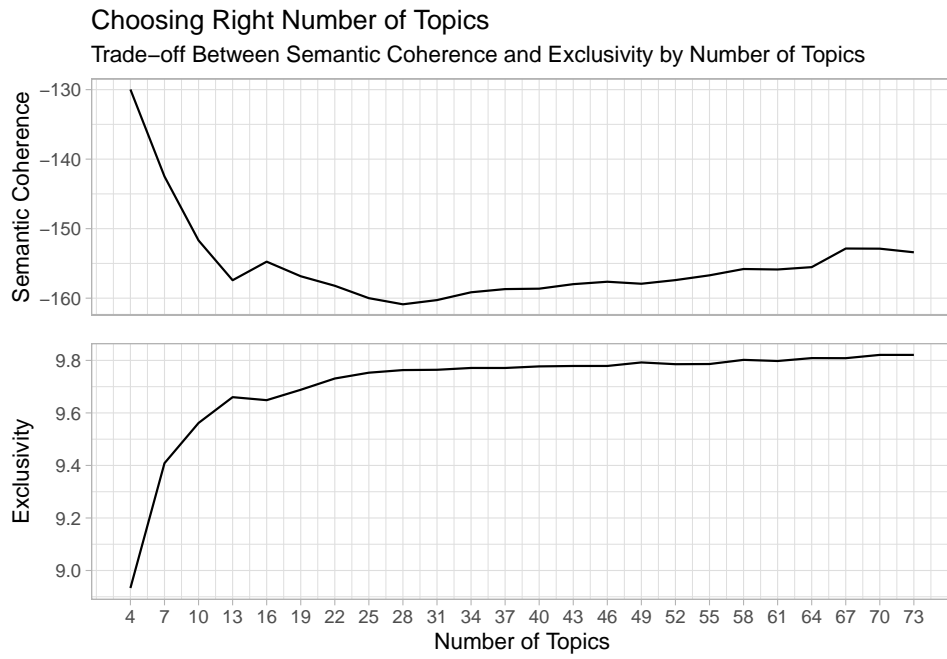


Figure A4: The model run for each of these different number of topics, and the results show the tradeoff between exclusivity and tradeoff for each number of topics.

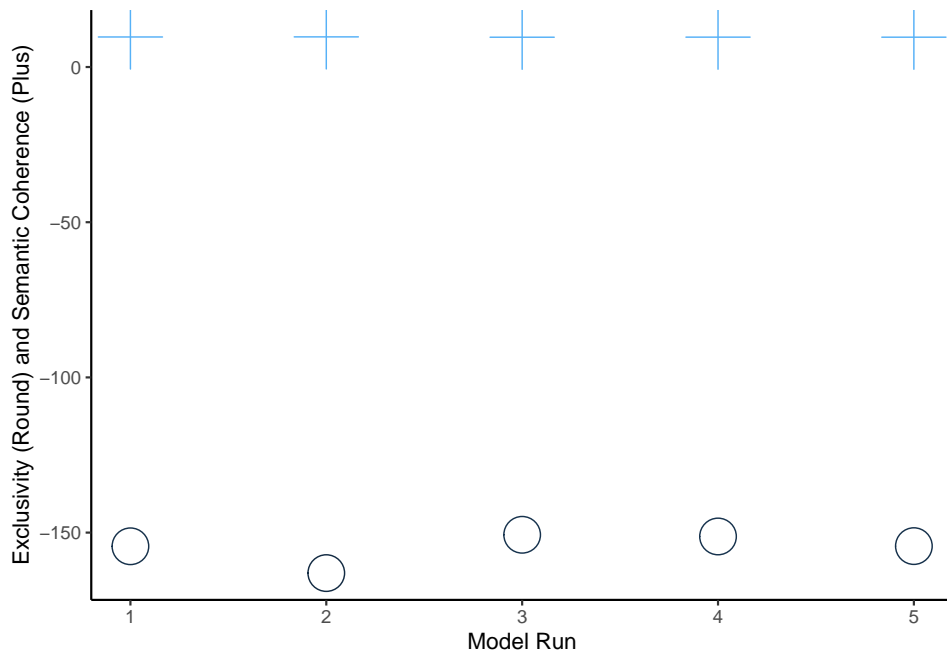


Figure A5: Exclusivity and Semantic Coherence scores among different runs when number of topics is 16.

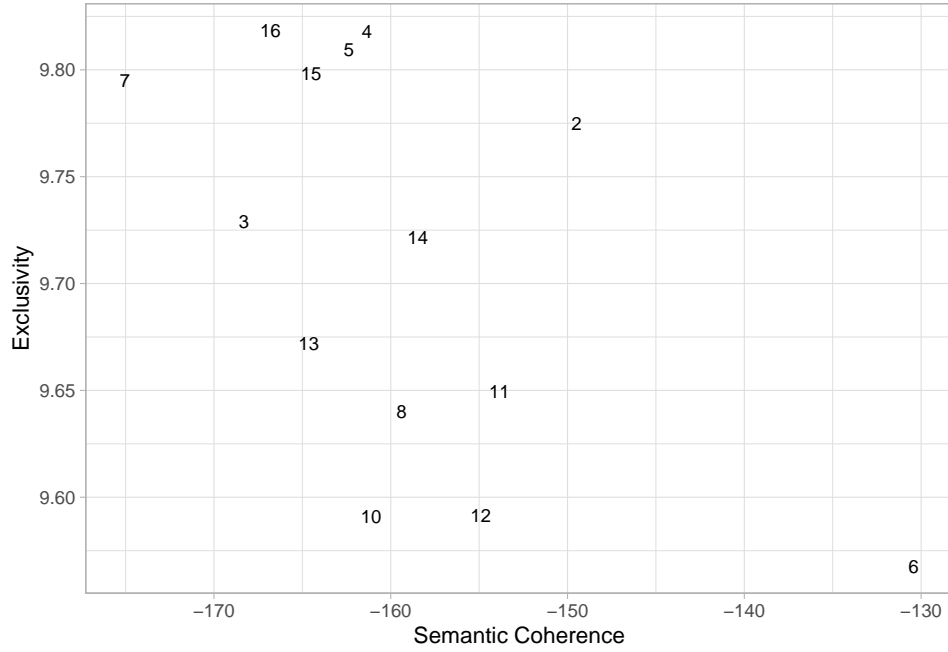


Figure A6: Semantic Coherence and Exclusivity Scores for Each Topic. The scores were calculated for the selected model, in which the number of topics is 16

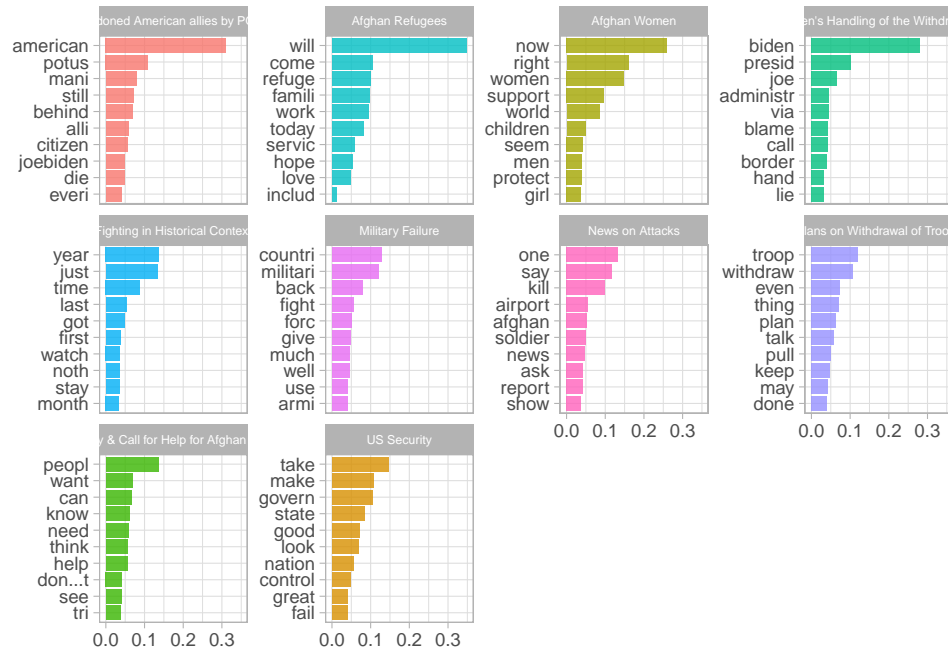


Figure A7: The words with the highest probability of selection for each topic.

Table 3: The Most Representative Tweets for the Top 10 Topics

Topic Name	Example 1	Example 2	Example 3	Example 4	Example 5
Pray & Call for Help for Afghan Ppl	If we out here saying pray for Afghanistan, let's really pray pray pray!!!!Like really pray to God and ask Him that He move in ways that restore and protect those in suffering, those mourning, those in difficulty! God cares, God hears,God knows!Ask! Seek!Knock! He's there!	@GiancarloC1985 If the people there really wanted what we were offering, the military wouldn't have laid down their guns and joined with the Taliban. I'm sure a good number of people totally want democracy, but it needs to be a majority wanting it for it to be effectual.	@KSAnimalRescue @BorisJohnson @DailyMailUK @SkyNews @DominicRaab @puppyrescuemisl @PressSec @FoxNews @BillFOXLA HELP please! jen u said in ur briefing to a reporter, if u know someone needing help in Kabul to get u their info...this woman, her staff, &amp; animals need help! ...all paperwork is in order EXCEPT NEED A LANDING PERMIT...PLS HELP!	@natiqmalikzada @JackPosobiec Makes sense? Taliban acquires a city and destroys it? Honestly. You can pray all you want won't but just not going to change. I pray for the innocent who just want to be free. Can ANY OF US IMAGINE being a U.S. soldier? I pray for them. I pray for all of you too. God Bless!\n	Same people that don't want to help immigrants from South America all of a sudden want to open the flood gates for Afghan Muslims? \nNot really, they just want to find something they can criticize Joe Biden about. \n#GOPHypocrisy https://t.co/drl8dJHuYA
Biden's Handling of the Withdrawal	The Biden administration is blaming President Trump for Afghanistan. I blame the Obama, Bush and Biden administration for the problems at the border and Afghanistan. Own up to your demented self Biden.	Everybody has had their fill of the commies Democrats and Biden mask Covid Afghan all the failures that's the reason for the fuck joe Biden chanting	I'm sick and tired of the body administration and the Democrats blaming the debacle of Afghanistan on President Trump President Biden administration has destroyed anything good that President Trump has done so why are they blaming the debacle of Afghanistan on President Trump	French President Emmanuel Macron Lectures Joe Biden on 'Moral Responsibility' in Afghanistan https://t.co/4V8vz13tw9 via @BreitbartNews	Rep. Markwayne Mullin: Biden admin lying about Afghanistan, president 'has blood on his hands'\nWr have reached the level of the question now is how to tell when Biden is NOT LYING! He now lies about his lies. \n\nhttps://t.co/q9v0EiijJ2
Military Failure	@LindseyGrahamSC Think of this. Peto Joe has singlehandedly given the Taliban a well trained and equipped army, a well trained and equipped Air Force and a giant well equipped air base. He's a Lefty Loon Grifter's dream!	@bryanrbeal That was weapons given to the afghan army who didn't use it to fight the Taliban and instead gave up	@Toxik_431 @CreamMachine326 @JuliaManch @benshapiro Imagine the Taliban is coming. What would you an American do? Fight! \n\nUSA spent trillions on training an Afghan army for 20 YEARS! They had 325k strong. 4:1 numbers, Air Force, Blackhawks, billions in military equip. They didn't even fire a shot for their Capital! No FIGHT! \$3.5 Trillion over 10 years is less than we spent in Afghanistan the last ten years, @JoeManchinWV.	@Styo28183449 @BuckeyeinDC @Baconside @LauraJedeed Who was paying the Afghan army? Once it became clear the money would stop where was the incentive to fight against the Taliban?The Afghan army when given a choice to fight the Taliban or put their guns down almost always turned tail and ran. This was about money not beliefs	@KwikWarren Honestly, it looks like all along (20 years to be exact) the US military was training the Taliban and strategically placing military equipment across the country for them, just in case they'll need it to fight the 'bad Taliban'. Well well well!
Fighting in Historical Context	Well, compare to the last 20 years. What's even crazier is that we watched the USSR invade Afghanistan, stay there for 9 years, then leave. Then we did something pretty damn similar. And we were involved in the USSR in Afghanistan, just funding the opposition. Same ole shit.	Last time we "pulled out of Afghanistan" we got ISIS and had to act to a complicated crisis. Come on @POTUS what's the last 20 years mean to you		@JohnCornyn Yesterday? Really? You've been in office as long as we've been In Afghanistan. This is the first time you've noticed a problem?	Just spoke with 4 veterans who served in Afghanistan who say after 20 years of fighting, it only took a matter of weeks for all they've sacrificed to fall apart. Full story soon. https://t.co/DpS8EsQBYo
News on Attacks	Open SmartNews and read ""Two 'high profile' ISIS targets in Afghanistan killed in US drone strike, Pentagon says"" here: https://t.co/o4lVlWTKKu \nTo read it on the web, tap here: https://t.co/cyfdluVTYO	Open SmartNews and read "" Afghanistan news: 17 reported dead in celebratory gunfire as Taliban claim to have taken Panjshir"" here: https://t.co/rfzeau1ZH8 \nTo read it on the web, tap here: https://t.co/WVK05YgJ3R	Open SmartNews and read ""Taliban show off captured, blindfolded ISIS terror suspect"" here: https://t.co/YppH8FAqpy \nTo read it on the web, tap here: https://t.co/IONxT5RFhN	Open SmartNews and read ""Taliban are reportedly beating Afghans for wearing western clothes"" here: https://t.co/MM7N8SozLP \nTo read it on the web, tap here: https://t.co/cTOdC1aWEB	BREAKINGNEWS UPDATE KABUL AIRPORT BOMBING - Two explosions at the Kabul Airport kills more than a dozen people. Pentagon officials say U.S. service members and Afghan civilians were among the casualties\n\nhttps://t.co/dUzAbW62n2
Abandoned American allies by POTUS	@POTUS Day 34 for the Americans U left behind in Afghanistan for the Taliban terrorist butchers. 38 CA school kids still there! #TalibanJoe #BidenDisaster	@joebiden @potus @PressSec @PentagonPresSec How many US Citizens are STILL #standed and being held #hostage in #Afghanistan ?? https://t.co/wbpD3Zs6oX	@POTUS Day 2 of Americans &amp; Afghan allies left behind by a weak, feckless President. #NoOneLeftBehind #TalibanJoe	Why is anyone surprised @JoeBiden abandoned his dog Major? The @POTUS abandoned how many Americans in Afghanistan? What's a dog to him.	@POTUS Day 42 for the Americans U left behind in Afghanistan for the Taliban terrorist butchers. #TalibanJoe #OpenBordersJoe
Plans on Withdrawal of Troops	America withdraws its troops and suddenly ya'll are okay with continuing to spend trillions of dollars to keep troops in Afghanistan and continue American imperialism.	2 of 2\n"Getting out of Afghanistan is a wonderful and positive thing to do. I planned to withdraw on May 1st, and we should keep as close to that schedule as possible." \n@EArOSEmenaM @YoourrMama @Hol_Shayer @JoannieRose78 @PRus51	""The US was going to pull out regardless, for political and economic reasons. Blame Biden for a bungled withdrawal, not for the withdrawal itself. Trump was even more eager to withdraw."" https://t.co/gktVppAkzv	Then he might want to recall this statement\n\n""Getting out of Afghanistan is a wonderful and positive thing to do. I planned to withdraw on May 1st, and we should keep as close to that schedule as possible."" -Donald Trump https://t.co/24iNzhxlRz	I accidentally retweeted a Pres. Trump statement from April praising HIS decision to pull out of Afg. Remember he invited the Taliban to the talks. Bidens mistake was to keep that plan but his withdrawal of troops has been a disaster. Maybe neither should have trusted them.
US Security	@FroghWazhma Military government, close down all non security institutions, spend more budget on security. Let @AmrullahSaleh2 to take control of the Gov %100. Eradication of Taliban first step from gov jails. %100 control over media, like Qatar.	The government of Afghanistan appeared to be expanding and solidifying its control beyond the urban areas and into remote regions. It looked like stability, civil authority, and dependable governance could take hold.\n\nWhen I returned to Afghanistan in 2015 I was concerned.	@tedcruz If we abandon those that helped our soldiers in Afghanistan.\n\nThen we have diminished the credibility of the United States and its government. It was never the intention for the United States to be controlled by those who make the largest donations.	By powers vest by the Constitution of the United States as President Commander and Chief of the United States Dwayne Antonio Riojas do here by VETO The Afghanistan \n\nHarris makes rare recess appearance to help pass Afghanistan evacuee bill https://t.co/QnOloxVa17 via @politico	Suggestion: start Military gov, close down all non security institutions, spend more budget on security. Let @AmrullahSaleh2 to take control of the Gov %100, or at least security cabinet.Eradication of Taliban first step from gov jails. %100 control over media, like Qatar gov.
Afghan Women	@RepMaxineWaters Hey big mouth! Haven't heard a peep from your so-called care for protecting women, for the women and girls of Afghanistan. Girls raped and tortured and married to older men. Women beaten and subjugated to men. Torture! AND, you care about horses.	@RichardEngel Are the Afghanistan men coming out? No? Perhaps the majority of men are with the Taliban's position on women's rights. Women all over the world face hostility and violence..USA is no exception.	In normal life I distain violence, but what the Afghan women will most likely suffer is not normal but the roots of evil. I encourage and I pray that the women take up arms to protect their rights since it appears that the men won't. https://t.co/ZV4Xxx8u8b	Today is a bad day for the rights of women and children. Women's rights are human rights and those right cannot flourish under a Taliban government.	This is a return to Taliban's draconian rule of the 90s denying men and women basic fundamental rights. If this wasn't acceptable to the civilized world back then why should it be now? #TalibanHaveNotChanged. https://t.co/7Ewi04ukKp
Afghan Refugees	Love love love my football club: "Around 150 Afghan refugees treated to free tickets for Watford cup match" https://t.co/1leoAuJsCz	Have you noticed @benshapiro that Taliban local Mayors sound like NYC's @BilleBlasio? \n\n"Workers will be encouraged to come back to work (wax) &amp; we'll be nice about it." \n\n*1 week goes by*\n\n"All will come back to work or be beheaded &amp; your family starved for your noncompliance."	Sacramento will always be a place that welcomes everyone to come &amp; live. Thankful we have a group of advocates working w/ our Afghan refugees - who come seeking safety &amp; shelter - w/ services they need to transition into life here in Sac. https://t.co/E0KMOA7WoS	Will #Syracuse become a Safe City for Afghan refugees and immigrants? I sure hope so. I hope @BenWalsh44 @SenGillibrand @SenSchumer are working towards this.	To the families of those US Marines who died or were wounded today in Kabul Afghanistan, my family and I salute you. We will pray for you. We are deeply grateful for the service of your loved ones and we are stricken by your loss. We are so sorry.