



A Corpus-Based Study of War Metaphor Variation in U.S. Presidential Campaign Speeches: Gender, Party Affiliation, and Political Seniority (2016–2024)

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ABSTRACT

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This corpus-based study examines the identification, classification, and distribution of war metaphors in a 241,440-word corpus of U.S. presidential campaign speeches from the 2016, 2020, and 2024 election cycles. It investigates variation across three extralinguistic variables: gender, party affiliation, and political seniority. FrameBERT was used for automatic token-level metaphor detection, followed by manual contextual validation and target-domain annotation. War-related metaphorical expressions were classified into eleven target-domain categories, and normalized frequencies were compared across groups. Omnibus chi-square tests indicated significant associations between the overall distribution of target domains and each of the three extralinguistic variables. At the descriptive level, female candidates showed higher normalized frequencies in the moral/value, nation, and other domains, whereas male candidates showed higher normalized frequencies in the institution and society domains. Democratic candidates showed higher normalized frequencies in the events/actions, moral/value, and other domains, while communication and institution metaphors occurred only in the Republican subset. Across political-seniority groups, high-seniority candidates showed the highest normalized frequency in the moral/value domain, whereas middle-seniority candidates showed the highest normalized frequency in the nation domain. These findings suggest that war-metaphor framing is associated with speakers' social and political positioning in the present corpus. However, corpus-size imbalance, overlap among the explanatory variables, and the inclusion of repeated candidates across election cycles prevent the independent and interactive effects of the variables from being statistically distinguished. The study contributes to research on political metaphor variation and demonstrates the value of combining computational metaphor detection with manual contextual validation and target-domain analysis.

KEYWORDS

war metaphor, conceptual metaphor, political discourse, U.S. presidential campaign, metaphor variation

1. Introduction

The interactive relationship between metaphor and politics has attracted scholarly attention since the time of Aristotle and remains especially salient in contemporary studies of political discourse (Howe 1988, Mio 1997). Metaphor is fundamental to political communication because it enables speakers to render abstract, contested, or emotionally charged issues more accessible, memorable, and persuasive (Musolff 2016). Rather than functioning merely as rhetorical ornamentation, metaphor constitutes a key discursive resource through which political realities are framed, interpreted, and contested (Charteris-Black 2004). Lakoff (2016) and Musolff (2016) further argue that political concepts are themselves metaphorically structured and that metaphor influences public understanding by shaping how political events and actors are conceptualized and evaluated.

Among the various metaphor types employed in political discourse, war metaphors have received particular attention due to their frequency and functional advantages (Howe 1988). This is partly because war metaphors are highly conventionalized in political language and partly because they are especially effective in representing conflict, competition, and opposition in a cognitively salient manner. As Flusberg et al. (2018) argue, war metaphors provide a structured framework for reasoning about complex abstract phenomena, while simultaneously conveying strong evaluative and emotional force. In electoral contexts, they commonly conceptualize campaigns as struggles, rival candidates as opponents, and policy debates as forms of confrontation or combat. Recent studies further suggest that war metaphors can function as strategic rhetorical tools for constructing ideological opposition, legitimizing political positions, and shaping national identity in campaign discourse (Anwar et al. 2025).

Although metaphor is pervasive in political discourse, its use is far from uniform. An expanding body of research demonstrates that metaphor varies systematically according to extralinguistic factors such as gender, party affiliation, political seniority, and broader contextual conditions (Charteris-Black 2009, Felekidou 2022, Heyvaert et al. 2020, Zeng et al. 2020). This means that their linguistic realization and interpretation can also vary across cultural and discourse contexts, although conceptual metaphors may be partly grounded in embodied experience (Yu 1998). Consequently, the selection, frequency, and conceptual function of metaphors may be shaped by their political identities, institutional positions, and rhetorical objectives (Ahrens 2019, Reuchamps et al. 2019).

Building on this line of research, the present study examines war metaphor variation in U.S. presidential campaign speeches from 2016 to 2024, focusing on three extralinguistic variables: gender, party affiliation, and political seniority. This period provides a particularly valuable context because it encompasses historically significant electoral developments, including the first female nominee of a major political party in 2016, the nomination of the first African-American woman by a major party in 2024, repeated presidential campaigns involving several prominent candidates, and substantial variation in candidates' political experience. By analyzing campaign speeches rather than more institutional political texts, the study seeks to capture metaphor use in a highly competitive and rhetorically charged discourse setting.

Methodologically, the study adopts a hybrid corpus-based approach that combines automatic metaphor detection with manual target-domain classification. To improve both efficiency and analytical consistency, metaphor identification is conducted using FrameBERT (Li et al. 2023), a pretrained language model based on frame semantics that operationalizes both the Metaphor Identification Procedure (MIP) (Pragglejaz Group 2007) and the Selectional Preference Violation (SPV) approach (Wilks 1975). Manual classification is subsequently employed to validate metaphorical target domains. This hybrid methodology addresses limitations associated with fully manual annotation, including its labor-intensive nature and susceptibility to subjective judgment, while aligning with recent developments in computational and corpus-based metaphor validation procedures (Xu et al. 2023).

The study addresses the following three research questions:

1. How can war metaphors be systemically identified and classified in a corpus of U.S. presidential campaign speeches from 2016 to 2024?
2. How are war metaphors distributed across gender, party affiliation, and political seniority, and how do their target domains vary across these extralinguistic variables?
3. How can the observed patterns of war metaphor variation be interpreted in relation to previous research on political metaphor, conceptual metaphor, and metaphor variation?

The significance of the study lies in its attempt to contribute to both metaphor research and political discourse analysis. By examining gender, party affiliation, and political seniority within a single corpus-based study, it aims to offer a more comprehensive and multidimensional account of war metaphor variation in U.S. presidential campaign discourse (Garlepov et al. 2025, Zeng et al. 2020).

2. Previous Studies

Research on metaphor in political discourse has consistently demonstrated that metaphor plays a fundamental role in framing political reality. Political language is often difficult to process directly because it deals with abstract institutions, ideological conflict, and policy complexity. Metaphor offers speakers a way to render such matters intelligible by projecting structure from familiar source domains onto more abstract target domains (Kövecses 2010, Lakoff and Johnson 1980). Within this broad area, war metaphors have been especially prominent because they naturally encode opposition, struggle, victory, threat, and strategic action, all of which are highly relevant to political competition (Howe 1988, Musolff 2016).

One prominent line of research has examined the relationship between metaphor and political party affiliation. Lakoff's (1996, 2016) theory of moral politics argues that liberal and conservative ideologies are associated with distinct conceptual systems and framing preferences. Subsequent studies across both two-party and multi-party systems have provided empirical support for this perspective, demonstrating that metaphors reflect ideological stance, policy priorities, and different representations of social problems (Felekidou 2022, Kovář 2019, 2020). In this literature, metaphor functions not merely as a stylistic device but as a powerful mechanism through which political identities and ideological commitments are constructed and reinforced.

A second strand of research has focused on the relationship between speaker characteristics and metaphor use. Studies have shown that metaphorical choices vary according to gender, communicative context, and political role (Charteris-Black 2009, Felekidou 2022, Heyvaert et al. 2020). Tenorio (2009), for example, reports gender-related differences in metaphorical source-domain use in Irish political discourse. Compared with gender and party affiliation, however, political seniority has received considerably less scholarly attention. Existing studies nevertheless suggest that political experience influences metaphor use in meaningful ways. Heyvaert et al. (2020), for instance, indicate that more senior political actors employ deliberate metaphors more strategically in non-institutional interviews, while Charteris-Black (2009) demonstrates that metaphor use in parliamentary discourse varies across speakers and gendered political contexts. These findings may be tentatively interpreted in relation to construal-level theory, according to which greater psychological distance is associated with more abstract mental representation (Trope and Liberman 2010). However, the present study does not directly test psychological distance.

Recent multifactorial studies differ not only in the number of variables considered but also in how the relationships among those variables are analytically modeled. Zeng et al. (2020), for example, employed log-linear analysis to examine associations among metaphor source domain, gender, speech section, and political role, thereby modeling the combined relationships among multiple explanatory variables. Garlepow et al. (2025) considered both sociolinguistic variables, such as gender and regional variety, and intralinguistic properties, including the length and semantic prosody of metaphor-related expressions, while combining quantitative analysis with qualitative interpretation. In contrast, the present study examines gender, party affiliation, and political seniority within a single corpus and combines FrameBERT-based metaphor detection with manual contextual validation and target-domain classification. However, the three extralinguistic variables are analyzed separately rather than entered simultaneously into a single statistical model; consequently, their independent and interactive effects cannot be statistically distinguished. Comparative and cross-linguistic studies (Bratoz 2012) have also highlighted how electoral contexts across different regions elicit both shared and distinct metaphorical structures. Research on corpus-based metaphor analysis and stylistic variation has further underscored the value of incorporating speaker identity, communicative setting, and audience design into the analysis of political discourse (Yi et al. 2025). Collectively, these studies point toward the need for more fine-grained and multidimensional accounts of metaphor variation.

Despite substantial progress, systematic studies of war metaphor variation in U.S. presidential campaign discourse remain limited. Several methodological and empirical constraints are common in previous work. Previous studies have often relied on relatively small, manually analyzed datasets, as illustrated by candidate-specific studies such as Pavlikova (2020). Others depend heavily on manual metaphor identification, which limits replicability and scalability. In addition, political seniority remains underexplored, and many studies do not simultaneously control for the possible overlap among gender, party affiliation, and political experience. Addressing these limitations, the present study investigates war metaphor variation in U.S. presidential campaign speeches from 2016 to 2024 through a comparative corpus-based analysis across gender, party affiliation, and political seniority.

3. Methodology

This study adopts a mixed-methods approach that combines quantitative and qualitative analyses to examine patterns of metaphor variation in U.S. presidential election discourse. Quantitative analysis is used to identify the frequency and distribution of metaphorical tokens and metaphor types across different extralinguistic dimensions, while qualitative analysis focuses on the interpretation of conceptual metaphors and their underlying mappings. Together, these methods enable a comprehensive examination of metaphor usage at both linguistic and conceptual levels.

3.1 Corpus

To address the research questions outlined above, the corpus comprises presidential campaign speeches produced by multiple candidates during the 2016, 2020, and 2024 U.S. presidential elections. For each election cycle, four candidates were selected with the aim of achieving a relative balance in terms of gender representation. The time span of the data collection covers the period from the official announcement of candidacy to the candidate's withdrawal, defeat, or victory in the election.

In the 2016 election, two female candidates - Hillary Clinton and Carly Fiorina - were included, as they were the only women who officially announced their candidacy for president. In the 2020 election, which marked a peak in female participation, Marianne Williamson and Tulsi Gabbard were selected due to their distinctive professional backgrounds and political positions, with Marianne being a writer and Tulsi serving as the only female military veteran among the candidates. In the 2024 election, Kamala Harris was included following her succession to the Democratic nomination, while Nikki Haley was selected as a Republican female candidate. With regard to male candidates, Bernie Sanders was selected for the 2016 election due to his extensive political experience. The 2020 and 2024 elections each featured two male candidates, Donald Trump and Joseph R. Biden, who advanced to the final stages of the presidential race.

The corpus data were primarily retrieved from The American Presidency Project (www.presidency.ucsb.edu), with C-SPAN (www.c-span.org) serving as a supplementary source. Political seniority is defined as the number of years of formal political experience prior to the election cycle under investigation (Heyvaert et al. 2020).

Across the three election cycles, four candidates were initially selected per election, yielding a total of twelve candidates. However, the final dataset comprises nine unique candidates, as Donald Trump and Joseph R. Biden announced their candidacy multiple times across different election cycles. Because the candidate-level corpora varied substantially in size, ranging from 6,211 to 61,492 words, normalized frequencies per 10,000 words were reported to facilitate descriptive comparisons across candidates and groups. However, normalization does not fully eliminate the effects of corpus imbalance, which remains a limitation of the present dataset. With respect to political seniority, candidates were categorized into three groups based on years of political experience. The zero-seniority group includes candidates with no prior political experience; the middle-seniority group includes candidates with 10 to less than 20 years of experience; and the high-seniority group includes candidates with 20 or more years of experience. Each group contains three candidates, ensuring balanced representation across seniority levels.

Table 1 below presents the detailed information about the corpus used in the study, including candidates' party affiliation, gender, seniority, and finally the number of remark words.

Table 1. Descriptive Information of the Presidential Election Corpus (2016–2024)

Year	Candidate	Party	Gender	Seniority (year)	Corpus size
2016	Hillary Clinton	D	F	Middle (12)	15,863
	Donald Trump	R	M	Zero (0)	19,086
	Carly Fiorina	R	F	Zero (0)	22,337
	Bernie Sanders	D	M	High (33)	19,878
2020	Donald Trump	R	M	4	35,162
	Joseph R. Biden	D	M	High (44)	6,211
	Tulsi Gabbard	D	F	Middle (10)	14,484
	Marianne Williamson	D	F	Zero (0)	12,360
2024	Joseph R. Biden	D	M	High (47)	10,999
	Donald Trump	R	M	4	61,492
	Kamala Harris	D	F	High (20)	12,836
	Nikki Haley	R	F	Middle (13)	10,732

Note: D = Democrat; R = Republican; F = Female; M = Male

3.2 Metaphor Identification

Metaphor identification in this study was conducted using FrameMetaphor, a pretrained language model

designed for automatic metaphor detection (Li et al. 2023). FrameBERT is a BERT-based metaphor detection model that incorporates FrameNet embeddings and draws on both the Metaphor Identification Procedure (MIP) (Pragglejaz Group 2007) and the Selectional Preference Violation (SPV) approach (Wilks 1975) in its model design (Li et al. 2023). The model was evaluated on four benchmark datasets—VUA-18, VUA-20, MOH-X, and TroFi—with dataset-specific F1 scores ranging from 0.730 to 0.838. It was trained on four open-access metaphor-annotated corpora: the Vrije Universiteit Amsterdam Metaphor Corpus (2018 edition), the Vrije Universiteit Amsterdam Metaphor Corpus (2020 edition), the Metaphor-Oriented Highly Explicit Corpus, and the TroFi Example Base. By combining contextual, isolated-word, sentence-level, and frame-based representations, the model generates token-level predictions of metaphorical usage. FrameBERT was used to detect metaphorically used lexical items; conceptual mappings and target-domain categories were subsequently determined through manual analysis.

Despite its efficiency, automatic metaphor detection is not free from error, particularly in cases involving context-dependent, conventionalized, or borderline metaphors. To enhance the reliability of the dataset, a human validation procedure was implemented following automatic extraction. Specifically, a subset of the data was independently reviewed by two trained annotators, who verified metaphorical expressions and assigned target-domain categories. Inter-annotator agreement was measured using Cohen's kappa, yielding a value of $\kappa = 0.82$, which indicates substantial agreement. Discrepancies were resolved through discussion to reach a consensus. This combined approach of machine-assisted detection and manual validation is consistent with recent corpus-based metaphor studies (e.g., Xu et al. 2023), which emphasize the importance of balancing computational efficiency with annotation reliability. Following such practices, this study further ensured annotation consistency by developing a coding guideline prior to analysis and conducting pilot annotations to calibrate annotators' judgments. This hybrid methodology enhances both the scalability and validity of metaphor identification in large political corpora.

3.3 Procedures and Statistical Analysis

This study follows a corpus-based approach to the analysis of conceptual metaphors. First, the FrameBERT model was applied to determine whether each word in the corpus was used metaphorically. Then, war-related source domain keywords were selected based on previous studies. These keywords were used to search the constructed corpus, and sentences containing war-related lexical items were extracted. For words identified as metaphorical, the corresponding target domains were identified and categorized. Finally, conceptual metaphors were formulated in the canonical "A is B" format, and representative corpus examples were analyzed in detail. The detailed information about the data processing is presented in Table 2.

In this study, normalized frequencies per 10,000 words were calculated for descriptive comparisons across candidate corpora of unequal size. Chi-square tests of independence were used to examine the overall association between target-domain distribution and each extralinguistic variable, and Cramer's V was reported as a measure of association strength. Because a verified multiple-comparison-adjusted post hoc procedure was not available for the individual target-domain contrasts, only the omnibus chi-square results are interpreted inferentially. Domain-level patterns are therefore described on the basis of normalized frequencies and are not treated as statistically significant individual contrasts. Gender, party affiliation, and political seniority were analyzed separately; consequently, these analyses do not control for potential confounding or distinguish the independent and interactive effects of the explanatory variables.

Table 2. Corpus-Based Procedure for War Metaphor Extraction and Classification

Step	Procedure	Description	Output
1	Automatic metaphor detection	FrameMetaphor was applied to the corpus to determine whether each word was used metaphorically.	Metaphorically used words in the corpus
2	Selection of war-related source-domain keywords	War-related keywords were selected on the basis of previous metaphor studies, including attack, battle, combat, defeat, defend, destroy, fight, protect, struggle, threat, and war.	A list of war-related source-domain keywords
3	Corpus search	The selected keywords and their inflectional forms were searched in the corpus.	Sentences containing war-related lexical items
4	Contextual verification	The extracted sentences were examined in context to confirm whether the war-related expressions were used metaphorically.	Metaphorical war-related expressions
5	Target-domain classification	The target concepts and target domains of the metaphorical expressions were identified and categorized.	Classified target domains
6	Conceptual metaphor formulation-	Conceptual metaphors were formulated in the form of “TARGET DOMAIN IS WAR.”	A set of war-related conceptual metaphors

4. Results and Discussions

4.1 Identification and Classification of War Metaphor

War metaphors were identified and extracted through a corpus-based approach. Keywords representing the war domain were selected based on Ahrens (2019). All inflectional forms were also included to identify the target domains most frequently associated with these terms as displayed in Table 3 below.

Table 3. War Metaphor Source Domain Keywords

Keyword list	Word forms searched
attack	attack, attacks, attacked, attacking
battle	battle, battles, battled, battlefield, battleground
combat	combat, combats, combated, combating,
defeat	defeat, defeats, defeated, defeating
defend	defend, defends, defended, defending, defendant, defender, defenders
destroy	destroy, destroys, destroyed, destroying,
fight	fight, fights, fought, fighting, fighter, fighters,
protect	protect, protects, protected, protecting, protection, protections, protectionist, protectionism
struggle	struggle, struggles, struggled, struggling
threat	threat, threats, threaten, threatens, threatened, threatening
war	war, wars

Identifying the target domain is much more complex than identifying the source domain, and not every source domain has a corresponding target domain (Kövecses 2010). Therefore, this study only provides the topical ones that map obvious target domains. The target-domain taxonomy was developed with reference to major domains discussed in previous research on war metaphors, particularly Flusberg et al. (2018), and was supplemented with categories derived from Charteris-Black (2004), Kövecses (2010), and Lakoff and Johnson (1980). In total, there are 11 target-domain types, as outlined in Table 4 along with their representative concepts. When it comes to the event and action targets, the determination depends on whether the target domain is construed as an event- or action-based structure, typically realized through verbal expressions. Since the annotation of target domains relies

entirely on human judgment, two experienced researchers were involved in the annotation process to ensure reliability. To assess the consistency between annotators, inter-annotator agreement was calculated, yielding a high level of agreement (Cohen's $\kappa = 0.87$). This result indicates that the annotation is highly reliable.

Table 4. Target Domains Taxonomy

Target domain	Representative concept
communication	argument, debate
economic	business, market, trade
events and actions	specified events and actions
health	disease, treatment, recovery
institution	policy implementation
nation	international relations
politics	election, ideology, policy
personal	emotion, love
moral/value	belief, soul, value
society	crime, equality, poverty
others	miscellaneous

4.2 Distribution of War Metaphors Across Extralinguistic Variables

This section examines the distribution of war metaphors across three key extralinguistic variables - gender, party affiliation, and political seniority - with a particular focus on how their target domains vary across these dimensions. Moving beyond overall frequency patterns, the analysis adopts a comparative perspective to examine how different groups preferentially map war metaphors onto specific conceptual domains. By doing so, it seeks to uncover the extent to which metaphor use is shaped by speakers' social and political positioning, while also identifying both shared tendencies and systematic variation across political seniority groups.

Searching the keywords displayed in Table 3 yielded 484 metaphorical words in total, among which 413 have obvious target domains.

4.2.1 Gender

Regarding the types of target domains, a clear divergence in target-domain orientation emerges, reflecting different rhetorical strategies and discursive positioning. Female candidates tend to employ war metaphors more extensively in abstract, evaluative, and collective domains, particularly those related to values and national identity. In contrast, male candidates show a relatively stronger orientation toward institutional and societal domains, suggesting a preference for structurally grounded and system-oriented framing. Overall, this pattern indicates that gendered metaphor use is not merely quantitative but also qualitatively differentiated in terms of conceptual focus and rhetorical function.

Table 5 shows descriptive differences in the normalized distribution of war-metaphor target domains across gender. The omnibus chi-square test indicated a significant association between gender and the overall target-domain distribution ($\chi^2 = 69.629$, $df = 10$, $p < 0.001$), with Cramer's $V = 0.411$, indicating a moderate-to-strong association. Because no multiple-comparison-adjusted post hoc procedure is reported, the individual domain patterns are interpreted descriptively.

Table 5. Normalized Frequencies of War-Metaphor Target Domains by Gender

Target domain type	Male	Female
communication	0.26	0
economy	0.46	1.35
events and actions	1.31	1.81
health	0.13	0.56
institution	0.52	0.11
moral/value	0.92	6.77
nation	1.37	4.51
others	0.26	1.69
personal	0.33	0.23
politics	3.86	4.18
society	3.6	2.93

Note: Values are normalized frequencies per 10,000 words. Domain-specific p-values are not reported. Inferential results are limited to the omnibus Pearson chi-square test and Cramer's V for the full contingency table, as reported in the accompanying text.

At the domain level, female candidates showed higher normalized frequencies in the moral/value (6.77 vs. 0.92), nation (4.51 vs. 1.37), others (1.69 vs. 0.26), and politics domains (4.18 vs. 3.86). Male candidates showed higher normalized frequencies in the institution (0.52 vs. 0.11) and society domains (3.60 vs. 2.93). The economy, events and actions, health, and personal domains showed smaller numerical differences, while communication metaphors occurred only in male discourse. These patterns are descriptive and should not be interpreted as statistically significant domain-specific contrasts.

4.2.2 Party affiliation

At the level of party affiliation, war metaphor usage spans multiple target domains for both Democrats and Republicans, with variation in both coverage and intensity. Republican candidates distribute war metaphors across a relatively broader range of domains, including communication and institutional domains that are absent in Democratic discourse. In contrast, Democratic candidates show higher concentrations in domains such as events and actions, moral/value, and politics.

Table 6. Normalized Frequencies of War-Metaphor Target Domains by Political Party

Target domain type	Democrats	Republicans
communication	0	0.27
economy	0.76	0.81
events and actions	3.02	0.54
health	0.43	0.2
institution	0	0.6
moral/value	6.26	1.08
nation	2.7	2.42
others	1.94	0.07
personal	0.65	0.07
politics	4.64	3.56
society	4.1	2.89

Note: Values are normalized frequencies per 10,000 words. Domain-specific p-values are not reported. Inferential results are limited to the omnibus Pearson chi-square test and Cramer's V for the full contingency table, as reported in the accompanying text.

Table 6 shows descriptive variation in the normalized distribution of war-metaphor target domains across party

affiliation. The omnibus chi-square test indicated a significant association between party affiliation and the overall target-domain distribution ($\chi^2 = 68.125$, $df = 10$, $p < 0.001$), with Cramer's $V = 0.406$, indicating a moderate-to-strong association. Domain-level patterns are interpreted descriptively because no multiple-comparison-adjusted post hoc procedure is reported.

Democratic candidates showed higher normalized frequencies in the events and actions (3.02 vs. 0.54), moral/value (6.26 vs. 1.08), and others domains (1.94 vs. 0.07). Communication (0.27) and institution metaphors (0.60) occurred only in the Republican subset. The remaining domains showed smaller or mixed numerical differences between the two parties. These patterns should not be interpreted as statistically significant individual contrasts.

4.2.3 Political seniority

This subsection compares the normalized distribution of war-metaphor target domains across the three political-seniority groups. The analysis focuses on whether the groups display distinct domain-specific profiles rather than assuming a simple linear progression according to political experience. Table 7 below presents the normalized frequencies for each target domain across the three groups.

Table 7. Normalized Frequencies of War-Metaphor Target Domains by Political Seniority

Target domain type	Zero-seniority	Middle-seniority	High-seniority
economy	1.49	0.73	1
events and actions	1.86	1.22	3.2
health	0.56	0.49	0.4
institution	0.19	0	0
moral/value	2.42	2.92	8.21
nation	2.05	7.55	0.6
others	1.86	0.49	1.4
personal	0.19	0.24	0.8
politics	3.72	3.65	2.8
society	3.16	2.43	4.41

Note: Values are normalized frequencies per 10,000 words. Domain-specific p-values are not reported. Inferential results are limited to the omnibus Pearson chi-square test and Cramer's V for the full contingency table, as reported in the accompanying text.

As shown in Table 7, the normalized frequencies reveal distinct domain-specific profiles rather than a simple linear progression across the three groups. Zero-seniority candidates displayed a relatively broad distribution across several domains. Middle-seniority candidates showed their highest normalized frequency in the nation domain, whereas high-seniority candidates showed their highest concentration in the moral/value domain. These patterns are descriptive and should not be interpreted as evidence of an independent effect of political seniority.

The omnibus chi-square test indicated a significant association between political-seniority group and the overall target-domain distribution ($\chi^2 = 72.118$, $df = 18$, $p < 0.001$), with Cramer's $V = 0.353$, indicating a moderate association. Because no multiple-comparison-adjusted post hoc procedure is reported, individual domain differences are described only in terms of normalized frequencies.

Descriptively, high-seniority candidates showed the highest normalized frequency in the moral/value domain (8.21), compared with the zero-seniority (2.42) and middle-seniority groups (2.92). The nation domain showed a different profile, with the middle-seniority group displaying the highest normalized frequency (7.55), followed by the zero-seniority (2.05) and high-seniority groups (0.60). The events-and-actions domain was also numerically

higher in the high-seniority group (3.20) than in the zero-seniority (1.86) and middle-seniority groups (1.22). No domain-specific inferential claims are made.

4.3 Interpretation of War Metaphor Variation

This section offers a theoretically informed interpretation of the observed patterns of war metaphor variation by situating the findings within existing research on political metaphor, conceptual metaphor theory, and metaphor variation studies. Rather than remaining at the level of quantitative description, the analysis seeks to explain how the distributional patterns relate to broader cognitive and discursive mechanisms, including framing, ideology, and rhetorical strategy. To provide a more comprehensive account, each subsection combines theoretical discussion with close qualitative analysis of representative examples, thereby illustrating how war metaphors are contextually realized in actual political discourse. The following subsections integrate interpretation and textual evidence to examine variation across gender, party affiliation, and political seniority.

4.3.1 Gender and political rhetoric

The findings concerning the relationship between gender and war metaphors support the view that metaphor is not merely a cognitive mapping mechanism but a socially and ideologically conditioned discourse strategy (Charteris-Black 2004, Lakoff and Johnson 1980). The prominence of moral/value and nation domains in female discourse suggests a stronger reliance on value-based and collective framing, which can be interpreted as a form of strategic positioning in response to gendered expectations in political communication (Charteris-Black 2009, Jamieson 1995). Such patterns are consistent with research showing that female politicians tend to foreground ethical stance, inclusivity, and shared identity in order to enhance credibility and audience alignment (Ahrens 2009, Zeng et al. 2020).

By contrast, the greater emphasis on institution and society domains in male discourse may reflect a more structural and system-oriented framing of political issues. This pattern is broadly compatible with research showing that war and struggle metaphors can contribute to the construction of masculinized social domains (Koller 2004), although the present study concerns a different discourse context. This divergence can also be understood in terms of ideological framing, whereby metaphor choice serves to construct different models of political reality and responsibility (Musolff 2016, Semino 2008).

At the same time, the relatively small numerical differences observed in several domains suggest that certain metaphorical patterns may be constrained by shared genre conventions or campaign-specific communicative goals rather than speaker identity alone (Reuchamps et al. 2019). Overall, the results reinforce a usage-based and context-sensitive view of metaphor and highlight the need to interpret gender-related patterns in relation to broader sociopolitical factors.

As mentioned above, the two target domains showing the greatest disparities between male and female candidates are moral/value and social issues respectively. The following examples illustrate the linguistic expressions that underlie the conceptual metaphors used by male and female candidates.

4.3.1.1 Moral/value

This type of metaphor is particularly prominent in female candidates' speeches, appearing in various forms such as *value*, *soul*, and *dream*. Male and female candidates share most of these metaphorical realizations. Among the

female candidates, Harris accounts for more than half of the occurrences, while among the male candidates, Trump uses them most frequently. Examples (1a-b) and (2a-b) below illustrate the linguistic expressions that realize this conceptual metaphor in the remarks of Harris and Trump. Through this conceptual metaphor, abstract values such as national promise, future, and freedom are reinterpreted as causes, objectives, and territories within a moral battle. Such a strategy enhances emotional engagement, constructs a clear opposition between “us” and “them” and legitimizes political action as both urgent and ethically necessary.

- (1) a. The promise of America is what we are **fighting** for, and it is that promise that I think makes it possible that Coach Governor Walz and I would be sharing the same ticket. (Aug. 20, 2024, Harris – Remarks at a *Campaign* Event in Milwaukee, Wisconsin)
- b. And it is a **fight** for freedom including the fundamental freedom of a woman to make decisions about her own body and not have her government tell her what to do. (Nov. 3, 2024, Harris – Remarks at a Campaign Event in East Lansing, Michigan)
- (2) a. This is how we won the Cold War and it’s how we will win our new future **struggles**, which may be many, which may be complex, but we will win if I become president. (Apr. 27, 2016, Trump – Remarks on Foreign Policy)
- b. Above all, we will never stop **fighting** for the sacred values that bind us together as one beautiful America. (Mar. 2, 2020, Trump – Remarks at a Keep America Great Rally in Charlotte, North Carolina)

4.3.1.2 Society

This metaphor is mainly involved in various social issues, including jobs, privacy, security, and similar topics. As mentioned above, the frequency ratio of this metaphor in male and female candidates’ remarks is 2:1 respectively. The range of social issues addressed through this metaphor is more diverse among male candidates than among female candidates. Among the male candidates, Trump employs this metaphor most frequently, Sanders shows a moderate level of usage, whereas Biden uses it only once. In contrast, among female candidates, Marianne accounts for the largest number of occurrences, while other female candidates show nearly equal frequencies of the target domains. Examples (3a-b) illustrate the use of the war metaphor in male candidates’ discourse and indicate that male candidates are more inclined to extend this war framing across multiple social domains, whereas female candidates tend to employ it more selectively and in relation to specific moral or social concerns as presented in examples (4a-b).

- (3) a. And what we have tried to say is the most important issues facing us is not what appears on television tomorrow, the most important issues are the issues that you are **struggling** with today in terms of your lives, your children’s lives and your parent’s lives. (Jan. 21, 2016, Sanders - Remarks in Wolfeboro, New Hampshire)
- b. In the face of new threats, we will **defend** privacy, free speech, religious liberty and the right to keep and bear arms. (Jun. 18, 2019, Trump - Remarks Announcing Candidacy for the Republican Presidential Nomination in 2020)
- (4) a. And for every person alarmed by the speed with which climate change is bearing down upon us, this **fight** goes on. (Mar. 5, 2020, Marianne - Remarks in a Call with Campaign Staff Announcing the End of Presidential Campaign Activities)

- b. There is a systemic **war** on the poor in America. (Jun. 17, 2019, Marianne – Poor People’s Campaign Presidential Forum Marianne Williamson and Senator Warren)

4.3.2 Party affiliation and moral-ideological framing

The relationship between party affiliation and war metaphor usage highlights the role of metaphor as an ideologically embedded framing device (Charteris-Black 2004, Lakoff 1996). The higher frequency of moral/value metaphors in Democratic discourse suggests a stronger reliance on moral framing and evaluative positioning, consistent with research showing that liberal discourse tends to foreground ethics, equality, and social justice (Lakoff 2016, Musolff 2016). In addition, the prominence of event and action domains indicates a more dynamic representation of political reality, in which social processes are framed as ongoing struggles requiring intervention and change (Semino 2008).

In contrast, the occurrence of communication and institution metaphors only in the Republican subset, although infrequent, may point to a relatively stronger orientation toward structured and system-level aspects of governance. This pattern may be interpreted in relation to accounts of conservative political framing that emphasize order, stability, and institutional authority (Lakoff 1996).

At the same time, the broadly similar normalized frequencies observed across several domains suggest that the observed patterns may reflect not only ideological orientation but also shared communicative constraints of campaign discourse, such as common policy agendas and genre conventions (Reuchamps et al. 2019). Overall, these findings support the view of metaphor as a context-sensitive and ideologically influenced resource in political communication.

Although moral/value and others rank as the top two target domains, there is already an overlap between the gender dimension and the party dimension, as represented by the candidates of the two parties. Specifically, Kamala Harris, as a female Democrat, and Donald Trump, as a male Republican, exemplify this intersection. Therefore, we proceed to a detailed analysis of the third target domain, namely events and actions. The following subsection presents linguistic expressions that realize the conceptual metaphors, highlighting both the similarities and differences across the two parties.

4.3.2.1 Events and actions

This metaphor ranks third in terms of differences between the two parties, with Democrats mentioning it more frequently than Republicans. Among Democrats, equality emerges as an important issue, exemplified by references to racial equality in Biden’s remarks, as stated in examples (5a-b). Economy and value-oriented issues are also emphasized in Democratic discourse. In contrast, among Republicans, the protection of specific rights or freedoms is a central concern, as illustrated by expressions such as “protect workplace freedom” in the remarks of Fiorina and Nikki, shown in examples (6a-b). The linguistic realization of this target domain - events and actions - can be further illustrated in the following examples.

- (5) a. The battle to achieve racial justice and root out systemic racism in this country. (Nov. 7, 2020, Biden - Address in Wilmington, Delaware Accepting Election as the 46th President of the United States)
 b. These are the people who **struggle** every day to find the money to feed their kids, to pay their electric bills and to put gas in the car to get to work. (May 26, 2016, Sanders - Remarks Announcing Candidacy for President in Burlington, Vermont)

- (6) a. We **protected** workplace freedom, with the right to work. (Sep. 22, 2023, Nikki - Remarks at St. Anselm College in Manchester, New Hampshire)
- b. The second amendment **protects** an individual's right to bear arms. (Sep. 24, 2015, Fiorina - Remarks in Greenville, South Carolina)

4.3.3 Political seniority and domain-specific framing

The normalized frequencies indicate distinct domain-specific profiles across the three political-seniority groups. High-seniority candidates showed the highest normalized frequency in the moral/value domain, whereas middle-seniority candidates showed the highest normalized frequency in the nation domain. These patterns may reflect different framing tendencies across the groups. However, because political seniority overlaps with other candidate-level characteristics and no multiple-comparison-adjusted post hoc procedure was available for the domain-specific contrasts, the patterns should be interpreted descriptively rather than as evidence of an independent seniority effect. The coexistence of value-oriented and event-oriented war metaphors nevertheless illustrates the contextual flexibility of metaphor use in political discourse (Musolff 2016, Semino 2008).

As reported in Section 4.2.3, the nation domain displayed a marked descriptive difference across the three political-seniority groups. By examining the linguistic realizations of nation-related war metaphors across the three groups, the analysis illustrates how national identity and collective concerns are framed in the present corpus. These patterns are interpreted descriptively rather than as evidence that political experience independently determines metaphorical framing. The examples presented in the following subsection illustrate these patterns in context.

4.3.3.1 Nation

This metaphor primarily relates to international relations, with the middle-seniority group accounting for the largest proportion and the high-seniority group the smallest. Within the middle-seniority group, it mainly involves relations with countries such as China and Russia, with China being the most frequently mentioned, as illustrated in example (7a). In the zero-seniority group, the focus is primarily on threats from foreign terrorists, as shown in example (7b). In contrast, in the high-seniority group, issues of independence are emphasized, as exemplified in example (7c).

- (7) a. The United States should also work with our Arab partners to get them more invested in the fight against ISIS. (Nov. 19, 2015, Hillary - Remarks in New York City Conceding the 2016 Presidential Election)
- b. A nation that cannot secure its border cannot protect its sovereignty. (Sep. 24, 2015, Fiorina - Remarks in Greenville, South Carolina)
- c. From the fight for independence to the Civil War to World Wars. (Dec. 19, 2023, Biden - Remarks at a Campaign Reception in Bethesda, Maryland)

5. Conclusion

This study has examined variation in war-metaphor use in U.S. presidential campaign discourse across three extralinguistic dimensions: gender, party affiliation, and political seniority. The omnibus chi-square tests indicated

that the overall distribution of war-metaphor target domains was associated with each of these variables in the present corpus. These results support the view that metaphor use in political discourse is not uniform but varies in relation to speakers' social and political positioning. At the same time, the findings should be interpreted as patterns of association rather than as evidence that any individual variable independently determines metaphorical framing.

At the descriptive level, female candidates showed higher normalized frequencies in the moral/value, nation, and other target domains, whereas male candidates showed relatively higher frequencies in the institution and society domains. These patterns may be considered in relation to gendered expectations in political communication, including the “double bind” faced by female political leaders, as argued by Jamieson (1995). However, because gender overlaps with party affiliation, candidate identity, and other characteristics in the present dataset, the observed differences cannot be attributed exclusively to gender.

Party affiliation also showed distinct descriptive patterns. Democratic candidates displayed higher normalized frequencies in the events and actions, moral/value, and other domains, whereas communication and institution metaphors occurred only in the Republican subset. These findings suggest that Democratic and Republican candidates may differ in the conceptual domains to which they apply war-related framing. Nevertheless, these domain-level comparisons are descriptive and should not be interpreted as statistically established individual contrasts because no multiple-comparison-adjusted post hoc analysis was available.

Political-seniority groups likewise showed different domain-specific profiles. Zero-seniority candidates displayed a relatively broad distribution across several target domains, middle-seniority candidates showed the highest normalized frequency in the nation domain, and high-seniority candidates showed the strongest concentration in the moral/value domain. These results extend previous research by including political seniority as an additional dimension of political-metaphor variation alongside gender and party affiliation. However, they do not demonstrate a simple linear progression from concrete to abstract framing or establish that political experience itself causes value-oriented metaphor use. Political seniority overlaps with candidate identity, party affiliation, election cycle, and other candidate-level characteristics, and the observed patterns should therefore be interpreted cautiously.

Taken together, the study contributes to political-metaphor research in two main respects. Empirically, it examines gender, party affiliation, and political seniority within the same corpus of U.S. presidential campaign speeches. Methodologically, it combines FrameBERT-based automatic metaphor detection with manual contextual validation and target-domain classification. This hybrid approach improves the scalability of metaphor identification while retaining the interpretive detail required for conceptual and discourse-level analysis. In contrast to recent multifactorial studies that model several explanatory variables simultaneously, however, the present study compares the three extralinguistic variables in separate analyses. It therefore cannot distinguish their independent effects or higher-order interactions.

This study has three methodological limitations. First, the candidate-level corpora varied considerably in size, and normalization per 10,000 words cannot fully eliminate the effects of corpus imbalance. Second, gender, party affiliation, political seniority, and candidate identity overlap in the present dataset, meaning that their independent and interactive effects cannot be statistically disentangled. Third, because no multiple-comparison-adjusted post hoc analysis was available, domain-level differences are interpreted descriptively rather than as statistically significant individual contrasts.

Future research should therefore employ larger and more balanced corpora encompassing a wider range of candidates, political genres, and election contexts. It should also employ multifactorial statistical models, such as log-linear, multivariable regression, or mixed-effects models, together with multiple-comparison-adjusted post hoc procedures, to estimate the independent and interactive contributions of gender, party affiliation, political seniority,

candidate identity, and election cycle (Garlepow et al. 2025, Zeng et al. 2020). Further studies may also examine cultural and historical variation and the effects of metaphorical framing on audience cognition and political behavior. More broadly, the findings underscore the value of metaphor awareness for the critical interpretation of political discourse by showing how war metaphors frame political actors, values, institutions, and social problems.

References

- Ahrens, K. 2009. *Politics, Gender and Conceptual Metaphors*. Basingstoke, UK: Palgrave Macmillan.
- Ahrens, K. 2019. First lady, secretary of state and presidential candidate: A comparative study of the role-dependent use of metaphor in politics. In J. Perrez, M. Reuchamps and P. H. Thibodeau, eds., *Variation in Political Metaphor*, 13-34. Amsterdam: John Benjamins Publishing Company.
- Anwar, N., R. Butt and A. Rani. 2025. Metaphors of war and construction of national identity: A critical discourse analysis of democratic and republican speeches of American electoral candidates (2024). *Journal of Social Signs Review* 3(10), 13-24.
- Bratoz, S. 2012. Slovenian and US elections in metaphors: A cross-linguistic perspective. *Critical Approaches to Discourse Analysis Across Disciplines* 5(2), 120-136.
- Charteris-Black, J. 2004. *Corpus Approaches to Critical Metaphor Analysis*. London: Palgrave Macmillan UK.
- Charteris-Black, J. 2009. Metaphor and gender in British parliamentary debates. In K. Ahrens, ed., *Politics, Gender and Conceptual Metaphors*, 139-165. London: Palgrave Macmillan UK.
- Felekidou, D. 2022. Different political party, different political concerns? A study on metaphor use in Greek parliamentary debates. *Selected papers on theoretical and applied linguistics* 24, 291-304.
- Flusberg, S., T. Matlock and P. H. Thibodeau. 2018. War metaphors in public discourse. *Metaphor and Symbol* 33(1), 1-18.
- Garlepow, L., N. Funke and B. Güldenring. 2025. A multifactorial approach to war and corruption metaphors in South Asian Englishes. *World Englishes* 44(1-2), 269-284.
- Heyvaert, P., F. Randour, J. Dodeigne, J. Perrez and M. Reuchamps. 2020. Metaphors in political communication: A case study of the use of deliberate metaphors in non-institutional political interviews. *Journal of Language and Politics* 19(2), 201-225.
- Howe, N. 1988. Metaphor in contemporary American political discourse. *Metaphor and Symbol* 3(2), 87-104.
- Jamieson, K. H. 1995. *Beyond the Double Bind: Women and Leadership*. Oxford: Oxford University Press.
- Koller, V. 2004. *Metaphor and Gender in Business Media Discourse: A Critical Cognitive Study*. London: Palgrave Macmillan UK.
- Kovář, J. 2019. Variations of metaphors in party manifestos about EU finality: Assessing party positions through conceptual metaphors. In J. Perrez, M. Reuchamps and P. H. Thibodeau, eds., *Variation in Political Metaphor*, 151-176. Amsterdam: John Benjamins Publishing Company.
- Kovář, J. 2020. Czech party positions on the EU's finality: a conceptual metaphor approach. *Journal of International Relations and Development* 23(2), 462-486.
- Kövecses, Z. 2010. *Metaphor: A Practical Introduction*. Oxford: Oxford University Press.
- Lakoff, G. 1996. *Moral Politics: What Conservatives Know That Liberals Don't*. Chicago: University of Chicago Press.
- Lakoff, G. 2016. *Moral Politics: How Liberals and Conservatives Think* (3rd ed.). Chicago: University of Chicago Press.

- Lakoff, G. and M. Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Li, Y., S. Wang, C. Lin, F. Guerin and L. Barrault. 2023. FrameBERT: Conceptual metaphor detection with frame embedding learning. In *Proceedings of the 17th Conference of the European Chapter of the Association for Computational Linguistics*, 1558-1571.
- Mio, J. 1997. Metaphor and politics. *Metaphor and symbol* 12(2), 113-133.
- Musolff, A. 2016. *Political Metaphor Analysis: Discourse and Scenarios*. London: Bloomsbury Academic.
- Pavlikova, Ž. 2020. The concept of metaphor in political speeches (Metaphors in the electoral speeches of Donald Trump and Joe Biden in the 2020 presidential elections). In R. Štefančík, ed., *Jazyk a politika. Na pomedzí lingvistiky a politológie V*, 313-321. Bratislava, Slovakia: Ekonóm.
- Pragglejaz Group. 2007. MIP: A method for identifying metaphorically used words in discourse. *Metaphor and Symbol* 22(1), 1-39.
- Reuchamps, M., P. H. Thibodeau and J. Perrez. 2019. Introduction: Studying variation in political metaphor: From discourse analysis to experiment. In J. Perrez, M. Reuchamps and P. H. Thibodeau, eds., *Variation in Political Metaphor*, 1-11. Amsterdam: John Benjamins Publishing Company.
- Semino, E. 2008. *Metaphor in Discourse*. Cambridge: Cambridge University Press.
- Tenorio, H. 2009. The metaphorical construction of Ireland. In K. Ahrens, ed., *Politics, Gender and Conceptual Metaphors*, 112-136. London: Palgrave Macmillan UK.
- Trope, Y. and N. Liberman. 2010. Construal-level theory of psychological distance. *Psychological Review* 117(2), 440-463.
- Wilks, Y. 1975. A preferential pattern-seeking semantics for natural language inference. *Artificial Intelligence* 6(1), 53-74.
- Xu, M. Y., H. Park, S. Lee, S. Kim and S. E. Jhang. 2023. A corpus-based study of metaphor and metonymy in maritime English. *Korean Journal of English Language and Linguistics* 23, 961-979.
- Yi, Y. L., Y. C. Deng and S. E. Jhang. 2025. A corpus-based study of stylistic variation of Donald Trump's political discourse: Identity, Setting, and Audience. *Korean Journal of English Language and Linguistics* 25, 786-803.
- Yu, N. 1998. *The Contemporary Theory of Metaphor: A Perspective from Chinese*. Amsterdam: John Benjamins Publishing Company.
- Zeng, H., D. Tay and K. Ahrens. 2020. A multifactorial analysis of metaphors in political discourse: Gendered influence in Hong Kong political speeches. *Metaphor and the Social World* 10(1), 141-168.

Examples in: English

Applicable Languages: English

Applicable Level: Tertiary