

Digital Discourse About Women: Community and Temporal Variation on Reddit

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Abstract

This study investigates the metaphorical framing of women across ideologically diverse Reddit communities, with a focus on how linguistic metaphors both reflect and reinforce stances toward gender and feminism. We leverage a hybrid method that combines large language model-based metaphor classification with semantic similarity scoring to detect metaphor use at the post level, alongside zero-shot stance classification using BART. Posts were categorized into metaphor types (commodity, war/threat, small animal, none) and stance was scored along a spectrum of supportiveness toward women. Our findings reveal that extreme subreddits like r/Antifeminist and r/Feminism exhibit the highest rates of metaphor usage, while centrist or female-aligned subreddits like r/MensLib and r/Leftist rely less on metaphor and more on literal language. Commodity metaphors, which reflect the objectification of women, appear most widely across subreddits, while war/threat metaphors are concentrated in adversarial spaces. Over time, we observe an increasing use of adversarial metaphors in r/againstmensrights, and a decline in objectifying language in r/MensLib, reflecting divergent rhetorical trajectories. User-level analysis further reveals that individuals adapt their metaphor use and stance depending on the subreddit they are posting in, particularly in discursive environments like r/AskFeminists. These findings highlight a broader polarization in digital gender discourse, with some communities moving toward more combative rhetoric and others toward more reflective and reformist language.

1 Introduction

The study of online political discourse is concerned with understanding how users convey their stance towards a particular target using the linguistic resources available to them, and whether these strategies constitute shared practices within ideological groups. While many users hold black-and-white stances, their linguistic practices are often significantly complicated by competing interests. Depending on the forum and its norms, users may be looking to commiserate, celebrate, convince, or vent, making for a crucial variable of interest when analyzing linguistic features and their relationship to stance [1].

Our study extends previous work by examining the ways in which subforum, in addition to ideology, influence how users convey stance on social media, particularly in posts about women. On Reddit, subreddits provide topic-specific political and non-political discourse environments that range from ideologically diverse to almost entirely unilateral. By analyzing subreddits on varying ends of the feminist spectrum and the cross-posters between them, we find that both the ideological orientation of a subreddit and its discourse norms shape how users linguistically express stance toward women. Specifically, ideologically extreme subreddits tend to feature more metaphorical and polarized language, while centrist or discussion-oriented forums promote more moderated, literal, and less adversarial expression. Cross-posters often adapt their rhetorical strategies to align with the prevailing tone of each subreddit, indicating that stance is not only a reflection of personal ideology but also responsive to the social and discursive expectations of the forum.

2 Background

Ideology emerges as the primary moderating factor, although its exact effect remains disputed [2]. There is strong evidence that conservative social media users were significantly more likely than liberals to use language that involved threat, intimidation, name-calling, humiliation, stereotyping, and negative prejudice, while liberals were slightly more likely than conservatives to use obscenities [2, 3]. The prevailing view is that although both liberals and conservatives harbor negative attitudes towards certain groups, liberal values of equality and democratic tolerance contribute to ideological asymmetries in how prejudice is expressed online. On both ends, extremists show higher negative emotion than partisan users, while far-left extremists express more anxiety than liberals and far-right extremists express lower anxiety than conservatives [4].

One particularly rich linguistic feature of interest is the use of metaphor. In their 2025 paper, Mendelsohn & Budak analyze the use of dehumanizing metaphor in Twitter discourse surrounding immigrants. They found that extreme ideologies were associated with greater use of creature-related metaphor, such as those that refer to "flocks, swarms, or stampedes of migrants" or immigrants as "infesting or plaguing the country." Increased conservative ideology was associated with greater use of object-related metaphor, such as those that refer to immigrants as sources of labor, imports, exports, or tools. Their finding that both sides of the political spectrum employed these metaphors rather productively contradicts the hypothesis that dehumanizing metaphors are primarily used to promote harsh immigration policy.

Our previous course project analyzed the semantic patterns of users across three subreddits: r/altright, r/wayofhebern, a Bernie Sanders subreddit, and r/leftcommunism. We used the same S-BERT model as Mendelsohn & Budak to encode sentences containing terms of interest from two categories: identity groups ("Black," "Latino," "immigrant" etc.) and political ideologies ("communism," "capitalism," "dictatorship" etc.) [5]. While our study replicated some major previous findings, such as the increased use of derogatory language on the right, we found that semantic fields for sensitive terms overlapped far more than anticipated, a finding we attribute to similar causes as in Mendelsohn & Budak: the interpretation of sentence or post-level encodings, while insightful, is not always clear-cut in long-form posts in which underlying sentiment is often presupposed.

A	Why do educated commies who post on Socialism think they would prosper in some commie societyGod you commie brigaders are retarded	r/altright
B	Here's a self-proclaimed commie sounding like a neoliberal when arguing in favour of mass immigration	r/altright
C	Trump has four avenues of attack (1) you're gonna open the borders and let the Muslims and Mexicans flow in (2) you're a commie (3) guns and abortion (4) you're gonna harm straight white males in relation to other populations	r/leftcommunism
D	So first, don't be the "anti-American" socialist commie they want you to be.	r/leftcommunism

Table 1: "Commie" example excerpts

In these example post excerpts, only sentence (A) harbors a clear-cut stance, while sentences (B)-(D) are not only ambiguous outside of context, but each contains right-leaning or capitalist-leaning semantic associations; namely, that neoliberals are for mass immigration, dehumanizing metaphor comparing immigrants to water, and that socialism is anti-American.

The results from our study alongside Mendelsohn & Budak's reinforce the hypothesis that some derogatory manners of speaking about immigrants and other sensitive groups have seen a high degree of conventionalization over time, to the point that they are now accepted as natural. This makes it highly likely that a user's stance towards a given term will not align with their language. Even so, discourse theory tells us that language is not only shaped by but also plays an active role in shaping society and ideology [6, 7]. By deploying them in online speech, users tacitly reinforce the negative associations that they hope to refute as permissible ways to think and talk about various groups, which has very real ramifications for how these groups are seen and their negative associations conventionalized.

While stance tends to remain relatively stable across subreddits for a given user, the use of hateful language and dehumanizing metaphor is mediated by contextual variables beyond broad ideology. For example, animal and vermin metaphors increase support for for-profit immigration detention

centers, but only among those with anti-Latino prejudice [8]. Online political discussions also become increasingly offensive as general elections ramp up, with offensive posts receiving outsized attention from the rest of the online community [9]. Similarly, liberals tend to be more sensitive to extreme metaphor and engage with these posts to a much higher degree [8]. In a qualitative review of their findings, Mendelsohn & Budak categorized the use of dehumanizing metaphor by liberals into four groups: (1) embracing metaphors, (2) sympathetic framing to highlight humanitarian concerns, (3) quoting or paraphrasing outpartisans in order to criticize, and (4) redirecting dehumanizing metaphors from immigrants to political opponents. We believe that these broad intention groupings are relevant to derogatory language practices beyond just metaphor and across all instances of online political speech across the political spectrum.

Our study examines how cross-posters on Reddit adapt their usage of metaphor in posts about women and how audience – in subreddit – and post-level stance mediate this adaptation. We leave a detailed qualitative analysis of intention and framing of linguistic practices to future work.

3 Data

Metaphorical concepts We select three source domains based on prior literature: war/threat, commodity, and creature (Table 2). Each of these encompasses common and linguistically salient metaphor trends we observe in popular culture and our target subreddits.

Source Domain	Example Expressions	Sources
WAR/THREAT	women fighting for their rights women need to be conquered women ruining men’s lives and trapping them	[10, 11]
COMMODITY	trading in a wife for a younger model. trophy wife women as damaged goods women as incubators or dishwashers	[12, 11]
SMALL ANIMAL	hunt and chase women women as snakes or cougars women as small, cute chicks	[10, 11]

Table 2: Selected metaphor types (concepts)

Subreddits We select subreddits from across the feminist to misogynist spectrum and also include more general political subreddits from the liberal to conservative spectrum. For each subreddit, we scrape posts between 2020 and 2022. Autodescriptions of each subreddit in ideological order can be found in table 3.

Subreddit	Description
R/ANTIFEMINIST	A space where users discuss and share content that is critical of feminism and the feminist movement.
R/MENSRIGHTS	Advocating for the social and legal equality of men and boys.
R/ASKFEMINISTS	A place to ask feminists your questions and to discuss the issues with feminists.
R/AGAINSTMENSRIGHTS	Forum exposing the hatred and bigotry beneath the men’s rights movement.
R/MENSLIB	A dialogue on the real issues facing men through positivity, inclusiveness, and solutions-building.
R/FEMINISM	Space for discussing and promoting awareness of issues related to equality for women.
R/LEFTIST	A space for discussion and learning about the breadth of leftism, from socialism and communism to anarchism and eco-socialism.

Table 3: Selected subreddits

4 Methods

Metaphor Detection We tested three different approaches to metaphor detection and measured their accuracy, compute cost, and robustness tradeoffs.

LLM Concept Score and semantic score: Our first approach was to adapt Mendelsohn & Budak’s LLM + sentence encoder method. This involves computing two different values and combining them through summation. The LLM concept score is generated by prompting the LLM to identify the number of words that align with a given metaphor concept ($C(\text{CONCEPT})$), which is then normalized by log-scaled document length ($C(\text{WORDS})$): $\text{LLM}_{\text{CONCEPT}} = \frac{C(\text{CONCEPT})}{\log(C(\text{WORDS})+1)}$. The second component, the semantic score, facilitates discourse-level metaphor processing by approximating associations between target groups. We encode each tweet and metaphor type with SBERT using the `all-MiniLM-L6-v2` model and calculate their cosine similarity. Metaphor types are represented as a set of carrier sentences, and their encoding is the average of their carrier sentence embeddings. We generated 94 carrier sentences, (29-35 per metaphor) based on examples from prior literature. The final metaphor score was the sum of the concept and semantic score. In analyzing these results, we found that the length of the posts heavily diluted the informativeness of the LLM concept score, which was originally adapted for tweets, which could be up to 280 characters. Reddit posts can be up to 40000 characters, and often involve a mixture of different discourse types, making it difficult for a concept score to fully encompass these word-level metaphor scores.

Concept	Post Excerpt	Concept Score
WAR/THREAT	You are doing great, men and women of MensRights, yes your voice is starting to be heard, keep going and do not despair	0.36
COMMODITY	Which one of you Karen sluts are gonna make me a sandwich?	0.41
SMALL ANIMAL	This cute asian chick speaks on how two mothers raising a boy will make him more desirable to women	0.22

Table 4: Selected Metaphor Examples & the Corresponding Concept Score

Source Domain	Example Carrier Sentence
WAR/THREAT	They must defend themselves from her.
	She is a threat to their control.
	She resists them.
COMMODITY	She is distributed between them.
	They use her to get the job done.
	They trade her in.
SMALL ANIMAL	She startles easily.
	They coddle her.
	She needs to be looked after.

Table 5: Selected carrier sentences

An alternative lightweight approach we also explored was zero-shot classification using `bart-large-mnli` with candidate labels being descriptions of each metaphor type. We found that even with additional fine-tuning, this method did not meet our subjective standards for accuracy across different example types.

Our final approach, and the one ultimately used in our analysis was a combination of LLM Classification and semantic score. We used a large language model, specifically FLAN-T5-Base, to detect metaphorical framings

of women in Reddit posts from the aforementioned subreddits. The goal was to classify each post into one of several metaphor categories: commodity, war/threat, small animal, or none. These categories correspond to common metaphorical ways women are referred to in discourse, such as being objectified (commodity), framed as adversarial (war/threat), or infantilized (small animal).

We leveraged the zero-shot and few-shot learning abilities of FLAN-T5, a transformer model fine-tuned by Google for instruction-following tasks. Using the HuggingFace transformers library, we constructed a structured prompt that clearly defined the task and included several in-context examples. These examples demonstrated what kinds of metaphorical expressions correspond to each category. For instance, a post saying "She is a fierce tiger in battles" would be labeled as war/threat.

For each Reddit post, the model was prompted with a detailed instruction and a short list of examples, followed by the full post text. The model was asked to return only one word indicating the dominant metaphorical category. To ensure valid outputs, we included a post-processing step that forced the response to be one of the four allowed categories.

This LLM-based approach enabled flexible and scalable metaphor detection without the need for manually labeled training data. By framing the classification as an instruction-following task and providing well-crafted examples, we achieved consistent results across ideologically diverse subreddits. We then combined each classification with semantic scores to incorporate discourse-level framing of each metaphor.

$$\text{SCORE}_{\text{CONCEPT}} = \text{SBERT}_{\text{CONCEPT}} \cdot \left(1 + \left[\begin{cases} 1 & \text{if } \text{LLM}_{\text{CONCEPT}} = \text{concept} \\ 0 & \text{otherwise} \end{cases} \right] \right)$$

Stance Detection To find post-level stance, we used a zero-shot classifier `bart-large-mnli` to assign a probability distribution across "against women", "supports women" and "neutral" labels for each post. Stance clusters were computed by vectorizing and performing k-means clustering on these values, and we measured differences in stances using KL divergence.

5 Results and Discussion

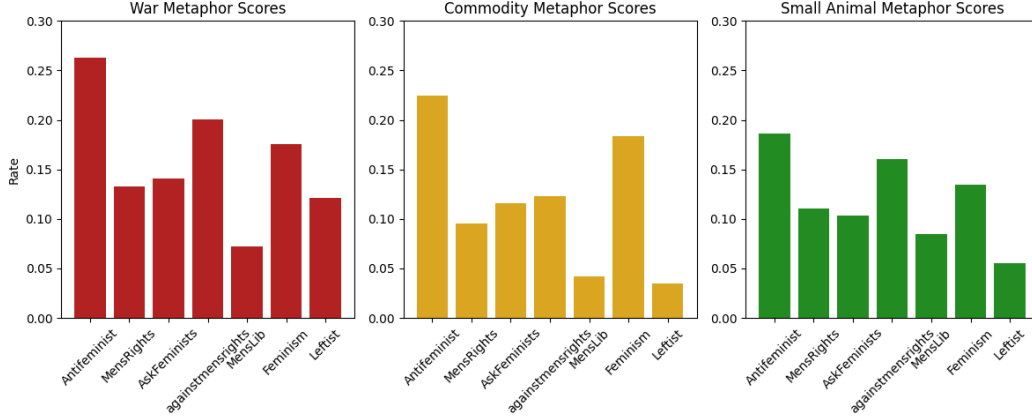


Figure 1: Average Metaphor Score for each Subreddit

Characterizing Individual Subreddits In Figure 1 we see the average metaphor score for each subreddit. `r/Antifeminist` has the highest average score across all metaphors, while `r/leftist` and `r/MensLib` have the lowest scores. The most commonly used metaphor for most subreddits is the war metaphor, followed by commodity. Our overall finding that `r/Feminism` and `r/Antifeminist` have the highest combined rates of metaphor usage supports the hypothesis that more extreme views lend themselves more readily to this kind of rhetorical language. We also note high rates of metaphor in `r/AskFeminist`, our intermediary subreddit, which potentially indicates the use of metaphor to achieve a communicative goal, which will be explored further in the next section.

Figure 2 shows the post-level and author-level proportions of stances from each of three stance clusters, which can be generally characterized as "generally supportive of," "generally neutral towards," and "generally against" women. We see that the neutral posts are disproportionately represented in the data. We also see a relative suppression of "against" stances from the author to the post-level statistics, indicating that pro-women authors are relatively more prolific. Supportive posts and authors are found in the highest proportion in `r/MensLib`, while `r/Antifeminist` has the highest proportion of negative posts and authors. `r/AskFeminists`, being a more discursive space, is well-balanced in its author membership. A relatively surprising finding is that these proportions are nearly equaled by `r/againstmensrights`.

After a preliminary analysis, we attribute this to the overarching tone of `r/againstmensrights`. The subreddit evolved in direct response to `r/mensrights`, and many posts are dedicated to surfacing, mocking, and criticizing ideas propagated in `r/mensrights`. This leads to such ideas being indirectly referenced, generating an overall negative stance towards women classification that does not reflect the presuppositions of its members. Selected examples of these more complex cases are listed in Table 6.

Subreddit	Example Post	Cluster Assignment
R/AGAINSTMENSRIGHTS	r/MensRights goes into misogynistic rant over Wikipedia entry on sexism - >Feminism these days is about entitlement not equality, and only for women. Generally Against The OP equates feminism with Nazism	Generally Against
R/AGAINSTMENSRIGHTS	Men's Rights things: wishing men were abused more so we could easily conclude Women Are Evil.	Generally Against
R/MENSRIGHTS	Poison fills the heart and greed feeds it more...	Generally Against
R/MENSRIGHTS	After all they want to replace man, and not man to replace them Women are the victim, in every situation	Generally Supports

Table 6: Posts with Implicit Stance

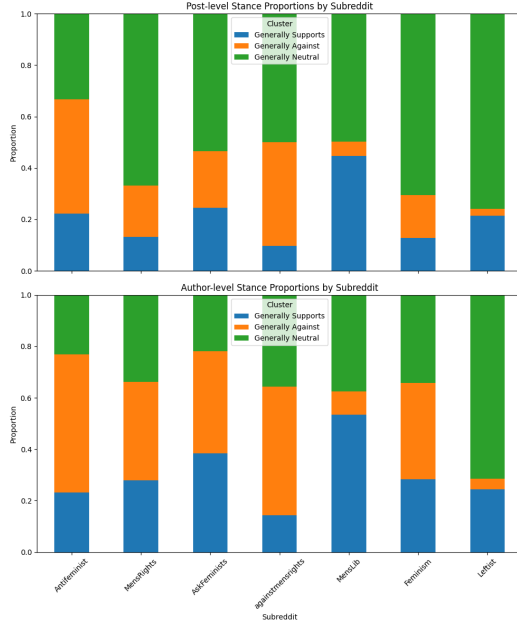


Figure 2: Stance Makeup for each Subreddit

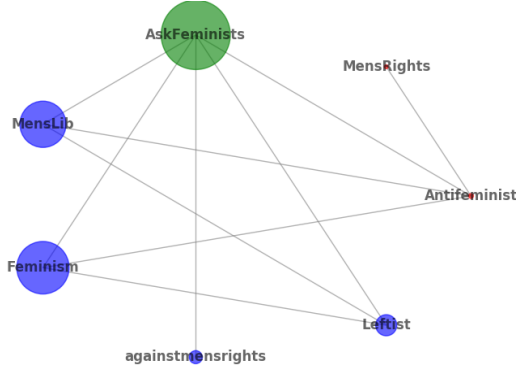
pared to other subreddits. We also see the highest rates of negative change in posters when they post in r/MensLib or r/Leftist. These align with the atmospheres of each. r/MensLib emphasizes positivity and support for the feminist movement and is predominantly frequented by men, who are therefore less likely to engage in as passionate rhetoric about women's issues. r/Leftist, similarly is not geared towards feminism and users are less likely to channel intense sentiments in this particular forum. Comparing adaptation in types of metaphor reveals few clear patterns, but does reveal a slight division between war metaphors and commodity or small animal metaphors. As we have noted, war metaphors can be used to champion women, for example by evoking the struggle of feminism or by describing female "warrior" strength. This does not align with our notions of commodity or small animal metaphors, and a qualitative analysis of the contexts in which these are deployed in comparison to war metaphors would help us to give a more complete account of their use.

In stance, we see the highest rates of adaptation between r/feminism and r/AskFeminists and between r/feminism and r/Antifeminists, which we posit can be attributed to the discourse environment of r/AskFeminists and the ideological gap between r/feminism and r/Antifeminists. In both cases, the highest divergences occur amongst the two ideological extremes rather than neutral authors, indicating that both groups temper their views in the opposite subreddits. The highest rates of alignment are between r/MensLib and r/Leftist or r/AskFeminists. Users between these subreddits retain more consistent stances, and as demonstrated prior, r/MensLib and r/Leftist posters have the lowest rates of metaphor usage. Overall, this signals that these less extreme subreddits lend themselves to more straightforward, less inflammatory language and more consistent expressions of opinion.

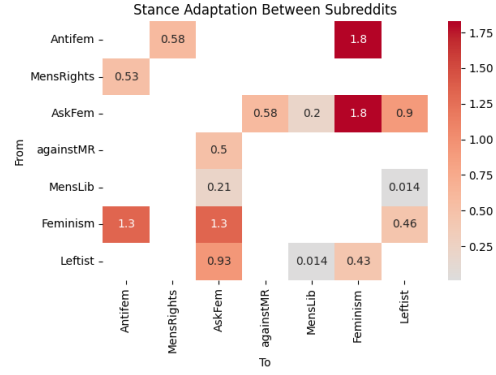
Furthermore, our analysis reveals the need to disentangle the very interlinked notions of womanhood and feminism. While feminism and misogyny belong at two ends of a spectrum, posts that are anti-feminism or that advocate for men's rights can occupy space at any point along this spectrum. Our paradigm tends to view posts against feminism as posts against women. Future work may investigate other methods of stance detection that separate these notions to various degrees.

Crossposting Next, we measure the behavior of users who post in multiple subreddits to explore how their language and stance evolve. The heatmaps in figure 3 and 4b show movement between subreddits, and the spaces represent transitions where not enough data has been collected to demonstrate a clear pattern. We calculate that all analyses can be filled in by including comments in the analysis.

Figure 3 shows the varying rates of metaphor adaptation, measured using the percent change. Across metaphor types, we see the highest rates of positive change, that is, an increase in metaphor usage, in r/AskFeminists posters compared to other subreddits.

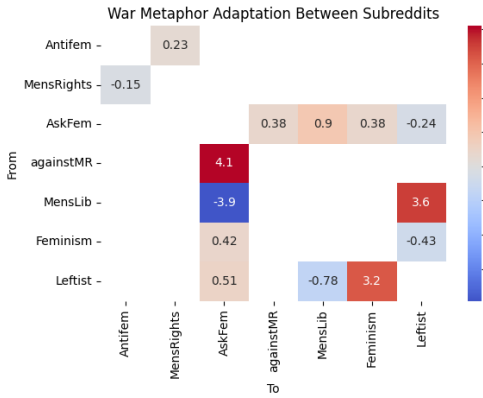


(a) Network Graph: scaled by degree

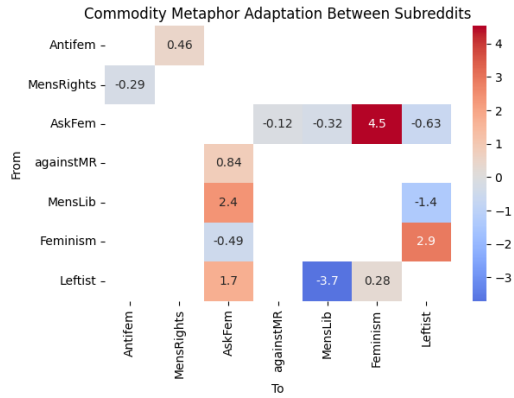


(b) Stance Adaptation

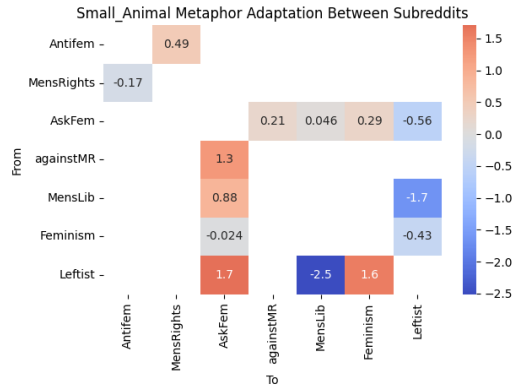
Figure 4



(a) War Metaphor Adaptation



(b) Commodity Metaphor Adaptation



(c) Small Animal Metaphor Adaptation

Figure 3: Metaphor-wise Adaptation

Diffusion We also analyzed metaphor detection over time.

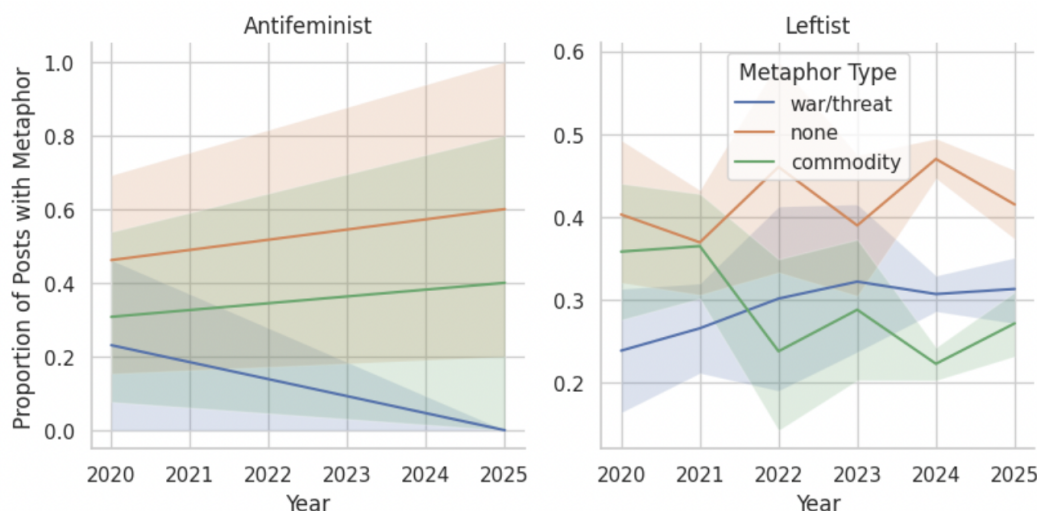


Figure 5: Proportion of Posts with Metaphor From 2020-2025

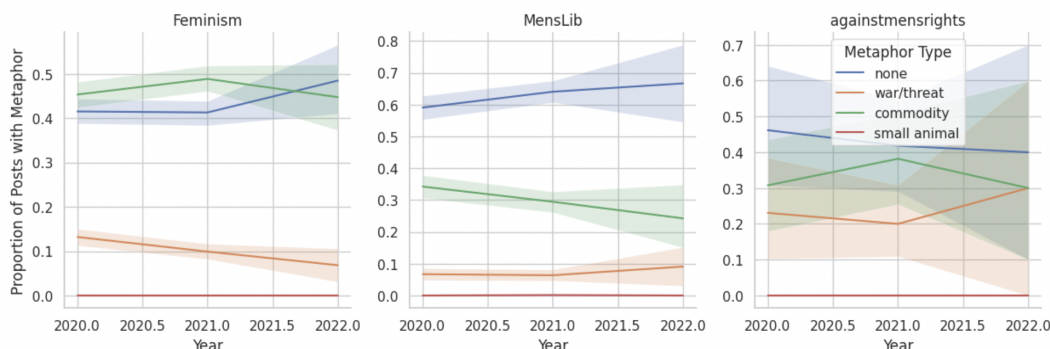


Figure 6: Proportion of Posts with Metaphor From 2020-2022

We observed that there is an escalation of adversarial framing in *r/againstmensrights*, evidenced by a rise in the use of "war/threat" metaphors from 2020-2022. Simultaneously, the proportion of posts without metaphor usage declines. The inverse movement suggests that posts that may have previously discussed women in literal or neutral terms are increasingly adopting a combative or hostile metaphorical frame. It also signals that warlike metaphors are becoming more normalized in this subreddit's discourse.

r/MensLib demonstrates a meaningful decline in objectifying metaphorical language, specifically in the use of "commodity" metaphors. The trend in this subreddit reflects that the subreddit appears to be moving away from language that reduces women to objects. The rise in non-metaphorical posts suggests a conscious or community-driven shift toward more literal language, likely encouraged by the forum's values and moderation practices. These findings may reflect not only subreddit-specific dynamics but also broader discursive trends in online masculinity and gender politics. The increasing uptake of war/threat metaphors in adversarial communities and the rhetorical detoxification in feminist-aligned spaces suggest diverging paths of metaphorical diffusion where one is toward escalation, and the other is toward reform. As such, this analysis may offer a microcosmic view into the larger rhetorical battlegrounds shaping digital gender discourse.

Across most subreddits analyzed, "commodity/object" metaphors appear more frequently than "war/threat" metaphors when describing women. This pattern likely reflects the deep cultural embedding of objectification in everyday language, especially in discussions of relationships, dating, and appearance. Referring to women as things to be possessed, valued, or exchanged is a more normalized and socially acceptable form of metaphorical framing, often perceived as neutral even

when it reinforces patriarchal norms. In contrast, "war/threat" metaphors, which imply conflict, danger, or adversarial dynamics, are more ideologically loaded and typically surface in subreddits with explicitly oppositional stances toward feminism or gender equity, such as [r/againstmensrights](#). Additionally, moderation policies in more inclusive or discussion-based communities such as [MensLib](#) and [AskFeminists](#) likely suppress overtly hostile metaphors while allowing more subtle objectifying language to persist. Overall, the dominance of commodity metaphors reveals how deeply ingrained objectification is in discourse, even when explicit antagonism is absent.

6 Future Work

Qualitative Work As mentioned in the paper, this study highlights the power of computational methods for accomplishing work in the social sciences, however, a complete understanding of the forces driving adaptation, temporal shifts, and the overall tone of each subreddit will require deeper categorization of posts and their goals, which can be a subjective undertaking. We also highlight that the methods used in the study, particularly the metaphor and stance detection paradigms, can be adjusted to highlight the researcher's needs, either by biasing more or less towards overt metaphor usage or by adjusting stance detection to more overtly toggle between pro-woman and anti-woman, rather than pro-man, discourse.

Data Expansion Automating metaphor and stance detection in comments poses a unique challenge, as prior context, including the post and subsequent comments being replied to, needs to be reliably summarized and conveyed as part of the input stream. Incorporating a treatment of metaphor and stance patterns in comments would increase the power of the study and be a fruitful avenue for future research.

Additionally, a promising direction would be to integrate multimodal data, especially images and memes, which are prevalent in many Reddit threads and often encode metaphorical meaning in visual form. For example, memes that portray women as objects, threats, or caricatures may convey metaphorical framings even more powerfully than text alone and are likely to resonate in culture-specific ways that text classification alone may miss. Combining text and image-based metaphor detection would require more sophisticated architectures such as vision-language models, but could yield a more holistic understanding of how metaphors operate in politically charged online spaces. This direction would not only expand the scope of analysis but also align with the multimodal nature of modern digital discourse.

Due to limitations in available GPU resources, the dataset for this project was constrained both in size and in the range of years it covered. As a result, the analysis may not fully capture longer-term trends or the influence of key external events. Future research would aim to scale up by including a larger volume of data spanning a broader time frame. Doing so would enable a more comprehensive examination of how metaphor usage evolves in response to major social and political developments such as elections, movements, or policy debates. Expanding the temporal scope would also allow for longitudinal modeling, which could uncover patterns in metaphorical framing over time and identify whether specific metaphors tend to emerge or intensify during moments of increased ideological conflict or cultural change.

7 Conclusion

Our study presents a proof of concept for the study of cross-subreddit stance and metaphor adaptation, while also providing preliminary results for the case of posts about women. The data collected supports the hypothesis that more extreme views engage in more metaphorical and inflammatory language and that in mixed discussion subreddits geared towards questions, such as [r/AskFeminists](#), extreme views are moderated and rhetorical styles become more tempered. Users posting across ideological spaces often adjust both their stance and metaphor usage to better align with the discourse norms in the community. Our findings underscore the importance of context in shaping how political positions are communicated and point to the potential for certain online environments to foster more nuanced and less divisive discourse.

References

- [1] Bowen Zhang, Genan Dai, Fuqiang Niu, Nan Yin, Xiaomao Fan, Senzhang Wang, Xiaochun Cao, and Hu Huang. A survey of stance detection on social media: New directions and perspectives, 2024.
- [2] Hoffarth M. Roper C. Parker T. Jost J. T. Badaan, V. Ideological asymmetries in online hostility, intimidation, obscenity, and prejudice. *Scientific reports*, 2023.
- [3] Kim D. Park E. Kim, J. I know your stance! analyzing twitter users’ political stance on diverse perspectives. *J Big Data*, 2025.
- [4] Meysam Alizadeh, Ingmar Weber, Claudio Cioffi-Revilla, Santo Fortunato, and Michael Macy. Psychology and morality of political extremists: Evidence from twitter language analysis of alt-right and antifa. *EPJ Data Sci*, 2019.
- [5] Nils Reimers and Iryna Gurevych. Sentence-bert: Sentence embeddings using siamese bert-networks. In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, pages 3982–3992, 2019.
- [6] Antonin Zita. *Discourse actively shapes society: A study grounded in Foucault’s concept of discourse*. PhD thesis, Masaryk University, Faculty of Arts, Department of English and American Studies, 2015. PhD dissertation.
- [7] George Lakoff and Mark Johnson. *Metaphors we live by*. University of Chicago press, 1980.
- [8] Julia Mendelsohn and Ceren Budak. When people are floods: Analyzing dehumanizing metaphors in immigration discourse with large language models, 2025.
- [9] Rishab Nithyanand, Brian Schaffner, and Phillipa Gill. Measuring offensive speech in online political discourse, 2017.
- [10] Zouheir Maalej. Of animals, foods, objects, plants, and others, or how women are conceptualized across languages and cultures 1, 06 2020.
- [11] Irene Rodríguez. Of women, bitches, chickens and vixens: Animal metaphors for women in english and spanish. 7, 01 2009.
- [12] Caitlin Hines. Rebaking the pie: The woman as dessert metaphor. In *Reinventing Identities: The Gendered Self in Discourse*. Oxford University Press, 09 1999.