A Study of Political Sentiment in Key Subreddits

The Dynamic Disinformation Dynamos

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Agenda

1. Problem
2. Methodology
3. Sentiment Analysis
4. Keyword Analysis
5. Engagement
6. Word Cloud
7. Persona Generation
8. Response Generation
9. Key Findings

Dark Brandon (Sleepy Joe) **VS** **The Donald (Cheeto Jesus)**
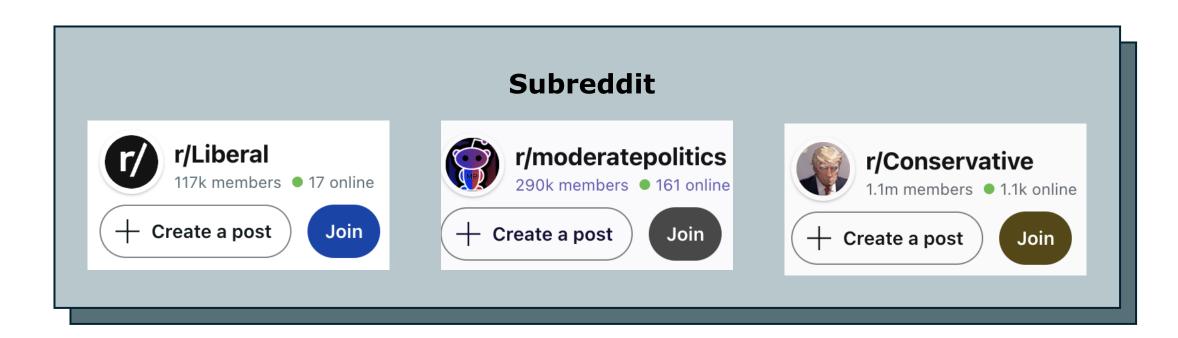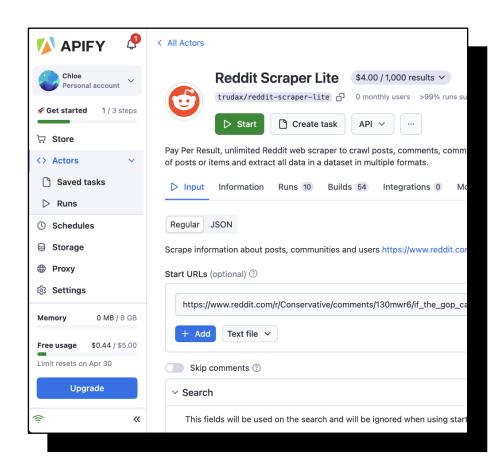
r/Problem

- Motivation
- Scope and importance
- Challenges
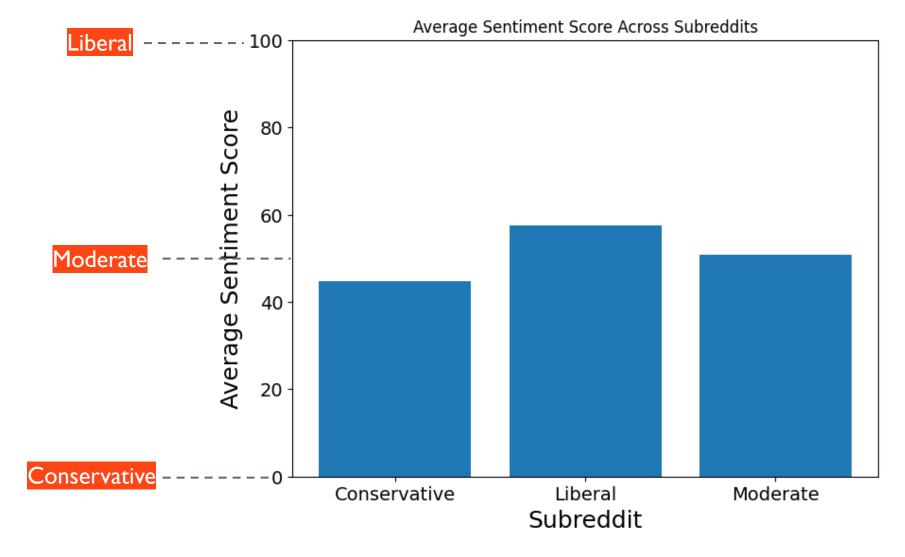 - account ban, karma restriction, data quality

Subreddit

r/Liberal
117k members • 17 online
Create a post | Join

r/moderatepolitics
290k members • 161 online
Create a post | Join

r/Conservative
1.1m members • 1.1k online
Create a post | Join

r/Methodology

- Data collection: third-party scraper
- Setup
- Analysis Convention
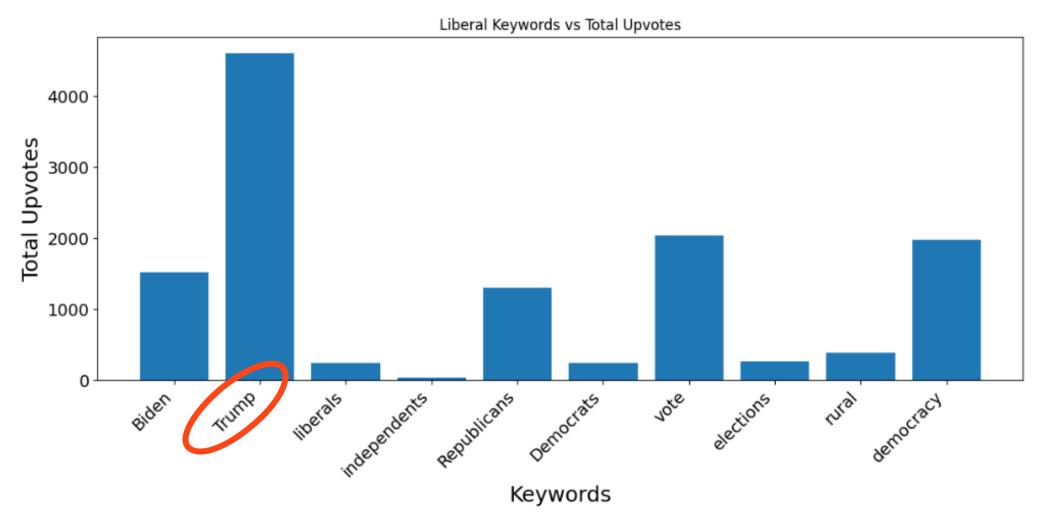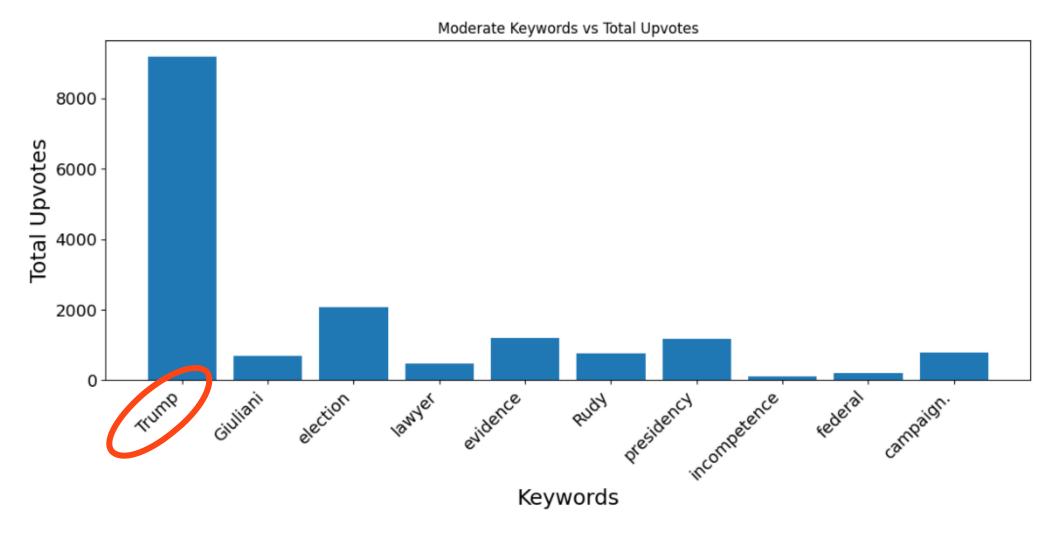
r/Sentiment Analysis

Average Sentiment Score Across Subreddits

r/Keyword Analysis

Liberal Keywords vs Total Upvotes

r/Keyword Analysis

Moderate Keywords vs Total Upvotes

r/Keyword Analysis

Conservative Keywords vs Total Upvotes

r/Engagement

8.87

Liberal

30.76

Moderate

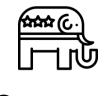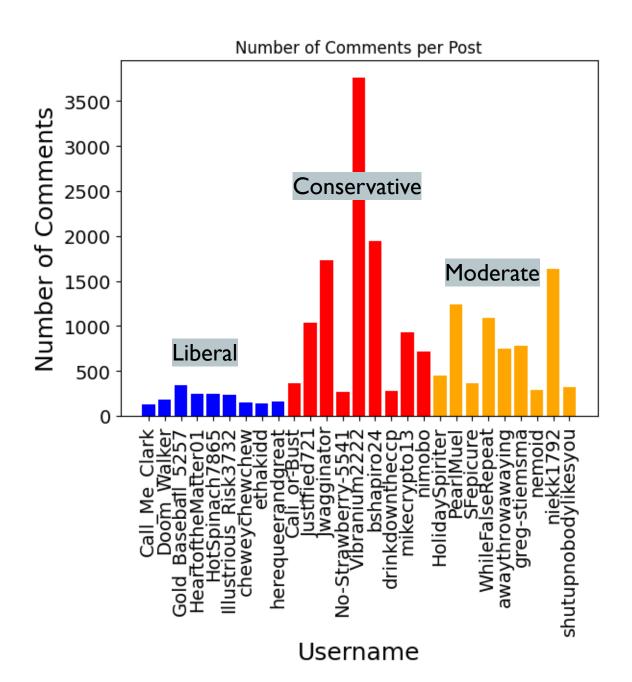**65.40**

Conservative

Engagement = Number of Upvote Count / Number of Comments
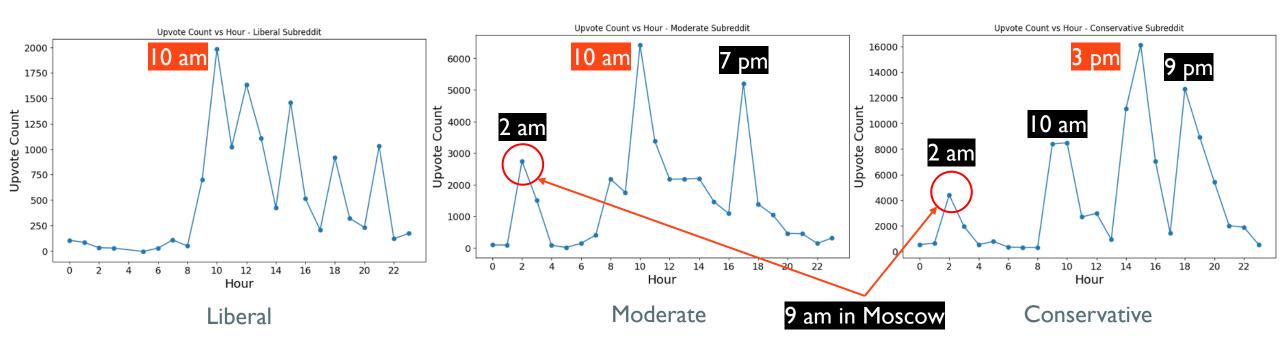
r/Engagement
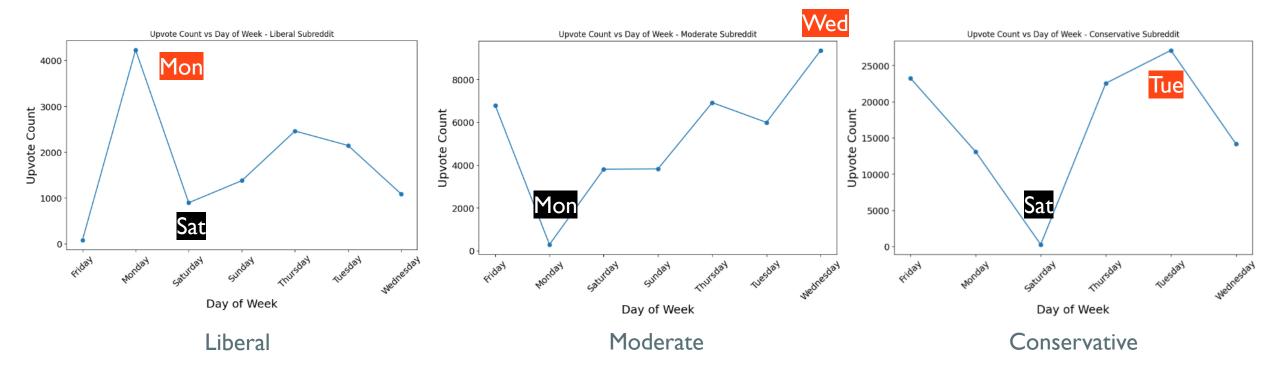
Upvotes vs. Hour (EST)

Upvotes vs. Day of Week

Liberal

Moderate

Conservative
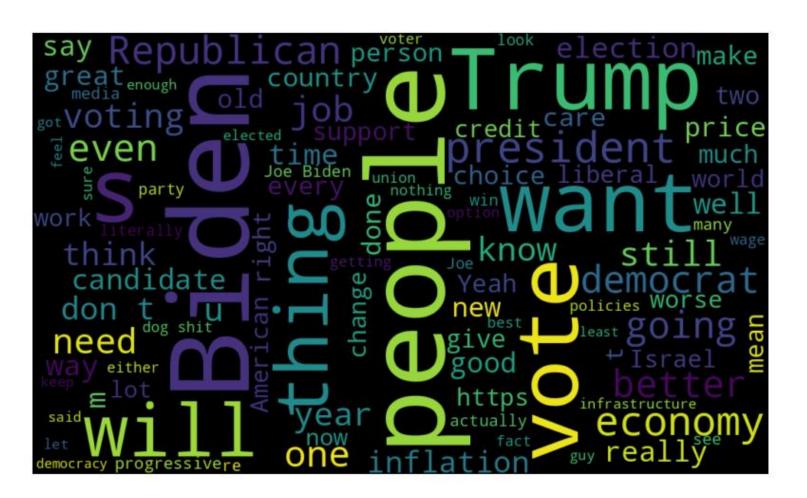
r/Wordcloud/Liberal
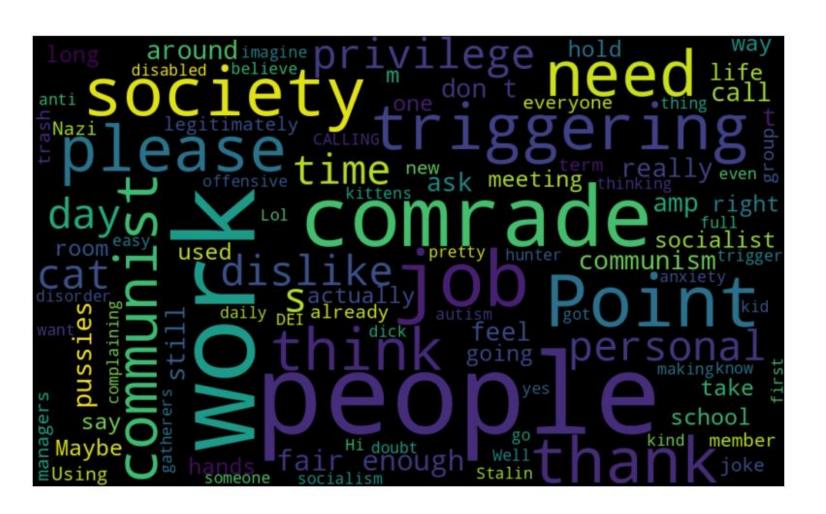
Cluster 0: Concerns about Trump's potential re-election and its consequences for democracy.

Cluster 1: Support for Biden despite concerns; acknowledgment of achievements, economic challenges, and desire for progressive policies.

Cluster 2: Criticism of Trump supporters; emphasis on effective messaging, combating misinformation, and encouraging voter turnout

r/Wordcloud/Moderate
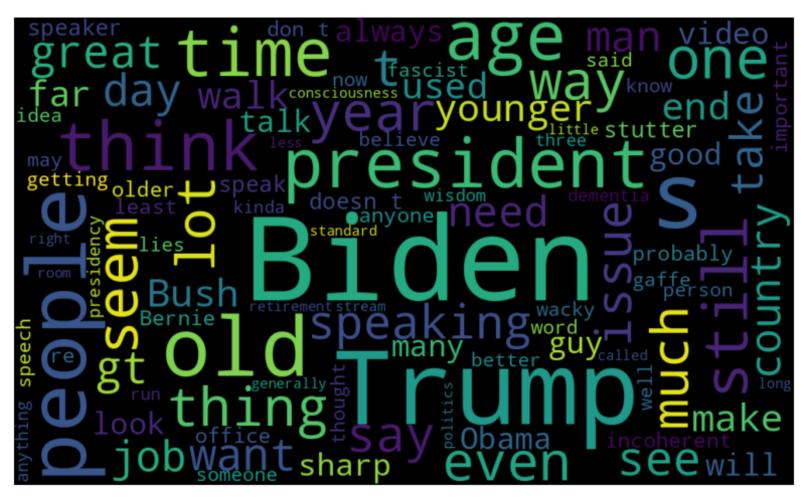
Cluster 6: Mocking leftist ideologies, pronouns, "anti-work," DEI initiatives; criticizing perceived hypocrisy.

Cluster 12: Criticizing Trump's behavior, age, mental state; calls for better leadership; age in politics.

Cluster 14: Mocking Biden's behavior with children; criticizing perceived hypocrisy; dismissive/sarcastic responses.

r/Wordcloud/Conservative

Cluster 2: Comparing speaking abilities and cognitive sharpness of Biden and Trump; critiques of their communication styles.

Cluster 3: Discussion on taxing the rich; debates on wealth taxes, estate taxes, and capital gains taxes; arguments for and against tax increases.

Cluster 4: Discussion about RFK Jr.'s controversial statement on COVID-19 and Jewish people; criticism of anti-Semitic conspiracy theories.

Cluster 11: Criticism of investigations into the Biden family; comparison to Trump family actions; concerns about nepotism and corruption in politics.

r/Persona for Typical Reddit User

Basic Demographics

- Age, gender, location
- Occupation, educational background

Interest and Hobbies

- Favorite subreddits
- Leisure activities
- Areas of expertise

Personality Traits

- Introvert/extrovert, serious/humorous
- Analytical/creative, aggregable/confrontational
- Optimistic/pessimistic

Communication Style

- Language
- Length of comments
- Tone

Opinions and Beliefs

- Political leaning
- Religious/philosophical views
- Stan on controversial topics

Goals and Motivations

- Aims through Reddit activity
- Reasons for engaging with specific communities

r/Persona Generation

Generating persona for r/Liberal...

Post comments on adjacent subreddits

For the liberal account, we posted on r/TheRightCantMeme.

For the moderate account, we posted on r/Libertarian.

For the conservative account, we posted on r/Republican.

Basic Demographics

- **Age:** 25-34 years old
- **Gender:** Male
- **Location:** Urban area, likely in a progressive state within the United States
- **Occupation/Educational Background:** College-educated, possibly with a bachelor's degree in Social Sciences, Humanities, or an emerging field related to technology. Works in a role that could be associated with technology, education, or social services.

Interests and Hobbies

- **Favorite Subreddits/Topics:** Participates in subreddits such as r/politics, r/science, r/technology, and r/AskHistorians. Shows interest in current events, technology, and social justice issues.
- **Leisure Activities:** Reading (both fiction and non-fiction with a focus on social and political themes), attending cultural events, and engaging in outdoor activities like hiking or cycling.
- **Areas of Expertise/Passion:** Passionate about environmental sustainability, social justice, and political advocacy. Likely engages in activities or volunteer work related to these areas.

r/typical liberal reddit user persona

Personality Traits

- **Introvert/Extrovert:** Leans towards introversion but is very vocal and expressive online.

- **Serious/Humorous:** Has a balance between seriousness and humor. Uses humor as a tool to engage in discussions or to make light of complex situations.

- **Analytical/Creative:** Highly analytical, especially in discussions involving politics and science, but also appreciates creativity in art, literature, and music.

- **Agreeable/Confrontational:** Generally agreeable but does not shy away from confrontations, especially on topics they are knowledgeable about or passionate towards.

- **Optimistic/Pessimistic:** Optimistic about the potential for societal progress but realistically cautious about the challenges that lie ahead.

Communication Style

- **Language:** Prefers formal language but can adopt a more casual tone when the situation or topic allows. Makes occasional use of slang, emojis, and acronyms to fit in with the Reddit culture.

- **Length of Comments:** Tends to write longer, more thoughtful comments on topics of interest, but also participates in shorter exchanges for casual conversations.

- **Tone:** Informed and respectful, aiming to contribute positively to discussions. Can become passionate or heated in debates on controversial topics.

r/typical liberal reddit user persona

Opinions and Beliefs

- **Political Leaning:** Left-leaning, supportive of progressive policies regarding healthcare, climate change, civil rights, and income inequality.

- **Religious/Philosophical Views:** May be secular or non-traditional in religious beliefs. Values science, logic, and humanistic principles.

- **Stance on Controversial Topics:** Supports LGBTQ+ rights, abortion rights, and comprehensive immigration reform. Advocates for science-based policy, especially concerning climate change and public health.

Goals and Motivations

- **Aims Through Reddit Activity:** Seeks to stay informed on current events and scientific advancements, engage in meaningful discussions to broaden their perspective, and advocate for social and political causes.

- **Reasons for Engaging with Specific Communities/Topics:** Driven by a desire to make a positive impact in the world, learn from diverse viewpoints, and connect with like-minded individuals who share their interests and passions.

r/Response Generation/Liberal

1

2 Top Comment

3 AI-generated Comment

"Totally with you on this one. The comparison feels like a major cherry-pick to push a narrative. Detroit's got its issues but using outdated images to make a point does a disservice to the people working hard to revitalize the city. Let's give credit where it's due, yeah?"

⬆ 14 ⬇

r/Response Generation/Moderate

1 Top Trending Post

r/Libertarian · 1 day ago
AbolishtheDraft **End Democracy**

I thought there was a war going on?

Politics

@amuse ✓ — Subscribe
@amuse

🇺🇦Ukraine: CBS News is reporting that the billions US taxpayers have funneled into Ukraine have allowed the bar scene in Kyiv to flourish - there are now more bars and nightclubs in the capital than before the war began.

0:01 / 0:26 CC

335 109 Share

2 Top Comment

Murtamatt · 1d ago

You are a dipshit if you believe that's what they're spending money on rn lol
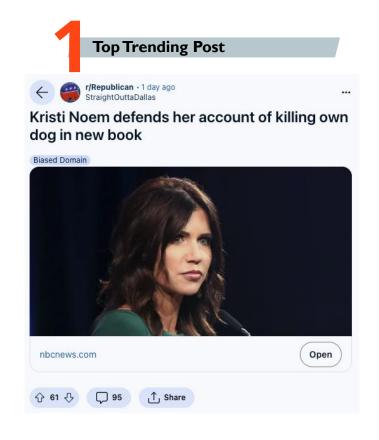
261 Reply Share

3 AI-generated Comment

"LOL, imagine thinking every dollar is just being poured into partying. It's good to see some positive vibes with all the heavy stuff happening, but let's not twist what the aid's really for."
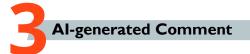
r/Response Generation/Conservative

1 Top Trending Post

r/Republican · 1 day ago
StraightOuttaDallas

Kristi Noem defends her account of killing own dog in new book

Biased Domain

nbcnews.com   Open

⬆ 61 ⬇   💬 95   ↑ Share

2 Top Comment

Opening-Citron2733 · 1d ago

So on the one hand this kind of thing happens on farms unfortunately because if the specific animal threatens the other livestock it can affect the business. I get that. On the other hand why would you put that in an autobiography when you are vying for VP? Yikes

⊖   ⬆ 67 ⬇   💬 Reply   ↑ Share   ...

3 AI-generated Comment

"Yeah, I'm all for doing what's necessary on a farm, but putting this in a book when eyeing a larger political role? Not the smartest move. It's one thing to make tough calls, another to broadcast it like a badge of honor. Yikes indeed."

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r/Key Findings

1 **Subreddit Engagement**

The conservative subreddit had the most subscribers, comments, and upvotes. Its engagement per subreddit, measured by upvote-to-comment ratio, was 8 times higher than the liberal subreddit, indicating a more active user base.

2 **Sentiment Analysis**

All subreddits had many neutral sentiment scores around 50, but average scores aligned with expected political leanings. Highly upvoted comments across subreddits were concentrated in the positive 80-100 range.

3 **Keyword Focus**

"Trump" was the top keyword in liberal and moderate subreddits, while conservative subreddits focused more on "evidence" and "jury". These variations highlight different priorities and framing in each community.

4 **Engagement Timing**

Optimal engagement times varied by subreddit, with the liberal peaking at 10am-12pm, moderate at 10am and 3pm, and conservative at 3pm and 6pm. M, W, and T were the most engaging days for liberal, moderate, and conservative subreddits respectively.

5 **Implications for Disinformation**

The ease of this analysis raises concerns about potential misuse by malicious actors. However, the findings could help platforms better detect and remove malicious bots, by identifying linguistic and behavioral patterns across political subreddits.

r/The Dead Internet Theory

*The belief that **the vast majority of internet traffic**, posts, and users have been **replaced by bots** and **AI-generated content**, leading to a situation where human activity on the internet is marginalized or overshadowed*

Reddit takes action against groups spreading Covid misinformation.

Reddit has quarantined r/Russia due to misinformation.
A moderator has also been removed.

Reddit was a misinformation hotspot in 2016 election, study says.
Researchers find a surge in links to controversial sites and redditors from "fringe" forums. The company's CEO says Reddit is "digging deeply" on potential abuse.

r/Q&A