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Rhetorical Strategies in Web3 Twitter Discourse: Emojis, Jargon, and Sentiment in Memecoin vs. SocialFi

Yunshao Wang (Hana) 

Methodology

- **Dual Analytical Framework**

This research employs a two-pronged approach to analyze rhetorical strategies: sentiment-based analysis of emotional and rational appeals, and interactional analysis via language mirroring.

- **Sentiment Analysis Model with Domain-Specific Features**

A customized sentiment model based on TextBlob is developed, treating emojis and Web3-specific jargon as rhetorical devices to capture pathos (emotional) and logos (rational) appeals in project tweets.

- **Language Mirroring Analysis**

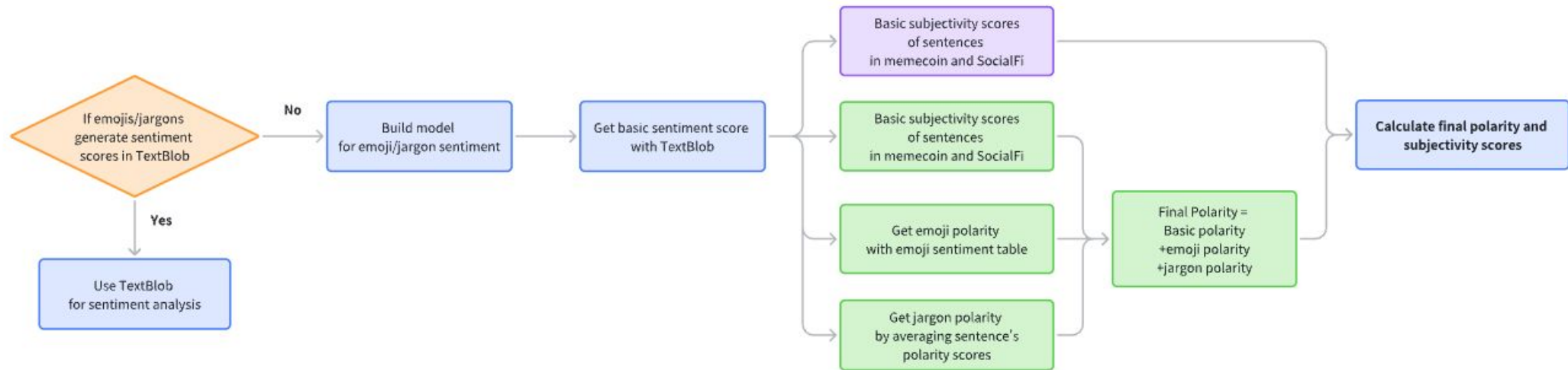
Language repetition patterns are examined by comparing lexical overlaps between official project tweets and user replies, aiming to assess community alignment and rhetorical resonance.

- **Dataset Construction and Comparative Analysis**

Tweets from memecoin and SocialFi projects were collected and cleaned to form sector-specific corpora. Comparative metrics were then applied to identify differences in rhetorical features and their correlation with user engagement.



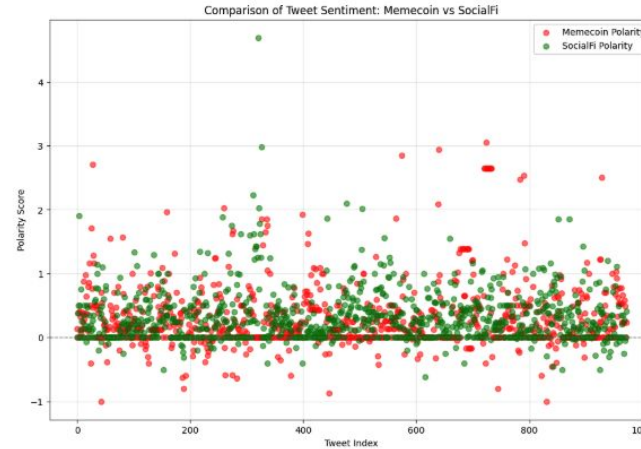
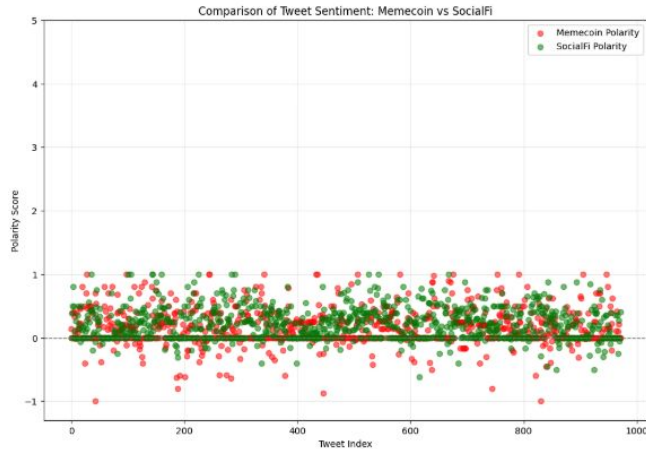
Sentiment Analysis Model Design



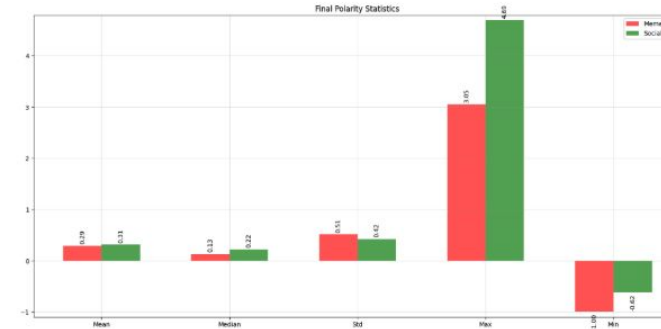
- **A custom sentiment analysis model** was built on TextBlob, extended with polarity scores for **emojis** and **Web3-specific jargon** to capture domain-specific emotional cues.
- **Polarity score assignment:** Emoji sentiment was quantified using Novak et al.'s (2015) polarity rankings, while jargon polarity was approximated by averaging the polarity of sentences containing each term.
- **The final polarity score** is the unweighted sum of text, emoji, and jargon polarities—prioritizing interpretability over statistical normalization to emphasize rhetorical intensity.



Key Results of Sentiment Analysis



Scatter Chart of TextBlob(left) and New Model(right)

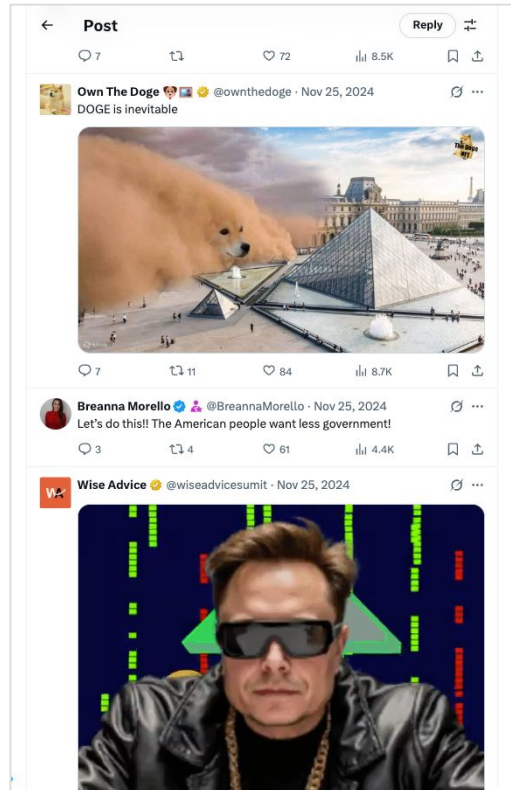


Bar Chart of TextBlob(left) and New Model(right)

- **Memecoin Tweets Exhibit Greater Emotional Variability** with a difference in standard deviation in polarity score: 0.52 vs 0.42.
- **Memecoin Tweets Contain More Rhetorical Devices** of emojis and jargons.
- **Distinction in Rhetorical Strategies:** Memecoin Projects adopt Pathos-driven strategy VS SocialFi projects Rely on Logos-driven expressions



Key Results of Language Mirroring in memecoin



User-generated meme for DOGE memecoin



Repeated GM (Good morning) of followers of #shib memecoin



The mirroring "TO THE MOON" response from followers

- **High Degree of Lexical Mirroring in Memecoin Communities:** replicated project-specific expressions—such as emojis, and meme—demonstrating emotional resonance.
- **Emergence of User-Initiated Variations and Reframings:** users actively reframe project language to generate new expressions, memes, and slogans, suggesting a participatory rhetorical ecosystem



Discussion

Limitations

- **High-Context Semantics Are Underrepresented:** the model fails to capture deeper semantic meanings and contextual nuances.
- **Jargon Scoring Relies on Subjective Assumptions:** the polarity scores assigned to jargons are based on average sentence polarity, introducing ambiguity and limits.

Contribution

- **Applying Sentiment Analysis to Rhetorical Strategy Analysis:** identifying and evaluate rhetorical strategies in emerging digital spaces.
- **Practical Guidance for Web3 Community Management:** revealing how different rhetorical approaches align with specific project types and community goals.

