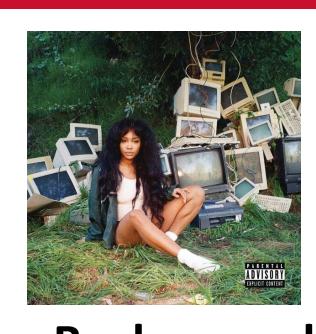


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Subject/Category: Natural Language Processing

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SZA's Ctrl vs. SOS

Nalika Palayoor

Background:

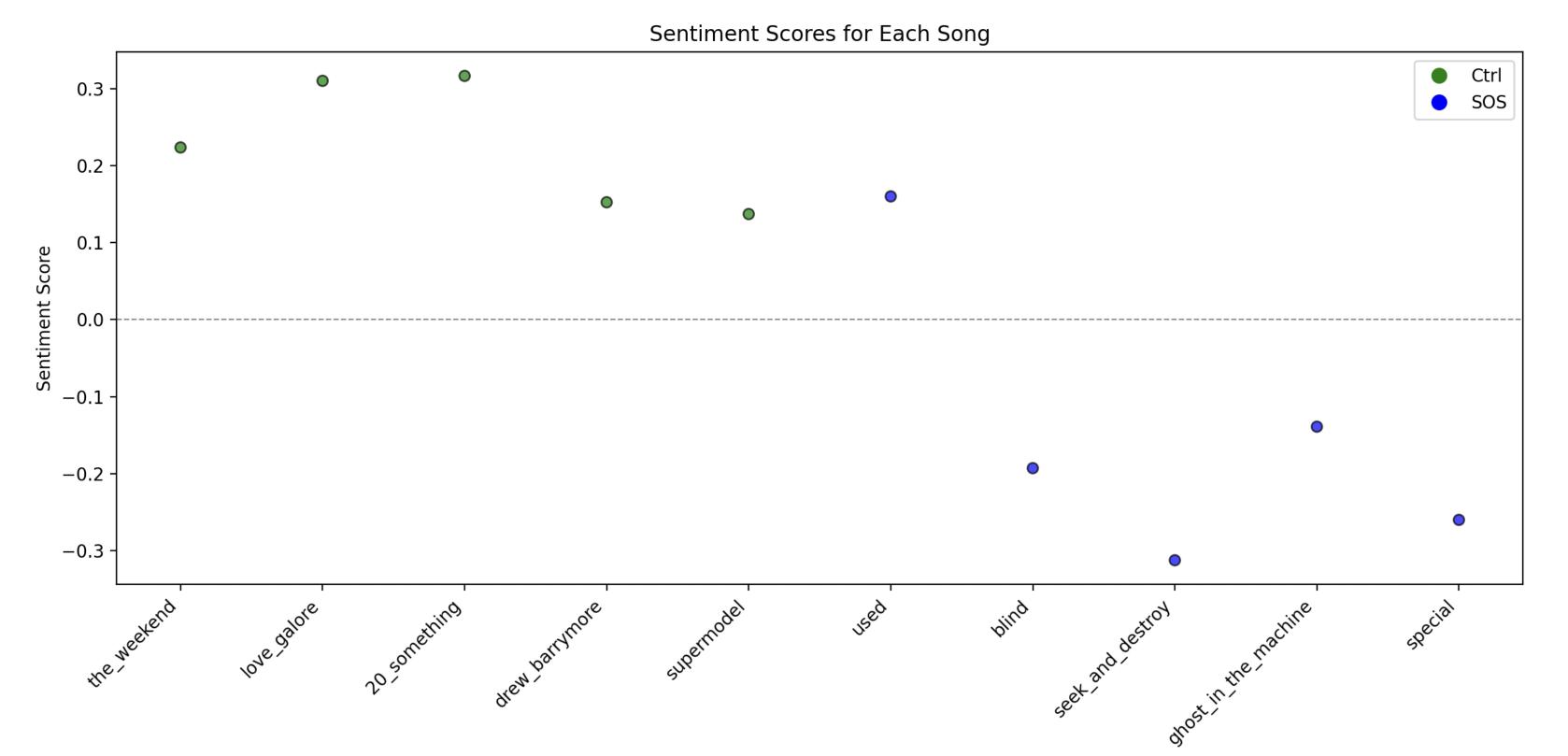
SZA, an influential R&B artist, is known for her introspective and poetic lyrics. Her albums *Ctrl* (2017) and *SOS* (2022) showcase her evolution as an artist, exploring themes of self-discovery, relationships, and resilience. By analyzing the lyrics from these albums, we can uncover shifts in her storytelling and thematic focus over time.

Motivation:

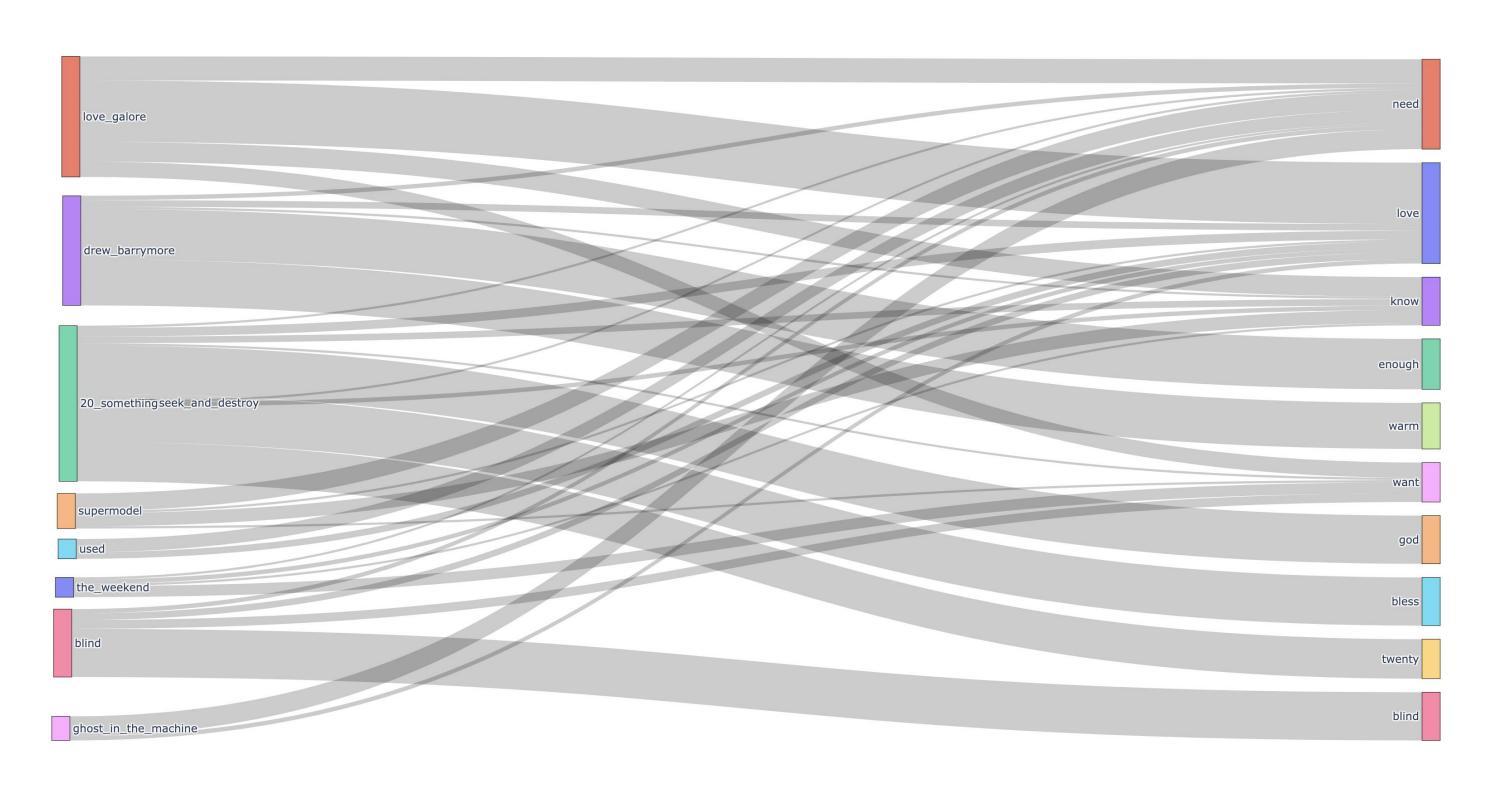
Music serves as a reflection of personal and cultural experiences. Understanding the progression in SZA's lyrics provides insight into how artists grow and connect with their audience, while also demonstrating the power of Natural Language Processing (NLP) in revealing patterns in text data.

Goals:

- 1. Compare the lyrical content of *Ctrl* and *SOS* to identify recurring and evolving themes.
- 2. Analyze popular words and their context
- 3. Highlight differences and similarities in tone, focus, and emotional depth between the two albums



Ctrl exhibits more positive sentiment. In contrast, SOS leans more toward negative sentiment, with an emotional tone of heartbreak and vulnerability. This shift suggests a transition in SZA's lyrical content from a more uplifting, confident tone in Ctrl to a more raw, emotionally challenged tone in SOS.



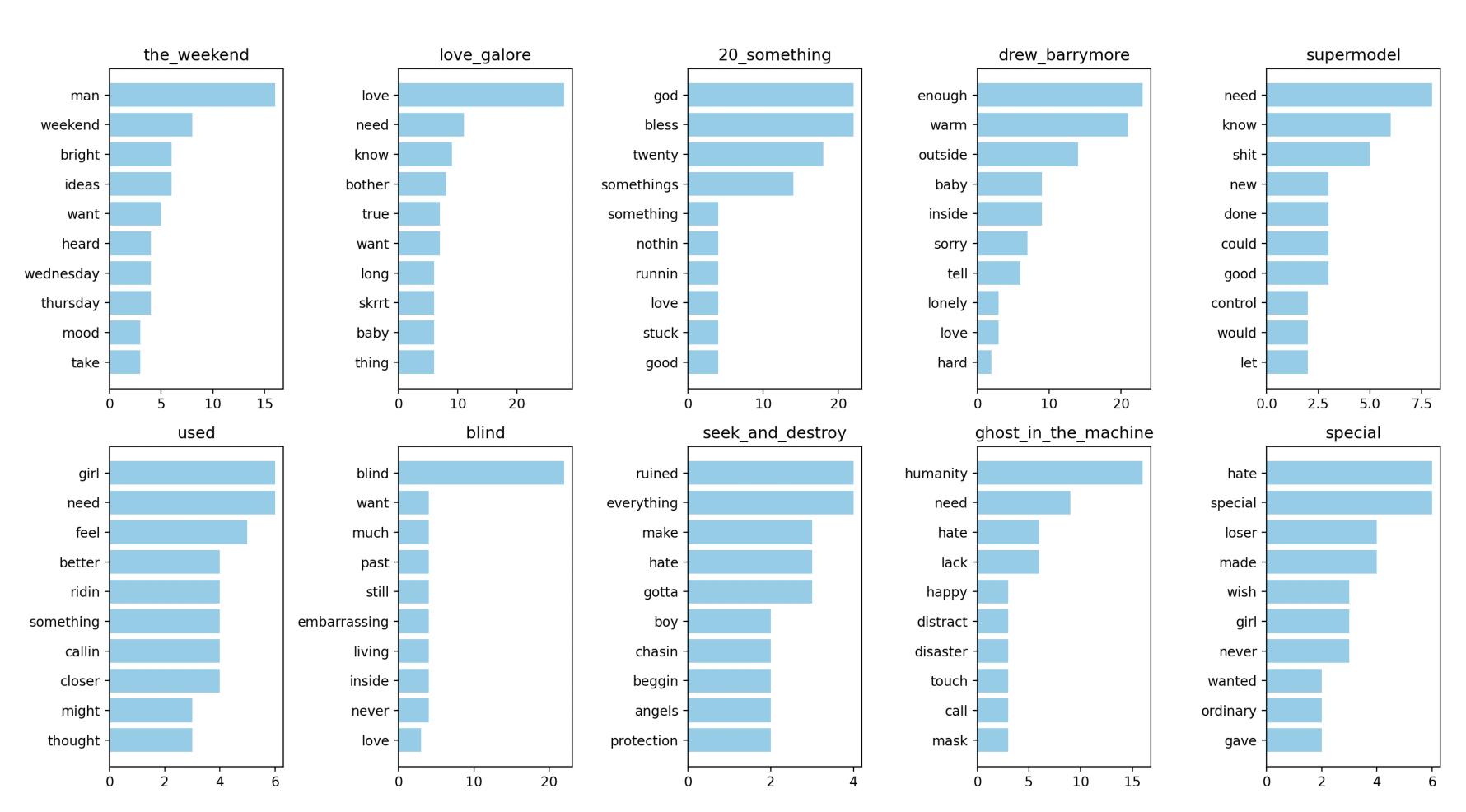
Songs from *Ctrl* show clear patterns of repetition, connecting them strongly to central themes like "love," "need," and "God."
Meanwhile, *SOS* songs are linked to a more diverse range of concepts, reflecting a broader thematic scope. This visualization emphasizes the evolution of SZA's lyricism between the two albums.

Data Collection:

- Use web scraping to gather lyrics for five songs from each of SZA's albums, Ctrl and SOS
- Store the lyrics in a structured format for processing

Text Preprocessing:

- Tokenize the lyrics into individual words
- Remove stop words, punctuation, and special characters to focus on meaningful content Natural Language Processing (NLP):
- Compute word frequency distributions to identify commonly used terms in each album
- Use techniques like Term Frequency-Inverse Document Frequency to highlight unique words for each album
- Perform sentiment analysis or thematic analysis



This visualization compares the most frequent words from SZA's *Ctrl* (top row) and *SOS* (bottom row) albums. Lyrics from *Ctrl* repeat key words, emphasizing intimate themes like love and self-reflection. In contrast, *SOS* features a broader range of vocabulary within each song, reflecting more diverse and complex storytelling. This shift highlights SZA's artistic evolution.

Conclusion:

- SZA's Ctrl emphasizes emotionally intimate and repetitive themes, reflecting vulnerability and self-reflection, while SOS goes into a deeper emotional spectrum with greater lyrical diversity.
- The evolution in SZA's songwriting highlights her growth as an artist and shift in attitude, as her second album has more multilayered themes
- NLP techniques, including word frequency analysis and sentiment scoring, are effective in uncovering thematic and tonal differences across her albums
- This analysis shows how music evolves to tell not only one's story of personal growth and change but also how society's narratives change

