

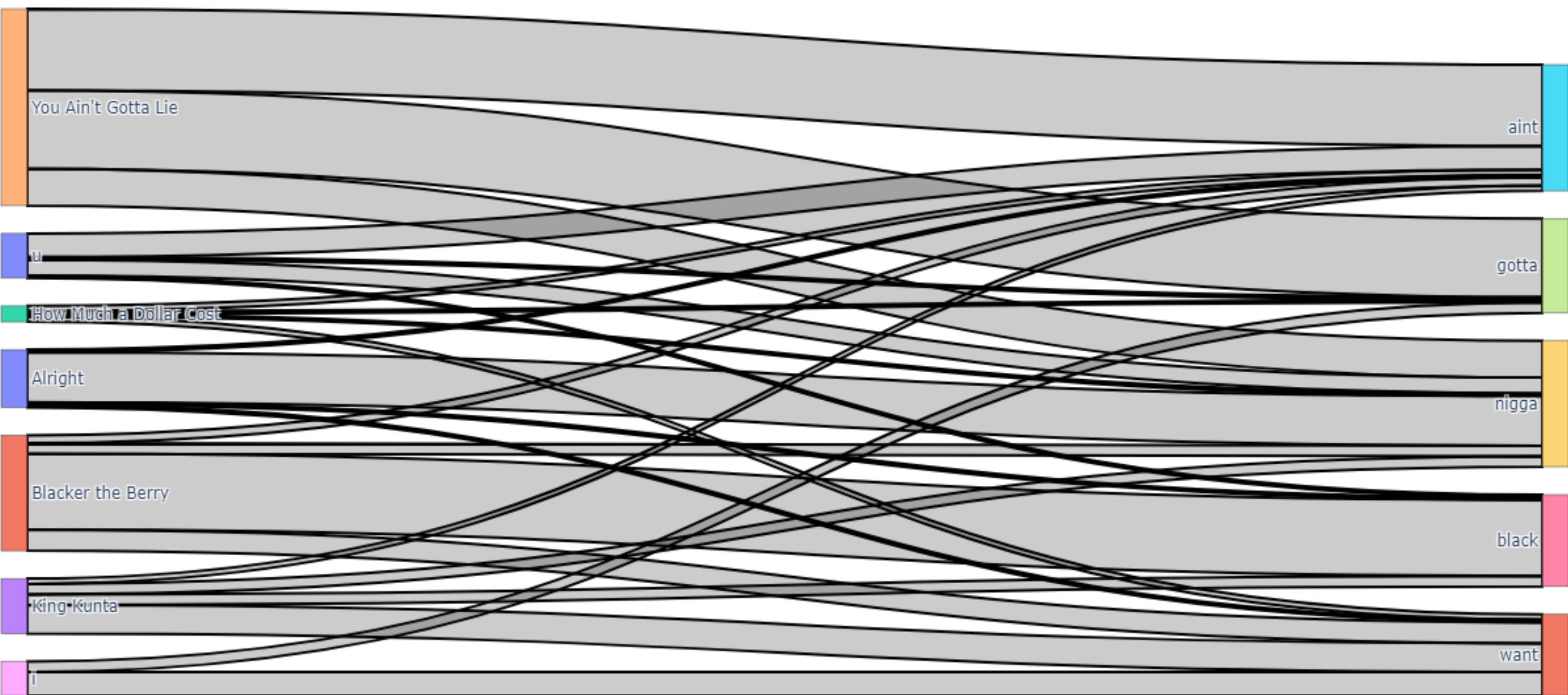
Lyric Analysis of Kendrick Lamar's "To Pimp A Butterfly"

Siddakk Chatrath, Kenneth Aldridge; John Rachlin

Background and Goal

Kendrick Lamar's album "To Pimp A Butterfly" has been lauded for supposedly pushing hip-hop musical boundaries and offering powerful social commentary on race, fame, and more since its release 9 years ago. Our project aims to use Natural Language Processing frameworks to analyze the lyrics of 7 TPAB songs and determine what makes them achieve the status they have today.

Findings and Products

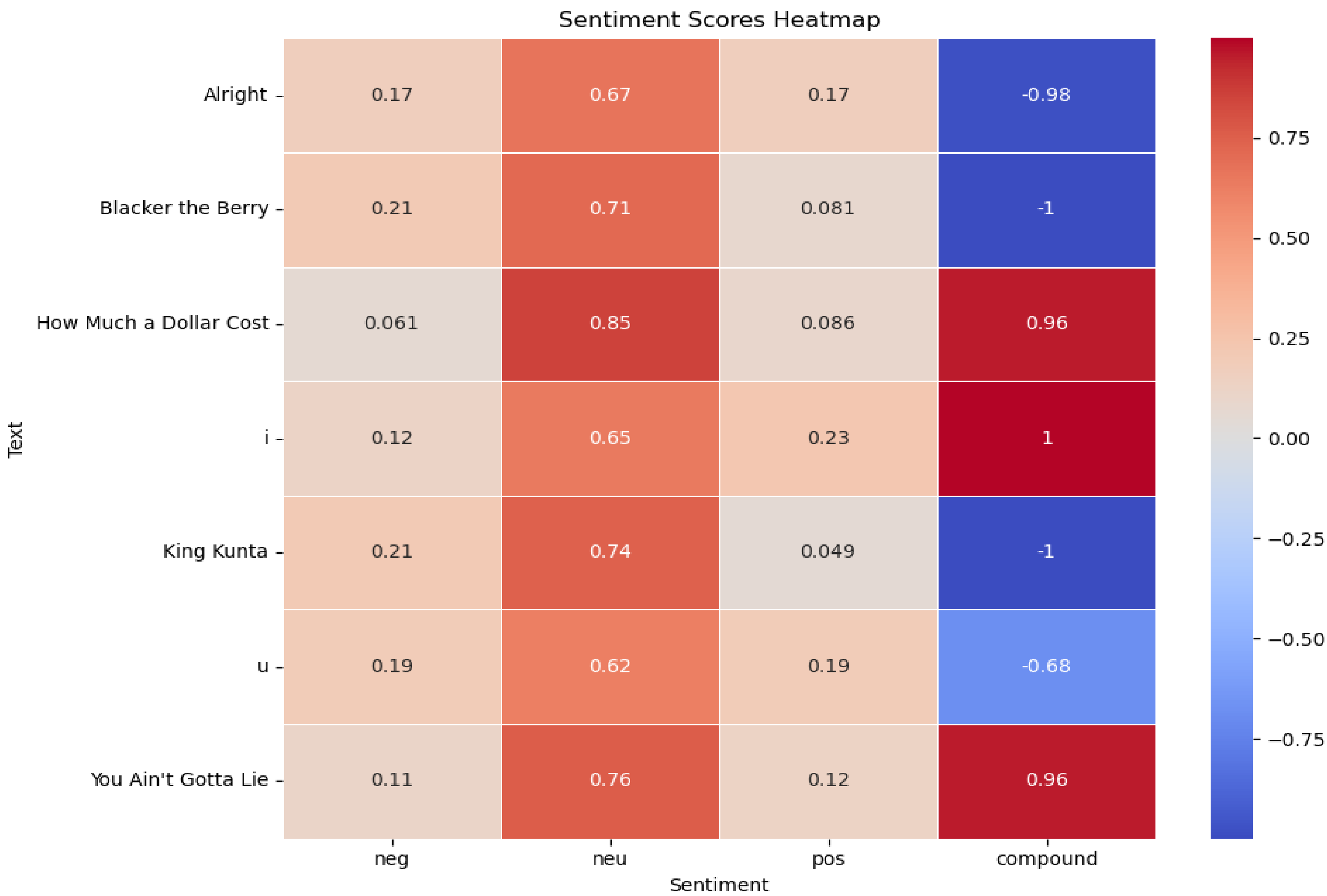


The five most common words among the 7 songs are unsurprising as they are popular rap lyrics. The diagram shows that most of the common words come from You Ain't Gotta Lie, which indicates that this song repeats many of its lyrics.

The most prominent words in the clouds indicate the topic and sentiment of each song progressing through the album; love being big for the positive 'i', complicated for 'u'

Process and Methods

Using text files of each of the 7 songs' lyrics, we passed them into a text parser, which removed punctuation and stop words. The parser also collected data about each song, such as the word counts and sentiment. Using this data, we created several visualizations, which reflected the lyrical trends of the songs.



Indicates negative, neutral, positive, and overall lyrical sentiment of every song, but sometimes the verses are "negative" while the song is more hopeful

Conclusion and Next Steps

Through analyzing the most frequent lyrics and the sentiment behind them, we are able to look into how Kendrick crafts his songs to convey his central messages in To Pimp A Butterfly and how they evolve through the album, in both personal and social contexts, to convey emotions ranging from angst and regret to hope.

