

Tyler, The Creator's *Chromakopia* in Text Analysis

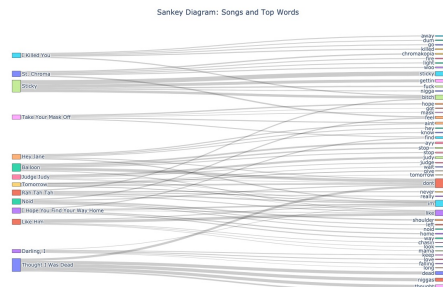
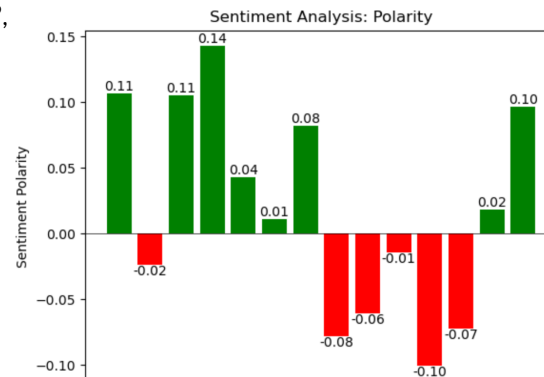
Nusha Bhat; John Rachlin

Background, Motivation, and Goals

- Tyler, The Creator recently released album *Chromakopia* this October 2024, and it has already been acclaimed for its emotional depth and meaningful lyrics. The album boasts 14 tracks, at 53 minutes total, and explores themes like resilience and personal freedom. The 14 tracks provide rich data for text analysis, and I aim to seek a deeper understanding. The main goal is to clearly see recurring themes and emotions in the lyrics using my data-driven techniques. Then the lyrical patterns will be represented in engaging visualizations, like Sankey diagrams and sentiment overlays. I have a strong appreciation for R&B music, but this new album caught my eye and I decided to perform lyrical analysis on this pop/rap album instead.

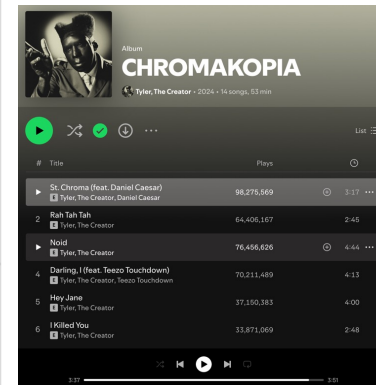
Findings and Products

- The word clouds proved to be an ideal visualization to see themes across songs in the album, especially in their progression. The introduction includes "light", "fire", and Song 7 has "judge", "judy", making it easy to decipher the song in the album.
- The sentiment analysis bar chart depicts sentiment per song. It measures positive sentiment, with tracks focused on themes of love, hope, or overcoming challenges. The chart also measures negative sentiment for anger and loss. Songs 3, 4, and 14 are at the highest positive polarity, and Songs 6, 8, and 11 are at the strongest negative polarity.
- The Sankey diagram connects each song to its most frequent words, to highlight unique vocabulary. "Tyler" appears across songs, emphasizing repeated phrases or calls to action throughout the album. Emotionally charged words like "hope", "killed", portray the song's story through lyrics.



Process and Methods

- To approach this problem, I collected data by pasting song lyrics from the album. I processed the data then created three types of visualizations. I utilized numerous libraries like nltk for text processing and stopword removal, textblob for sentiment analysis, wordcloud for the word cloud generations, and plotly for the interactive Sankey to address key analytical questions.



Conclusion and Next Steps

- The album *Chomakopia* explores a range of emotions and recurring themes, namely light, hope, and struggle. The sentiment analysis displays the progression from introspection to conflict then resolution and peace within oneself, as explored in the final song of the album. Personal references with "Tyler" lyrics underscore the autobiography of his musical style.
- Songs could be grouped by theme to build off my current analysis, and I can show viewers how tone progression is quantified across the album.
- I am eager to see how this lyrical analysis compares to music across genres, especially in an exclusive rap album like GMX, recently released by Kendrick Lamar, and pop music such as Taylor Swift.

