

Analysis of the Discography of Kanye West, Kid Cudi, Jay-Z and their Rap Supergroups

Kids See Ghosts and *The
Throne*

By Adham Chakohi

Project Summary

The data processed is the entire lyrics discography of **Kanye West**, **Kid Cudi**, **Jay-Z**, and the 2 different supergroups formed between them **Kids See Ghosts** and **The Throne**. The data is web scraped from lyrics.fandom.com. After mining the dataset, I conduct a co-occurrence analysis inside the discographies, and then perform topic modeling to extract and visualize salient terms. The purpose of this project is to compare the topics of each individual rappers, and how they change when they are in their respective supergroups.

Who are these people?

Kanye West

- Married to Kim Kardashian
- Infamous for interrupting Taylor Swift receiving an award at the 2008 VMAs.
- Infamous for proclaiming “George Bush doesn’t care about black people”
- Was called “a jackass” by Barack Obama
- Infamous for supporting trump
- Started as a producer in 1996, started rapping in 2003.
- Named his daughter “North West”
- Won 21 Grammy awards



Kanye West



Jay-Z

- Married to Beyonce
- Started rapping in 1995
- Dealt drugs to make ends meet
- 3rd richest musician in the world
- Gave Kanye West his start in mainstream music
- Cheated on Beyonce, and they made 3 albums (and millions) out of it.
- Made 13 studio albums
- Won 22 Grammy awards



Kid Cudi

- Released his first project in 2008 after being discovered by Kanye West
- Music style has been described as "an atmospheric take on melodic rap, with a dollop of charming, off-key singing"
- One of the first rappers to utilize melodic rap.
- Won 1 Grammy award.



Kid Cudi

Kanye West

Jay-Z

Kids See Ghosts

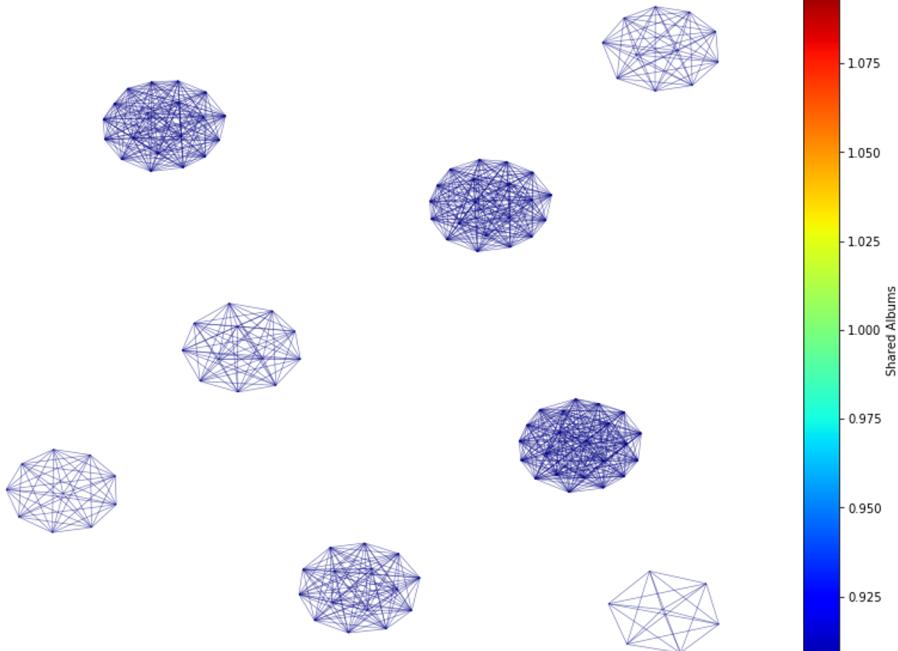
The Throne

Analysis of their discography

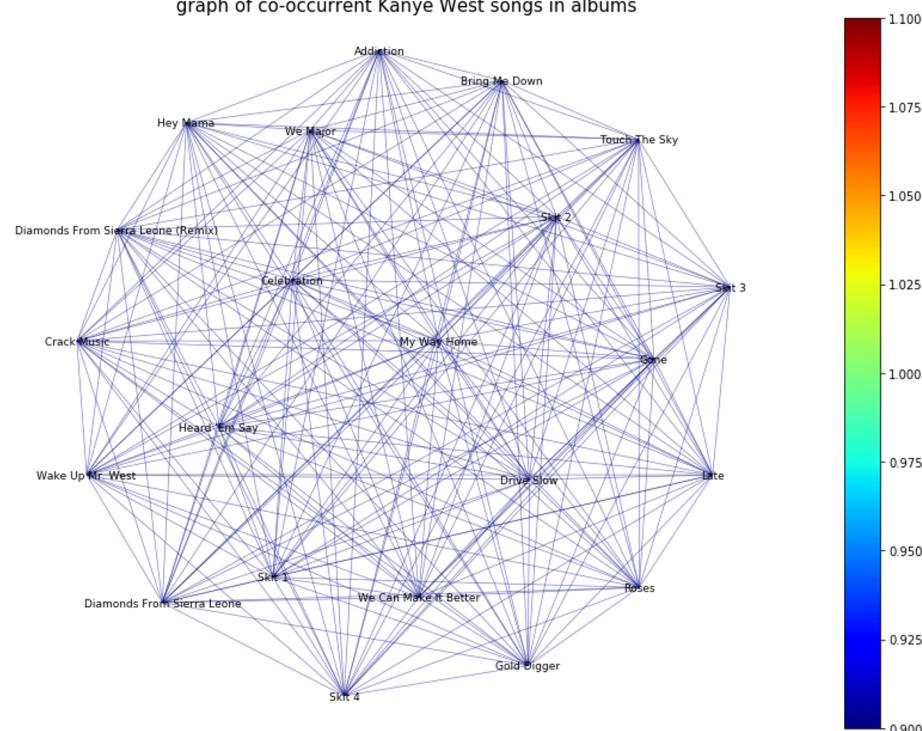
Co-Occurrent Songs

Kanye West

The graph of co-occurred Kanye West songs in albums



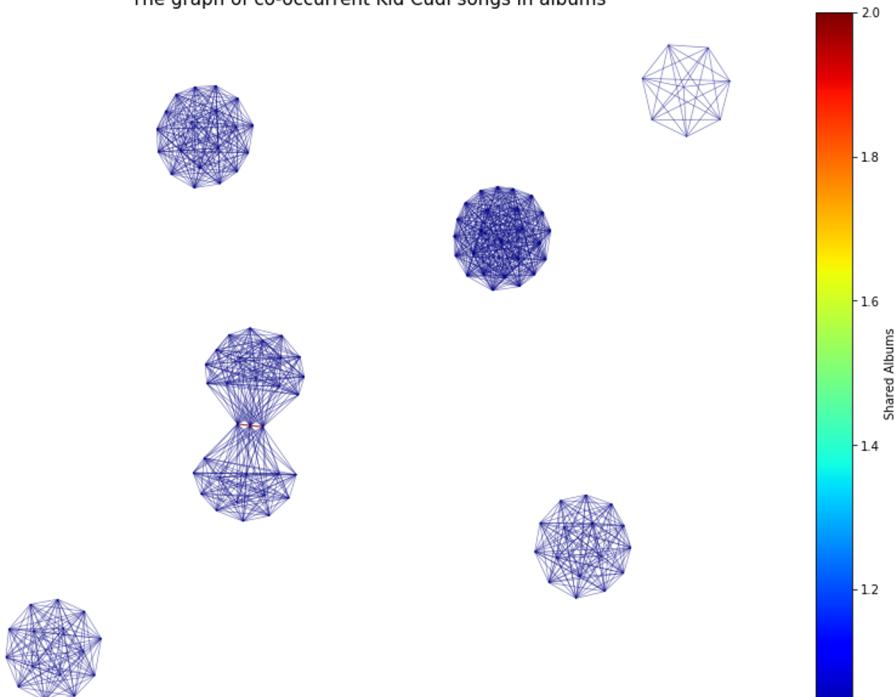
The largest connected component of the graph of co-occurred Kanye West songs in albums



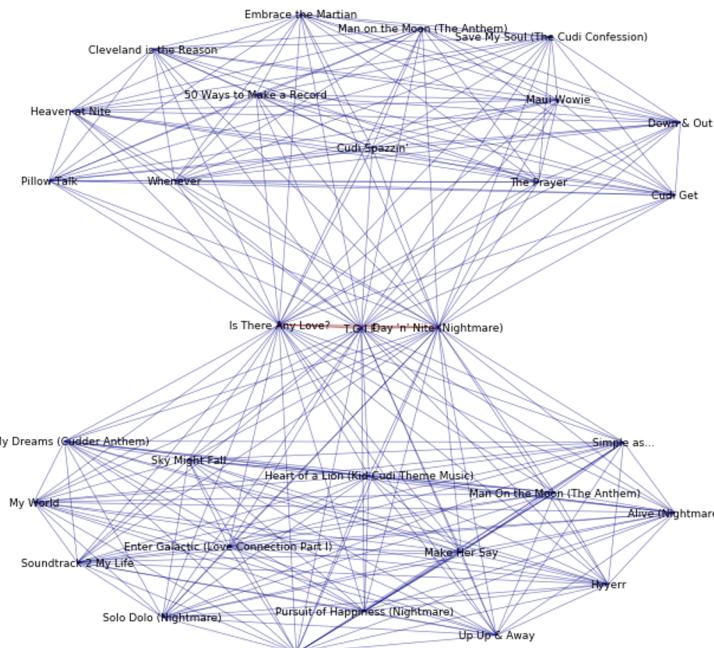
No Co-Occurrences (songs in multiple albums) anywhere in his discography!

Kid Cudi

The graph of co-occurred Kid Cudi songs in albums



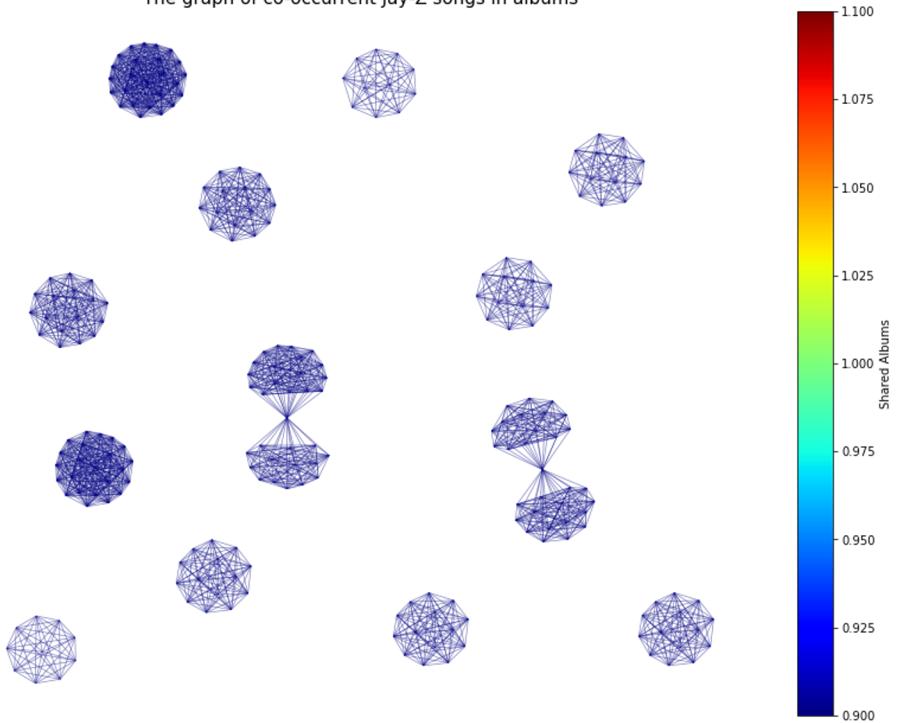
The largest connected component of the graph of co-occurred Kid Cudi songs in albums



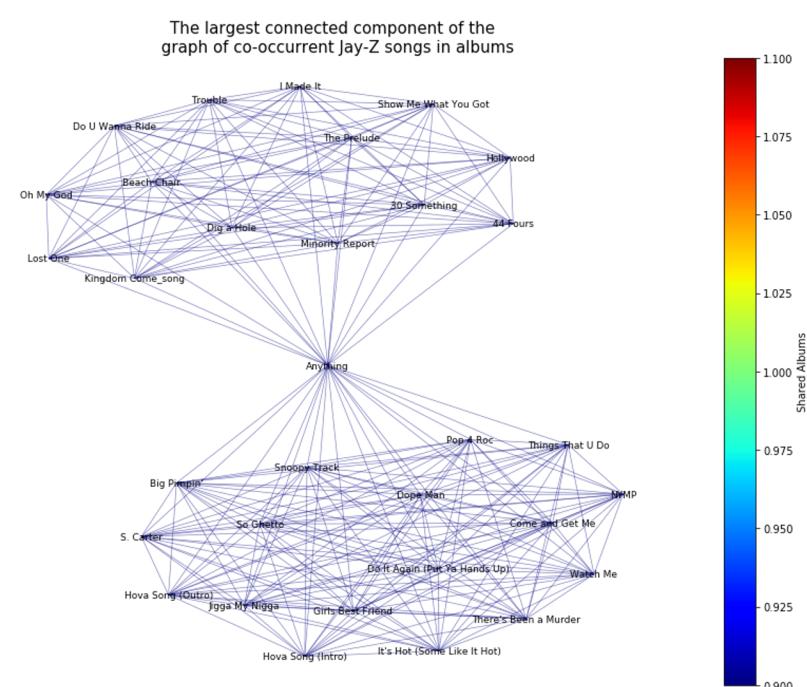
3 Co-Occurrences between 2 Albums. The songs “Is There Any Love”, “T.G.I.F”, and “Day N Nite” are in both A Kid Named Cudi and Man on the Moon

Jay-Z

The graph of co-occurred Jay-Z songs in albums



The largest connected component of the graph of co-occurred Jay-Z songs in albums

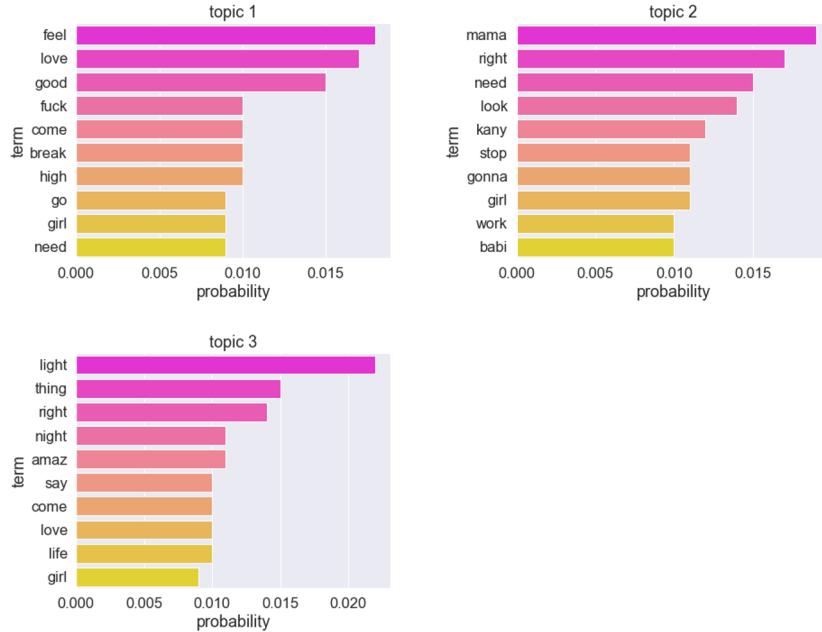


2 separate Co-Occurrences between 4 different albums

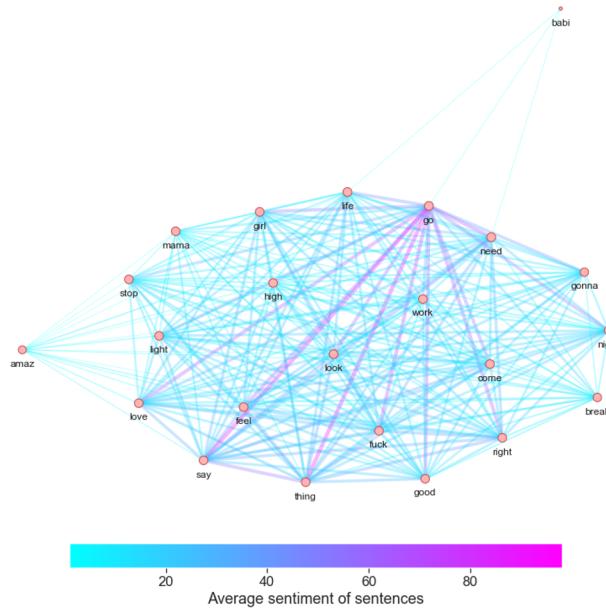
Topic Modeling

Kanye West

Unsupervised Topic Modeling (TM) of Kanye West's Discography

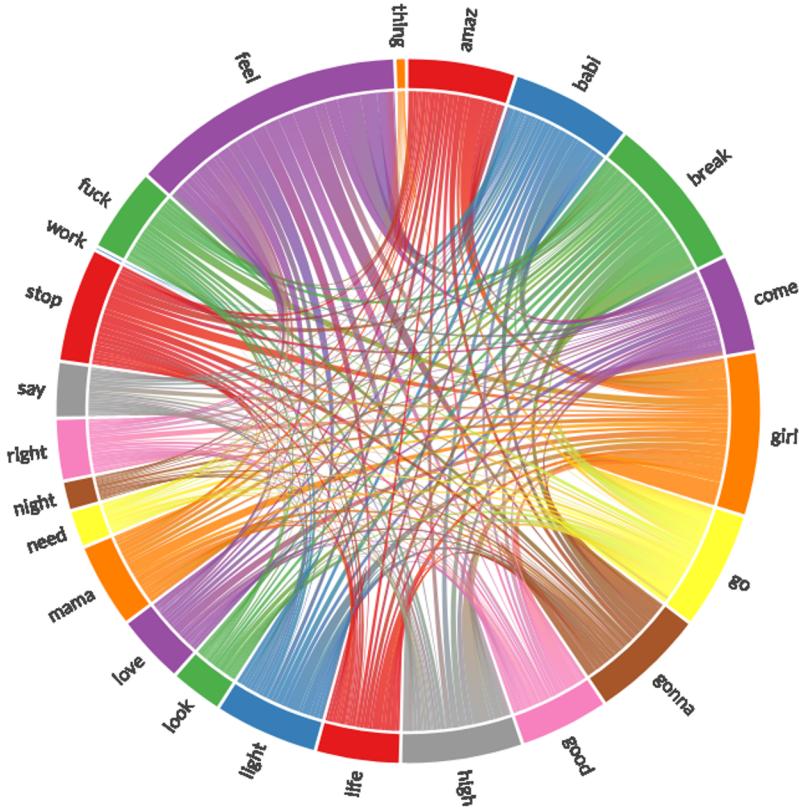


The graph of sentimentally co-occurred unsupervised TM terms in Kanye West's Discography weighted over their average sentiment score



Salient topics: Feelings, his mother, and light (as in god's light)

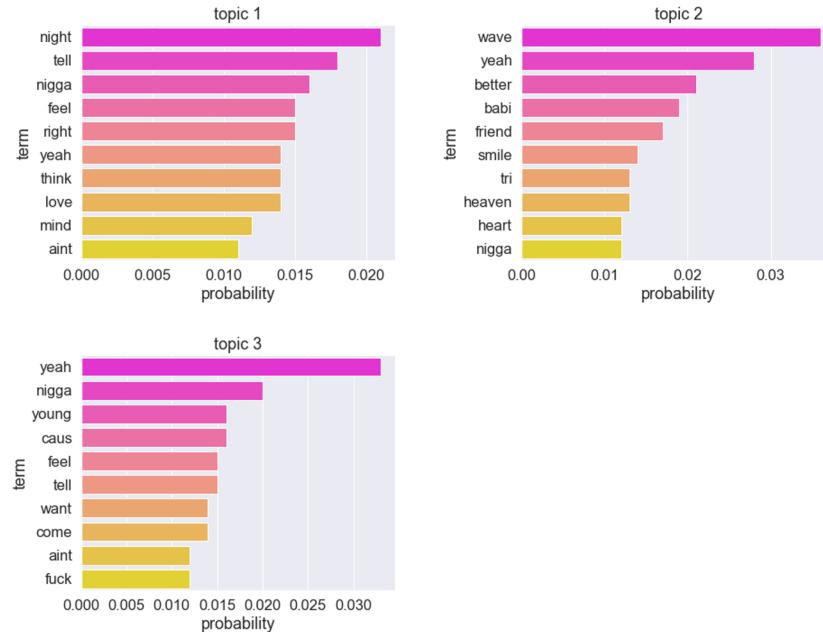
Kanye West



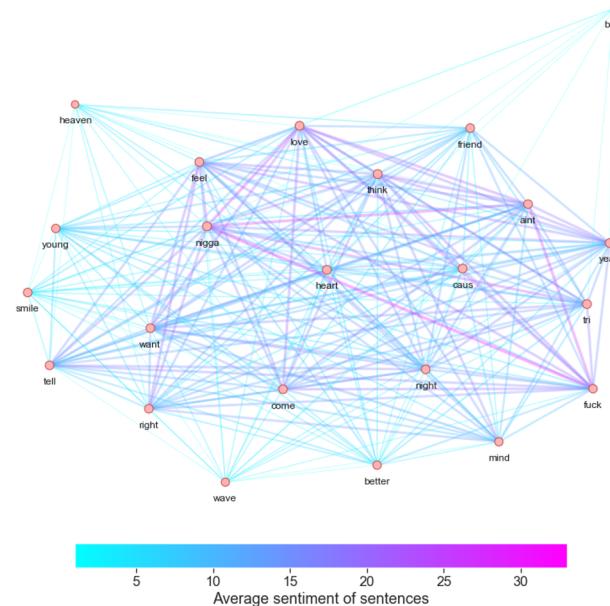
<https://chakohi.github.io/Chord/>

Kid Cudi

Unsupervised Topic Modeling (TM) of Kid Cudi's Discography

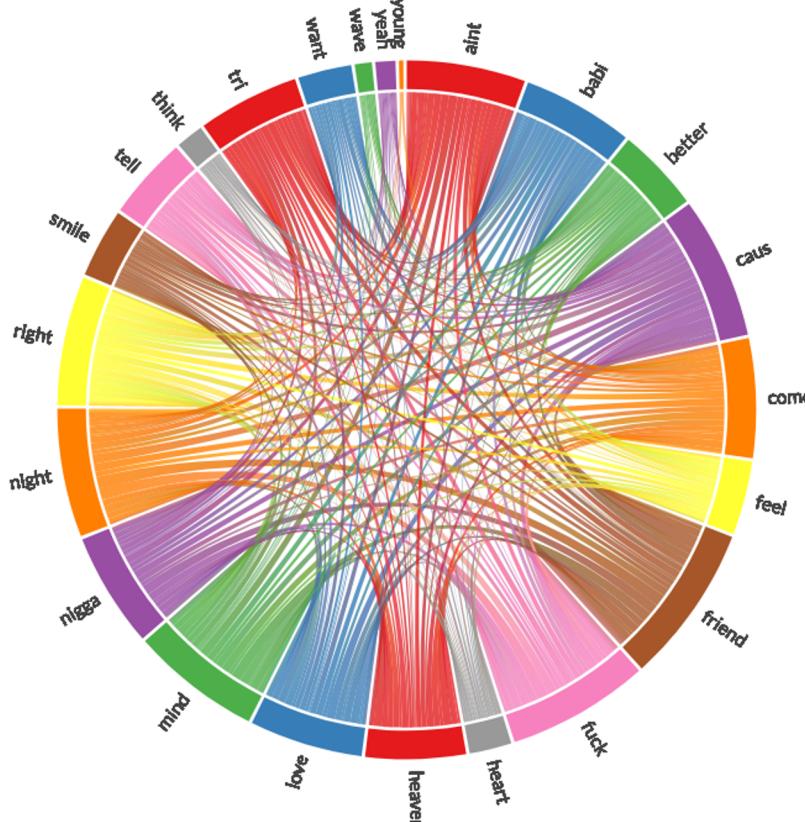


The graph of sentimentally co-occurred unsupervised TM terms in Kid Cudi's Discography weighted over their average sentiment score



Salient topics: Night, the concept of being “wavy”, and being young

Kid Cudi

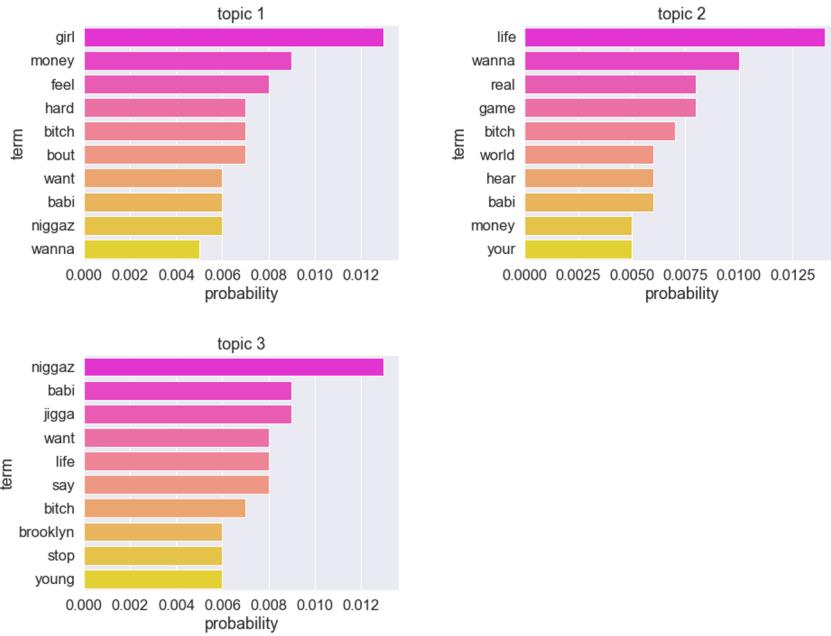


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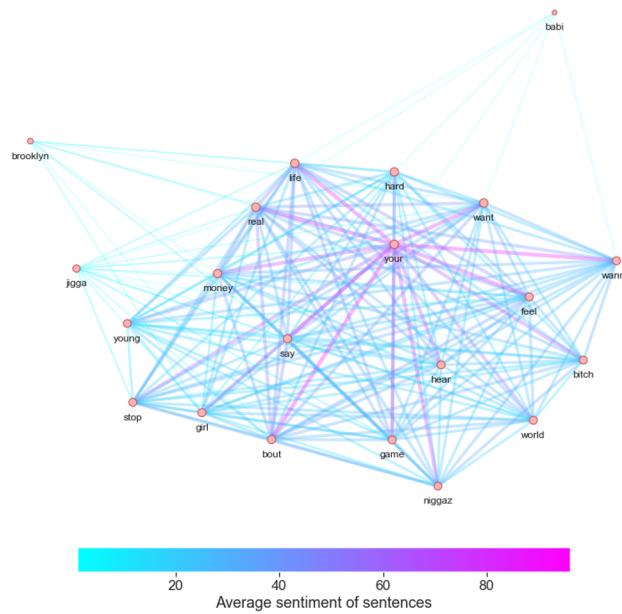
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Jay-Z

Unsupervised Topic Modeling (TM) of Jay-Z's Discography

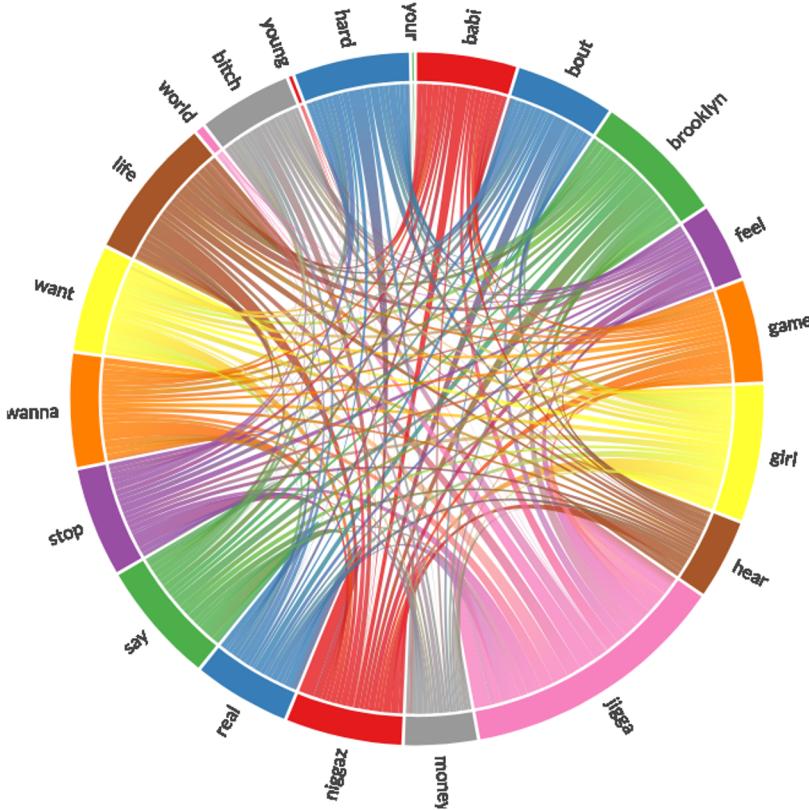


The graph of sentimentally co-occurred unsupervised TM terms in Jay-Z's Discography weighted over their average sentiment score



Salient topics: Girls, Money, The good Life, N*****

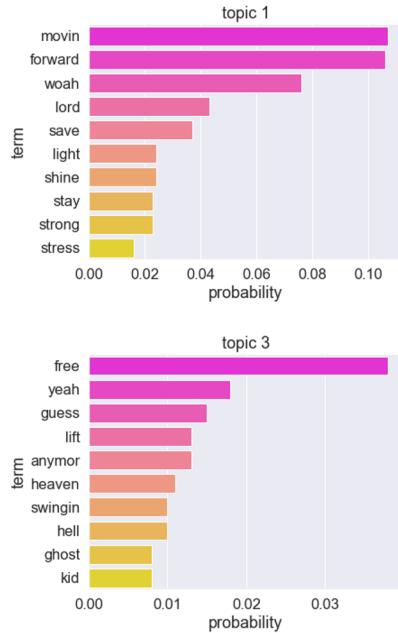
Jay-Z



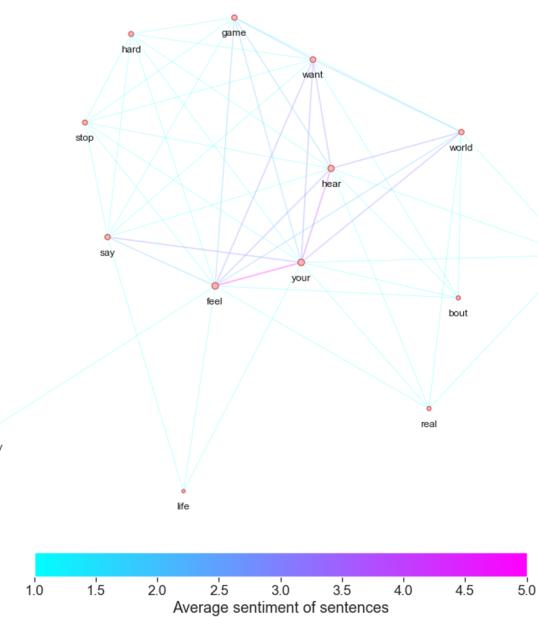
<https://chakohi.github.io/Chord/>

Kids See Ghosts

Unsupervised Topic Modeling (TM) of Kids See Ghost's Discography

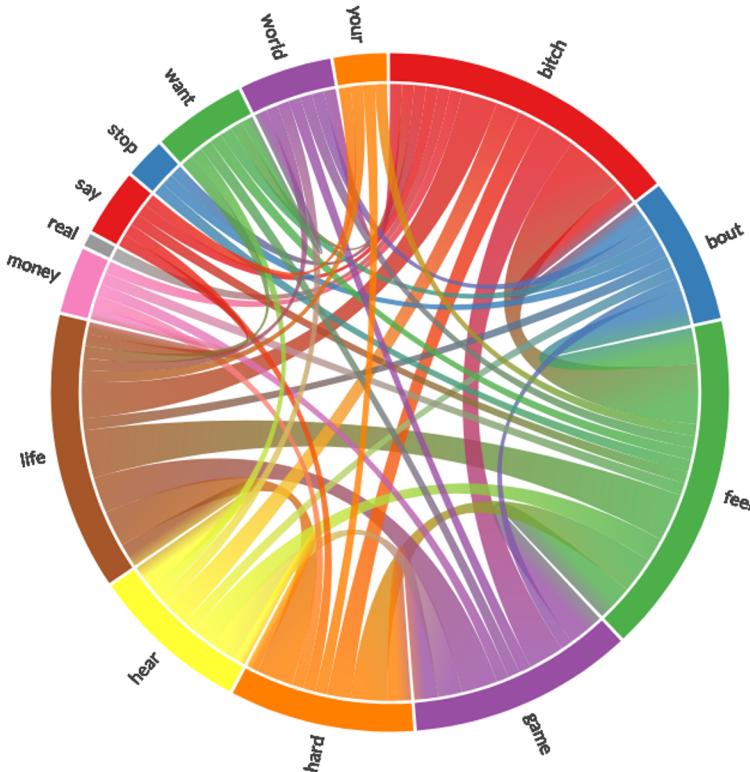


The graph of sentimentally co-occurred unsupervised TM terms in Kids See Ghost's Discography weighted over their average sentiment score



Salient topics: “Moving Forward”, ghosts (as in metaphorical demons), being free

Kids See Ghosts

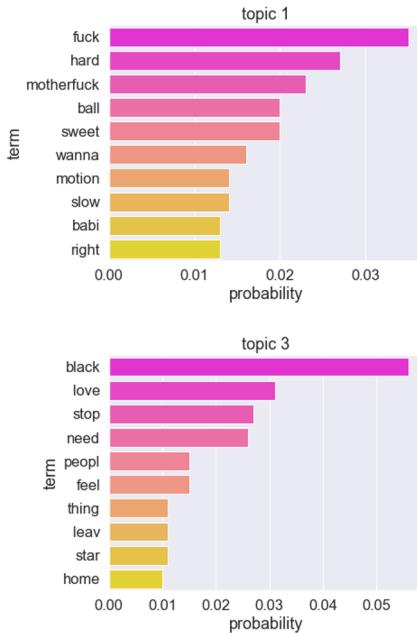


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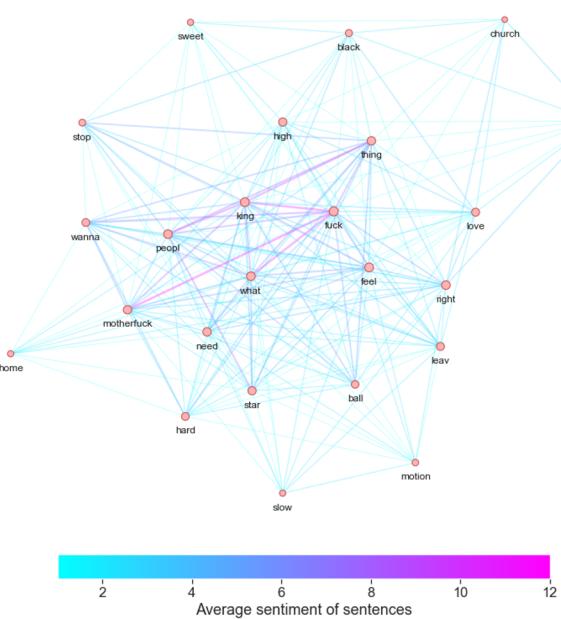
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The Throne

Unsupervised Topic Modeling (TM) of The Throne's Discography

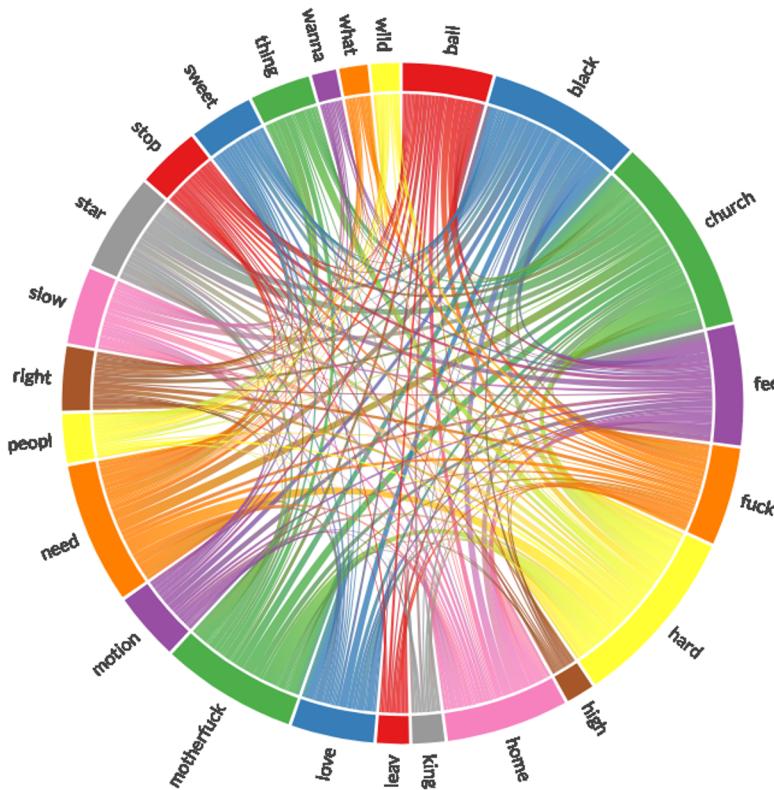


The graph of sentimentally co-occurred unsupervised TM terms in The Throne's Discography weighted over their average sentiment score



Salient topics: Being black in America, religion, and “balling”

The Throne



made with [chord](#)

<https://chakohi.github.io/Chord/>

Kids See Ghosts

Kanye West:

Feelings
his mother
light (as in god's light)

Kid Cudi:

Night
being “wavy”
being young

Kids See Ghosts:

“Moving Forward”
Ghosts
being free

The Throne

Kanye West:

Feelings
his mother
light (as in god's light)

Jay-Z:

Girls
Money
The good Life
N*****

The Throne:

Being black in America
Religion
“balling”

Conclusion & Further Work

I could possibly extend this project with adding the newly formed supergroup between **Kid Cudi** and **Travis Scott**, called **The Scotts**, as well as the supergroup between **Jay-Z** and **Beyonce** called **The Carters**. Additionally, I can explore this idea in other supergroups such as **Black Hippy** and **Bad meets Evil**. I can also expand this idea to include topic modeling on the rappers' biographical and background information, and see if there is any correlation on an expanded dataset.

Thank You