

## **Agenda**

**Define the Problem** 

**Collection** 

**Cleaning** 

**Exploring** 



**Modeling** 

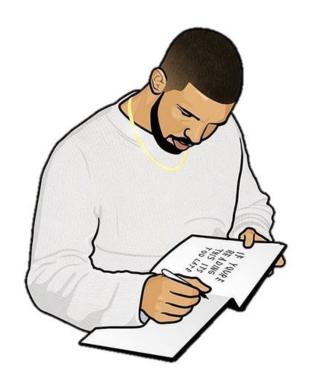
**Topic Modeling** 

**Text Generation** 

**Answering** 

# **Define the Problem**

**Success v Lyricism** 



Who is Drake?

**Problem Scope** 

#### **Lyric Genius**



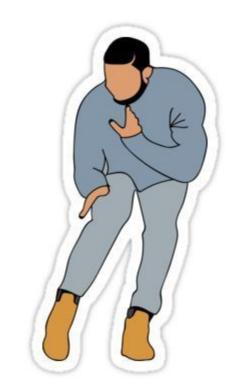
**Corpus** 

**Future Considerations** 

**Artist Selection** 

**Collection** 

## **Cleaning**



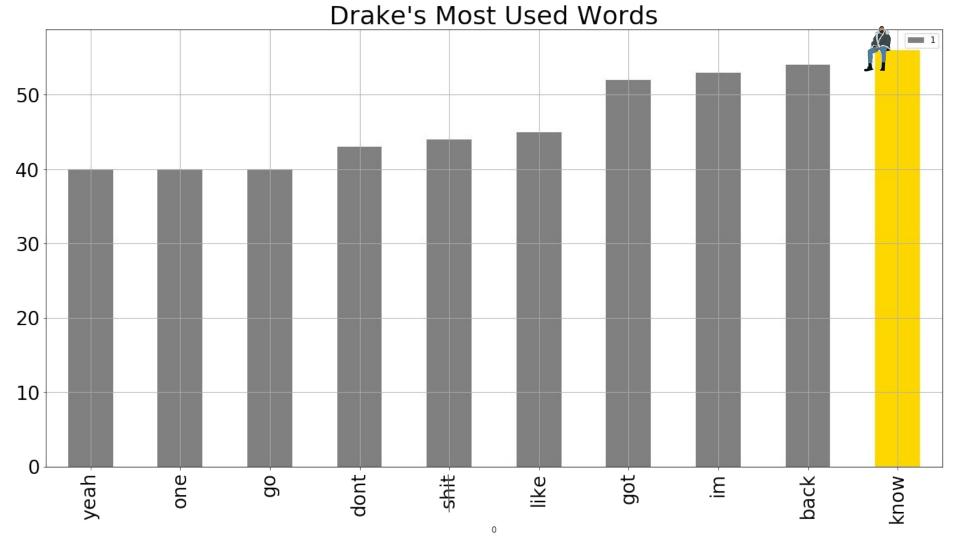
#### **Preserve Profanity**

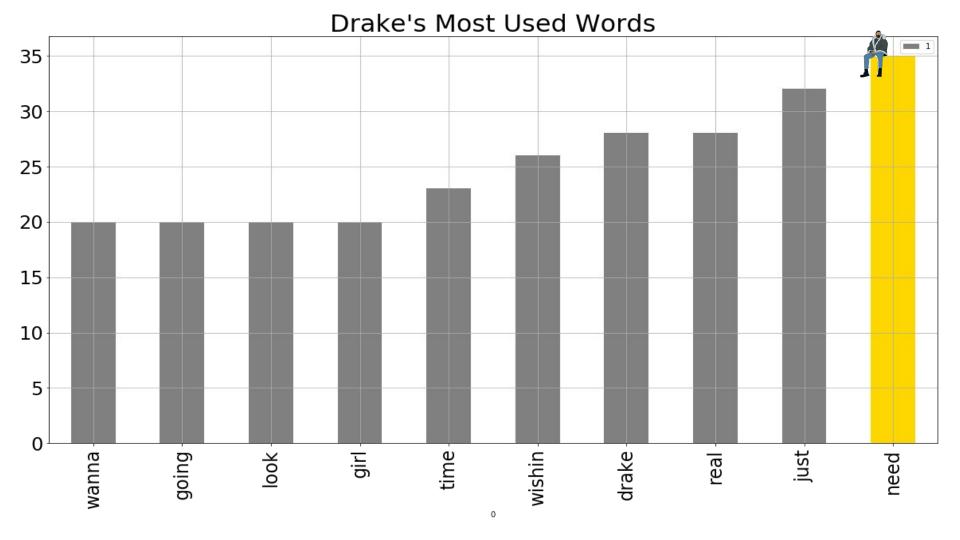
Remove section headers

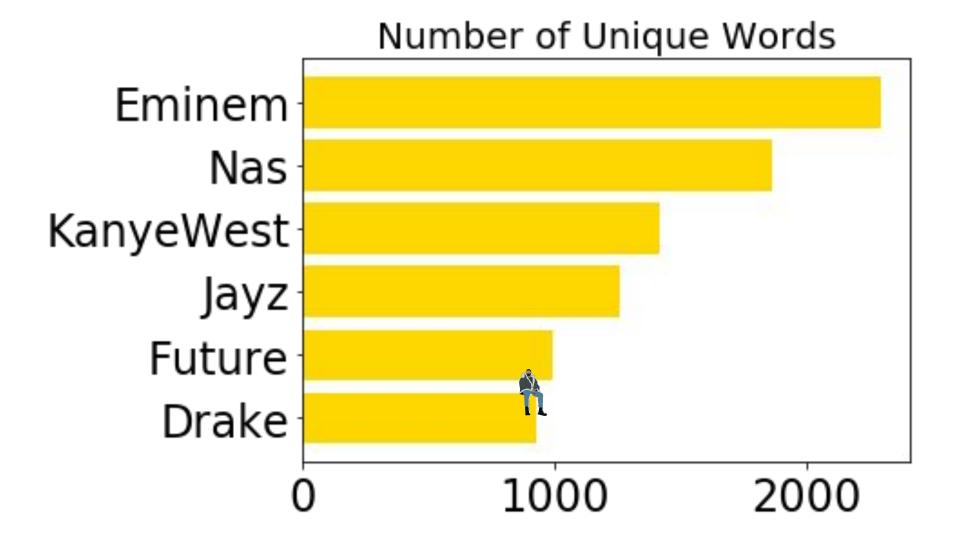
Remove featured artist

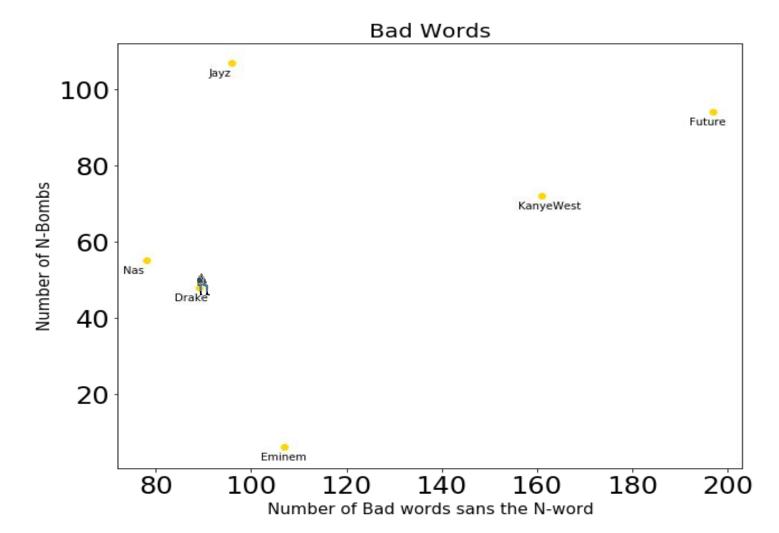
**Preserve numbers** 

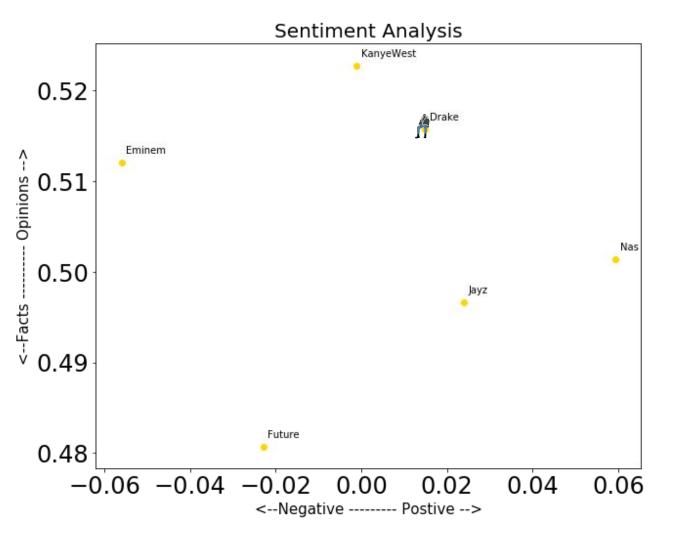
**Future** considerations

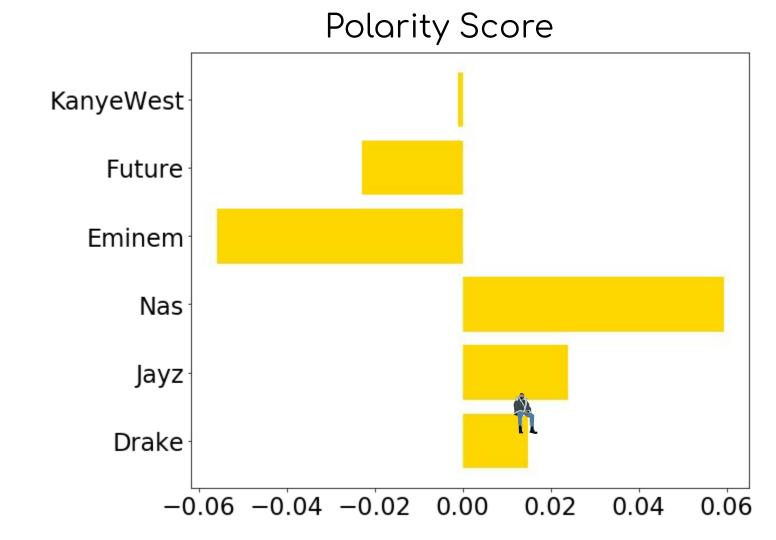












# Using Latent Dirichlet Allocation

	Topic	Word	P
0	0	life	0.011404
1	0	high	0.009815
2	0	lets	0.009588
3	0	low	0.008680
4	0	thou	0.008680
5	1	better	0.005964
6	1	gon	0.005428
7	1	common	0.005160
8	1	time	0.004892
9	1	moment	0.004892
10	2	love	0.018148
11	2	world	0.014176
12	2	man	0.011308
13	2	time	0.009543
14	2	real	0.007998
15	3	clique	0.015914
16	3	god	0.009451
17	3	swerve	0.009451
18	3	black	0.007189
19	3	big	0.006543

Jay-Z

**Future** 

**Eminem** 

Nas

**Drake** 

**Kanye West** 

# **Using Markov Chains**

Drake: 'Cuddle with the goats for someone else you left your advances god d\*\*\* chorus gods plan i had a lot...'

Nas: 'Reject me bustin off quick forever n\*\*\*\*\* i never fell nas yeah yo then we rock chorus scratches by large...'

Drake: 'A\*\* back and wine it be on me on that you do not your advances god i know you bring...'

Nas: 'Soldiers i got to break bread with your motha\*\*\*\*\* mind outro one love you can sell some jewels in school...'

Drake: 'Outlive me all me stay up im the shine i know it like eight advances god d\*\*\* okay made yall...'

Nas: 'Alive and be famous and tried you 36 in egypt learning something deep i rock and killer coppers even though...'

### **Conclusion**

Introspective, search within

Overall Positive, low aggression

Topics seemed be aligned with Nas



Use RNN Model over Markov Chains

Clean data better

More rap diversity



Fin.