

# the notorious NLP



t u p a c   v s .   b i g g i e

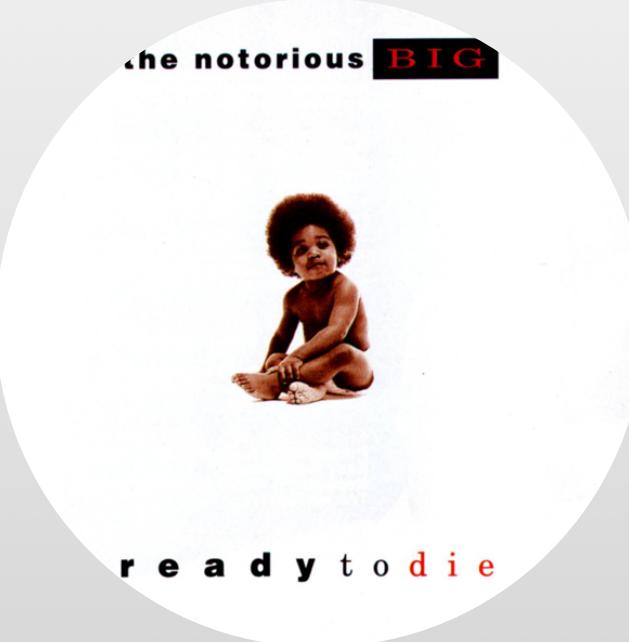
even though  
you're **fed up**,  
gotta keep  
your **head up**

-2pac



	<b>Biggie</b>	<b>2pac</b>
albums	4	10
tracks	113	198
unique words	5675	7264
longest word	aightyouknowimsayin	institutionalized
avg. word length	5.97 letters	6.23 letters

C E N T U S



**born sinner,**  
opposite of a  
**winner**

-biggie

methodology

lemmatokenizer

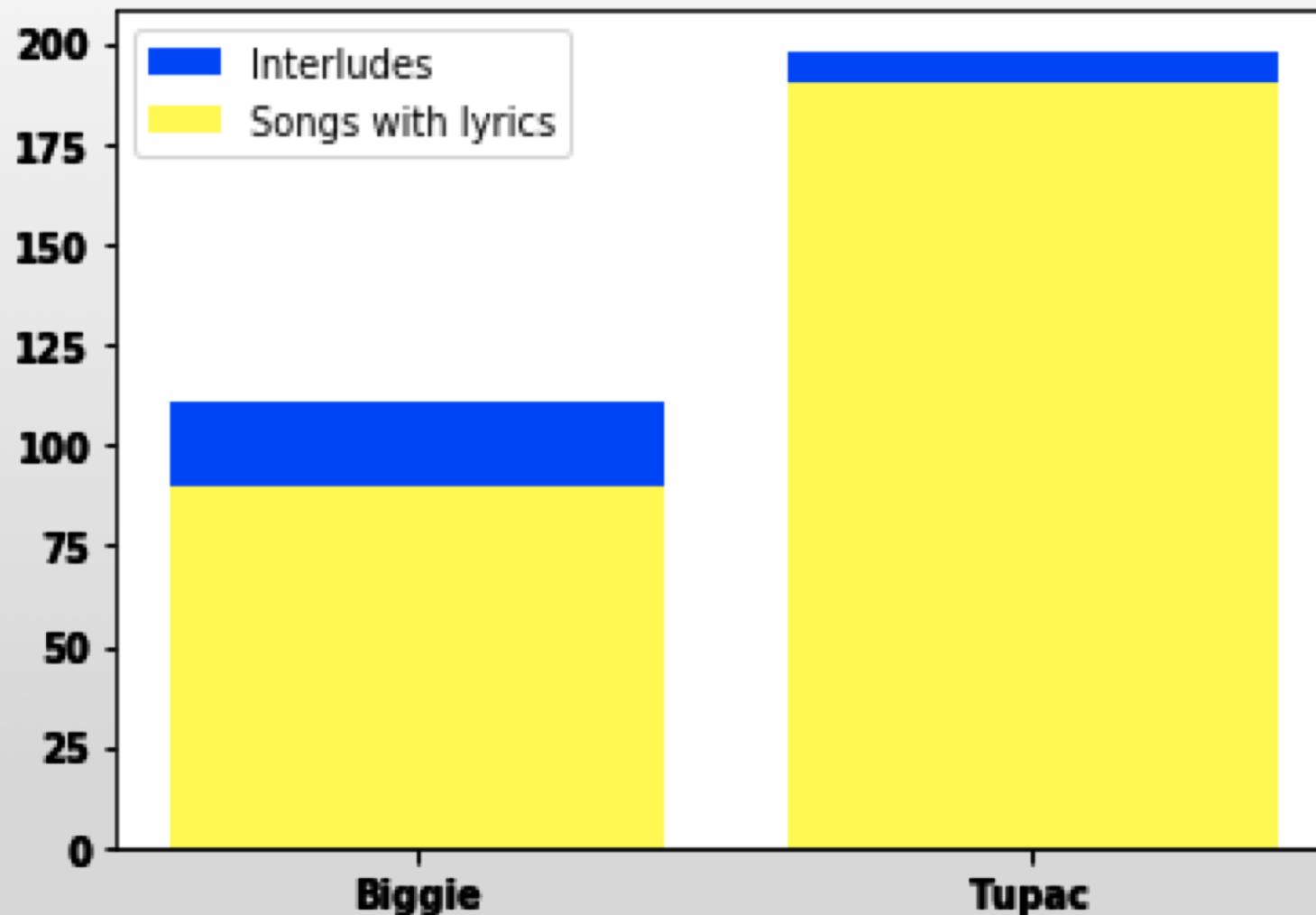
TFIDF

NMF

max\_df

stop words

## Total Tracks



["(Puffy background) What about ten years from now? (Biggie) Ten years from now, where do I want to be? I wanna be...just livin' man, just Living comfortably with my niggas man, in a pool and shit, smoking plenty indo You know I'm saying? I got my wife, just lounging with my wife you know i'm Saying? With my daughter, her daughter, you know just laid back, just chillin You know i'm saying? Living all my niggas is living where I think I be? Ten Years I don't think I will see it for real dogg for real man, that shit ain't Promised man I don't think my luck is that good, I hope it is but if it ain't, so be it, I'm Ready (your dead wrong) (B.I.G.chant) (Repeat til fade out) The weak or the strong You got it going on Your dead wrong...."]

artist: **biggie**

album: **born again**

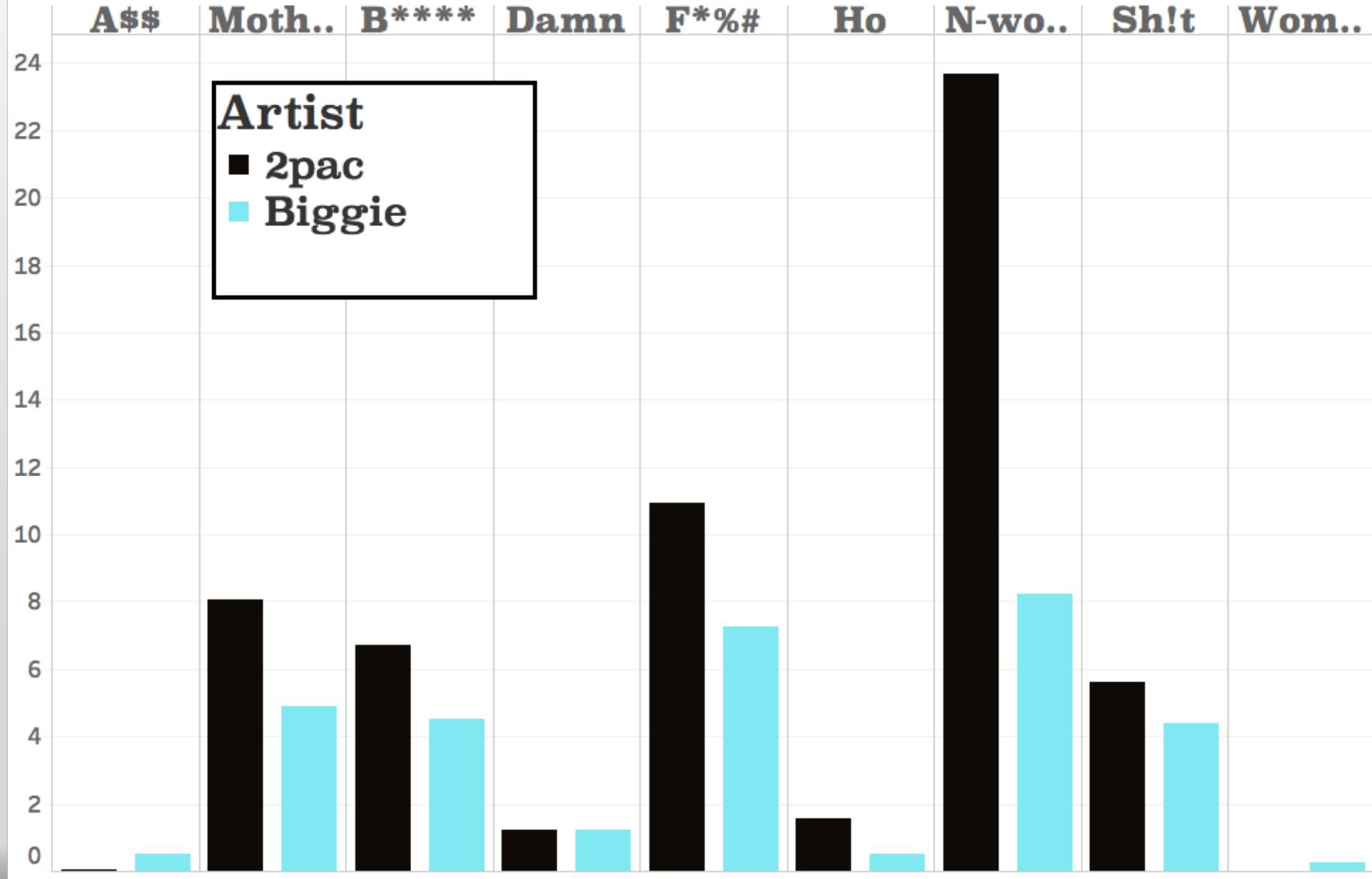
year: **1999**

posthumous: **yes**

["(Puffy background) What about ten years from now? (Biggie) Ten years from now, where do I want to be? I wanna be...just **livin'** man, just Living **comfortably** with my niggas man, in a **pool** and shit, smoking plenty indo You know I'm saying? I got my wife, just lounging with my wife you know i'm Saying? With my **daughter**, her daughter, you know just laid back, just chillin You know i'm saying? Living all my niggas is living where I think I be? Ten Years I don't think I will see it for real dogg for real man, that shit ain't **Promised** man I don't think my luck is that good, I hope it is but if it ain't, so be it, I'm Ready (~~your dead wrong~~) (B.I.G.chant) (Repeat ~~til fade out~~) The weak or the **strong** You got it going on Your dead wrong...."]

artist: **biggie**  
album: **born again**  
year: **1999**  
posthumous: **yes**

# Who Curses More?



and if you  
don't know,  
now you  
know.

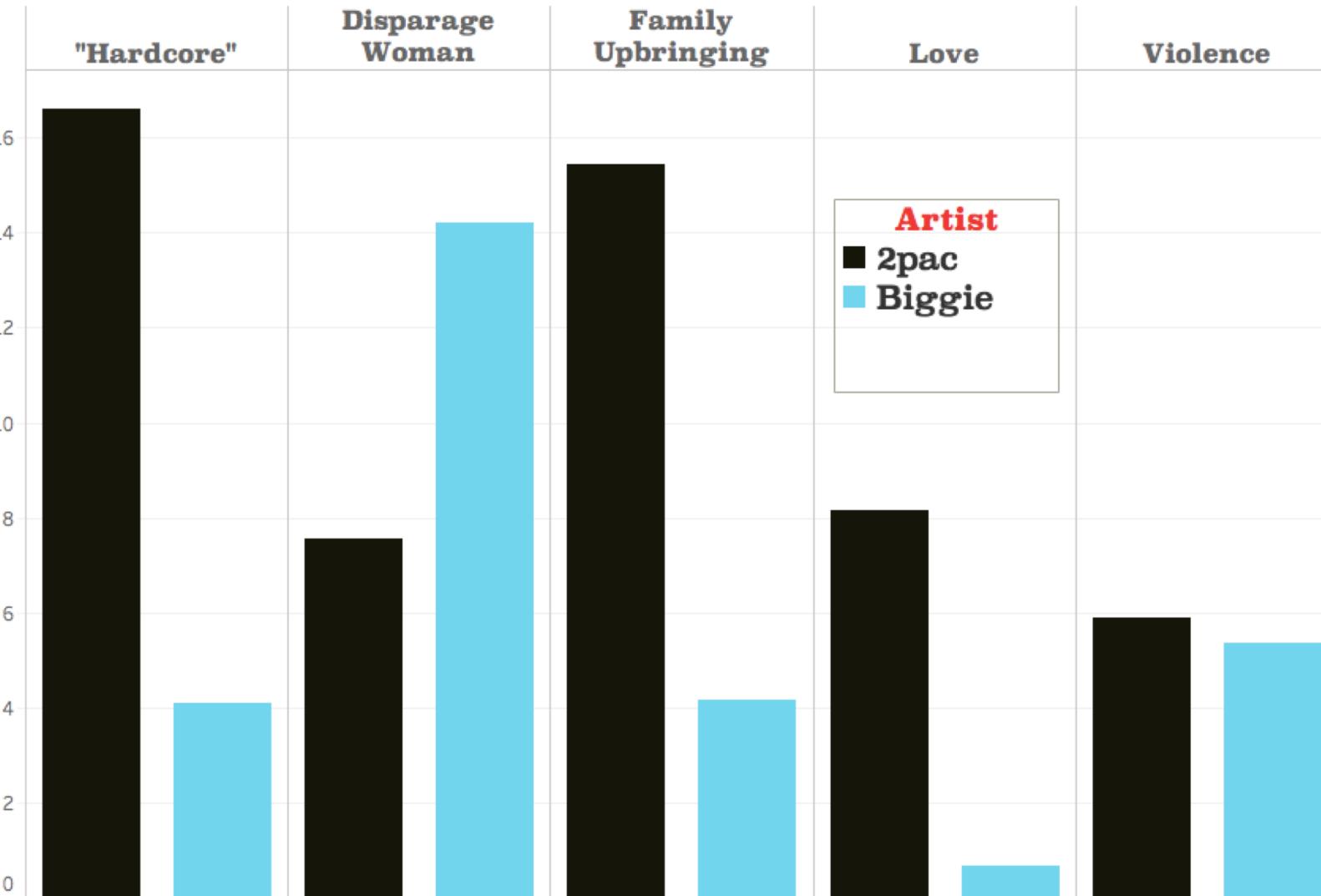
-biggie

life goes on

-2pac

- **“hardcore”**: n-\*, f#, b\*\*\*, die, life, em, s&\*\*, outlaw, ride, see, yall, pac, cause, dont
- **disparage woman**: b\*\*\*\*, biggie, know, big, dont, baby, f\*\*\*, yeah, d\$#, call, man, want, h\*\*
- **family/upbringing**: time, dont, mama, world, aint, cause, know, take, life, day, love, away, ghetto, see, never
- **love**: thug, maybe, lot, hold, baby, passion, lady, need, yeah, girl, life, wan, give, tell, goin
- **violence**: mother\*, proceed, come, give, ready, need, coast, jm, free, f\*, therell, shot, released, die, blunts

# Who Talks About Which Topic More?

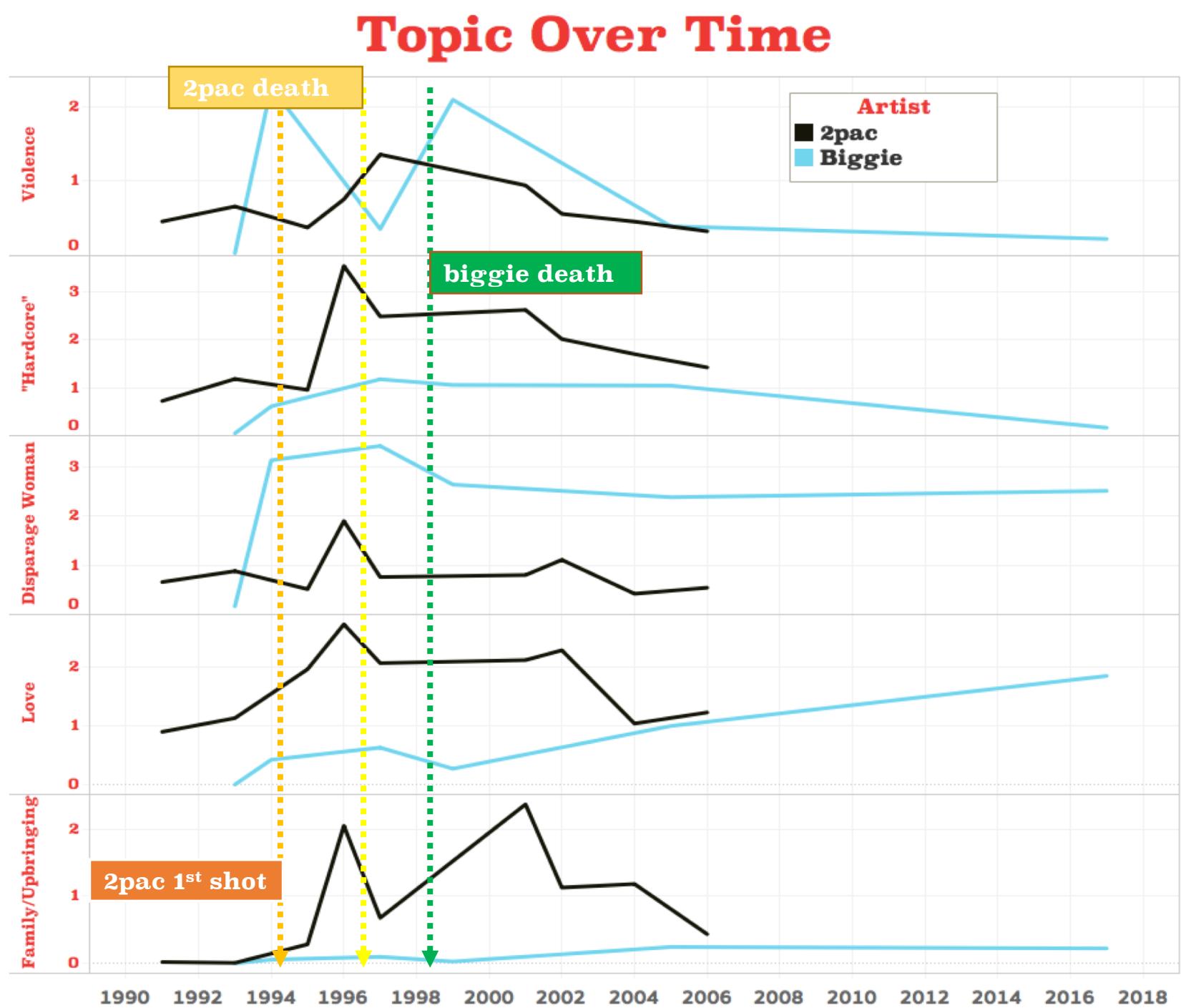


federal  
agents mad  
'cause i'm  
flagrant

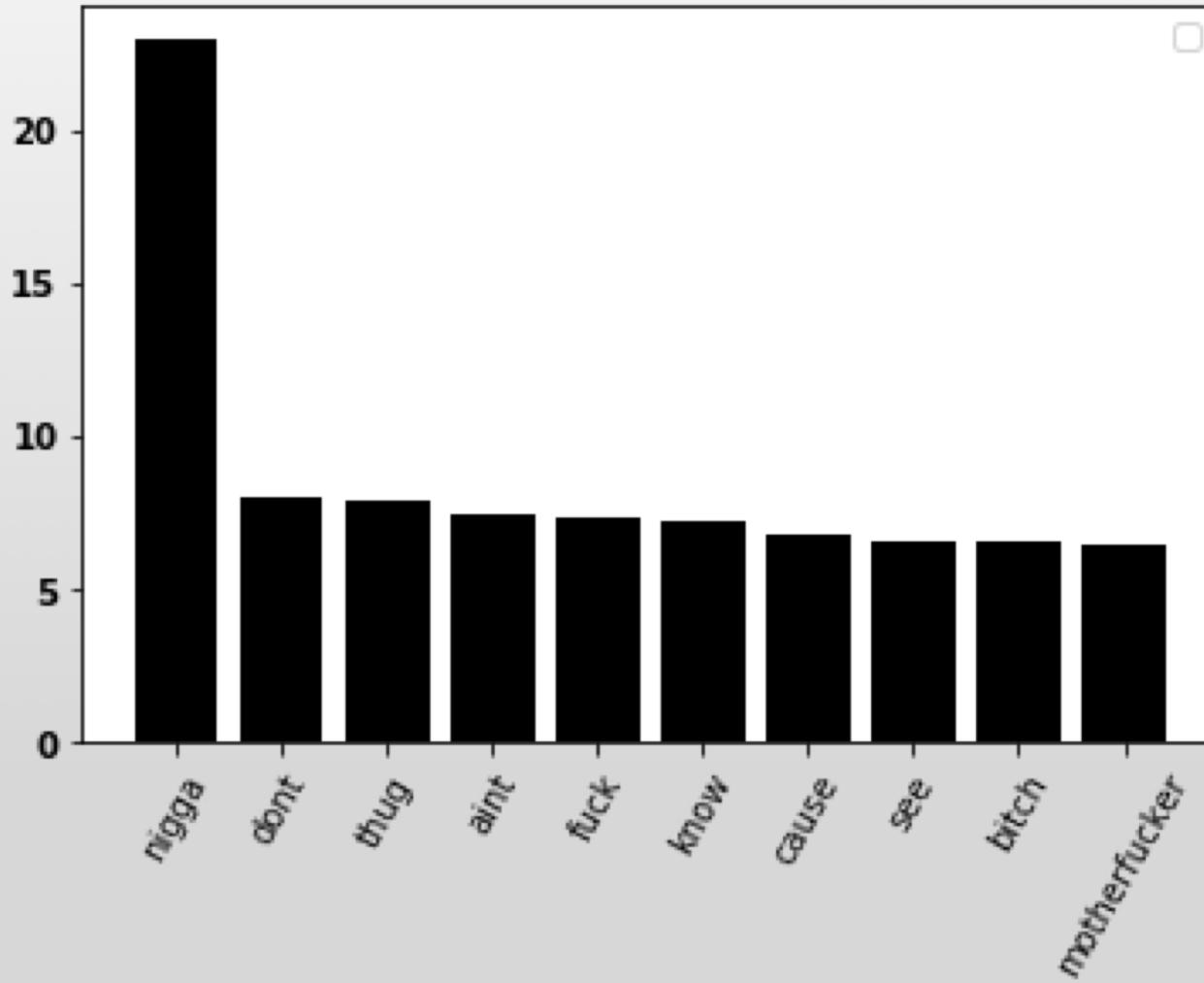
-biggie

separate the  
**weak** from  
the **obsolete**

-biggie



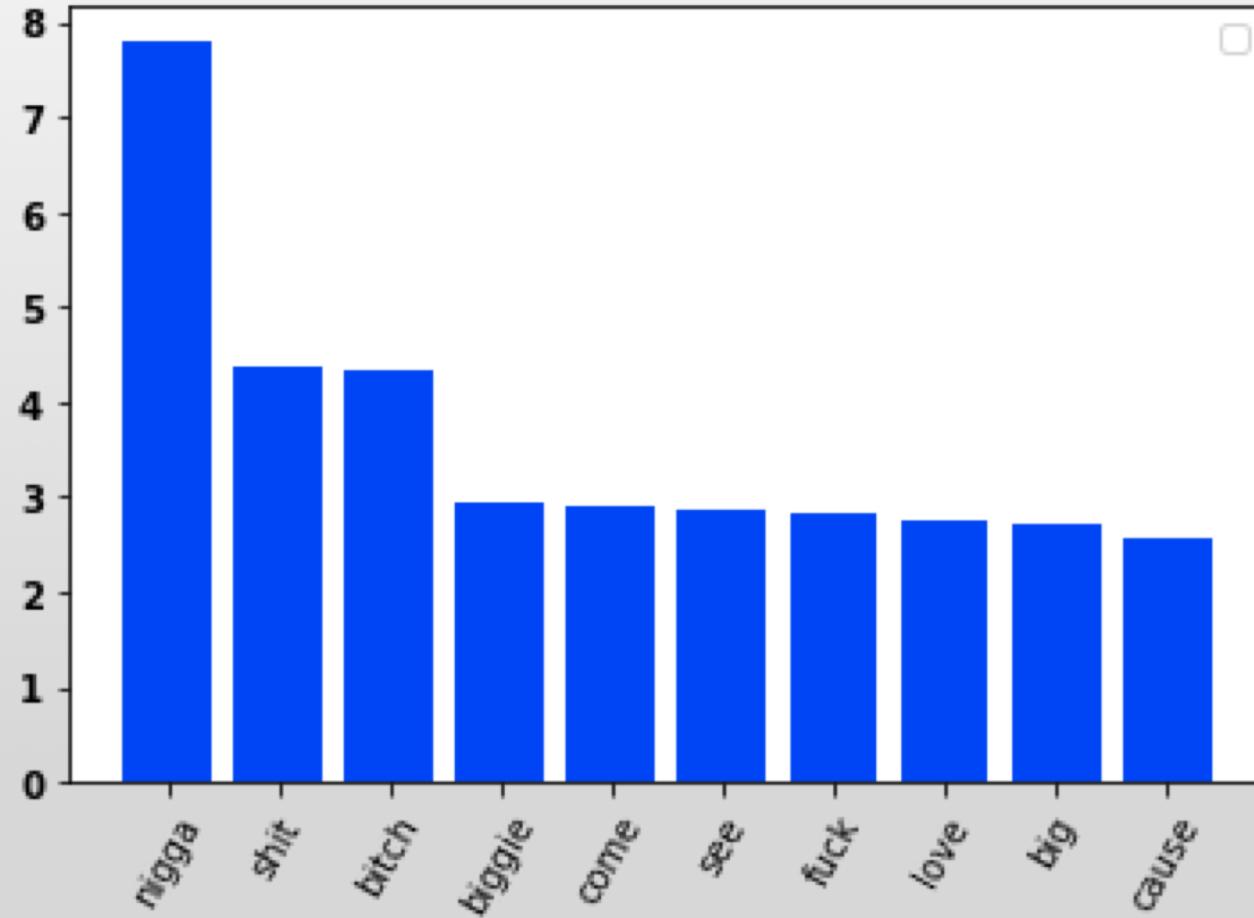
## 2pac's Most Frequent Words TFIDF



ain't a woman  
alive that  
could take my  
**mother's**  
**place**

-2pac

## Biggie's Most Frequent Words TFIDF



ain't a woman  
alive that  
could take my  
mother's  
place

-2pac

# 2pac's Longest Words

	word	rate	longest_word	length
3086	institutionalized	0.105289	True	17
4913	awayyyheyyyehhhh	0.052435	True	16
2443	yaknowwhatimsayin	0.149714	True	16
4298	beinternational	0.061986	True	15
6035	unconditionally	0.040748	True	15
4649	procrastination	0.055228	True	15
2613	firstborn—feel	0.135433	True	14
4210	motherfuckerin	0.063334	True	14
5989	vulnerable—are	0.040913	True	14
4384	identification	0.060043	True	14
5122	knowhatimsayin	0.049905	True	14
6190	congratulation	0.035457	True	14
3247	shadyaftermath	0.097315	True	14
5076	understandably	0.050187	True	14
4979	schwarzenegger	0.051181	True	14
5703	semi—automatic	0.044202	True	14
4182	responsibility	0.064411	True	14
6179	incarceration	0.036697	True	13
3642	underestimate	0.081929	True	13
6198	backstabbing	0.034498	True	13

# biggie's Longest Words

	word	rate	longest_word	length
4480	aightyouknowimsayin	0.044100	True	19
2949	bedford-stuyvesant	0.065804	True	18
971	youknowwhatimsayin	0.220502	True	17
3395	actionguaranteed	0.060675	True	16
4365		0.044970	True	16
2896	memoryeverybody	0.068473	True	15
4870	choke—gunsmoke	0.029350	True	14
3493	represent—baby	0.059093	True	14
2591	indecipherable	0.075091	True	14
2773	statistically	0.070955	True	13
5117	sentimentally	0.015563	True	13
4423	assassination	0.044555	True	13
4471	youknowwhatims	0.044100	True	13
5176	contradiction	0.012135	True	13
4304	unexplainable	0.046320	True	13
4944	chickenhearts	0.025658	True	13
5171	contraception	0.012135	True	13
2628	orchestration	0.073778	True	13
3668	misunderstood	0.057196	True	13
3161	collaboration	0.062903	True	13

# Songs for Topic Modeling

- “hardcore”: N\*\*\*\* -biggie
- disparaging woman: One More Chance – biggie
- family/upbringing: Dear Mama (Frank Nitty Remix) – 2pac
- love: Thug N U Thug N Me (Remix) - 2pac
- violence: Who Shot Ya? -biggie

separate the  
**weak** from  
the **obsolete**  
-biggie