



JORGE MARQUES + MELISSA BADRUDIN

POPULAR MUSIC OVER TIME

A Ironhack Presentation

IN THE BEGINNING THERE
WAS...

THE SPOTIFY DATASET

THE ASPIRING DATA ANALYST
DREAM DATA SET



SPOTIFY DATASET

160000
SONGS

Large enough

CLEAN


'nuff said

DIVERSE

lotsa
different
interesting
metrics

ANOTHER
SOURCE?

our evil
overlord
demands it...



what
else?

IT'S JUST A
SNAPSHOT

needs data
over time

THAT CAN BE
ARRANGED

BILLBOARD. COM

ALL THE TOPS

TOP 100

WEAKLY

1960-2020

3150 TOP 100S

315000 DATA POINTS

MULTIPLICATIONS ARE NOT THAT HARD
TO DO

EASY TO SCRAPE

TRY:

SCRAPE ALL THE THINGS

EXCEPT:

SLEEP A BIT

OBSTACLES & SOLUTIONS

■ 3150 REQUESTS

I'M NOT THAT LUCKY

◆ STEP BY STEP

SAVE INBETWEEN
TRY AND TRY AGAIN

■ NO COMMON KEYS

GOTTA MATCH THOSE
NAMES...

◆ BRUTE FORCE

...AND A BIT MORE TIME
WOULD BE NICE

SPOTIFY DATA B.D.

acousticness
danceability
energy
instrumentalness
valence
tempo
liveness
loudness
speechiness
explicit

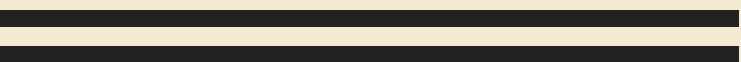


SPOTIFY DATA A.D.

acousticness
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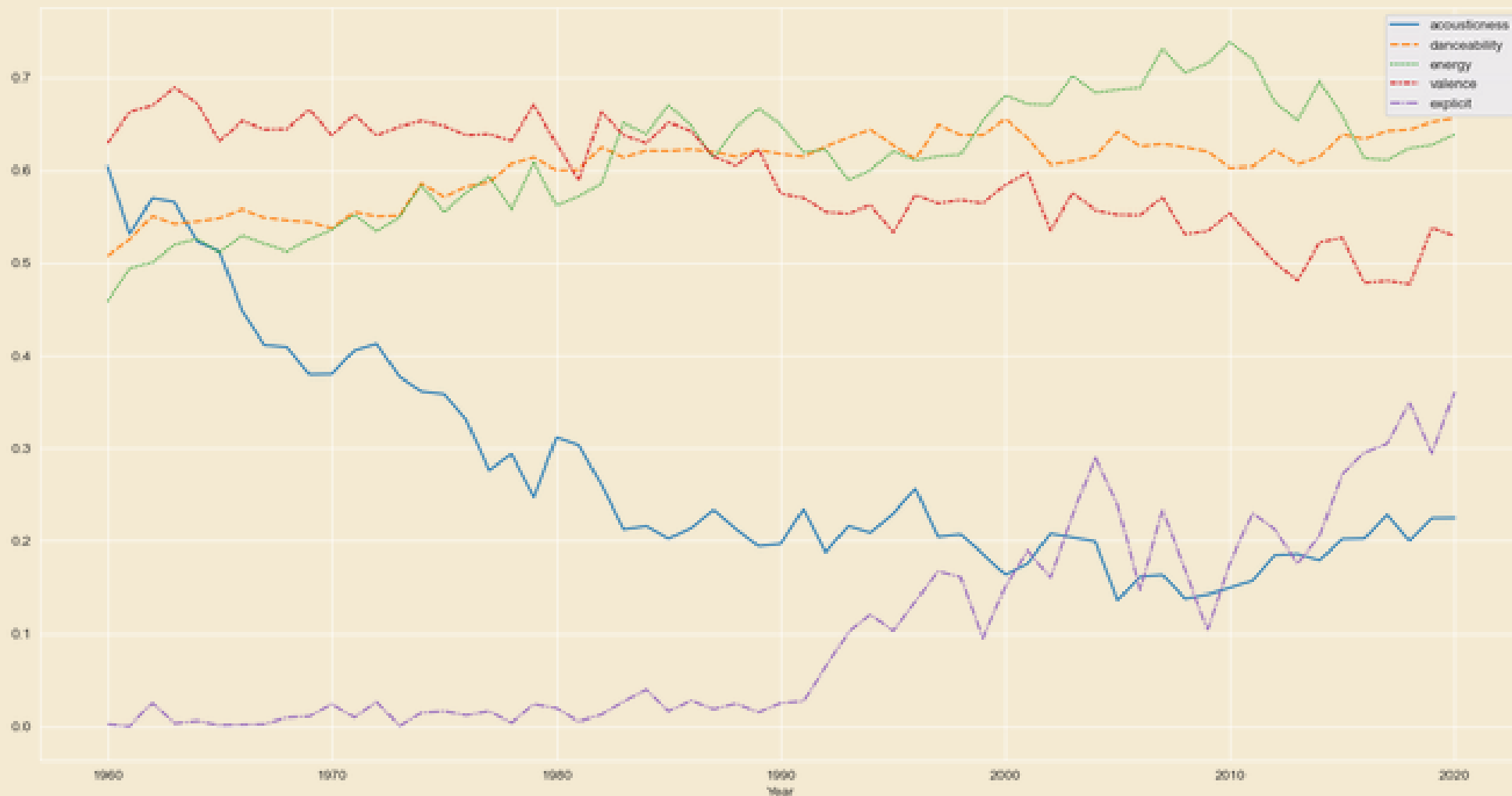
instrumentalness
tempo
liveness
loudness
speechiness





Variables over time

POPULARITY ADJUSTED



Valence

DESCRIBING THE MUSICAL
POSITIVENESS CONVEYED BY A TRACK.



Valence

WHILE TRACKS WITH LOW VALENCE
SOUND MORE
SAD/DEPRESSED/ANGRY...

Aretha Franklin

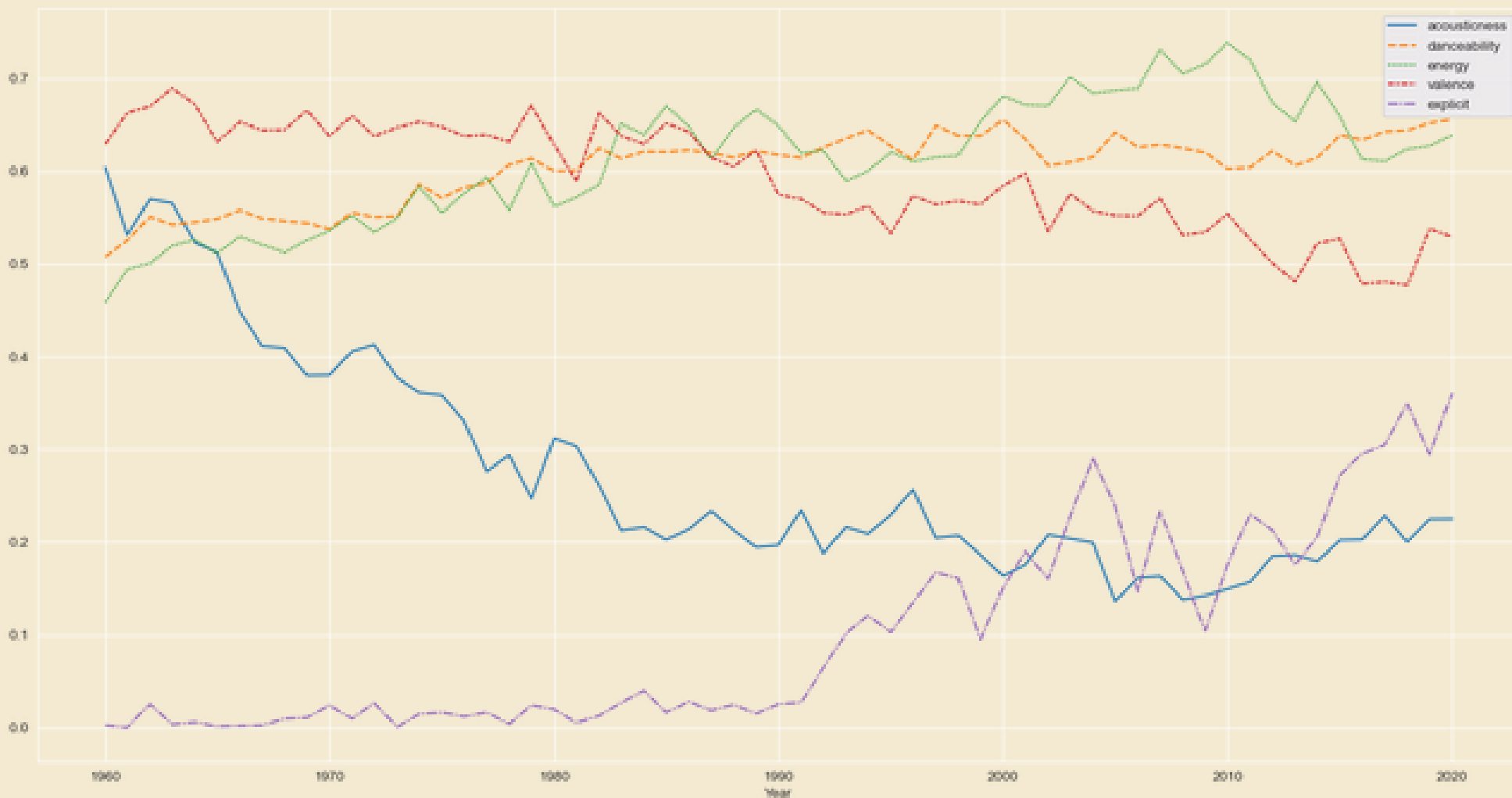


Andre Gagnon



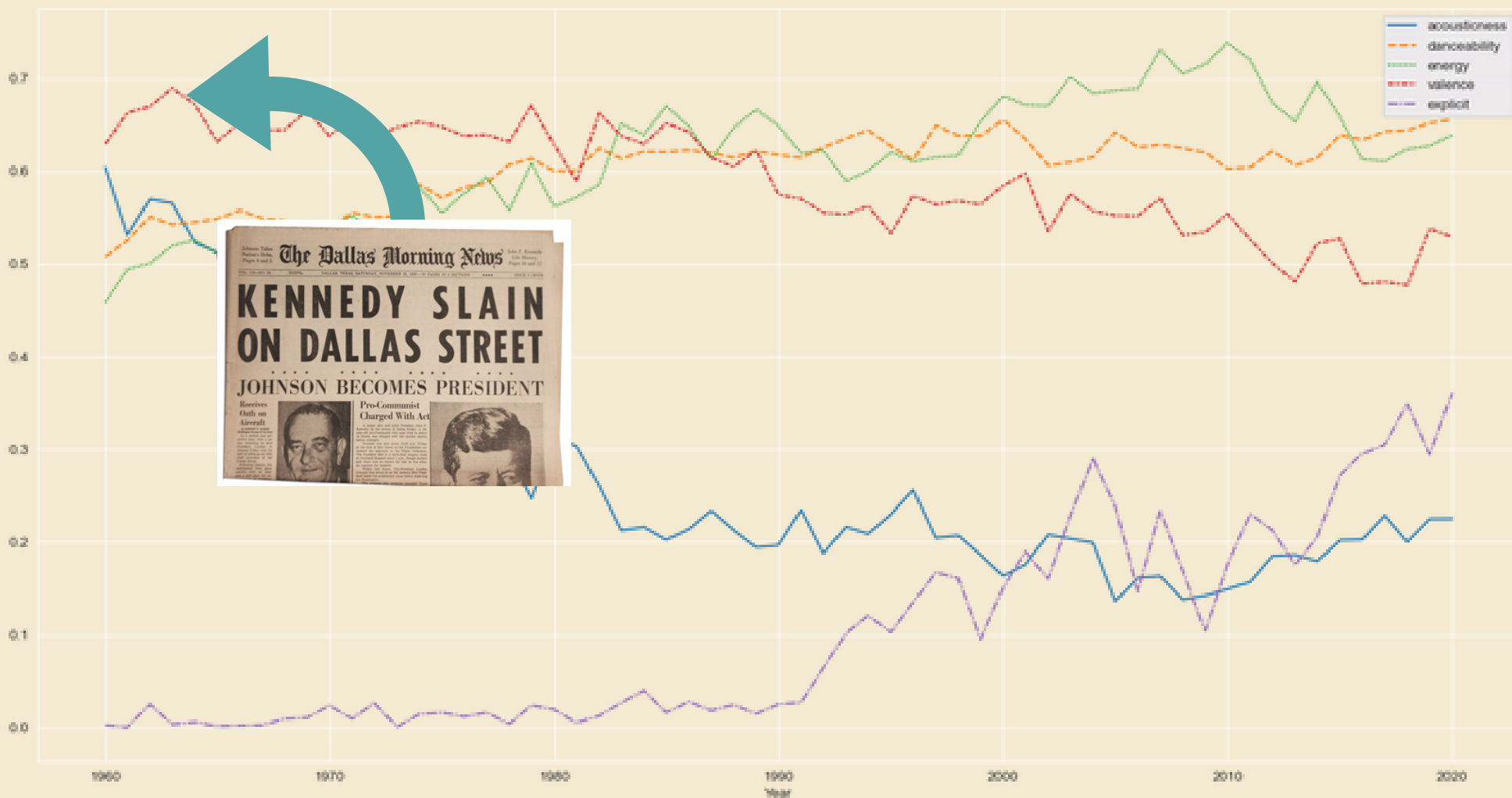
VALENCE over time

POPULARITY ADJUSTED



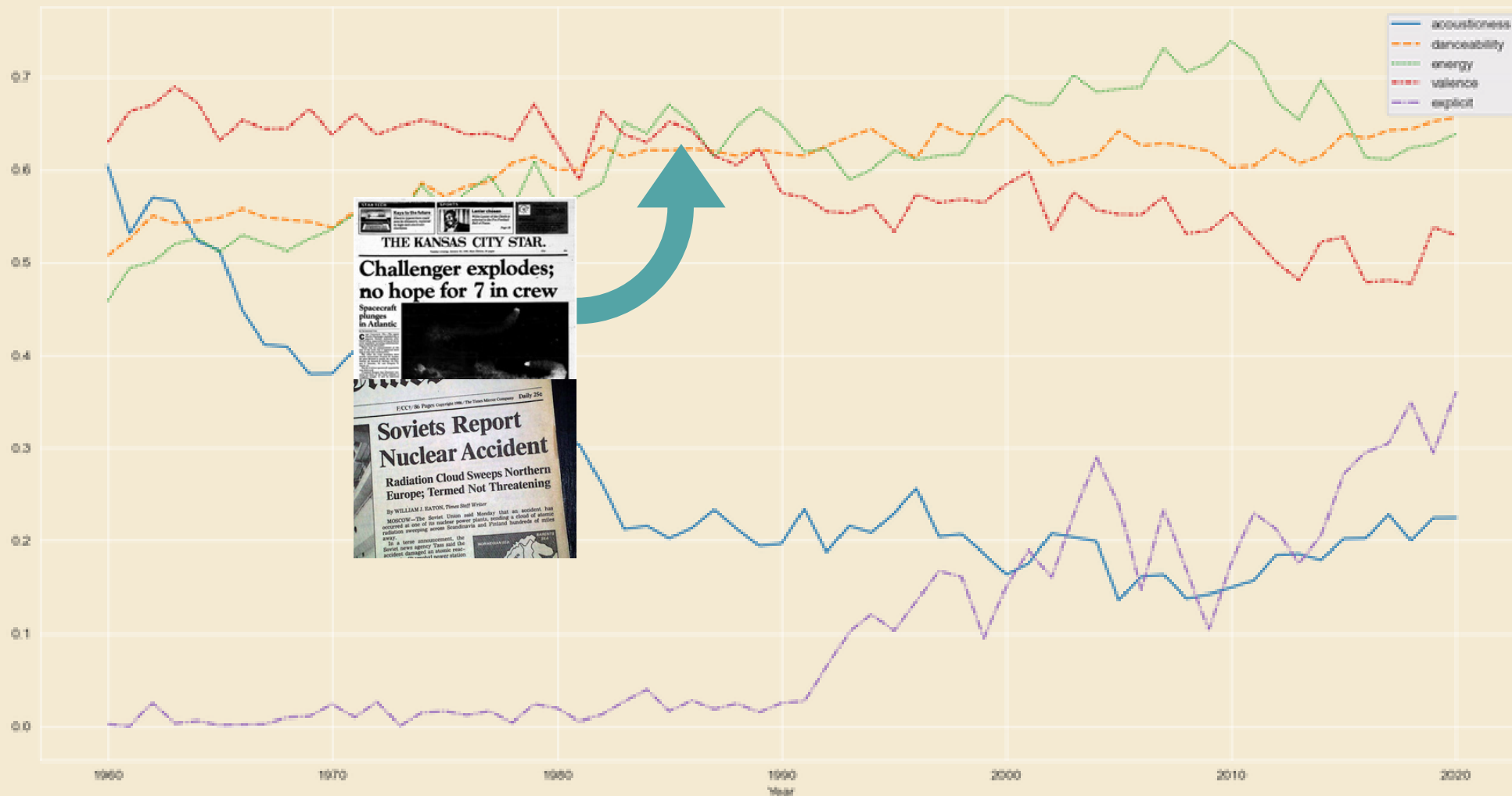
VALENCE over time

POPULARITY ADJUSTED



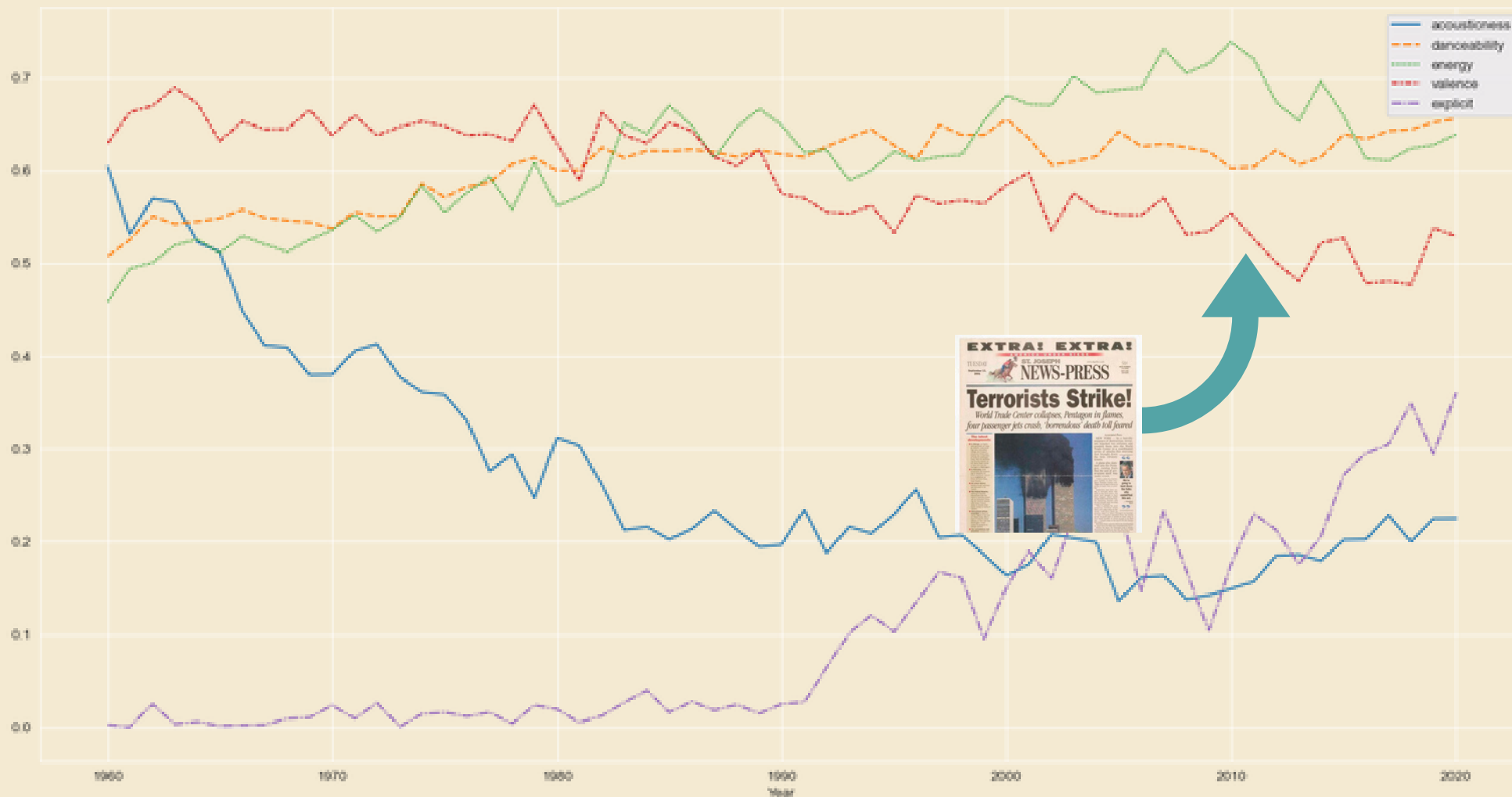
VALENCE over time

POPULARITY ADJUSTED



VALENCE over time

POPULARITY ADJUSTED



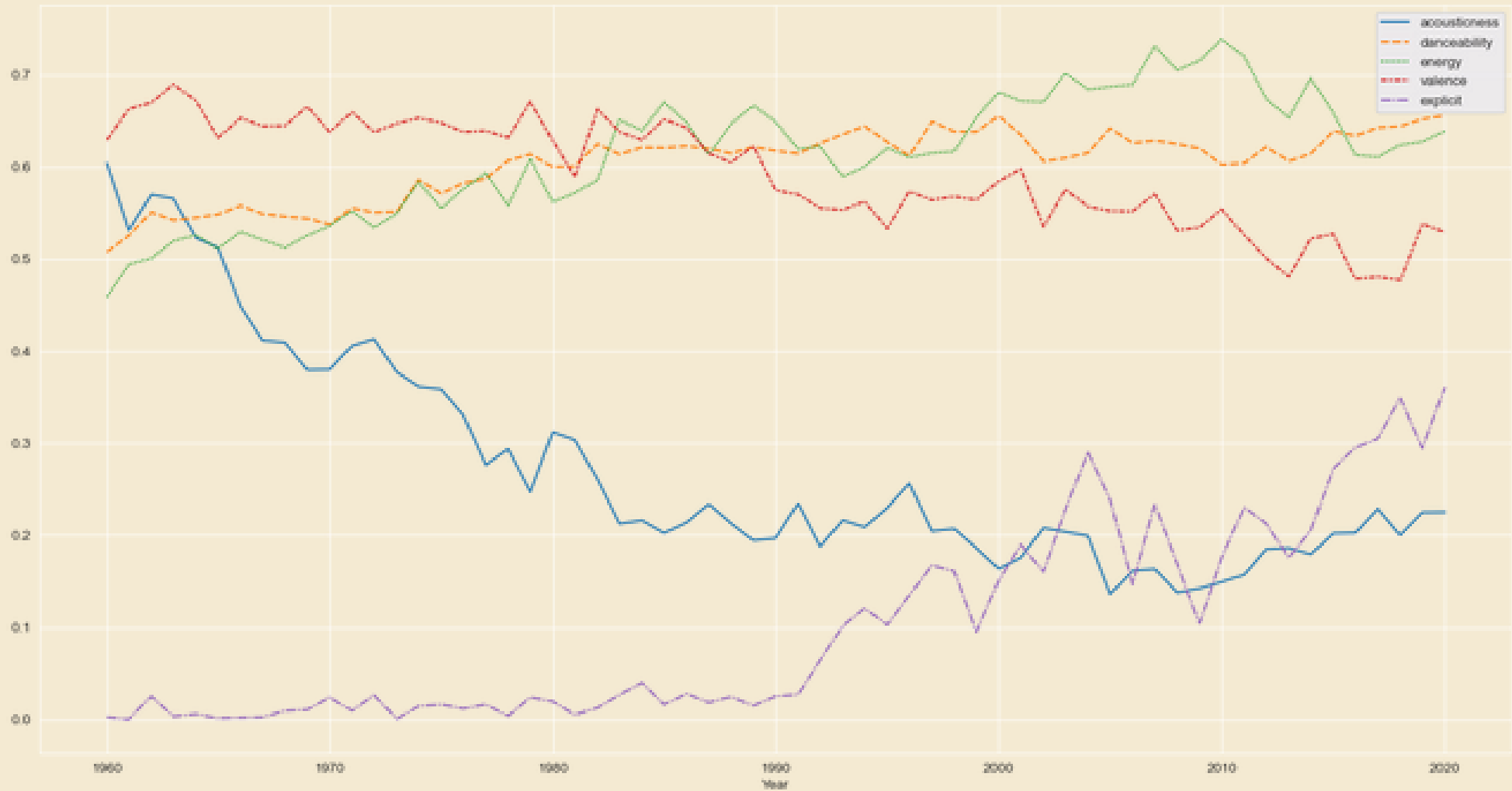
Acousticness

DESCRIBES HOW ACOUSTIC
A SONG IS.



ACOUSTICNESS over time

POPULARITY ADJUSTED



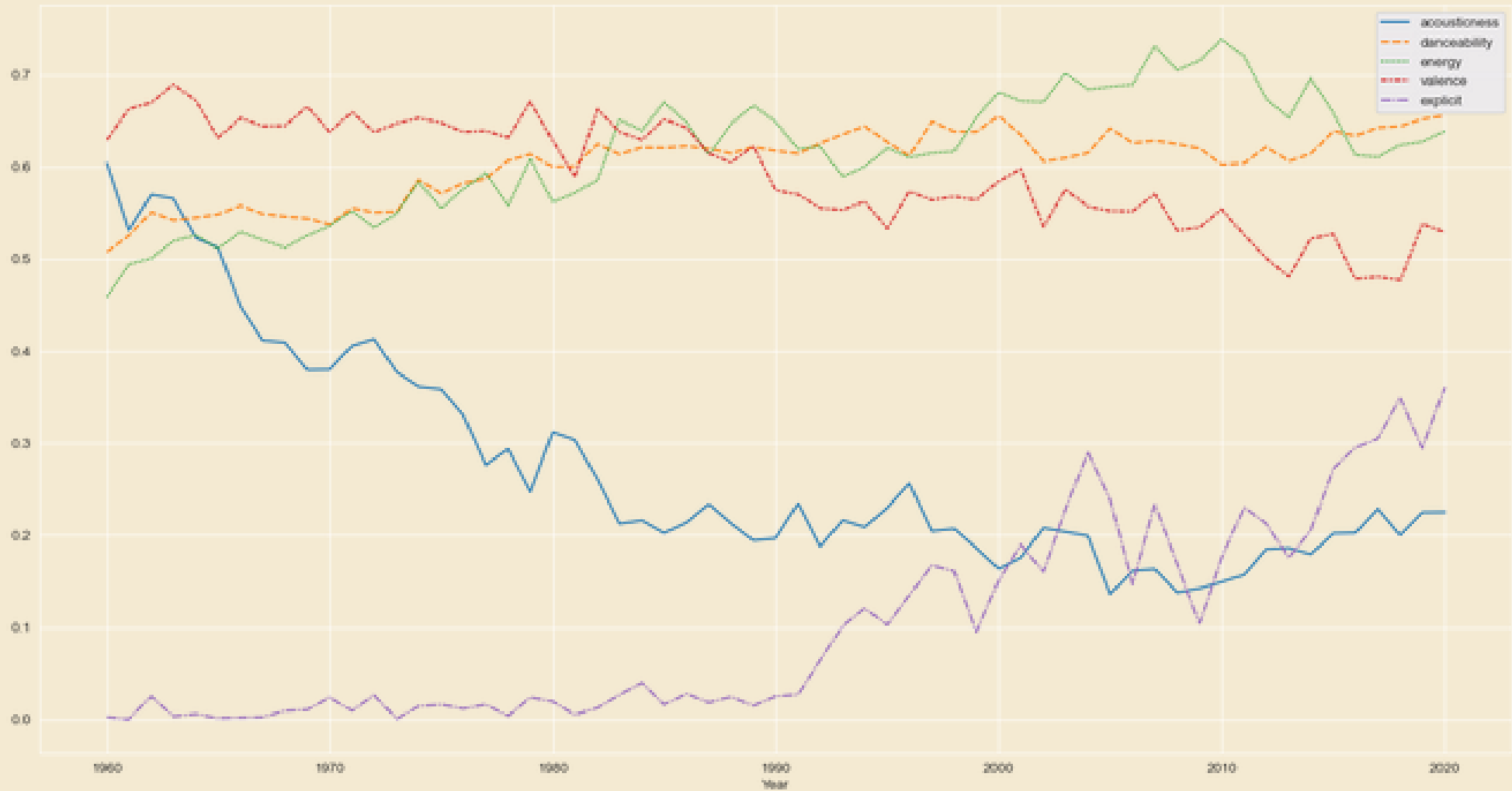
Energy

REPRESENTS A PERCEPTUAL
MEASURE OF INTENSITY AND
ACTIVITY.



ENERGY over time

POPULARITY ADJUSTED



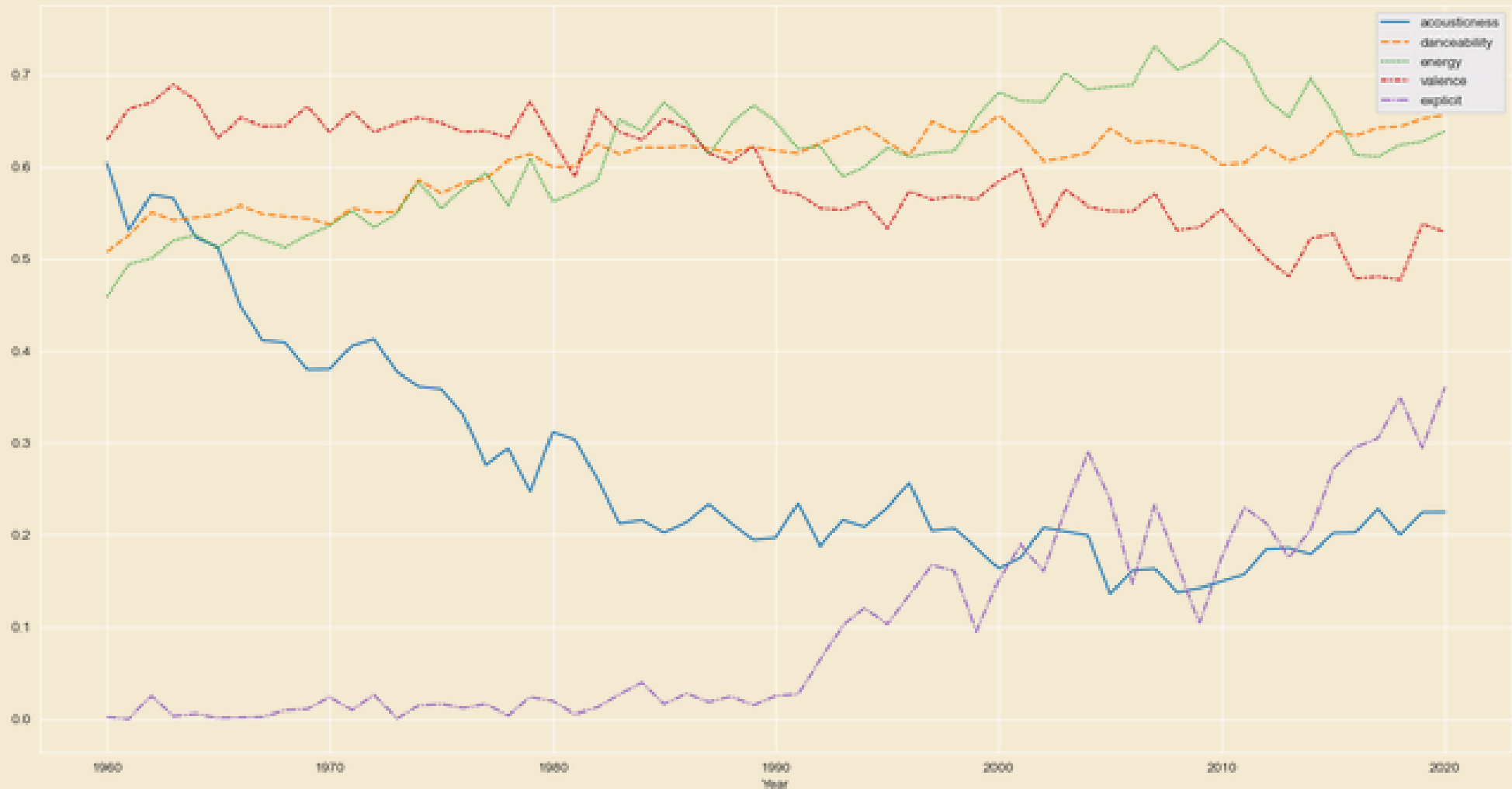
Danceability

DESCRIBES HOW SUITABLE A TRACK
IS FOR DANCING BASED ON A
COMBINATION OF MUSICAL
ELEMENTS



DANCEABILITY over time

POPULARITY ADJUSTED



Explicit

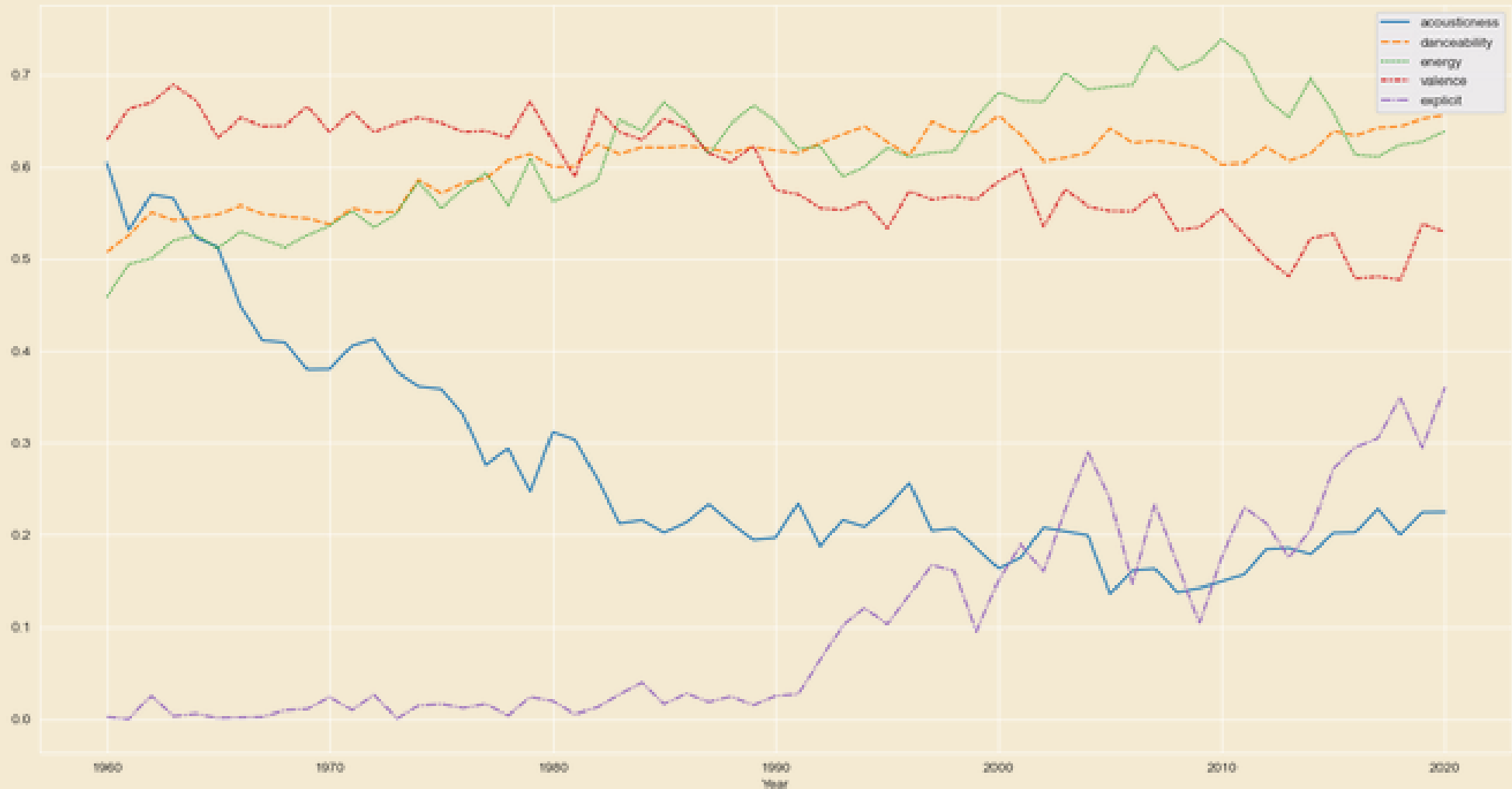
SELF EXPLANATORY...



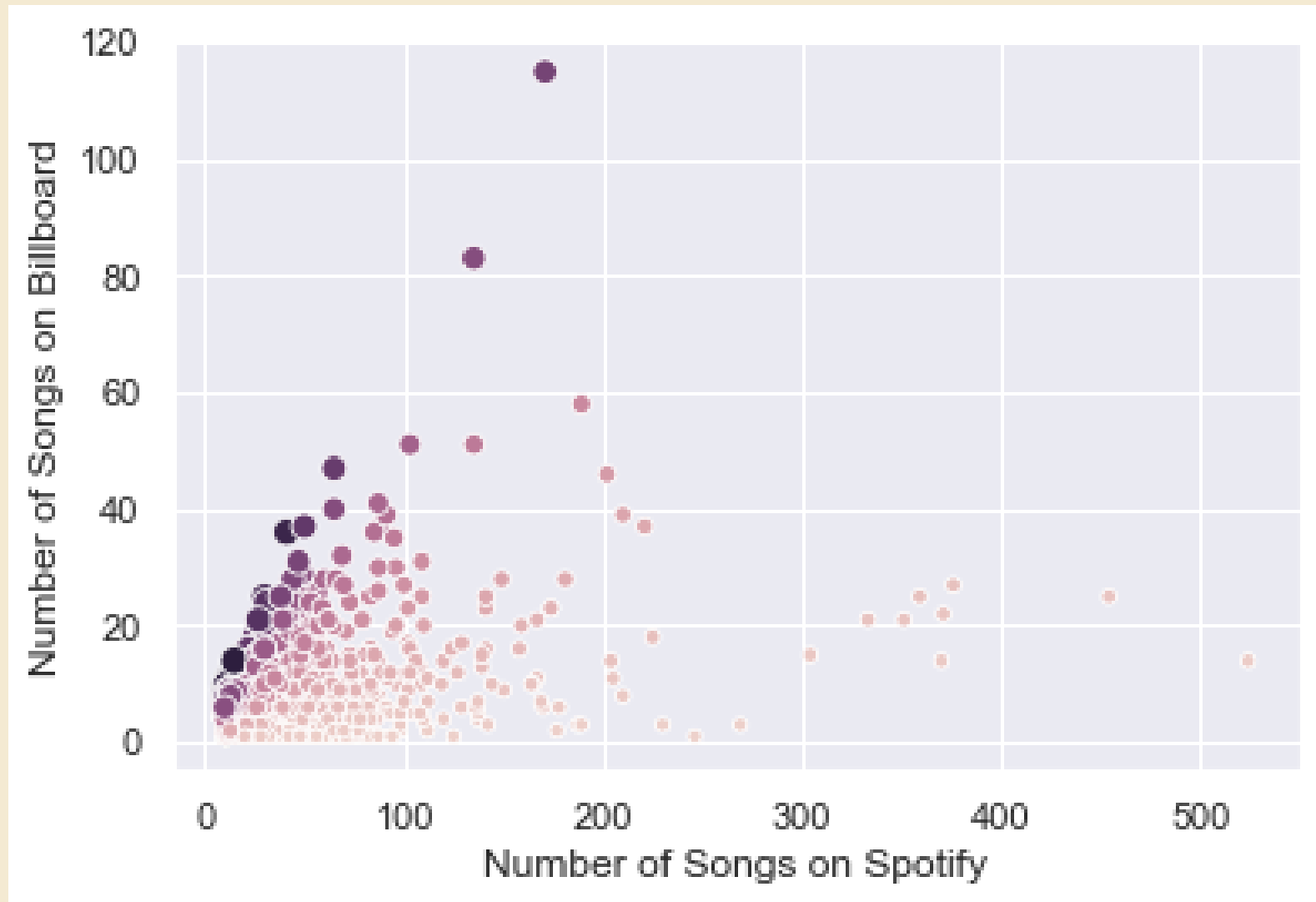


EXPLICIT over time

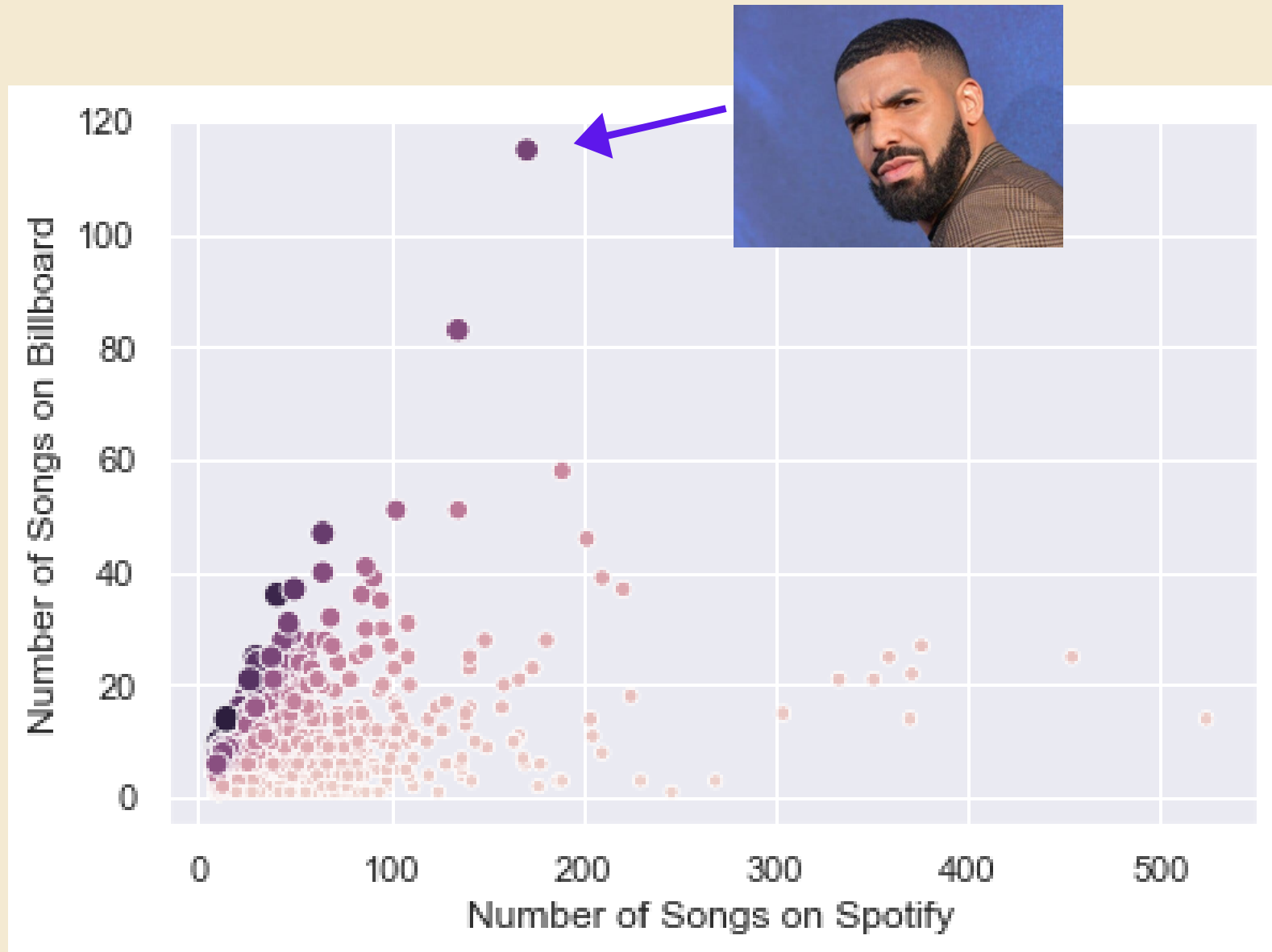
POPULARITY ADJUSTED



Artist Efficiency



Artist Efficiency



“Those who dare to fail
miserably can achieve
greatly.”

- JOHN F. KENNEDY



TOWN&COUNTRY

**THAT'S IT
FOLKS!**