# A Linguistic Look Inside Outsider Music

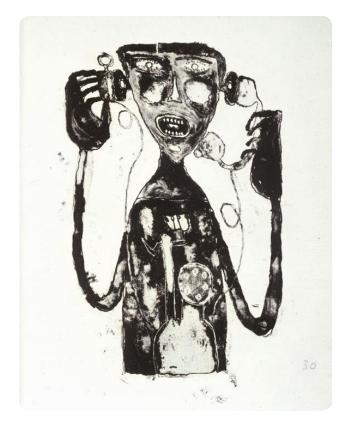
Emma McKibbin



### Outsider Art

Encyclopedia Britannica describes it as:

"any work of art produced by an untrained idiosyncratic artist who is typically unconnected to the conventional art world—not by choice but by circumstance."



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# Expanded to Music

Outsiders often suffer from mental illnesses

Works characterized as "childlike," "primitive"

# "Not by choice but by circumstance"

 Self-taught, selfrecorded, and selfproduced

## But it's hard to define...

Do these characteristics apply across the whole genre?

And can we determine that computationally?



## Initial Research Questions



### **Looking within Outsider Music:**

What linguistic trends exist within the genre? For example: repetition, nonsense lyrics, word and text length, etc.



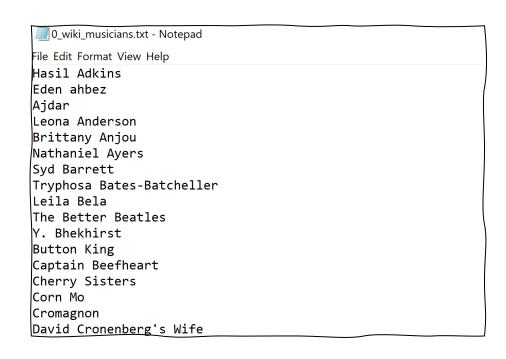
# Comparing Outsider and "Insider" Music:

What characteristics distinguish outsider music from popular music?

Binary classifier - not included here



# Data Collection Musician List



- beautifulsoup4 and requests packages
- Retrieved from Wikipedia
   111 artists
- Manually edited quotation marks and parentheticals

# Data Collection Genius Lyrics

- John W. Miller's <u>lyricsgenius</u> package and Genius API
  - Looped through musician list
  - Saved as JSON
- 40 artists were not found
  - 26 not found on Genius
  - 14 misidentified on Genius
- In the end, only 63 artists

- (F) Nat Ayer (Nathaniel Ayers)
- (F) Leia BLACKSWAN (Leila Bela) this is K-Pop
- (F) LesCompagnonsDeLaChanson (Cromagnon)
- (F) DIVINE (Divine) intended to be Pink Flamingos Divine
- (F) ROE (Marian Dora?)
- (F) Naomi Hale (Naomi Hall) really wish I had these lyrics though
- (F) Lil Peep (Lil B) This is popular Rap
- (F) Miguelito Angel Masso (Angela Masson)
- (F) Global Network Sophia Amato (Amaro Neto)
- (F) Sandra Phillips (Sondra Prill)
- (F) Smelly Ellie (Smelly)
- (T) Alexander Skip Spence (Skip Spence)
- (F) The Tillers (The Tinklers)
- (F) JPEGMAFIA (Wing)
- (F) John Reuben (Zapoppin')

## Data Cleaning

- Load JSONs to data frame
- What needed cleaning?
  - "Song Title Lyrics"
  - "\dEmbed"
  - "Transcription in progress..."
  - Stripping whitespace
  - Replace "\n" and other formatting characters
  - Remove empty strings or "instrumental"

```
artist
                                    title
                                                                                       lyrics
                                             Bring It When You Come Lyrics\nTerrible things...
               Bring It When You Come
0 Abner Jay
                                             Cocaine Lyrics\nFolk music is high-class music..
1 Abner Jay
2 Abner Jav
                          Cocaine Blues
                                          Cocaine Blues LyricsCocaine, Cocaine\nRunning ...
                                             Don't Mess with Me Baby Lyrics\nTerrible thing..
3 Abner Jay Don't Mess with Me Baby
4 Abner Jay
                                 I cried
                                                    I cried LyricsI, I cried\nI cried in the ni-ig...
```

Cathy please come south and be my mateEmbed solidarity is historical leadership identityEmbed

## What did NOT need cleaning?

Foreign language data.

## Language Detection!

### **Rudimentary Version:**

- Detecting characters that can't be encoded in ASCII
  - Bad precision and recall
  - Found formatting errors

### spaCy Language Detector:

- Better at guaranteeing a fully English dataset
  - However, many false positives →
  - Removed Swedish and Japanese

#### language: es

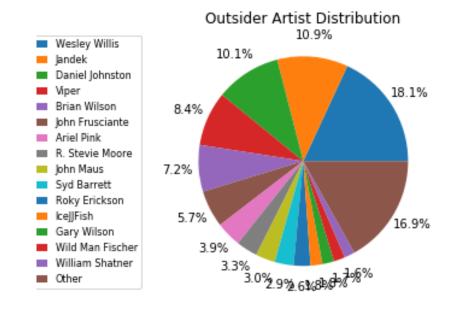
Deck the halls with boughs of holly Fa, la, la, la, la, la, la, la, la 'Tis the season to be jolly Fa, la, la, la, la, la, la, la Don we now our gay apparel Fa, la, la, la, la, la, la, la, la Troll the ancient Yule tide carol Fa, la, la, la, la, la, la, la See the blazing Yule before us Fa, la, la, la, la, la, la, la Strike the harp and join the chorus Fa, la, la, la, la, la, la, la Follow me in merry measure Fa, la, la, la, la, la, la, la While I tell of Yule tide treasure Fa, la, la, la, la, la, la, la Fast away the old year passes Fa, la, la, la, la, la, la, la, la Hail the new, ye lads and lasses Fa, la, la, la, la, la, la, l a, la Sing we joyous, all together Fa, la, la, la, la, la, la, la, la Hee dless of the wind and weather Fa, la, la, la, la, la, la, la, la Deck the halls with boughs of holly Fa, la, la, la, la, la, la, la, la, 'Tis the se ason to be jolly Fa, la, la, la, la, la, la, la Don we now our gay ap parel Fa, la, la, la, la, la, la, la Troll the ancient Yule tide caro a, la, la, la, la, la, la, la Fa, la, la, la, la, la, la, la, la Fa, 





## Beginning Analysis

- 3,102 lyric entries
- 62 unique artists
  - 561 songs by Wesley Willis (18.1%)



## Popular Music

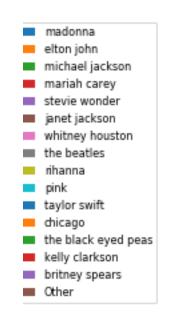
- Using Kaylin Pavlik's "50 Years of Pop Music"
  - Billboard Hot 100 Dataset

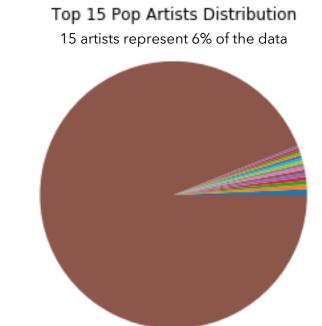
- Caveats:
  - Only the most popular music from many subgenres
  - Different cleaning schema
    - Apostrophes and newlines

# Beginning Analysis Popular Music

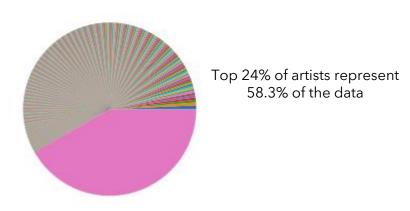
- 4,627 lyric entries
- 2,335 unique artists
  - 33 songs by Madonna (<1%)

No one artist dominates this data.

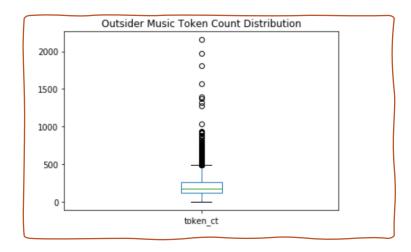




Top 556 Pop Artists - Proportional Pie Chart



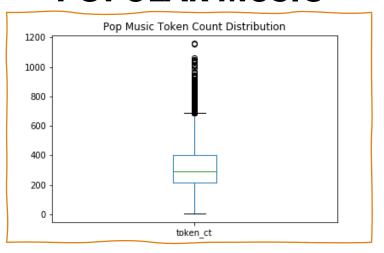
# Token Count Distribution OUTSIDER MUSIC



- Mean = 215
- Min = 1
- Max = 2155 (30 minutes long)
- 50% of data within 119-267 tokens

Note scale differences\*

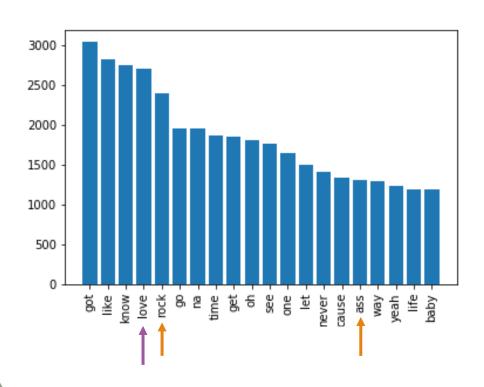
### **POPULAR MUSIC**



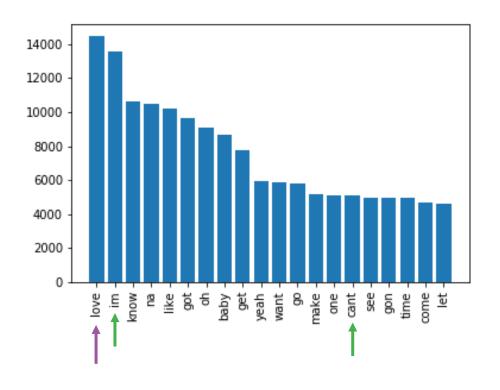
- Mean = 330
- Min = 5
- Max = 1158
- 50% of data within 214-403 tokens long

# Most Common Words without stopwords

### **OUTSIDER MUSIC**



### **POPULAR MUSIC**



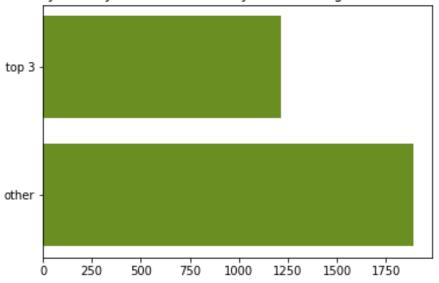
## So far... OUTSIDER vs. POP

- There is some disparity in average text length
- Notable difference in most common words, BUT:
  - The artist distribution is very different for the two datasets
    - Pop is more representative
    - Outsider is more idiosyncratic and skewed

# The Faces of Outsider Music

## The Top 3 Artists





In the cleaned dataset, these 3 artists make up nearly 40% of the data.

- Three very well-known artists in the genre with idiosyncratic styles:
  - Wesley Willis
  - Jandek
  - Daniel Johnston

# Rock N Roll McDonalds Wesley Willis

### [Verse 1]

McDonald's is the place to rock

It is a restaurant where they buy food to eat

It is a good place to listen to the music

People flock here to get down to the rock music

### [Chorus]

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

### [Verse 2]

McDonald's will make you fat

They serve Big Macs

They serve Quarter-Pounders

They will put pounds on you

### [Chorus]

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

### [Verse 3]

McDonald's hamburgers are the worst

They are worse than Burger King

A Big Mac has 26g of fat

A Quarter-Pounder has 28g of fat

### [Chorus]

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

Rock 'n' Roll McDonald's

### [Outro]

Rock over London

Rock on, Chicago

Wheaties, breakfast of champions

## I Whipped Batman's Ass Wesley Willis

### [Verse 1]

Batman got on my nerves

He was messing my day up

He was running me amok

He ridiculed me by calling me a bum

### [Chorus]

I whipped Batman's ass

I whipped Batman's ass

I whipped Batman's ass

I whipped Batman's ass

### [Verse 2]

Batman thought he was bad

He was a real stupid jerk

He was a real asshole

He got knocked to the floor by me

### [Chorus]

I whipped Batman's ass

I whipped Batman's ass

I whipped Batman's ass

I whipped Batman's ass

### [Verse 3]

Batman beat the hell out of me

He knocked me to the floor

I got back up and knocked him to the floor

Batman was being such a jack-off

### [Chorus]

I whipped Batman's ass

I whipped Batman's ass

I whipped Batman's ass

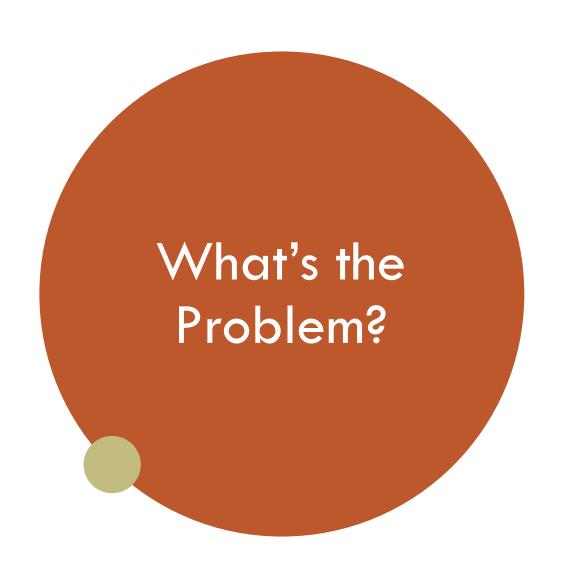
I whipped Batman's ass

Does this look familiar?

### [Outro]

Rock over London, rock on, Chicago

RadioShack - "It's the technology store"



Perhaps if we were to only look at the top artists, existing generalizations would apply.

**But what about IceJJFish?** 

# On the Floor IceJJFish

### [Intro]

You rockin' to a Headshots production

### [Verse 1]

It's something about ya', girl

That just makes my head wanna twirl

You got me wanting to tell all them other girls

"There's nothing else better on this world"

The moment I seen her, I was in shock

So shocked you would've think that I've just been shot

Shot down right down in this spot

But too bad this doesn't happen a lot

Oh, girl, you got me visualizing me on top

On top of your hot body while we're sweating a lot

A lot of time on the clock before we would have to stop

Too bad she's not into that stuff a lot

Oh man, she's just super hot

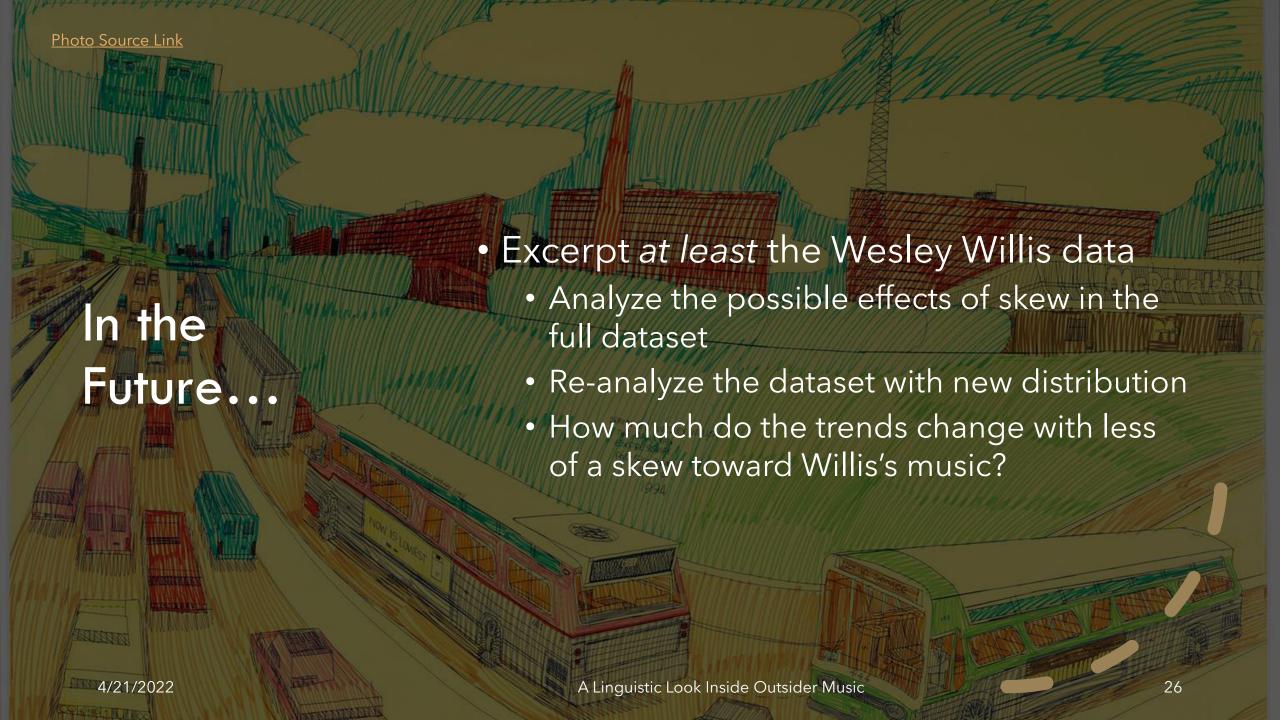
Hotter than the sun that's right on top

On top of our heads, oh man, there she goes, so I had to stop

And ask her some questions that I had in stock

- Represents only 1.8% of the data
  - Many other artists with low representation

Totally different subgenre





# Thank you!

Feel free to ask any questions