Pitchfork Album Reviews

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- 2. Our Data
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 - b. YouTube Streams
- 3. Numerical Analyses
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What is Pitchfork?

- One of the premier music review and rating sites
 - Generally concentrates on new music, but Pitchfork journalists have also reviewed reissues and box sets
 - Generally focuses on "indie" music
- Rates albums on a scale of 0.0 to 10.0
- Contains written critique of album as well
- Amasses to a total of ~18,000 reviews (and counting) since 1999
- Big question: Are they biased toward certain music?

King Krule **The OOZ**



TRUE PANTHER / XL - 2017

by **Jayson Greene** Contributing Editor

/ ROCK

OCTOBER 13 2017

The producer born Archy Marshall crafted *The OOZ* to be alien and timeless. It is the richest and most immersive album the London singer-songwriter has made yet, under any name.



rchy Marshall doesn't star in his own music—he wanders through it. You might find him spotlit and center stage, foregrounding his violent voice like a fist denting chrome.

Data Collection

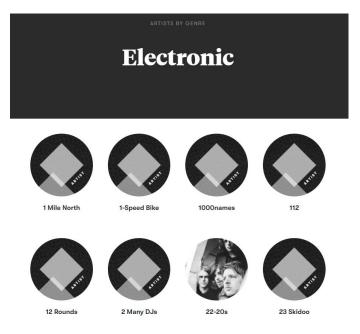
Pitchfork Data

artistNameAlbuml	albumName	albumReleaseYe	artistName	authorName	body	genre	publishDate	rating	title	url
theMIND - Summi	Summer Camp	2016	theMIND	Matthew Ra						

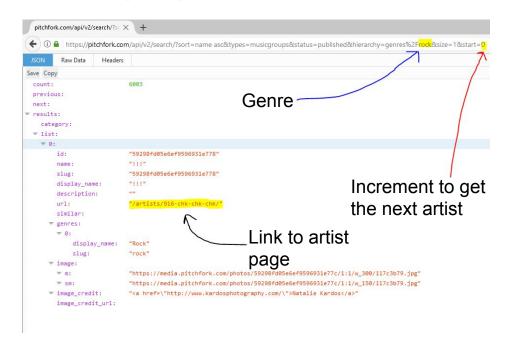
Pitchfork Genres

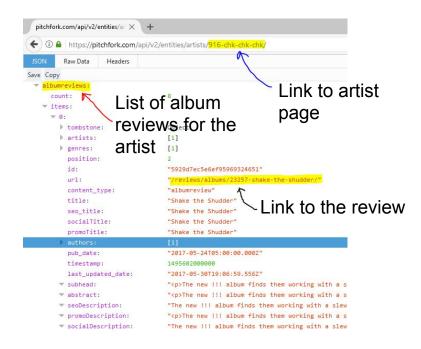
- Electronic
- Folk
- Jazz
- Pop
- Rap

- Experimental
- Global
- Metal
- Rock

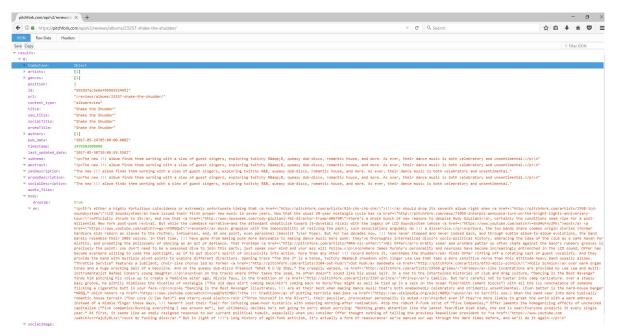


Pitchfork API





Pitchfork API



Pitchfork Data Organization

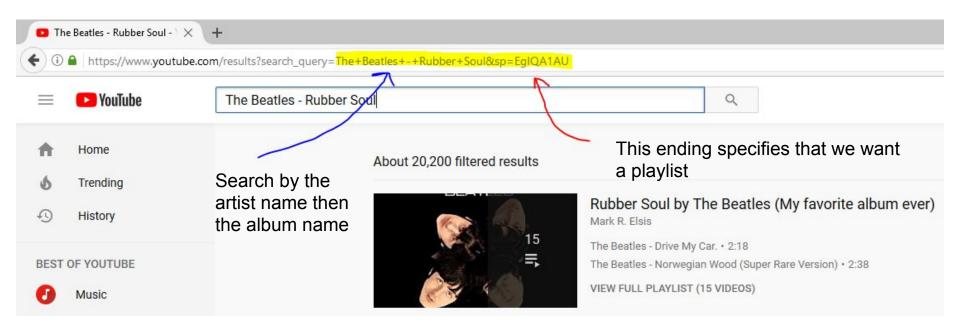
- Album Name
- Album Release Year
- Artist Name
- Genre
- Review Author Name
- Review Publish Date
- Review Score
- Review Title
- Review Body
- Review URL



- Stored in a DynamoDB instance on AWS
 - NoSQL
- Keyed on Artist Name Album Name



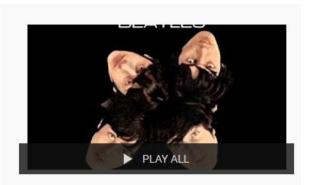
YouTube Stream Counts



YouTube Stream Counts

- The top playlist was selected.
- The total view count for the playlist is shown.
- The view count and playlist URL were stored in dynamoDB with the appropriate review.





Rubber Soul by The Beatles (My favorite album ever)

15 videos · 571,463 views · Last updated on Dec 3, 2015





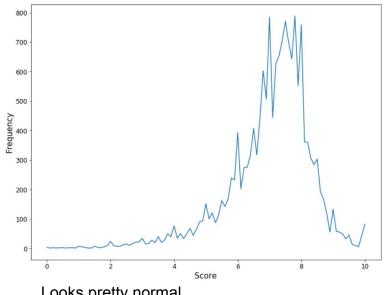
Numerical Analyses

Analyzing the raw data

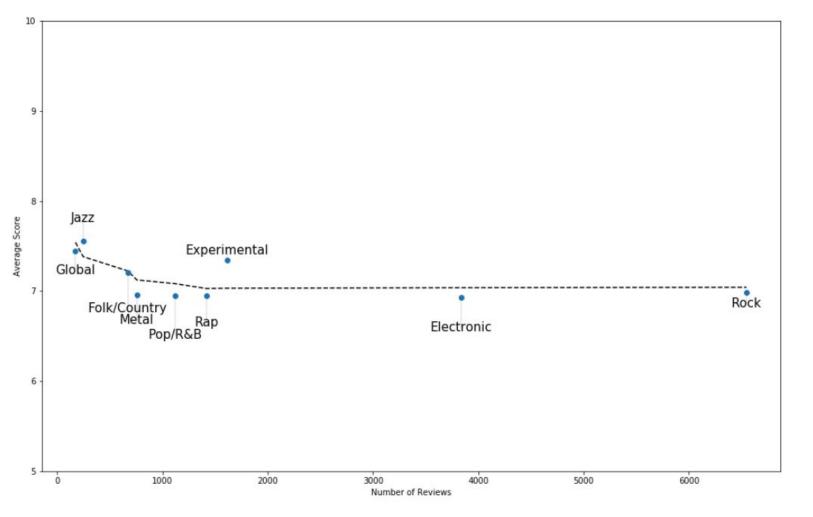
- Average rating for all albums is 7.02 with an std of 1.27
- Mean by genre:

	count	mean	std	
genre				
Electronic	3834	6.934038	1.283513	
Experimental	1618	7.346106	1.063343	
Folk/Country	673	7.206538	1.037361	
Global	175	7.446857	1.021931	
Jazz	249	7.553815	1.161546	
Metal	758	6.959763	1.380216	
Pop/R&B	1121	6.948707	1.253146	
Rap	1422	6.949719	1.261924	
Rock	6546	6.981485	1.310626	

All Review Scores



Looks pretty normal...





Highs and Lows

82 albums received a perfect 10/10.

Some notable ones:

- 6 Beatles albums
- 5 Prince albums
- Radiohead OK Computer and Kid A
- Kanye West My Beautiful Dark Twisted Fantasy
- Neutral Milk Hotel In the Aeroplane over the Sea
- Guns 'N' Roses Appetite for Destruction (???)

And 3 got a 0/10...

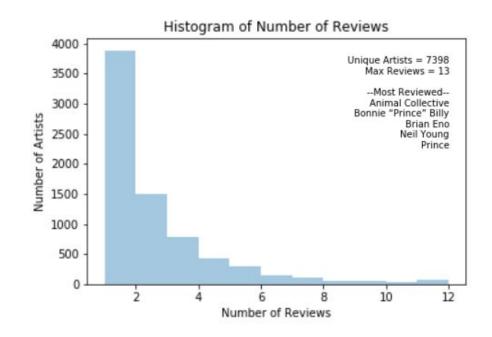
- Jet Shine On
- Travis Morrison Travistan
- Liz Phair Liz Phair

Sorry if you are fans of any of these albums and feel they deserve better.

Analysis of Artists

Highest rated artists with more than 1 review:

- My Bloody Valentine
 - o 2 reviews, 9.55 average
- D'Angelo
 - o 3 reviews, 9.53 average
- A Tribe Called Quest
 - o 2 reviews, 9.50 average
- John Coltrane
 - 3 reviews, 9.50 average
- The Velvet Underground
 - 7 reviews, 9.46 average



The "Pitchfork favorites"

- Let's consider some so-called "Pitchfork favorites" such as Grizzly Bear, Fleet Foxes, and Bon Iver.
 - These are artists that the online music community considers Pitchfork to unanimously overrate.
 - If you do a quick Google search of "pitchfork bias" you will see countless references to artists that Pitchfork supposedly loves.
- Compare their Pitchfork album reviews with Metacritic which averages ratings across the internet
 - Metacritic is out of 100, so scores were converted to the same scale as Pitchfork
- Sampled the discographies of the "Pitchfork favorites" and compared the Pitchfork score with the Metacritic score.

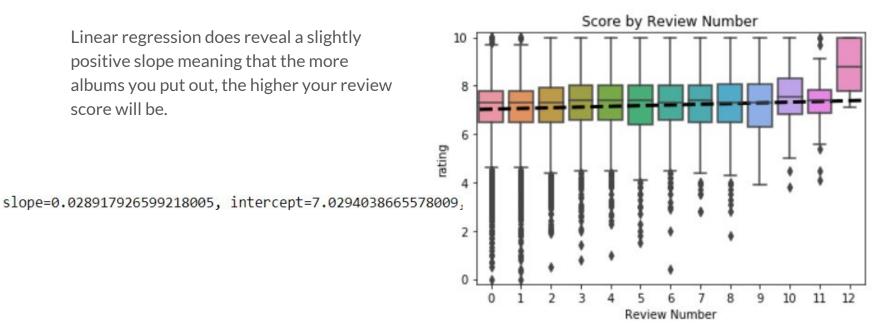
Artist - Album	Pitchfork Score	Metacritic Score
Bon Iver - <i>Bon Iver</i> (2011)	9.5	8.6
Bon Iver - 22, A Million (2016)	9.0	8.7
Grizzly Bear - Veckatimest (2009)	9.0	8.5
Grizzly Bear - <i>Painted Ruins</i> (2017)	8.7	7.9
Fleet Foxes - Fleet Foxes (2008)	9.0	8.7
Fleet Foxes - <i>Helplessness Blues</i> (2011)	8.8	8.5

Across the entire discographies of the "Pitchfork favorites", Pitchfork rates albums .17 higher than Metacritic.

The above just shows the top two albums for each artist.

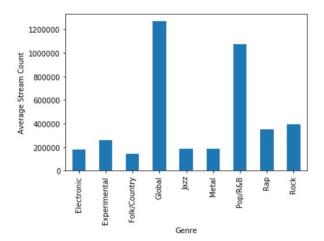
How does number of reviews affect score?

Linear regression does reveal a slightly positive slope meaning that the more albums you put out, the higher your review score will be.



Looking at Stream Counts

- Surprise, surprise. People listen to a lot of Pop/R&B and Global music
 - o Global includes artists such as Bob Marley, Major Lazer, M.I.A., out of 172 total unique artists in this genre
 - o Bob Marley's 3 reviewed albums each have 60 million+ reviews which drives this up tremendously

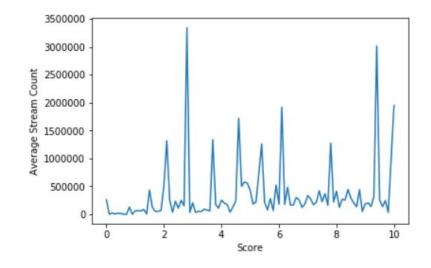


Stream Counts and Review Score

There is no correlation between the amount of streams an album has and the score it received from Pitchfork.

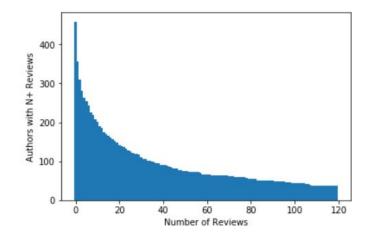
In fact, the most streams come from albums with a rating of 2.8, including popular artists such as:

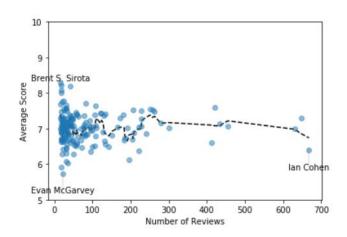
- Bassnectar
- Eminem
- Ed Sheeran



Reviewers

 Pitchfork has had over 400 different reviewers in its 18 years of existence, most have reviewed less than 50 albums.

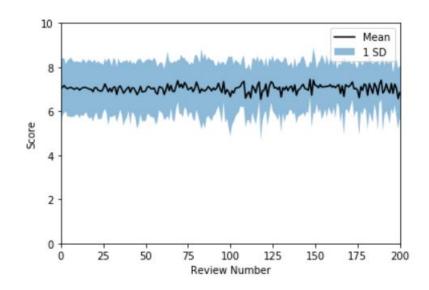




Authors over time

 Authors do not generally get more or less harsh as they review more.

 However, there seems to be more polarization of review scores with reviewers with more experience.



Do authors have preferences?

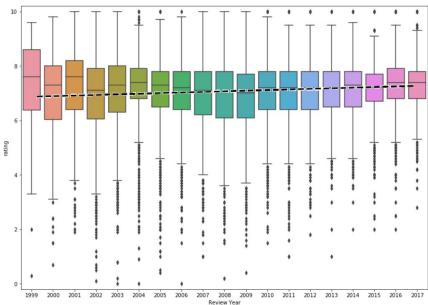
- Definitely, some more so than others.
- Comparing the most active authors shows that some authors rate genres much lower than others.
 - Only looked at authors who have reviewed more than 15 albums in that genre.

Author	Favorite Genre (Avg. Score)	Least Favorite Genre (Avg. Score)	Difference
lan Cohen	Folk (6.78)	Electronic (5.96)	.82
Joe Tangari	Global (7.71)	Rock (7.22)	.49
Stephen M. Deusner	Folk (7.28)	Electronic (6.75)	.53
Brian Howe	Rap (7.18)	Pop/R&B (6.67)	.51
Stuart Berman	Experimental (7.36)	Pop/R&B (6.74)	.62

Pitchfork Reviews through the Years

Over the years, the mean review score has been increasing! Music is either getting better or reviewers are laxing up.

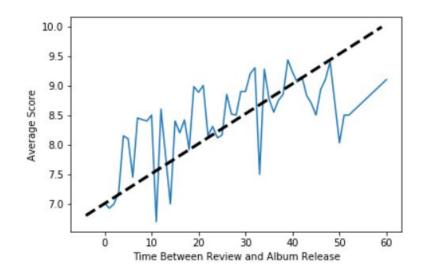
slope=0.018344231537222252, intercept=-29.837197548424431



Time between release and review

As was expected, albums that were rated long after release tended to do linearly better than those reviewed soon after release.

This makes sense as albums that are reviewed long after release are likely to be considered "classics."



Genres over the Months

* means also month of most reviews This calculation excludes December due to its small number of reviews

Genre	Best Month	Score
Rock	September*	7.07
Electronic	October	7.07
Rap	May	7.09
Pop/R&B	April	7.19
Jazz	September	7.81
Folk/Country	January	7.33
Experimental	June	7.42
Global	September	7.72
Metal	March*	7.16

Final Thoughts

Issues Encountered

- Spotify API deprecated, so we were forced to just count YouTube streams
- Textual analysis did not give us any good information about the review content
 - Tried LDA (right) to see if we could group reviews into the 8 genres
 - Attempted sentiment analysis, but only a few reviews deemed "negative"

```
Topics in LDA model:
Topic #0:
album just song sound record time year music rock band
Topic #1:
album song record band music sound time just year rock
Topic #2:
band album record year rock sound just time music song
Topic #3:
band time sound music just song year album record rock
Topic #4:
song time rock music year band record album just sound
Topic #5:
music band time sound just record year rock song album
Topic #6:
album music song year record time just sound rock band
Topic #7:
band rock song record album time just year music sound
```

Further Questions

- Is it possible to predict the album score?
 - There are no numeric values beside the score, so it was challenging to determine a possible way to predict album scores.
 - Would probably require training a neural net on review content to associate what reviewers say and what the score is.
- Will Spotify ever re-instate its API?
- Gather purchase data and compare that with stream data and album scores
 - Do enough people still buy records to make this a viable measure?
- Is there a textual analysis model that would be useful for these reviews?

Conclusions

- Pitchfork does seem to have a slight bias toward certain artists.
- Stream counts have some obvious correlations with genre, but other than that, nothing too notable
- Time plays a small factor in review score
 - Over the years, the average score is getting higher
 - Albums reviewed long after release are rated higher ("classic effect")
 - Day of week and month play no role in an album's rating
- Some reviewers are more critical than others.
 - Reviewers are also biased toward certain genres.
- Textual analyses shows that the language across reviews remains quite consistent.

Questions?

https://github.com/jtliso/pitchviews