


A03: Author Popularity within the Star Wars Fandom

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IDC 5131: Distributed Computing



Overview

- Data Collection
- Measuring Popularity
- Characterizing Stories
- Insights

Data Collection

Data Utilized

- ArchiveofOurOwn.com
- Star Wars fanfiction (All Media Types)
- Restricted to General Audiences
- Over 60,000 works

Web Scraper

- Scraped using BeautifulSoup4
- Metrics collected:
 - Everything shown below!
 - As well as full text and story summaries



a reylo fic by [treezie](#)

19 Dec 2015



[Star Wars - All Media Types](#), [Star Wars Episode VII: The Force Awakens \(2015\)](#)

No Archive Warnings Apply, [Kylo Ren/Rey \(Star Wars\)](#), [Kylo Ren](#), [Rey \(Star Wars\)](#), [stan loona](#), [#ReleaseTheRianJohnsonCut](#)

short rey/kylo fic :)

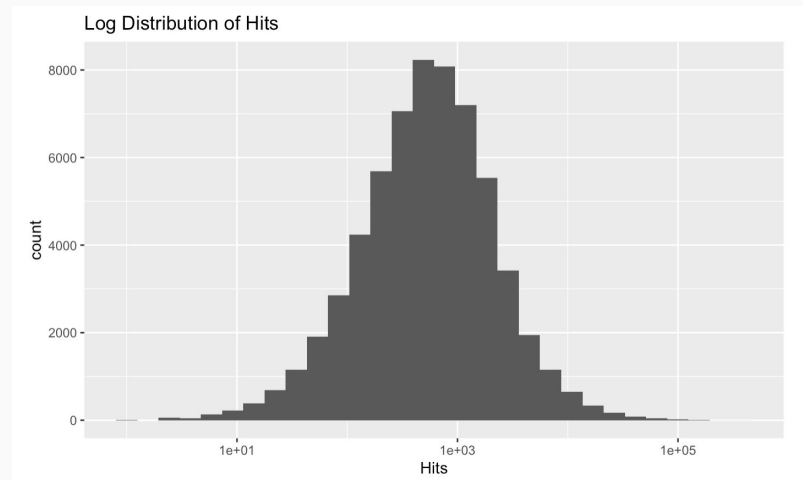
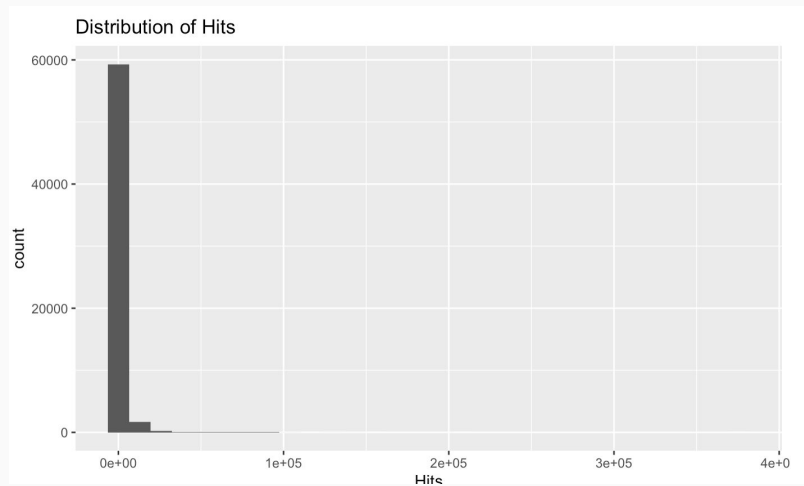
Language: English Words: 12 Chapters: 1/1 Comments: [8597](#) Kudos: [58507](#) Bookmarks: [2153](#) Hits: 378939

Measuring Popularity

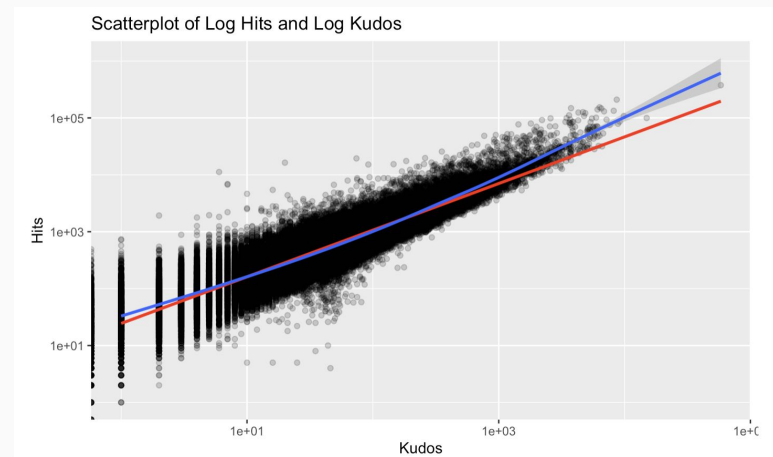
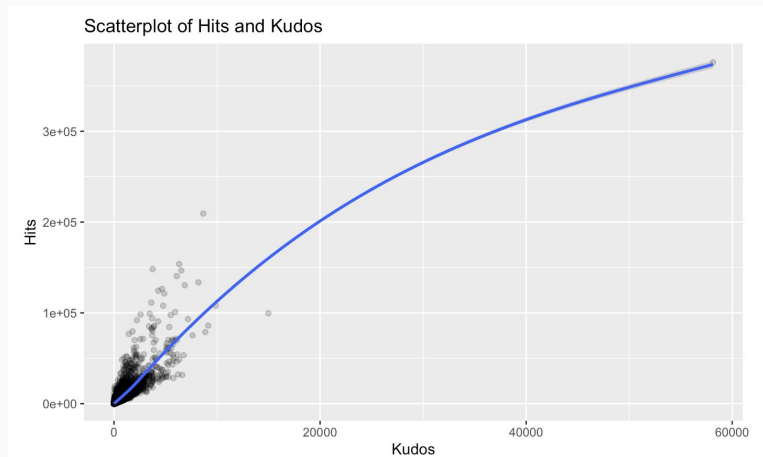
Deciding Popularity

- Three Possible Metrics
 - Number of Hits
 - Number of Kudos
 - Number of Bookmarks
- We use the Number of Hits as a measure of story popularity
 - The average Number of Hits per story to measure author popularity

Popularity: Number of Hits



Popularity: Hits and Kudos



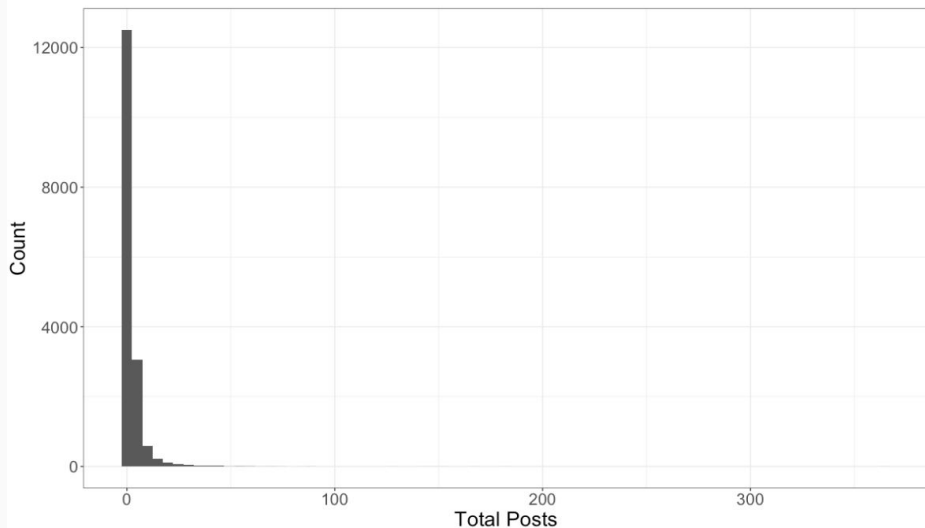
Characterizing Stories

Post Frequency

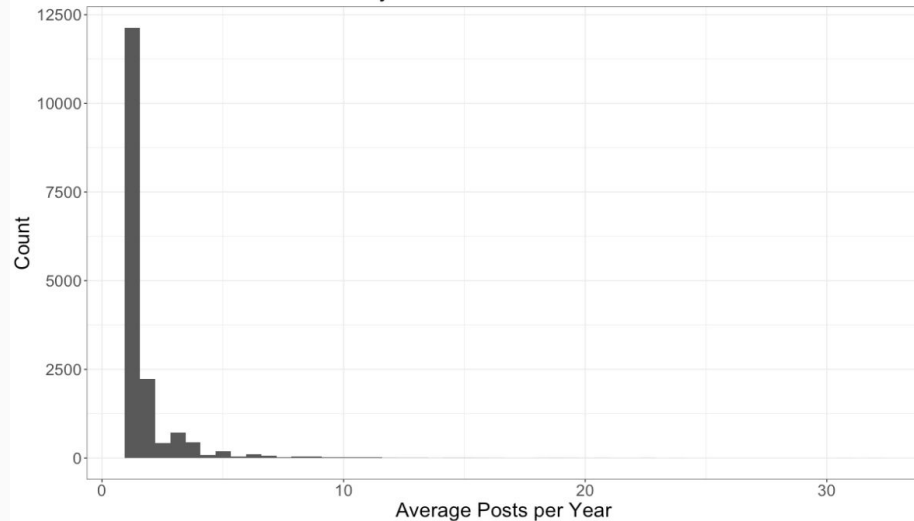
- Majority of authors post only one story (67.3%)
- Average author posts per year is 1.6 stories
- Only 81 of 16,680 authors have an average posts per year greater than 10

Post Frequency

Distribution of Author Total Posts



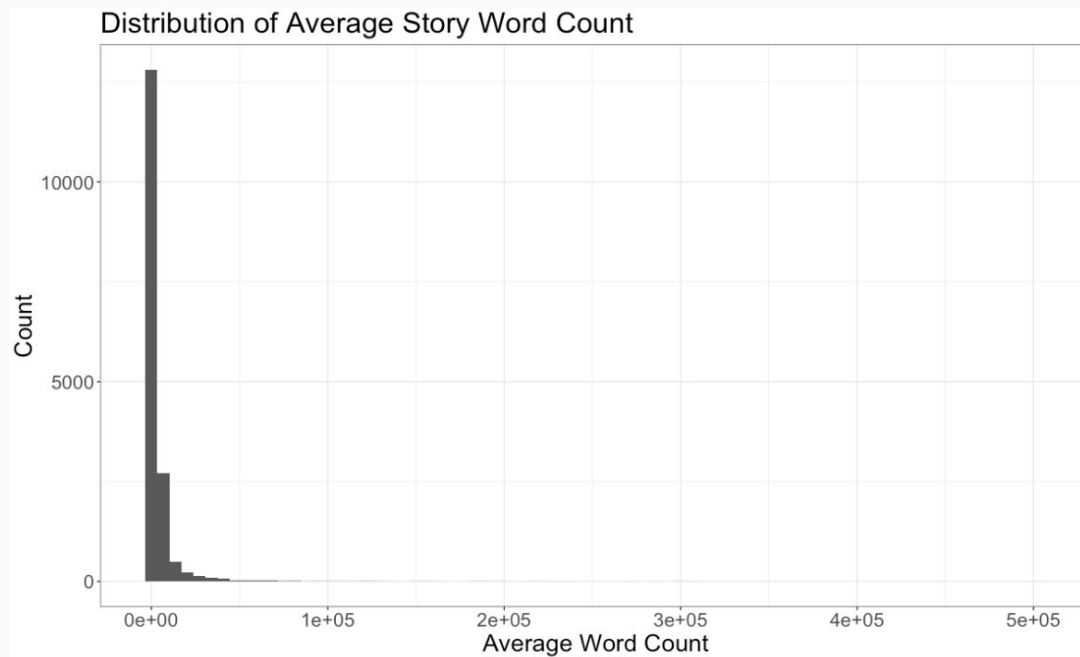
Distribution of Author Yearly Posts



Story Structure

- Median of average author story word count is 1,560 words. Average is 4020 words
- 1,184 of 16,680 authors have an average story word count of at least 10,000 words

Story Structure



Popular Relationships & Characters

Common Relationships

- Luke Skywalker & Darth Vader
- Cody & Obi-Wan Kenobi
- Qui-Gon Jinn & Obi-Wan Kenobi
- Obi-Wan Kenobi & Ahsoka Tano
- Anakin Skywalker & Ahsoka Tano

Common Characters

- Darth Vader
- Mace Windu
- CC-2224/Commander Cody
- The Mandalorian
- Anakin Skywalker
- Baby Yoda

Popular Tags and Their Performance

Common (2-3k Average Hits)

Alternate Universe/Canon Divergence

Crack

Fix-It

Family

Hurt/Comfort

Uncommon (5-22k Average Hits)

Time Travel* (6/10 top tags)

Time Travel Fix-It*

Tatooine Slave Culture

Female Obi-Wan Kenobi

Insights

Predicting Author Popularity

- We attempted training a neural network and multiple linear regression model to predict author popularity
 - Assumptions on residuals are broken due to the behavior of variables (right-skewed)
 - High RMSE
- Though weak ($r \approx .2$), we find that there is a positive relationship of an author's max story rating total posts with a higher number of posts, yearly post frequency, and average word count

Insights

- To rise to popularity within the AO3 Star Wars Fandom, we recommend Alice:
 1. Post frequently (≥ 1 story/month)
 2. Write longer stories (> 4000 words)
 3. Write stories that include Darth Vader, Anakin Skywalker, Obi-Wan Kenobi, Ahsoka Tano, The Mandalorian & Grogu (Baby Yoda), Mace Windu [Important Characters from The Mandalorian and the Clone Wars series]
 4. Consider exploring stories about time-travel in the Star Wars Universe

Questions?

Bonus Slides

Insights

Rating by word count

Quartile <int>	lower_val <dbl>	mean_avg_rating <dbl>
1	0.0	725.1912
2	575.0	757.6143
3	1032.0	952.7227
4	1560.5	1182.6938
5	2414.0	1328.9548
6	4622.5	3093.8396

6 rows

Insights

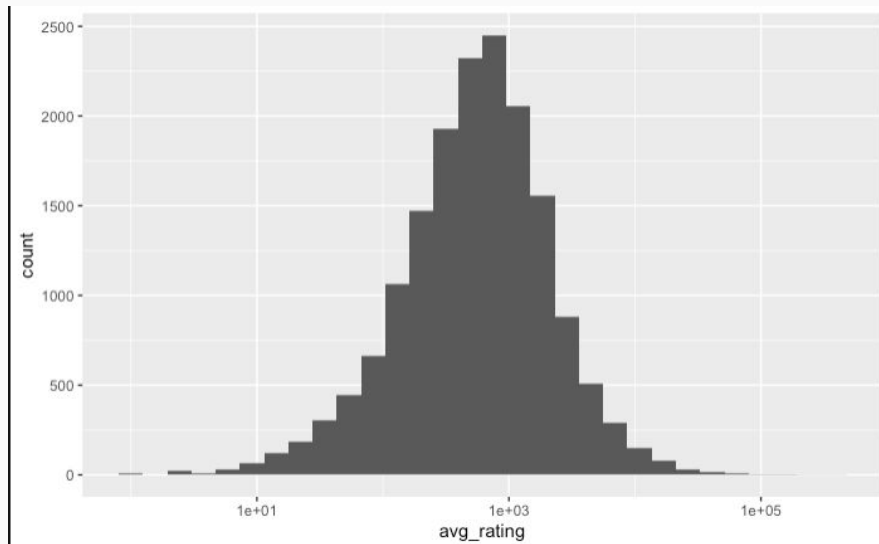
Rating by Total Posts

Quartile <int>	lower_val <dbl>	mean_avg_rating <dbl>
1	1	1443.791
2	1	1079.559
3	1	1128.102
4	1	1220.386
5	1	1275.686
6	1	1541.589
7	2	1338.491
8	2	1269.076
9	3	1486.032
10	6	1618.981

1-10 of 10 rows

Insights

Distribution of Author Average Rating in Log-Scale



#1 General Audience Star Wars Fanfiction

a reylo fic treezie

Summary:

short rey/kylo fic :)

Notes:

(See the end of the work for notes.)

rey picks up kylo and dunks him into the garbage. fucking obliterated

Notes:

rey is a lesbian and this ship fucking sux

Rating:

General Audiences

Archive Warning:

No Archive Warnings Apply

Category:

F/M

Fandoms:

Star Wars – All Media Types, Star Wars Episode VII: The Force Awakens (2015)

Relationship:

Kylo Ren/Rey (Star Wars)

Characters:

Kylo Ren, Rey (Star Wars)

Additional Tags:

stan loona, #ReleaseTheRianJohnsonCut

Language:

English

Stats:

Published: 2015–12–19 Words: 12 Chapters: 1/1 Comments: 8598 Kudos: 58517 Bookmarks: 2152 Hits: 379042