

The Quantified Self and Media Consumption Tracking

HANNAH TRAN

Psychology of Data Visualization

April 3, 2025

WHAT IS THE QUANTIFIED SELF?

Self knowledge through numbers



Self-improvement

Personal Informatics

Self-tracking

Self-monitoring

Life logging

Self-surveillance

Personal analytics

THE QUANTIFIED SELF & PSYCHOLOGY

Everyday Science

Making science accessible

Parallels to psychological research

 **Jacque Schrag** @jacqueschrag.com · 1d
#30DayChartChallenge: Fractions 🇮🇹

I've tracked my daily mood and activities for more than 1,500 days. These are my moods visualized. An empty circle was a terrible day, while a full circle was a fantastic day.



3 1 34 ...

ALT

HISTORY

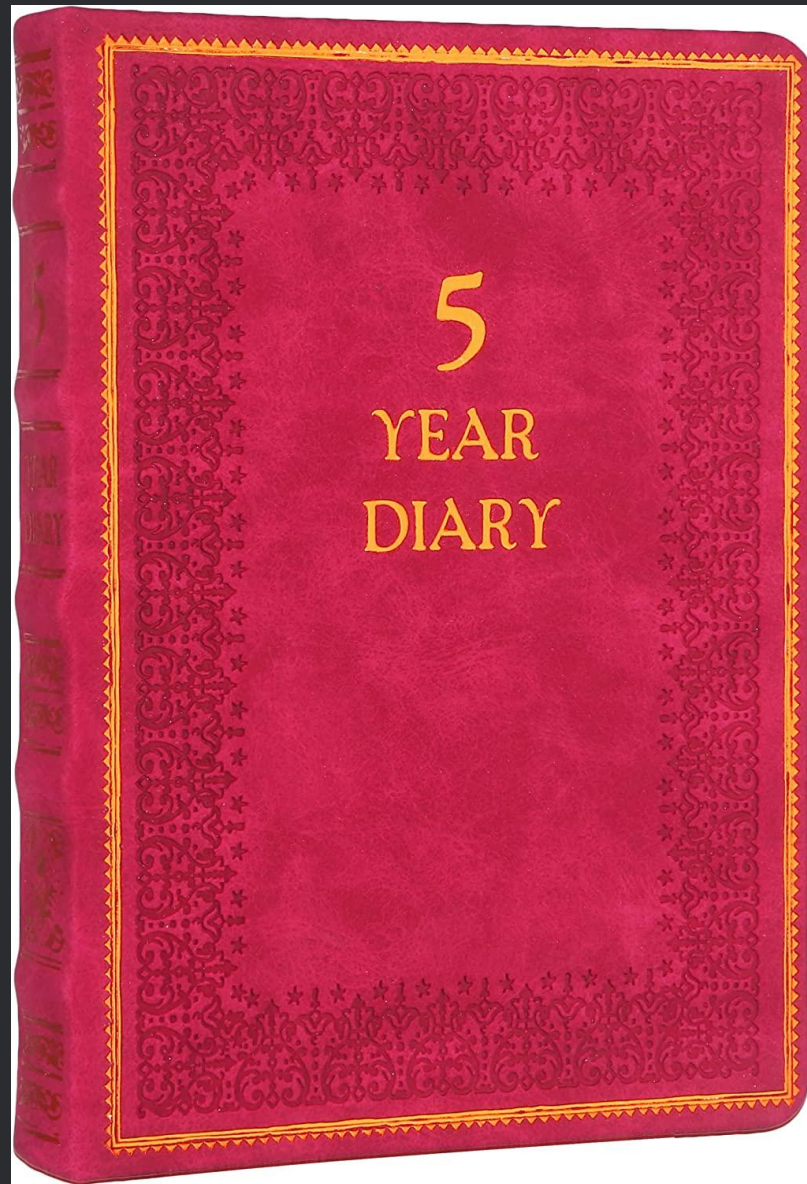
- Wired, 2007: “A collaboration of users and tool makers who share an interest in self-knowledge and tracking”
- Quantified Self community:



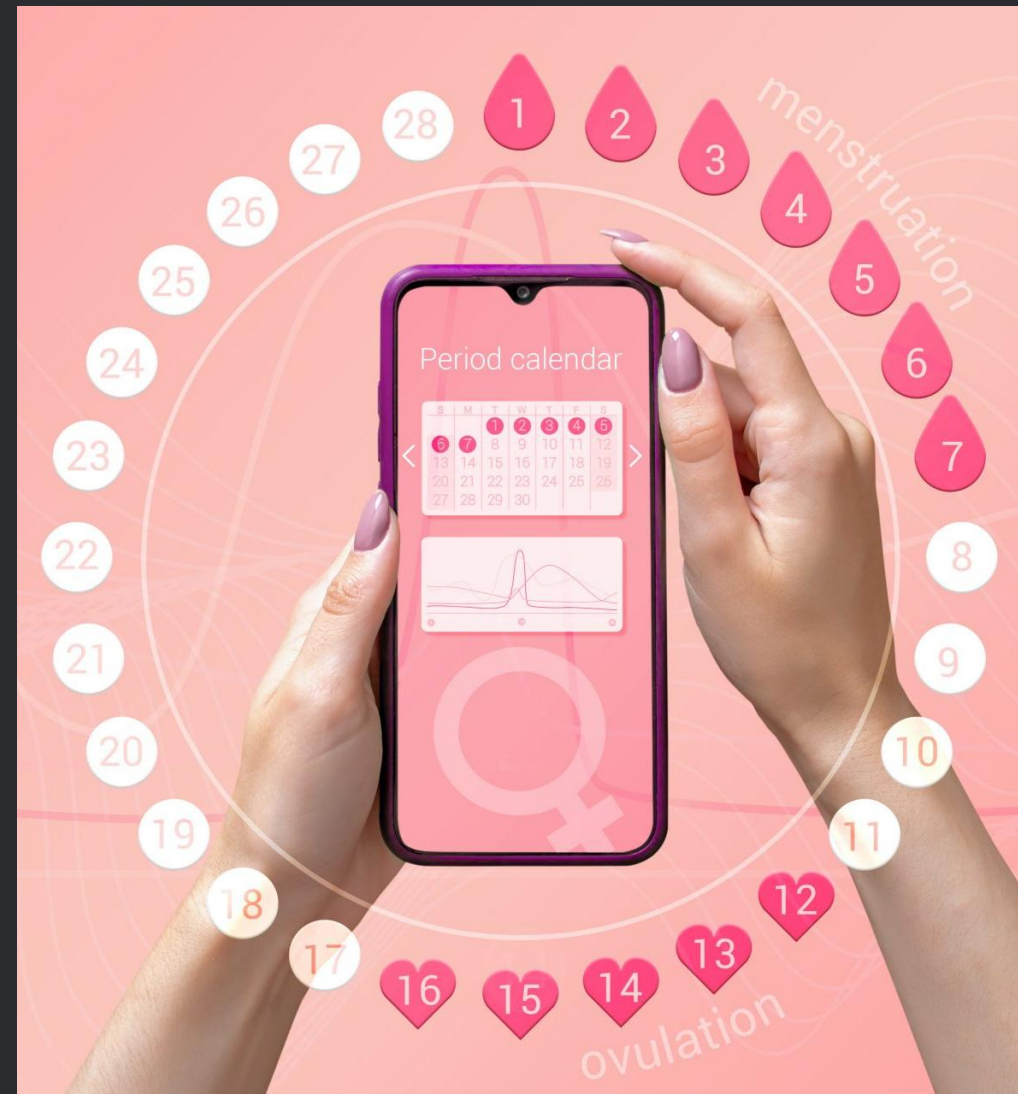
Quantified Self supports every person's right and ability to learn from their own data. We're committed to accuracy, independence, inclusiveness, and transparency in all of our work.

- “Quantified self” existed far before this...

PERSONAL LIFE



HEALTH



STAGES OF QUANTIFYING THE SELF

1. Preparation

2. Collection

3. Integration

4. Reflection

5. Action

MEDIA

The screenshot shows a Letterboxd user profile for 'USERNAME'. The page features a navigation bar with 'FILMS', 'LISTS', 'MEMBERS', and 'JOURNAL' tabs, along with a search icon and a '+ LOG' button. The user's profile statistics are: 4 FILMS, 4 THIS YEAR, 0 LISTS, 1 FOLLOWING, and 0 FOLLOWERS. The main content area is divided into several sections: 'RECENT ACTIVITY' (with a filter for 'ALL'), 'CURRENTLY WATCHING', 'WATCHLIST', 'DIARY', and 'RATINGS'. The 'RECENT ACTIVITY' section displays four movie posters: 'LIGHTYEAR' (4 stars), 'DOCTOR STRANGE IN THE MULTIVERSE OF MADNESS' (3 stars), 'MINIONS THE RISE OF GRU' (4 stars), and 'THE BATMAN' (5 stars). The 'CURRENTLY WATCHING' section shows 'A KNIGHT'S TALE' with a red progress indicator and a note 'Started At 11:30'. The 'WATCHLIST' section shows a list of 269 items, including 'On the Count of Three', 'OPE', 'LOVE', 'EL HEART', and 'THE BATMAN'. The 'DIARY' section shows 239 entries, including '6 Elvis' and '3 The Crow'. The 'RATINGS' section features a bar chart showing the distribution of ratings from 1 to 5 stars, with a single 1-star rating and five 5-star ratings highlighted in green.

Letterboxd USERNAME FILMS LISTS MEMBERS JOURNAL + LOG

USERNAME FOLLOW 4 4 0 1 0
FILMS THIS YEAR LISTS FOLLOWING FOLLOWERS

[Profile](#) [Activity](#) [Films](#) [Diary](#) [Watchlist](#) [Likes](#) [Network](#) [Gift Pro](#)

RECENT ACTIVITY ALL

LIGHTYEAR ★★★★★ **DOCTOR STRANGE IN THE MULTIVERSE OF MADNESS** ★★★ **MINIONS THE RISE OF GRU** ★★★★ **THE BATMAN** ★★★★★

FOLLOWING 1

RATINGS

CURRENTLY WATCHING Started At 11:30

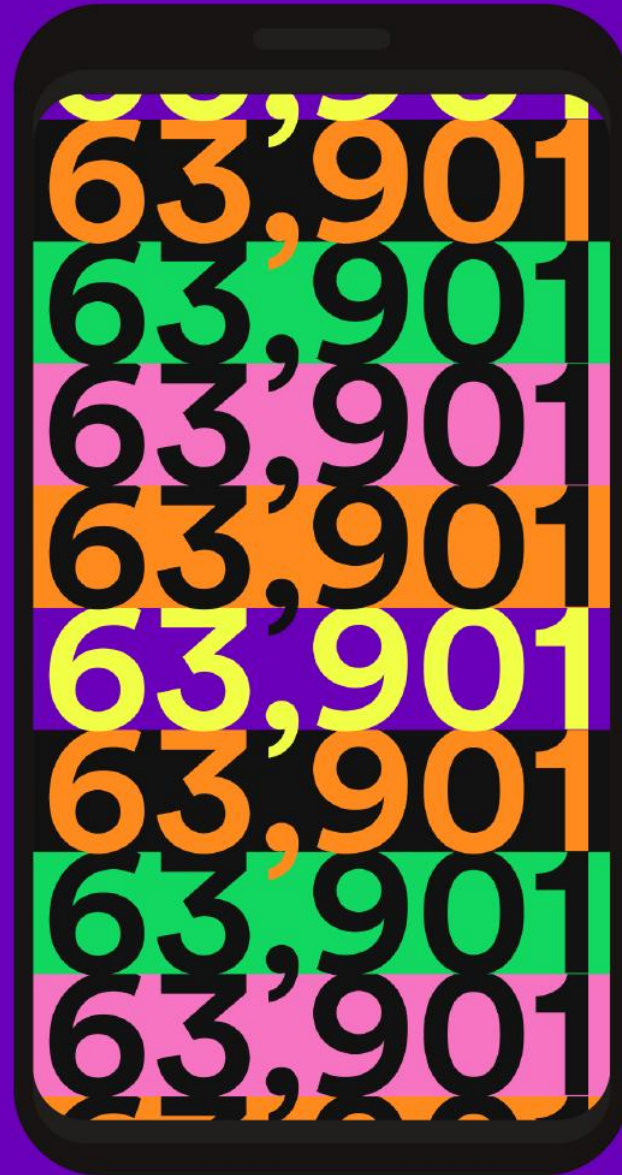
WATCHLIST 269

DIARY 239

DIARY JUL 6 Elvis 3 The Crow

*Disclaimer: Not my Letterboxd account

MEDIA



My Top Song
Sweetest Pie
Megan Thee Stallion (ft. Dua Lipa)

Most Listened On
October 31, 2022

Total Streams
243

Spotify SPOTIFY.COM/WRAPPED

My Listening Personality

The Fan Clubber

You're the type of fan that artists dream of. When you love an artist, you support them with your full heart.

+ FNVC +

Familiarity · Newness · Variety · Commonality

Spotify SPOTIFY.COM/WRAPPED

Top Artists

- 1 Bad Bunny
- 2 PinkPanthress
- 3 Harry Styles
- 4 Megan Thee Stalli...
- 5 BADBADNOTGO...

Top Songs

- 1 Callaita (See...
- 2 Where You Are
- 3 Late Nite Talking
- 4 Pressurelicious (f...
- 5 Time Moves Slow

Minutes Listened
800,116

Top Genre
Hip Hop

Spotify SPOTIFY.COM/WRAPPED



#SPOTIFYWRAPPED

MEDIA

@nadia's
May 2024 Wrap-Up

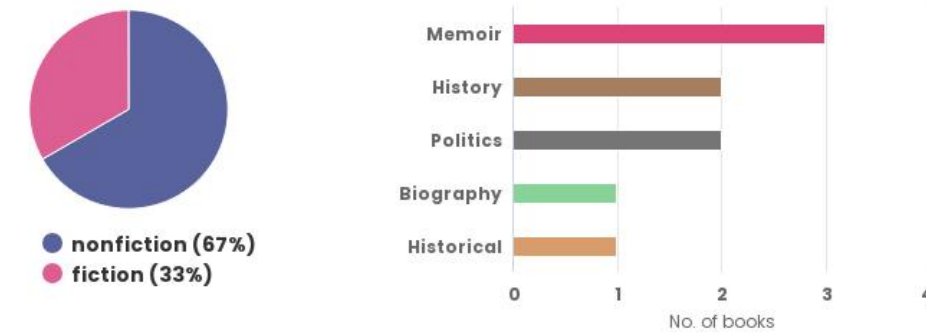
BOOKS
9

PAGES
2,480

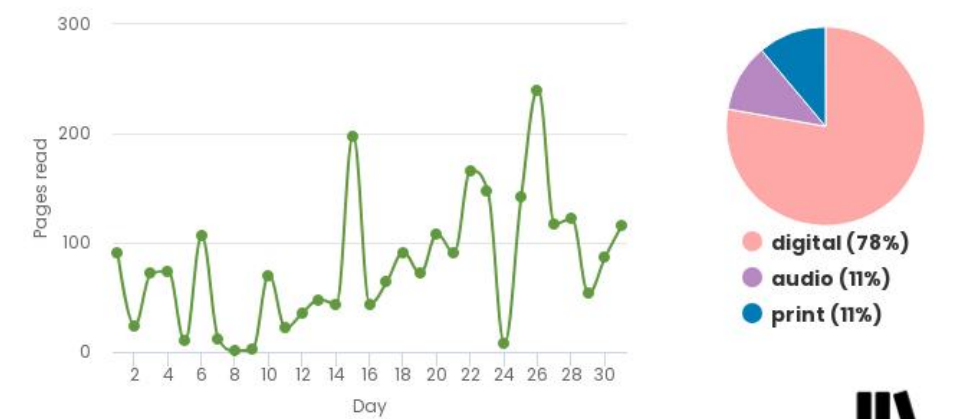
AV. RATING
3.58



Average book length: **310 pages** | Average time to finish: **5 days**



Compared to April...
Books **↑ 50%** | Pages **↑ 14%**



THE STORYGRAPH

MEDIA

Fanfiction:

Unauthorized, fictional work created by fans and based on an existing work of fiction (e.g., books, movies, TV series, video games)



The screenshot shows the top portion of the Archive of Our Own website. At the top left is the logo, a stylized red figure with arms raised, followed by the text "Archive of Our Own" in red and "beta" in a smaller, lighter red font. In the top right corner, there is a "Log In" link. Below the logo and text is a dark red navigation bar containing the links "Fandoms", "Browse", "Search", and "About" in white. To the right of these links is a white search input field with a "Search" button. Below the navigation bar, the main content area has a white background with the following text: "A fan-created, fan-run, nonprofit, noncommercial archive for transformative fanworks, like fanfiction, fanart, fan videos, and podfic". At the bottom of this section, there is a line of statistics: "more than 71,170 fandoms | 8,286,000 users | 14,760,000 works".

1. PREPARATION

Motivations & Challenges

- Separate apps for everything
- Limitations to visualizations on apps
- Better understand habits, preferences, and sense of accomplishment
- Automation difficult (impossible?)

We cannot go back in time to stop data collection that already occurred, or remove AO3's content from existing datasets, as much as we may dislike that it happened. All we can do is attempt to reduce such collection in the future. **The Archive's development team will continue to be on the lookout for individual scrapers collecting AO3 data, and to take action as needed.**

2. COLLECTION

My tracker that I started keeping after starting this course!



My Library

- ▶ **Books**
- ▶ **Fanfiction**
- ▶ **Television**
- ▶ **Movies**



Harry Potter and the Data Visualization Course

| | |
|--------------|---|
| ☆ Rating | ★★★★★ |
| 👤 Author | Dr. Vizzie |
| ♥ Fandom | Data Viz |
| 🔗 Link | https://friendly.github.io/6135/ |
| ⚙️ Status | WIP |
| # Word Count | 6823 |
| 📅 Year | 2025 |
| ↗️ Year Read | 📖 2025 |

- A Chorus of Mushrooms** by Hiromi Goto. Rating: ★★★. Genre: Fiction. Year: 1994. Status: In Progress.
- Rebecca** by Daphne du Maurier. Rating: ★★★★★. Genre: Gothic. Year: 1938. Status: In Progress.
- The Seven Husbands of Evelyn Hugo** by Taylor Jenkins Reid. Rating: ★★★★★. Genre: Fiction. Year: 2017. Status: Finished.
- Summer Cannibals** by Melanie Hobson. Rating: ★★★. Genre: Fiction. Year: 2018. Status: Finished.


3. INTEGRATION

| |
|---------------|
| ▼ dat |
| \$ Title |
| \$ Year |
| \$ Rating |
| \$ Fandom |
| \$ Read.Date |
| \$ Author |
| \$ Link |
| \$ Status |
| \$ Word.Count |
| \$ Year.Read |

▼ *Reading Summary*

♥ 2025 ↕ ... New ▼

🔍 Search Year: 2025 ▼ + Add filter



♥ 2025

Books:

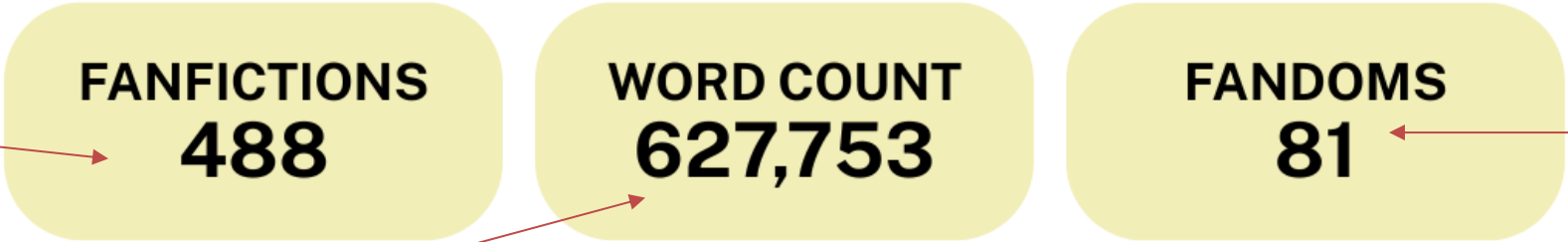
—

- ♥ 5 novels read
- ♥ 2,160 pages
- ♥ 0 poetry books read
- ♥ 2 audiobooks listened to
- ♥ 6 books in progress

Fanfiction:

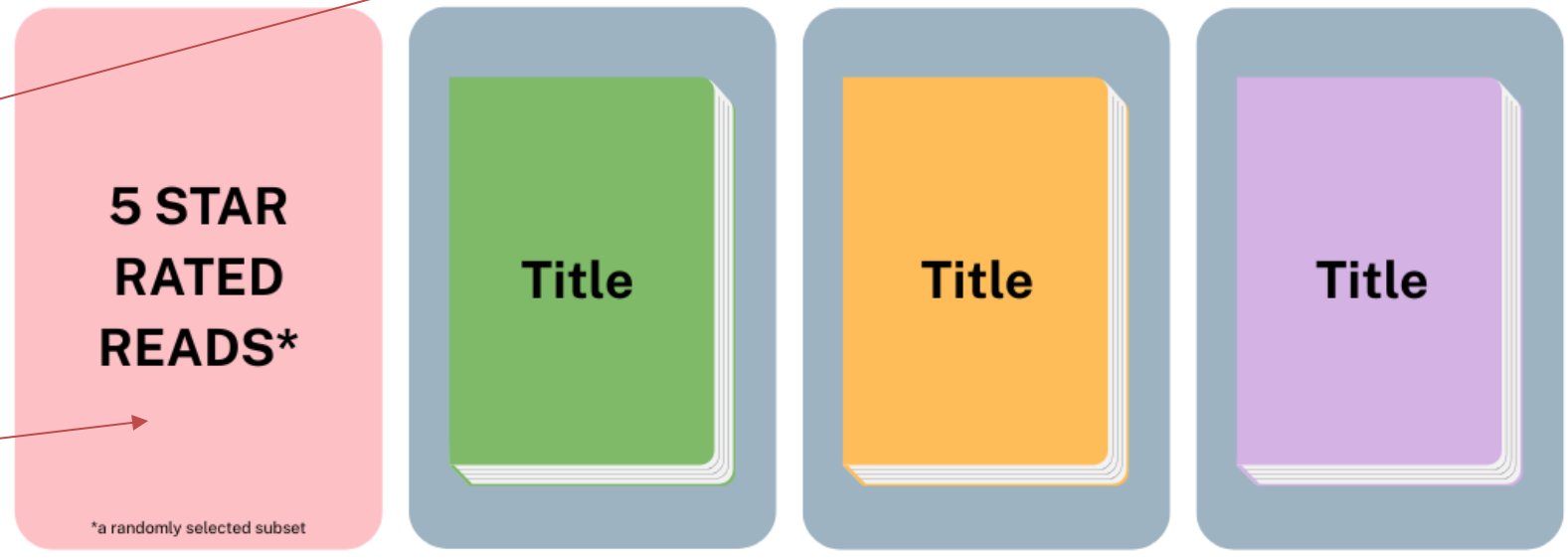
- ♥ 83 fanfics
- ♥ 487,240 words
- ♥ 24 ships

nrow(dat)



n_distinct(dat\$Fandom)

sum(dat\$Word.Count)



```
random_titles <- dat %>%
  filter(Rating == 5) %>%
  sample_n(5)

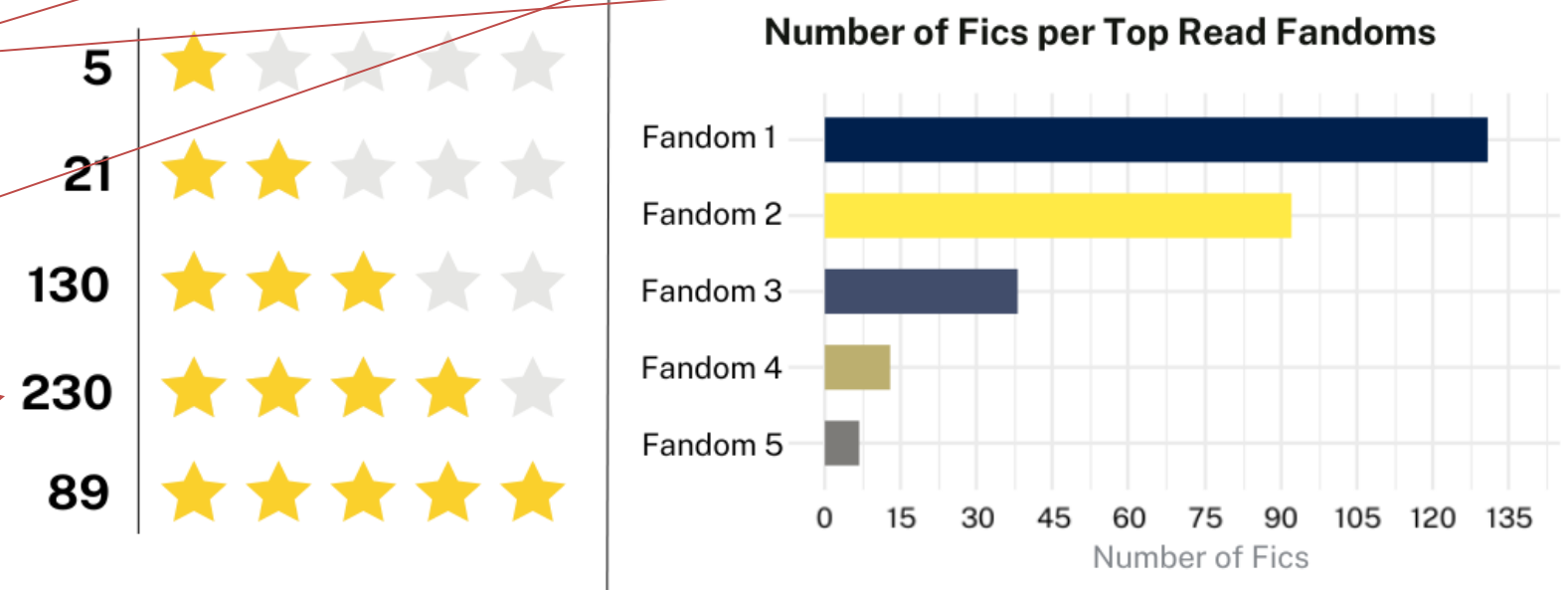
random_titles$Title
```

Shortest fic: **369 words** Average fic length: **16,607 words** Longest fic: **572,921 words**

range(dat\$Word.Count)

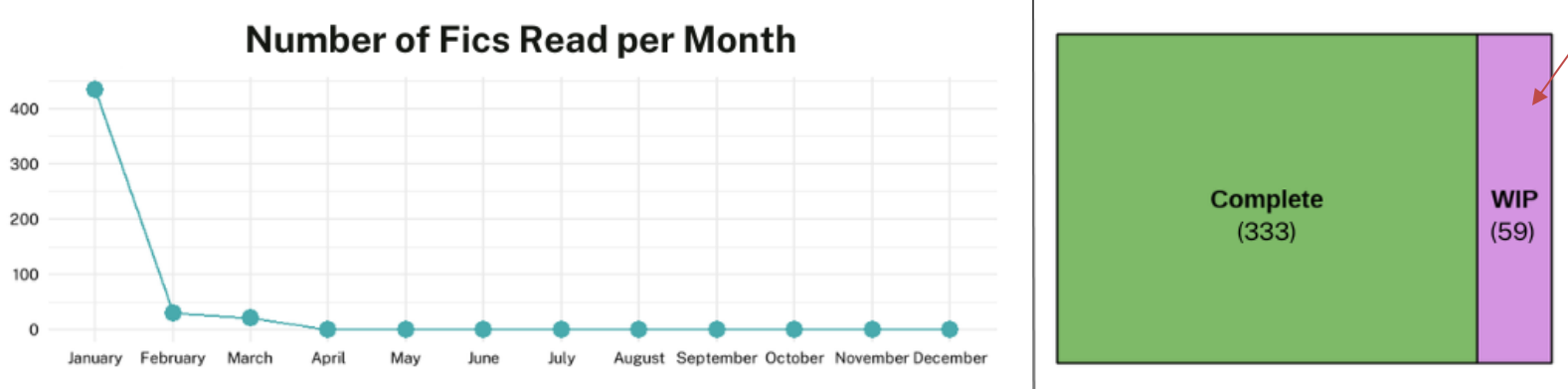
mean(dat\$Word.Count)

table(dat\$Rating)



```
statusdat <- dat %>%
  filter(!is.na(Status))
group_by(Status) %>%
  summarise(Count = n())

treemap(statusdat,
  index = c("Status"),
  vSize = "Count",
  vColor = "Status",
  fontsize.labels =
    c(25,25),
  draw = TRUE)
```



FANFICTIONS
488

WORD COUNT
627,753

FANDOMS
81

5 STAR
RATED
READS*

Title

Title

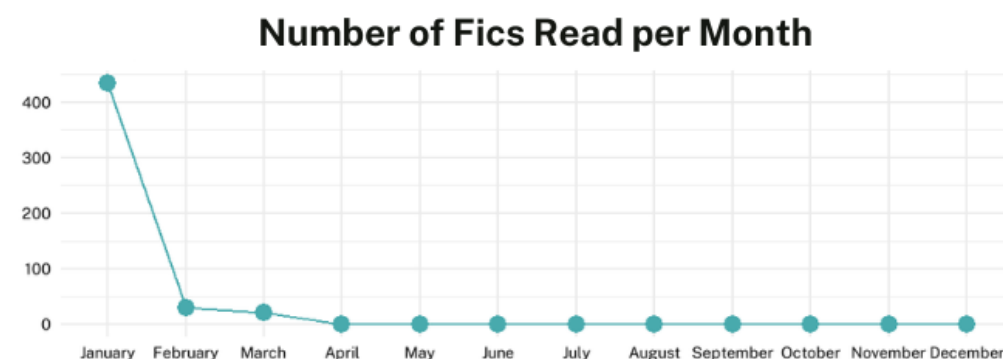
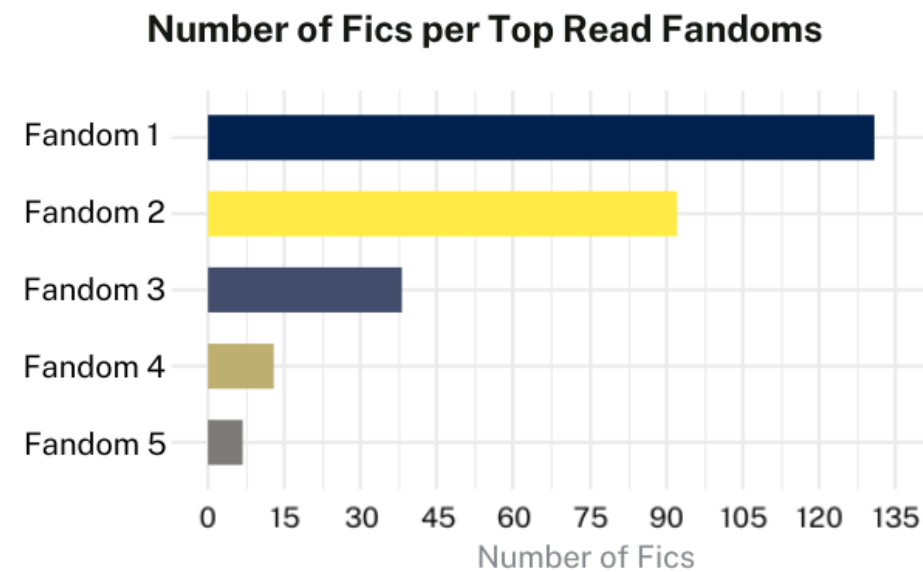
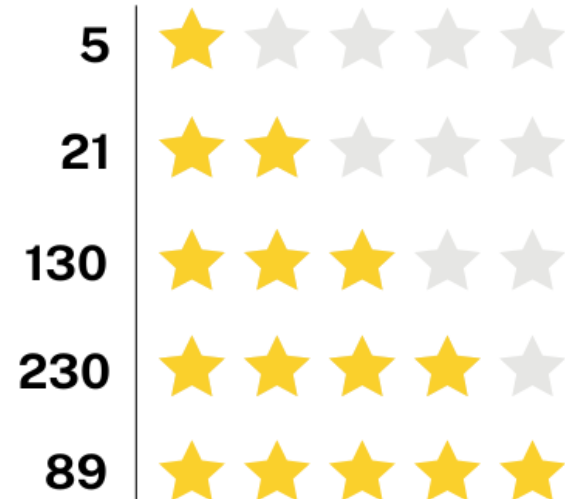
Title

*a randomly selected subset

Shortest fic: **369 words**

Average fic length: **16,607 words**

Longest fic: **572,921 words**



```
top_fandoms <- dat %>%  
  filter(Fandom != "" & !is.na(Fandom)) %>%  
  count(Fandom, sort = TRUE) %>%  
  top_n(5, n)
```

```
library(viridis)
```

```
ggplot(top_fandoms, aes(x = reorder(Fandom, n), y = n, fill =  
  as.factor(Fandom))) +  
  geom_bar(stat = "identity", width = 0.6) +  
  scale_fill_viridis_d(option = "cividis") +  
  (title = "", x = "", y = "Number of Fics") +  
  theme_minimal() +  
  coord_flip() +  
  scale_y_continuous(limits = c(0, 140),  
    breaks = seq(0, 140, by = 15)) +  
  theme(  
    plot.title = element_text(family = "public_sans", size = 16, face =  
      "bold", color = "black"),  
    axis.title = element_text(family = "public_sans", size = 12, face =  
      "plain", color = "gray"),  
    axis.text = element_text(family = "public_sans", size = 12, color =  
      "black"),  
    legend.position = "none"  
  )
```

FANFICTIONS
488

WORD COUNT
627,753

FANDOMS
81

5 STAR
RATED
READS*

Title

Title

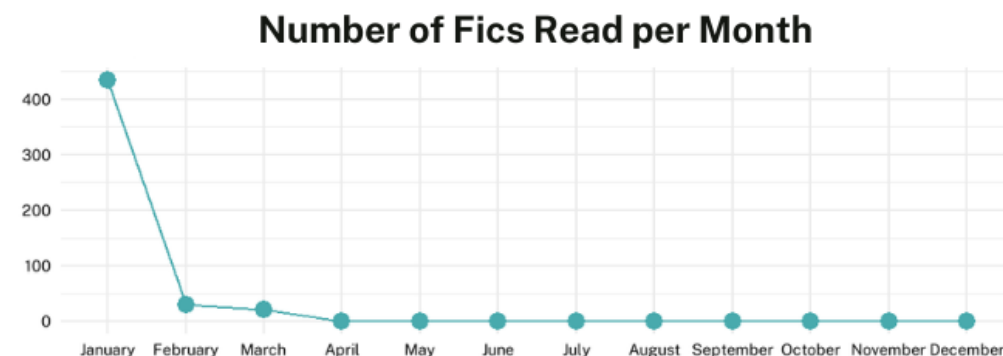
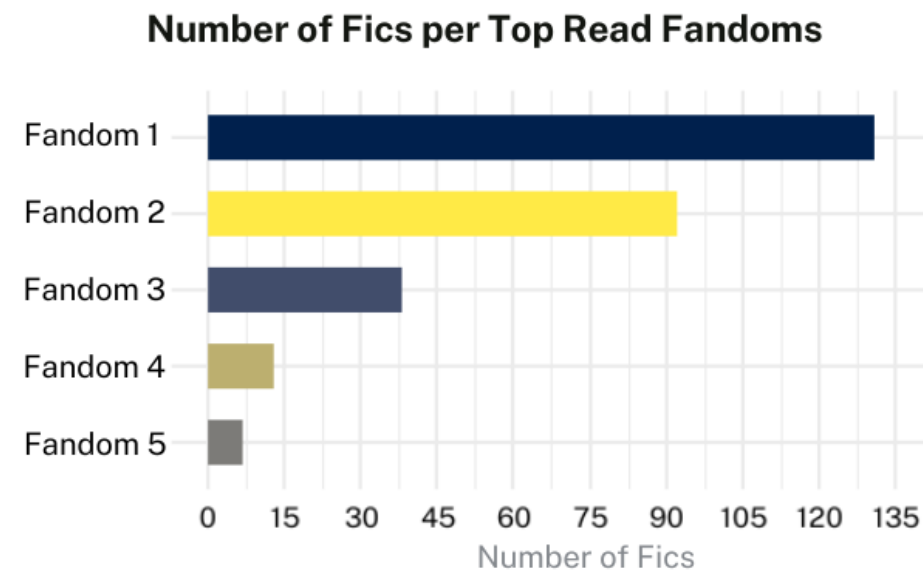
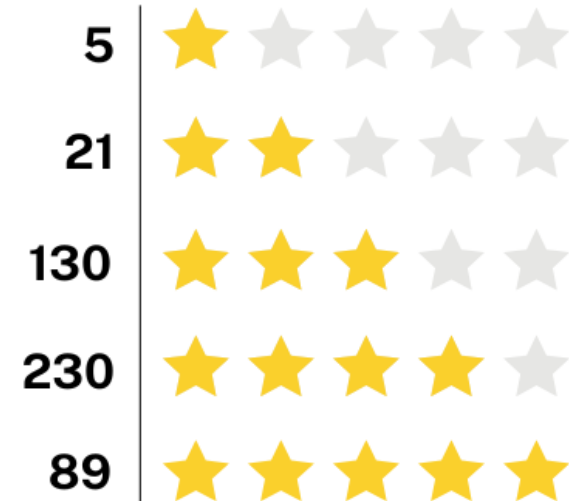
Title

*a randomly selected subset

Shortest fic: **369 words**

Average fic length: **16,607 words**

Longest fic: **572,921 words**



```
#count fics per month  
monthsread <- dat %>%  
filter(!is.na(Read.Date) & Read.Date != "") %>%  
group_by(Read.Date) %>%  
summarise(Count = n())
```

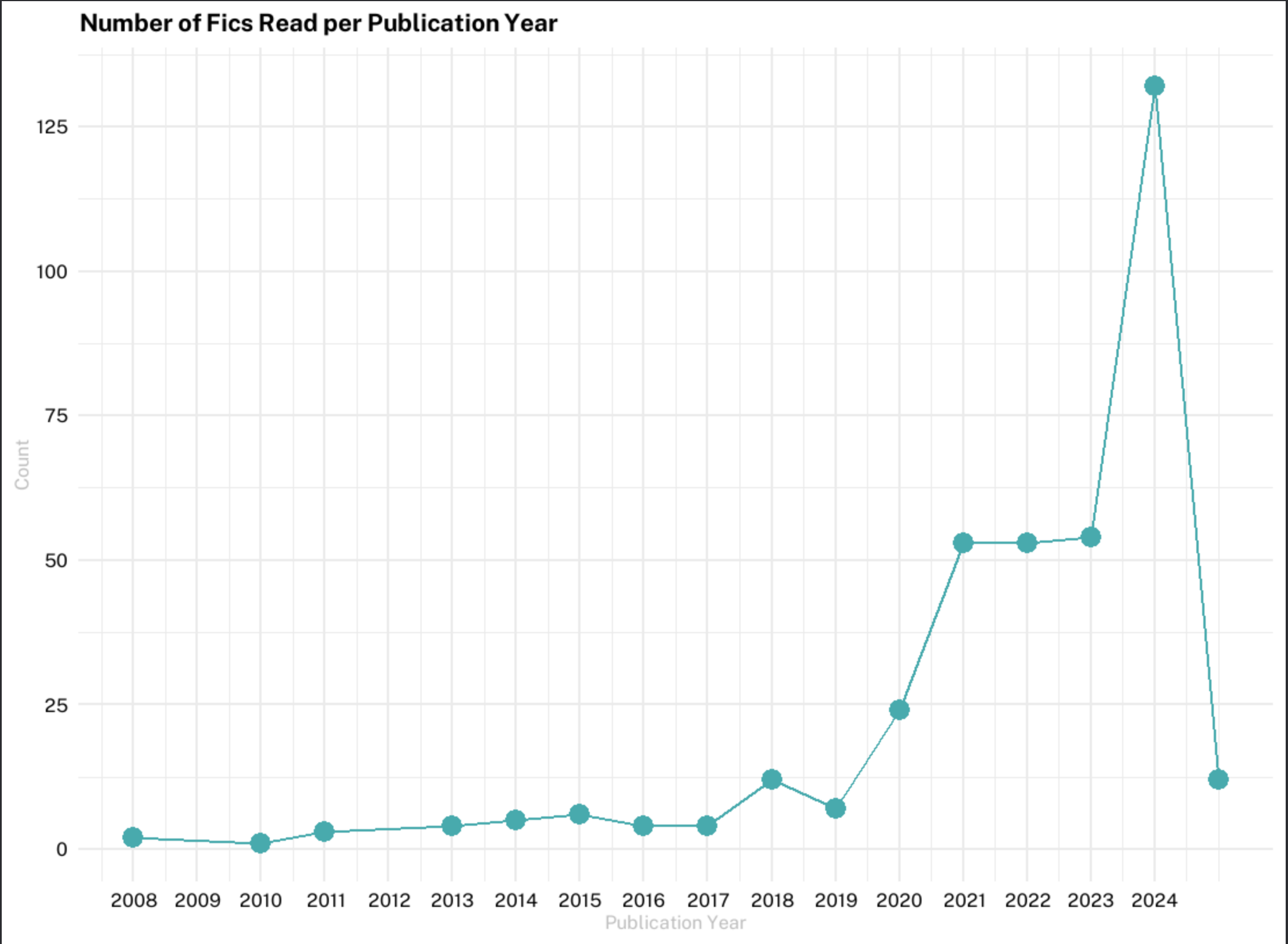
```
#add all months of the year  
all_months <- data.frame(Read.Date = month.name)
```

```
monthsread_full <- all_months %>%  
left_join(monthsread, by = "Read.Date") %>%  
mutate(Count = ifelse(is.na(Count), 0, Count))
```

```
#factor months  
monthsread_full$Read.Date <- factor(monthsread_full$Read.Date, levels =  
c("January", "February", "March", "April", "May", "June", "July",  
"August", "September", "October", "November", "December"))
```

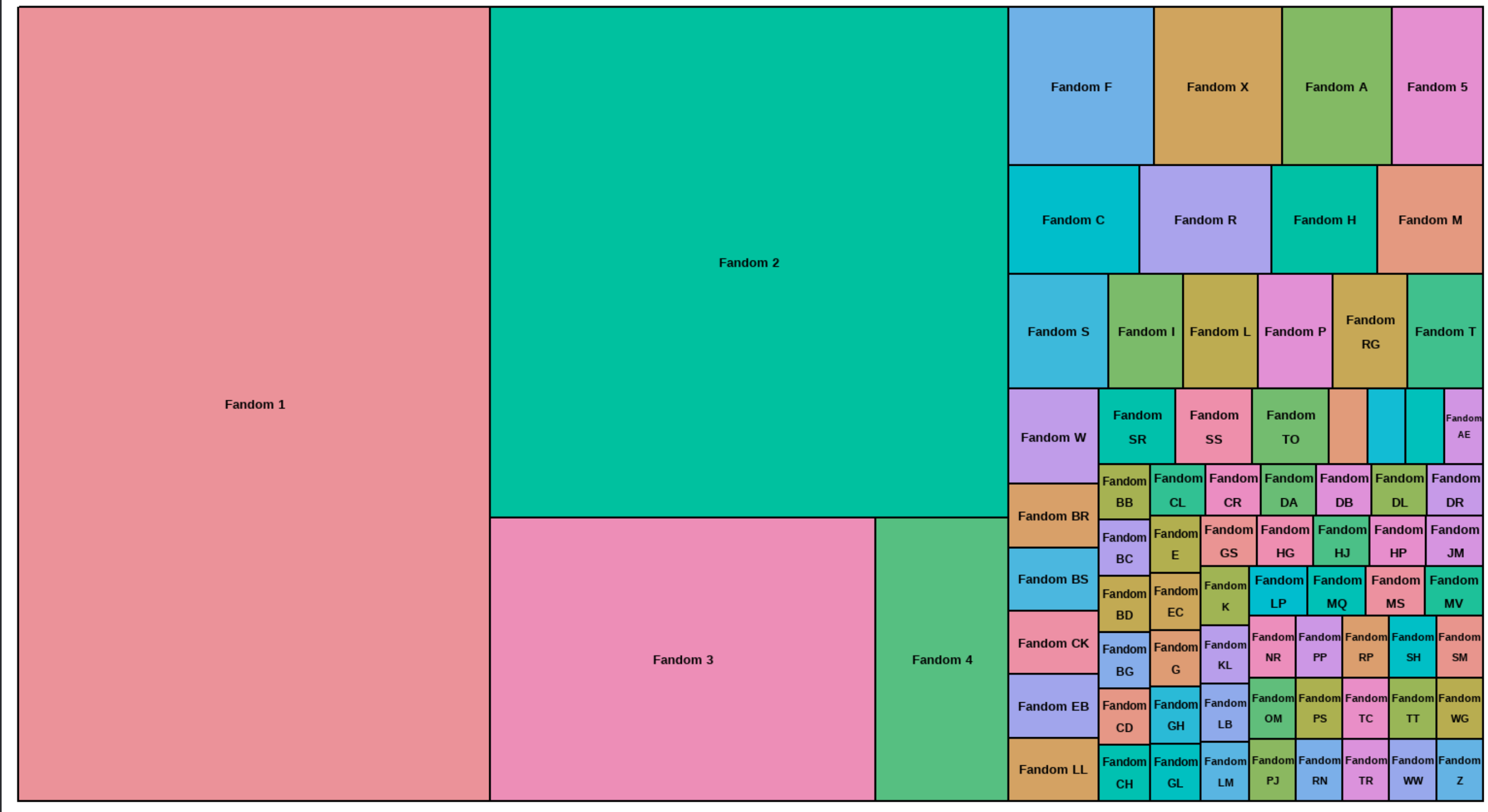
```
#plot  
ggplot(monthsread_full, aes(x = Read.Date, y = Count)) +  
geom_line(aes(group = 1), color = "#48AAAD") +  
geom_point(color = "#48AAAD", size = 4) +  
labs(title = "", x = "", y = "") +  
theme(  
plot.title = element_text(family = "public_sans", size = 16, face =  
"bold", color = "black"),  
axis.title = element_text(family = "public_sans", size = 12, face =  
"plain", color = "gray"),  
axis.text = element_text(family = "public_sans", size = 12, color =  
"black"),  
legend.position = "none"  
)
```


3. INTEGRATION



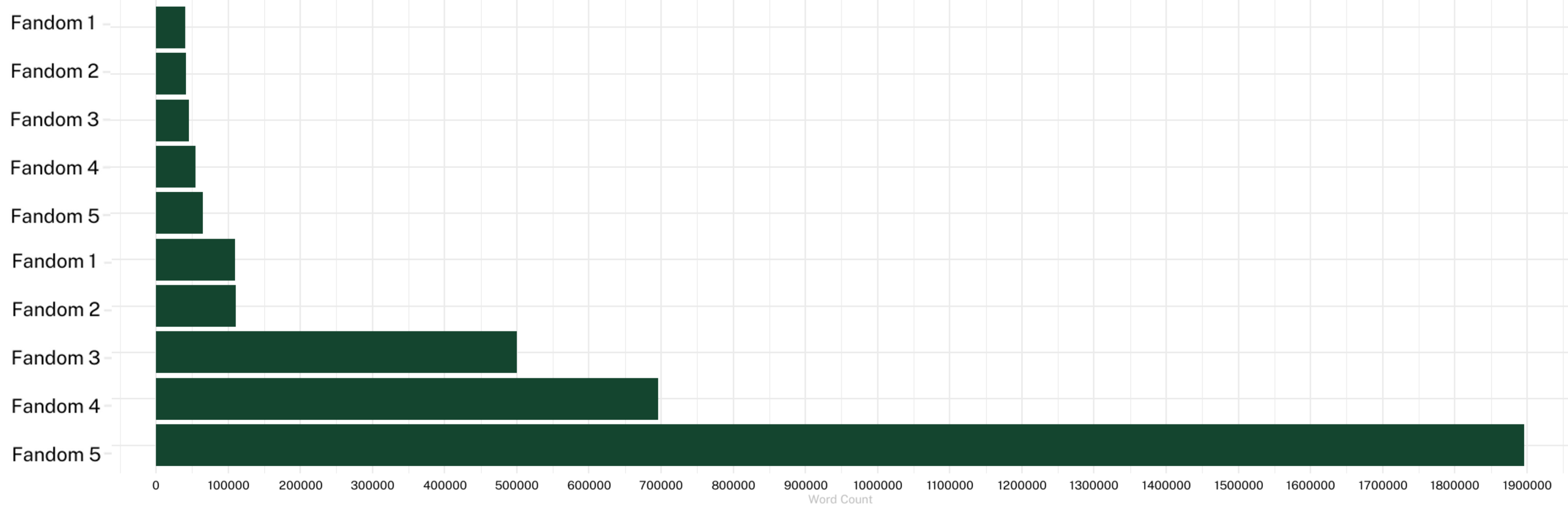
3. INTEGRATION

Treemap representing the proportion of each fandom read across total fics



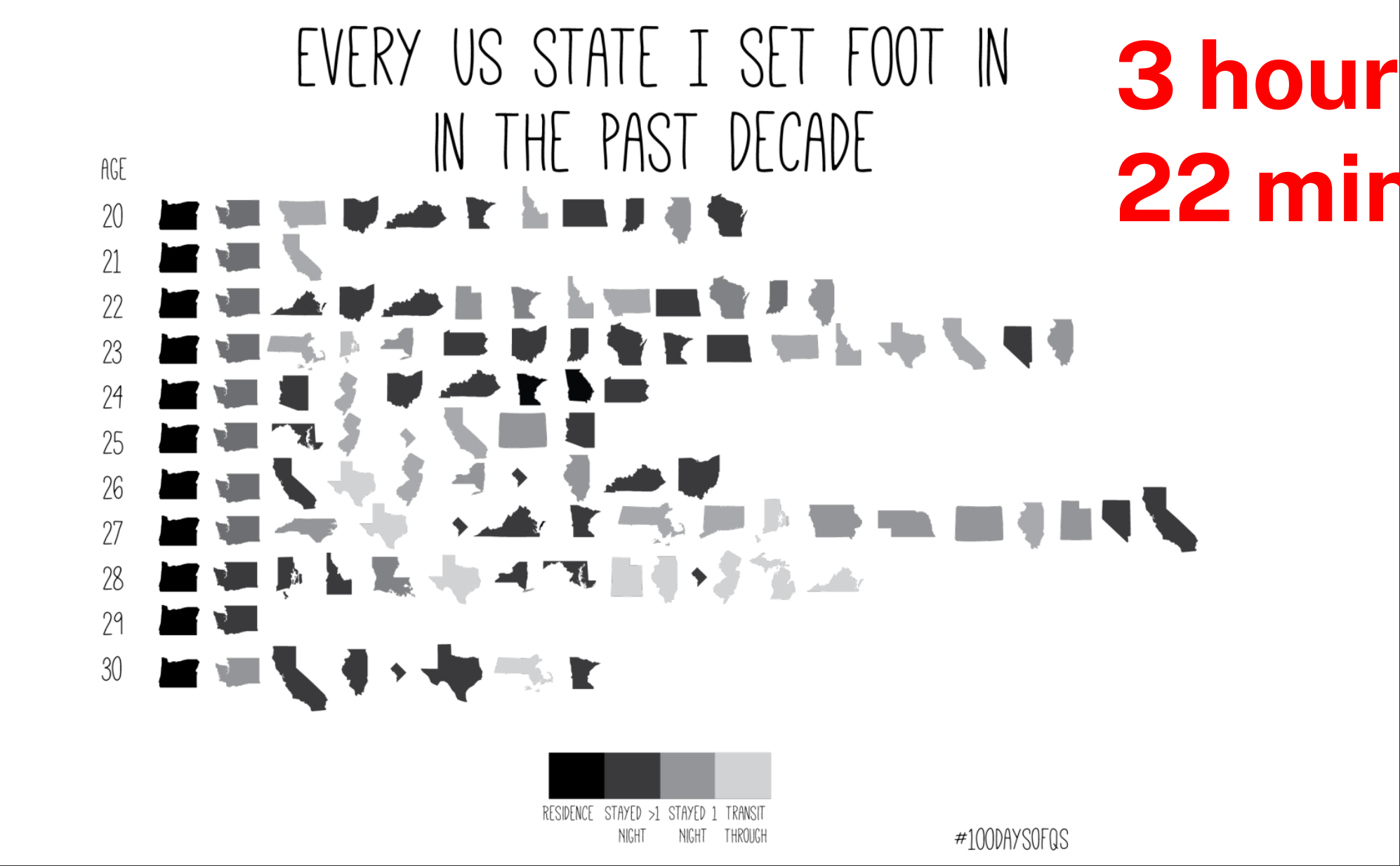
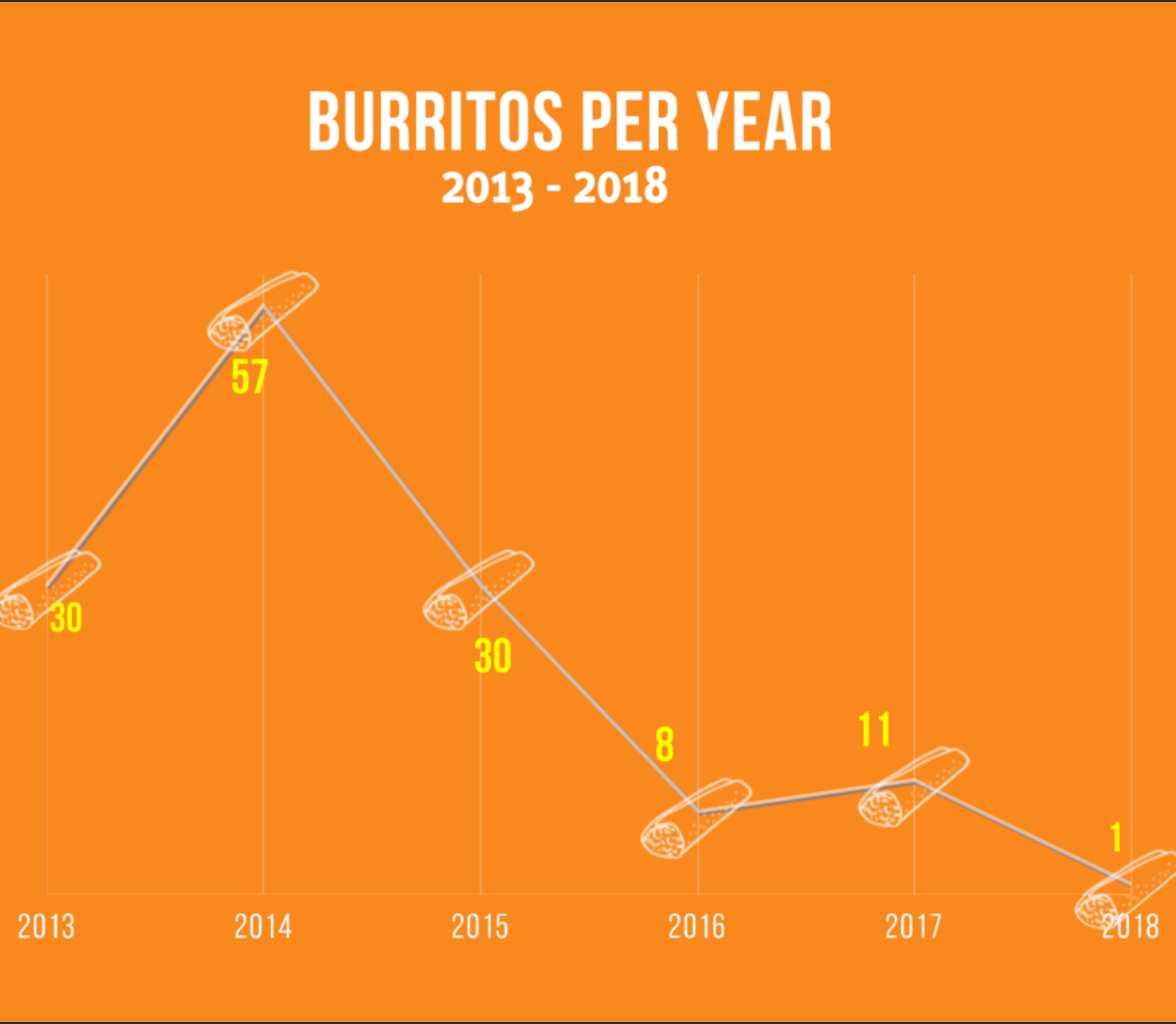
3. INTEGRATION

Top 10 Highest Word Counts per Fandom



4. REFLECTION & 5. ACTION

Time-consuming and labour-intensive (but fun!) → Larger critique of quantifying the self



3 hours and 22 minutes

4. REFLECTION & 5. ACTION

Time-consuming and labour-intensive (but fun!) → Larger critique of quantifying the self

Action? → I should probably read more books

Data visualization made accessible

KEATING MEMORIAL SELF RESEARCH GROUP

Would you like to get help with your self-research project from an active, experienced group of peers? You're invited to join the **Keating Memorial Self Research** group, in which we share and discuss our self-research projects and support each other in our efforts. We were inspired by Steven's pioneering self-research to try to make it easier for everybody to learn about themselves using their own capacity for empirical observation.

This is an opportunity to try self-research for the first time – or to pursue a project you already have – by doing it with a small group of people who have diverse skills, lots of experience, and a desire to support you. The chat is organized in partnership with our longtime collaborators at [Open Humans](#).

We meet every Thursday at 10am Pacific time. You can find the agenda, notes & links to the Zoom room in our continuous notes-document. We're inviting you to join these calls and share your self-research ideas, projects etc. Whether you're an experienced self-researcher or just curious to get started: You don't have to come every week and of course you don't need to present anything.

<https://quantifiedself.com/blog/the-keating-memorial-self-research-group/>

Thank You!

Questions?