Online Reading Communities: Their Tags, Reviews, and Values

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- NLP4DH 2023 -

Why do we care about online book reviewers?

The study of readers and literary reception is well established, but it has traditionally focused on **elite readers**.

Online book reviews provide abundant and accessible evidence documenting **diverse readers'** perceptions of books in detail and **in their own words**.

Online book reviewers shape our modern reading landscape.
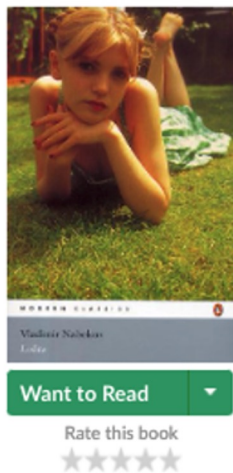
Lolita

by Vladimir Nabokov, Craig Raine (Afterword)

Bren's review   Apr 11, 2018

★★☆☆☆

bookshelves: classics, dark-and-heavy, dnf-lost-interest, read-and-reviewed, literary-fiction, better-or-worse-than-expected

Recommended for: People who genuinely want to read it OR b ook snobs who want to rate it a five.

I did no like Lolita.

I am giving Lolita a two.

I am just now writing this even though I "read" it some time ago.

This review is inspired by some of my GR friends whose fearlessness about giving low stars to books they do not like has inspired me to change my rating of Lolita from three stars to two stars as that is what I really feel.

I could not read the whole thing.

I struggled.

I get that this a classic and book snobs who read this will sign in indignation but I do not care.

Want to Read

Rate this book

★★★★★

Data Ethics: Private or Public?

- Reviewers share personal and political opinions and stories—but also often view their reviews as professional work.

- Replicating texts of reviews takes away users' ability to edit, update, or delete their reviews.

- **We contact all reviewers whom we directly quote and ask their preferences**

Bruckman. "Studying the amateur artist: A perspective on disguising data collected in human subjects research on the Internet." *Ethics and Information Technology,* 2002.

Fiesler and Proferes. "'Participant' Perceptions of Twitter Research Ethics." *Social Media + Society,* 2018.

What do reviewers mean when they write about the "classics"?

Our Goodreads "Classics" Dataset

~900 Goodreads reviews for each of 144 classic texts

- 300 oldest, newest, and default reviews per book
- Filtered to English-language reviews

127,855 total Goodreads reviews (2007-2019)

How do reviewers write about "classics"?

- Sometimes used as an excuse for trolling
- Sometimes a deterrent from sharing further opinions
- Often referenced in the context of school and education

"Every so often I'll get into a classic. I guess because I feel like writing a really nasty review. Classics are great fodder for nasty reviews because 1. The people who made them are LONG dead . . . Saying bad stuff about a classic novel doesn't hurt the creator's feelings ... 2. Classics have such a pedestal in the literary world already that the opinion of one lone weirdo ... is pretty irrelevant."

-- Peter Derk, The Phantom of the Opera

What do reviewers tag as a "classic"?

Compared to school syllabi, Goodreads "classics" are more diverse in genre, much less diverse in race.

94% of the Goodreads classics authors are white, which makes them whiter than both the AP recommended authors (70%) and the Open Syllabus authors (86%).

External influences

Topic 1: School
Topic 2: Editions & Translations
Topic 3: Adaptations & Audiobooks
Topic 4: Goodreads User Criticism
Topic 5: Review Industry & Meta-Review Discourse

Book subjects and themes

Topic 6: Gender & Sexuality
Topic 7: Race
Topic 8: Family
Topic 9: Life & Death
Topic 10: War & Adventure
Topic 11: Murder & Revenge
Topic 12: The Future (Dystopias)
Topic 13: Marriage
Topic 14: Comedy
Topic 15: Mystery & Suspense
Topic 16: Children's Literature

Book stylistic elements

Topic 17: Critical Status
Topic 18: Plot & Characters
Topic 19: Unlikeable Characters
Topic 20: Beautiful Writing
Topic 21: Length & Pace
Topic 22: Thought-Provoking
Topic 23: Enjoyable & Interesting
Topic 24: Re-Readable

Writing styles of reviews

Topic 25: Literary Language (Quotations)
Topic 26: Conversational & Slangy Language
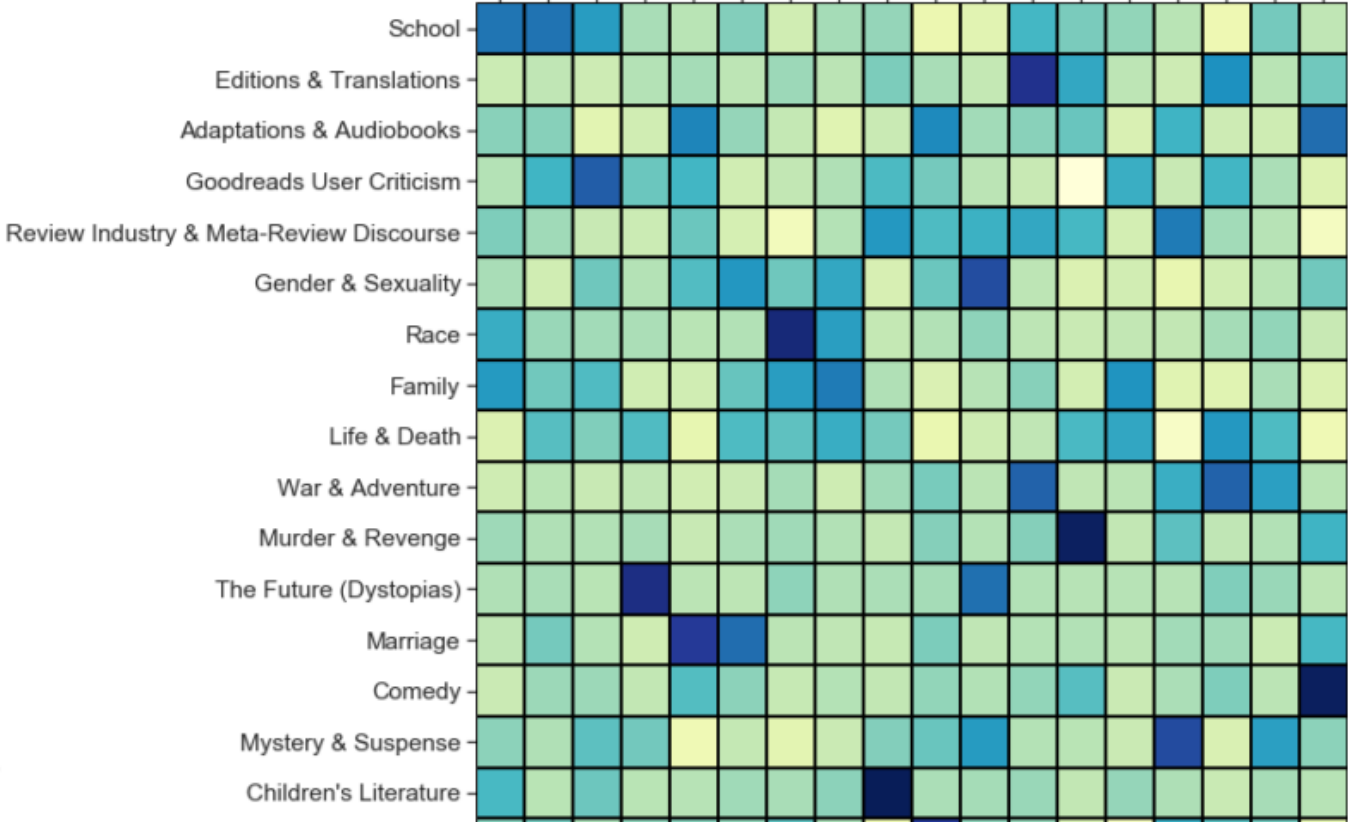Topic 27: Description & Dialogue (Quotations)
Topic 28: Gushing & Loving Language
Topic 29: Talking & Speaking
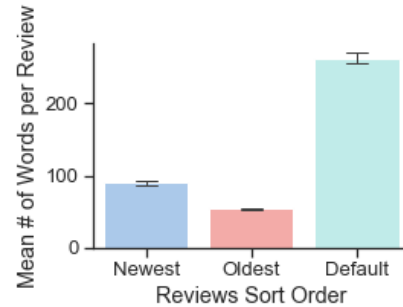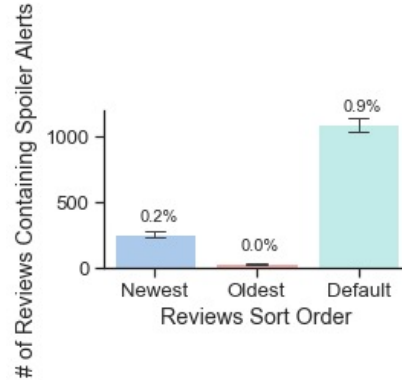
Topic 30: Non-English Reviews

The Goodreads Echo Chamber

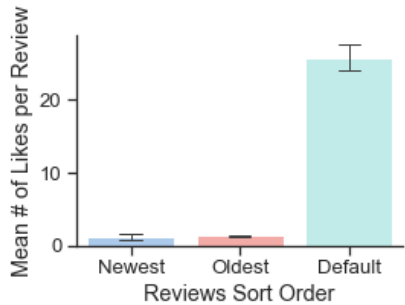- Goodreads includes many users, books, and reviews, but most of this data is inaccessible to users

- Tagging and reviewing occur in an "algorithmic echo chamber"
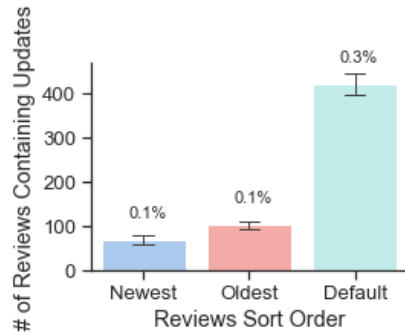
How do reviewers create and organize genre categories?

Who decides how to organize genres?

- We know how literary critics, academics, publishers, authors think about genre, but what about people in **online reading communities**?

- How do non-traditional genres stand in relation to traditional genres?

- How are online genres related to offline organization of books?

How prior work has mapped genres

Literary scholars emphasize that genres are blurry, change over time, and depend on context.

Pavel. "Literary Genres as Norms and Good Habits." *New Literary   History*, 2003.

Rosen. "Literary Fiction and the Genres of Genre Fiction." *Post45*, 2018.

Computational studies have focused on genre classification of book-length texts.

Brett Kessler et al. "Automatic Detection of Text Genre." *ACL*, 1997.

Stamatatos et al. "Automatic Text Categorization in Terms of Genre and Author." *Computational Linguistics*, 2000.

Wilkens. "Genre, Computation, and the Varieties of Twentieth-Century U.S. Fiction." *Cultural Analytics*, 2016.

Underwood. "The Life Cycles of Genres." *Cultural Analytics*, 2016.

LibraryThing: A Web of Books

Similar to Goodreads but more ✨ independent + accessible ✨

Social website for curating and cataloging and sharing your collection of books and reviews

Revenue is generated through a catalog for small bookstores and libraries—and the catalog is built from the free-text tags applied by users!

Folksonomies & Tagging

- LibraryThing allow users to **tag** books with free-text fields.

- Tags can be used as personal categories, community rankings, genres, and more.

- **Folksonomies**: unconstrained tags (rather than rigid hierarchies or taxonomies) applied by individuals and communities

Vander Wal. 2005. "Folksonomy Definition and Wikipedia."
http://www.vanderwal.net/random/entrysel.php?blog=1750

Vander Wal. 2007. "Folksonomy."
https://www.vanderwal.net/essays/051130/folksonomy.pdf

Data Collection

- Gathered **book metadata, all reviews,** and **reviewer tag clouds** for the top 1000 books for 20 tags on LibraryThing

- Mostly English-language reviews

- **17,440 books; 319,850 reviews; 33,849 users**

Interview with the Vampire

by Anne Rice

Other authors: See the other authors section.

Series: The Vampire Chronicles (1)

Members	Reviews	Popularity	Average rating	Mentions
20,113	293	150	★★★★ (3.83)	441

A vampire recounts his tragic two-century life, marked by an endless thirst for human blood.

▼ **Tags**　　　　　　　　　　　　　　　　　　　numbers　show all

1001 (81)　1001 books (82)　1001 books you must read before you die (56)　20th century (65)　American (64)
Anne Rice (221)　dark fantasy (70)　**fantasy** (851)　**fiction** (1,687)　**gothic** (256)
historical fiction (88)　**horror** (1,376)　Lestat (121)　Louisiana (56)　made into movie (58)
New Orleans (260)　novel (182)　own (112)　paperback (80)　**paranormal** (175)　Paris (55)
read (307)　rice (58)　series (204)　**supernatural** (216)　**to-read** (434)　urban fantasy (69)
vampire (609)　**Vampire Chronicles** (339)　**vampires** (1,490)

Genre	Words Per Review	Related Tags	Most Tagged Books
politics	312 words	presidents, American Presidents, communism, political science, US history	*The Prince* *The Communist Manifesto* *Animal Farm*
science fiction	289 words	Terry Pratchett, futuristic, sf, dystopian, dystopia	*Ender's Game* *The Hitchhiker's Guide to the Galaxy Fahrenheit 451*
vampires	273 words	vampire, werewolves, werewolf, paranormal romance, paranormal	*Twilight* *New Moon* *Eclipse*
memoir	252 words	autobiography, biography, essays, travel, Islam	*The Glass Castle: A Memoir* *Angela's Ashes* *Running with Scissors*
crime	238 words	Agatha Christie, Christie, crime fiction, police procedural, historical mystery	*The Girl with the Dragon Tattoo* *In Cold Blood* *The Girl Who Played with Fire*
picture book	175 words	Caldecott Medal, Caldecott Honor, collection:Fiction, shelf:Fiction, colors	*Where the Wild Things Are* *The Very Hungry Caterpillar* *Goodnight Moon*

| Genre	Words Per Review	Related Tags	Most Tagged Books
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"It's knocked my socks off, thrown me in the corner and left me a crumbling, emotional wreck...the character and story development, the writing, the way in which it stirs the emotions and its sheer humanity have all hit the right spot. It is also an emotional study into how a person may react to the possibility of the onset of dementia...Yes, Flowers for Algernon has won awards for science fiction and yes it is in the SF Masterworks list but ultimately it is a story of humanity and a person struggling to gain acceptance for who he really is not for who others want him to be."
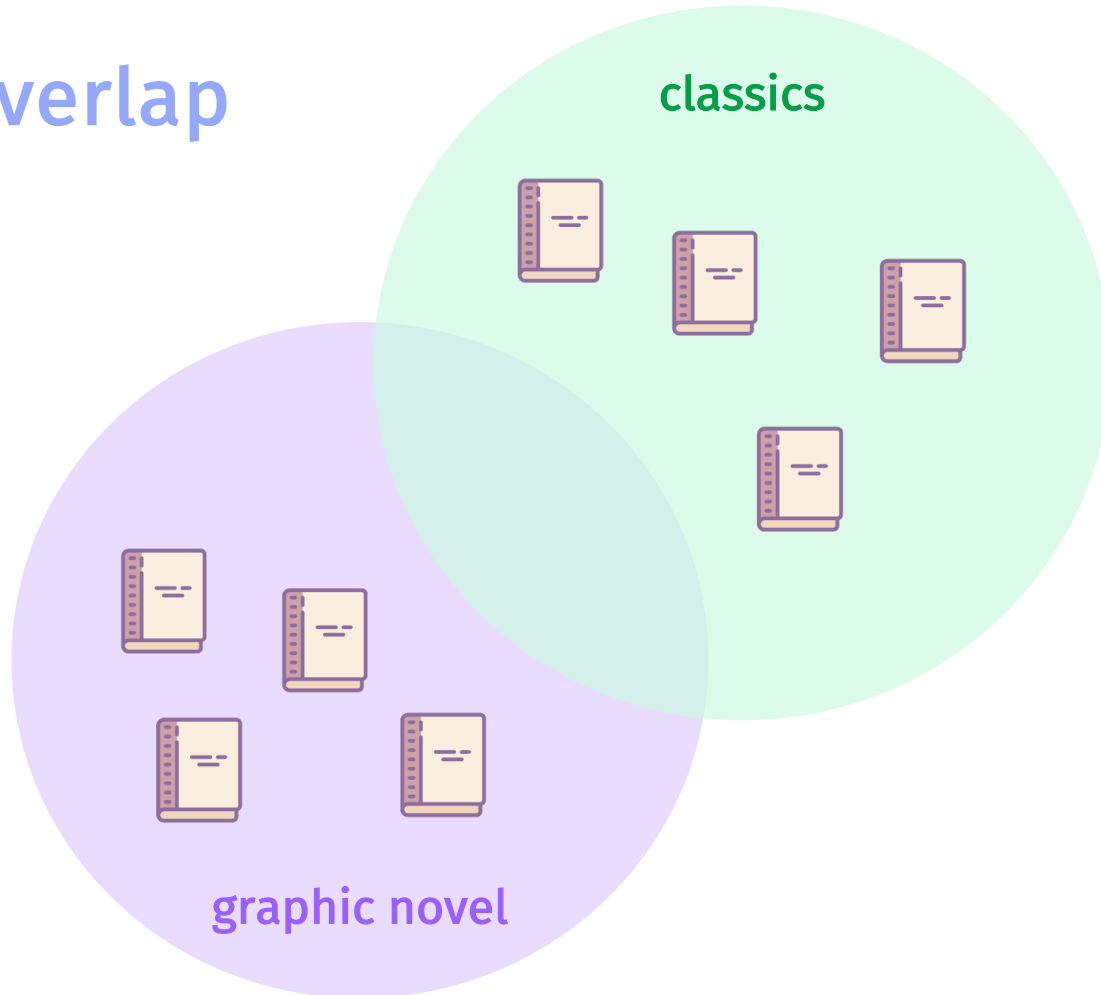
— lilywren, review of *Flowers for Algernon*

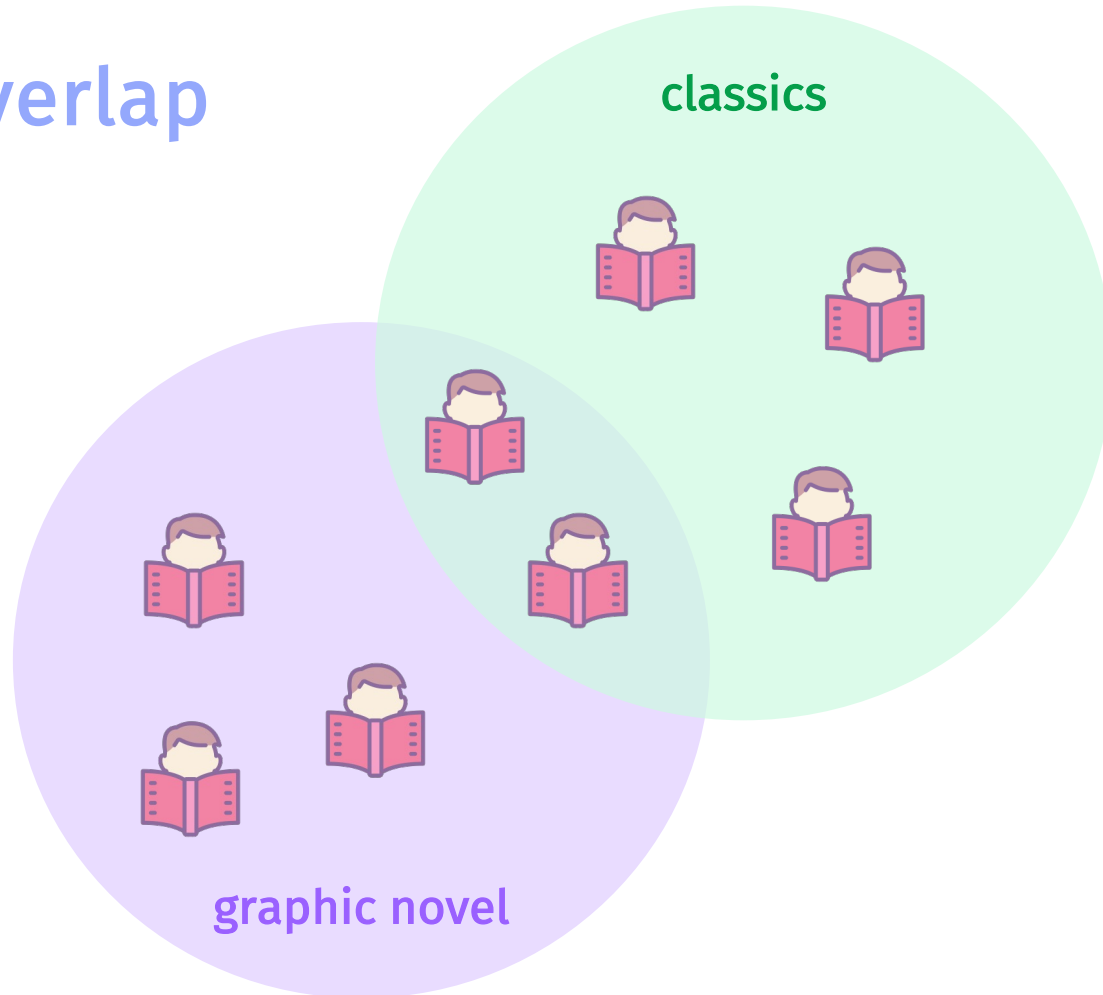# How to map and measure "genre"?
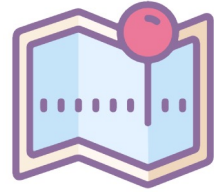
- How much **overlap** of books and users is there between genre pairs?

- How distinctive are the **review texts** for this genre?

- How similar are the tagging habits of a genre's **reviewers**?

Book Overlap

classics

graphic novel

User Overlap

classics

graphic novel

fewer

shared books

more

more ← shared users → fewer

memoir + mystery
mystery + politics
memoir + crime
biography + mystery
graphic novel + classics
graphic novel + animals
graphic novel + mystery
science fiction + mystery
science fiction + crime
fantasy + crime
crime + politics
historical fiction + memoir
historical fiction + humor
historical fiction + biography
fantasy + picture book
picture book + classics
classics + politics
picture book + biography
historical fiction + mystery
humor + picture book
young adult + animals
fantasy + animals
family + politics
humor + animals
children + humor
classics + animals
children + young adult

fewer

shared books

more

memoir + mystery
mystery + politics
memoir + crime
biography + mystery
graphic novel + classics
graphic novel + animals
graphic novel + mystery
science fiction + mystery
science fiction + crime
fantasy + crime
crime + politics
historical fiction + memoir
historical fiction + humor
historical fiction + biography
fantasy + picture book
picture book + classics
classics + politics
picture book + biography
historical fiction + mystery
humor + picture book
young adult + animals
fantasy + animals
family + politics
humor + animals
classics + animals
children + humor
children + young adult

more ← shared users → fewer

fewer

shared books

more

memoir + mystery
mystery + politics
memoir + crime
biography + mystery
graphic novel + classics
graphic novel + animals
graphic novel + mystery
science fiction + mystery
science fiction + crime
fantasy + crime
crime + politics
historical fiction + memoir
historical fiction + humor
historical fiction + biography
fantasy + picture book
picture book + classics
classics + politics
picture book + biography
historical fiction + mystery
humor + picture book
young adult + animals
fantasy + animals
family + politics
humor + animals
classics + animals
children + humor
children + young adult

more ← shared users → fewer

Take Aways from LibraryThing

- Genres differ by their surprisal, reviewer homogeneity, topics, and book and user overlap with other genres

- Free-form tagging gives individuals **creative license** to diverge from traditional catalogs

- Goodreads and LibraryThing help shape literary reception—and **reviewers' tags are directly shaping your bookstores and libraries**

Can we use online reading communities to study a specific reading community in the past?

Shakespeare and Co. as a reading community

The growth of social reading platforms such as Goodreads and LibraryThing enables us to analyze reading activity at very large scale and in remarkable detail.

But twenty-first century systems give us a perspective only on contemporary readers.

Meanwhile, the digitization of the lending library records of Shakespeare and Company (S&C) provides a window into the reading activity of an earlier, smaller community in inter-war Paris

What can Goodreads teach us about S&C?

We explore the extent to which we can make comparisons between the S&C and Goodreads communities.

By quantifying similarities and differences, we are able to identify patterns in how works have risen or fallen in popularity across these datasets.

We can also measure differences in how works are received by measuring similarities and differences in co-reading patterns.
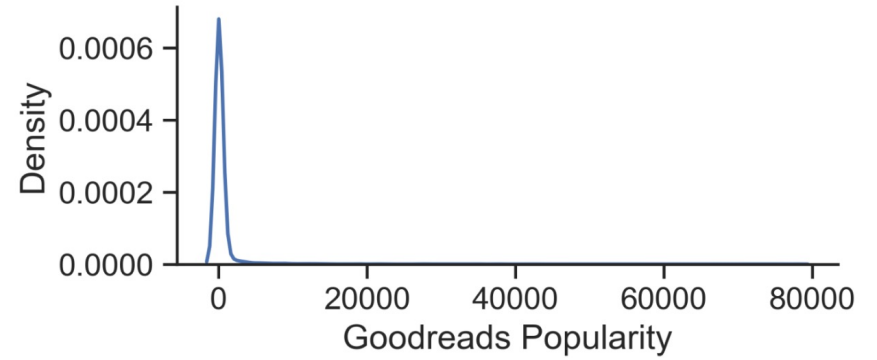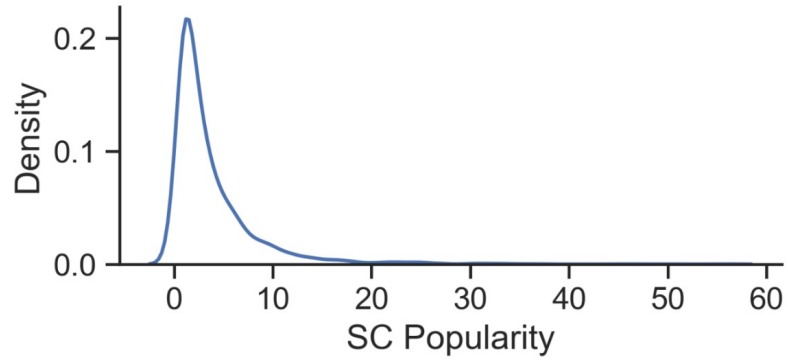
Figure 1. Kernel density estimate (KDE) plots of the popularity distributions for SC and Goodreads.

Top **SC** Authors	Total Borrows (Across Titles)	Top **Goodreads** Authors	Total Text Reviews (Across Titles)
D. H. Lawrence	300	Jane Austen	168543
Virginia Woolf	249	Agatha Christie	125986
Aldous Huxley	235	F. Scott Fitzgerald	84789
Dorothy M. Richardson	198	Charles Dickens	69609
W. Somerset Maugham	187	John Steinbeck	60344
James Joyce	182	William Shakespeare	59935
Ernest Hemingway	182	Oscar Wilde	53992
John Galsworthy	180	Charlotte Brontë	53796
Henry James	169	Fyodor Dostoyevsky	49215
William Faulkner	163	Emily Brontë	42503
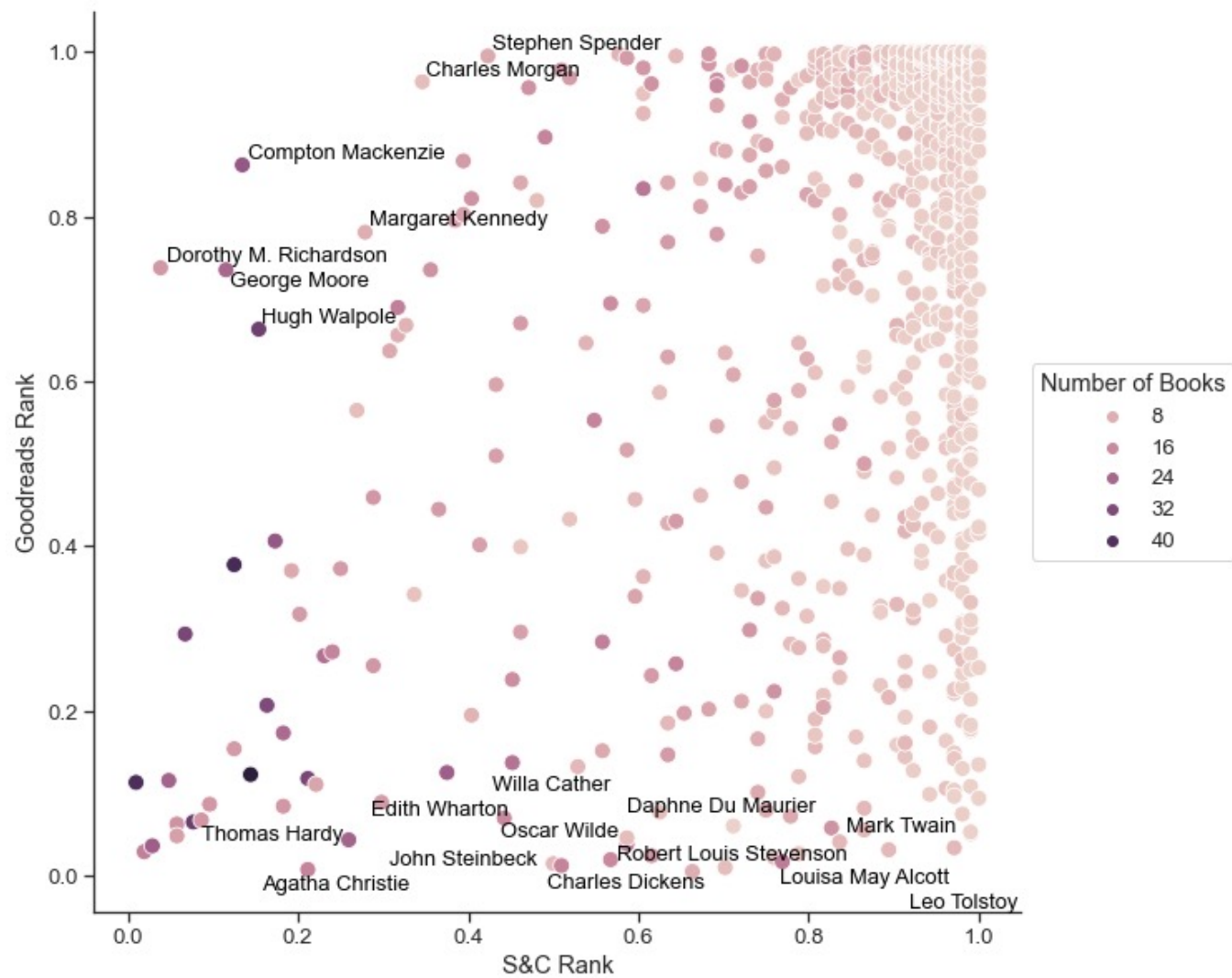
Change in Rank	Title	Author
+0.96	*Little Women*	Louisa May Alcott
+0.96	*Dracula*	Bram Stoker
+0.96	*The Wonderful Wizard of Oz*	L. Frank Baum
+0.95	*Anna Karenina*	Leo Tolstoy
+0.92	*Macbeth*	William Shakespeare
+0.92	*The Trial*	Franz Kafka
+0.92	*Madame Bovary*	Gustave Flaubert
+0.91	*All Quiet on the Western Front*	Erich Maria Remarque
+0.91	*Uncle Tom's Cabin*	Harriet Beecher Stowe
+0.91	*Mansfield Park*	Jane Austen

Change in Rank	Title	Author
-0.59	*Bliss & Other Stories*	Katherine Mansfield
-0.60	*The Tunnel: Pilgrimage, Volume 4*	Dorothy M. Richardson
-0.63	*Pointed Roofs, Backwater, Honeycomb*	Dorothy M. Richardson
-0.63	*Pilgrimage: Backwater*	Dorothy M. Richardson
-0.63	*The Fountain*	Charles Morgan
-0.63	*Experiment in Autobiography: Discoveries & Conclusions of a Very Ordinary Brain (Since 1866)*	H. G. Wells
-0.64	*Studies in the Psychology of Sex*	Havelock Ellis
-0.70	*South Wind*	Norman Douglas
-0.74	*Sparkenbroke*	Charles Morgan
-0.85	*Pointed Roofs*	Dorothy M. Richardson

List Name	Number of Books on List
Best Books Ever	465
Books That Everyone Should Read At Least Once	312
100 Books to Read in a Lifetime: Readers' Picks	239
Best Books of the 20th Century	217
1001 Books You Must Read Before You Die	212
Must Read Classics	188
The Great Classics You Have Not Read Yet	170
The Guardian's "1000 Novels Everyone Must Read"	168
Best Books of the 19th Century	164
Books that Blew Me Away and that I Still Think About (of all types)	162

Change in Rank	Lists That **Rose** Most in Rank	Change in Rank	Lists That **Fell** Most in Rank
+0.84	100 Must Read Books	-0.05	Interwar British Vogue Recommends...
+0.84	Clean	-0.05	Best of Sinclair Lewis
+0.83	Books that reached 1000 editions (or more)	-0.05	James Joyce Reading List
+0.83	Half a million ratings to a million ratings	-0.06	REALLY Seriously Underrated Books (100 to 500 Ratings)
+0.82	Amazing books that won't make you blush, squirm, get sick or have nightmares!	-0.07	Best of George Bernard Shaw
+0.81	Proliferation of Classics	-0.07	Modernism - An Alternate Canon
+0.81	Books Every Child Should Read	-0.08	Books banned in Ireland 1928-1929
+0.81	ONE DAY Best Summer Reads	-0.08	REALLY Underrated Books (Fewer than 1,000 Ratings)
+0.80	Best Free eBooks	-0.08	Best of D.H. Lawrence
+0.80	My Favorite Childhood books	-0.12	Underrated Bestsellers, Fewer Than 100 Ratings

Change in Rank	Shelves That **Rose** Most in Rank	Change in Rank	Shelves That **Fell** Most in Rank (or Rose Least)
+0.75	read-in-school	+0.06	to-read
+0.73	school-reading	+0.04	bloomsbury
+0.72	william-shakespeare	+0.03	stream-of-consciousness
+0.71	thriller-mystery	+0.01	virago-modern-classics
+0.71	chick-lit	-0.03	lit-crit
+0.70	classics-read	-0.03	literary-criticism
+0.69	the-classics	-0.03	virago
+0.69	realistic-fiction	-0.05	d-h-lawrence
+0.69	childrens-lit	-0.05	criticism
+0.68	great-american-read	-0.08	joyce

What historical eras do readers imagine when they think about different genre categories?

What do readers mean by "science fiction"?

- Ursula K. Le Guin's novel *The Left Hand of Darkness* from 1969?

- Neal Stephenson's novel *Snow Crash* from 1992?

- Hugh Howey's series *Silo* from 2011?

- C.S. Lewis's novel *Perelandra* from 1943?
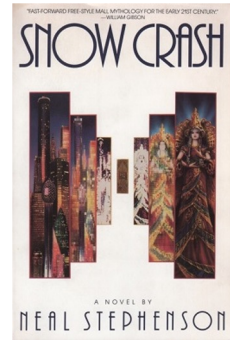
Comparing median publication dates

- We examine the distribution of publication years for the tags

- Reminder: the free-text tags are applied by users

- **Which tags have higher or lower median publication dates?**
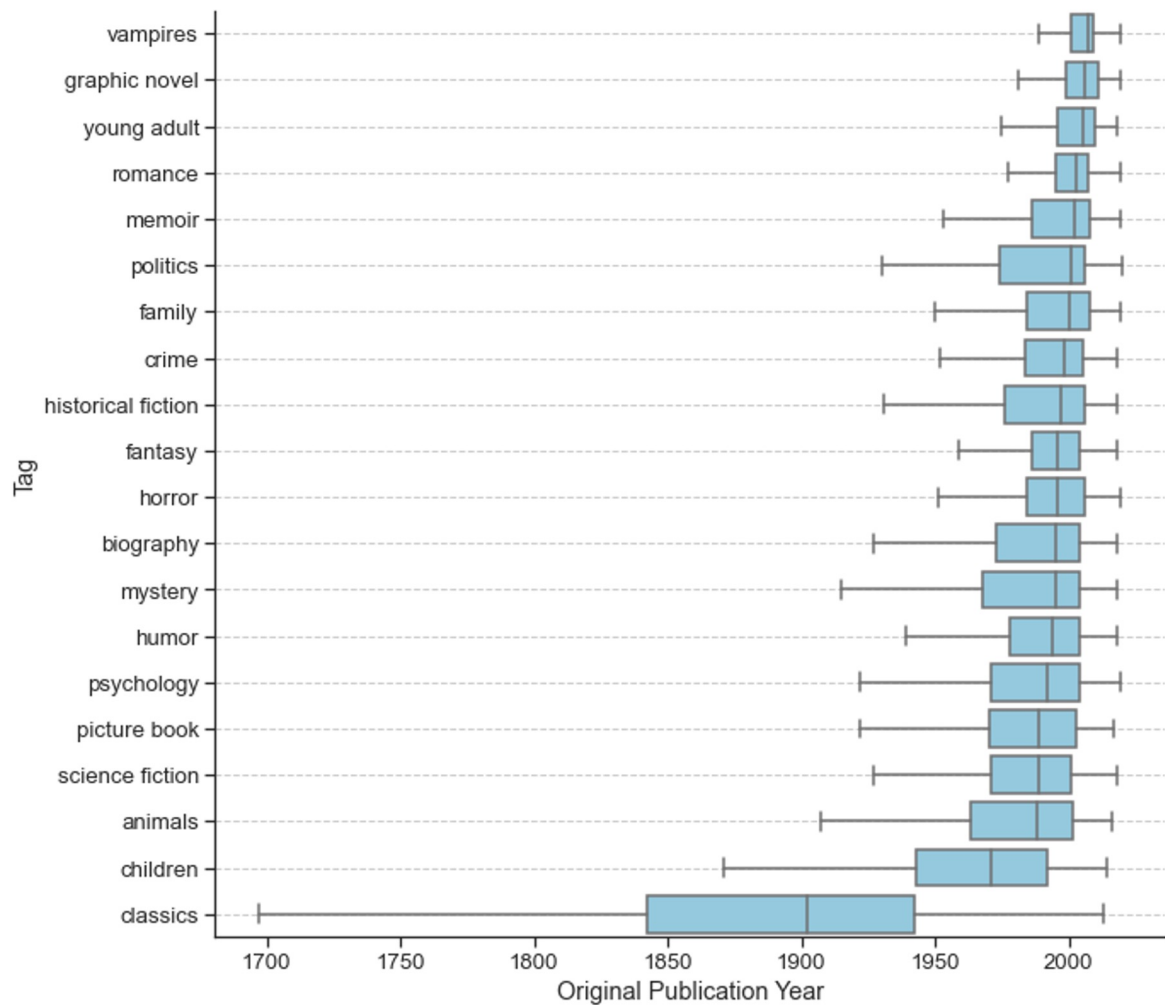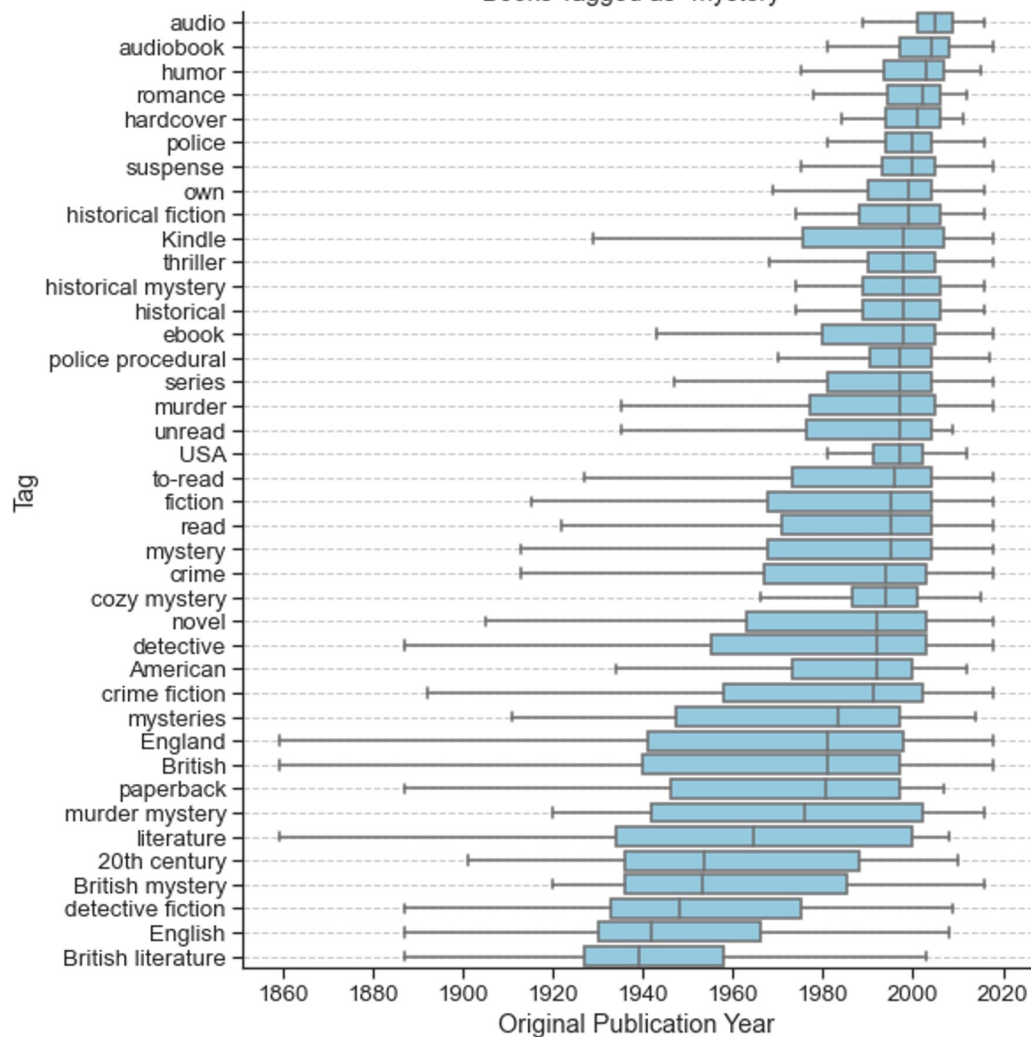
Co-occurring tags

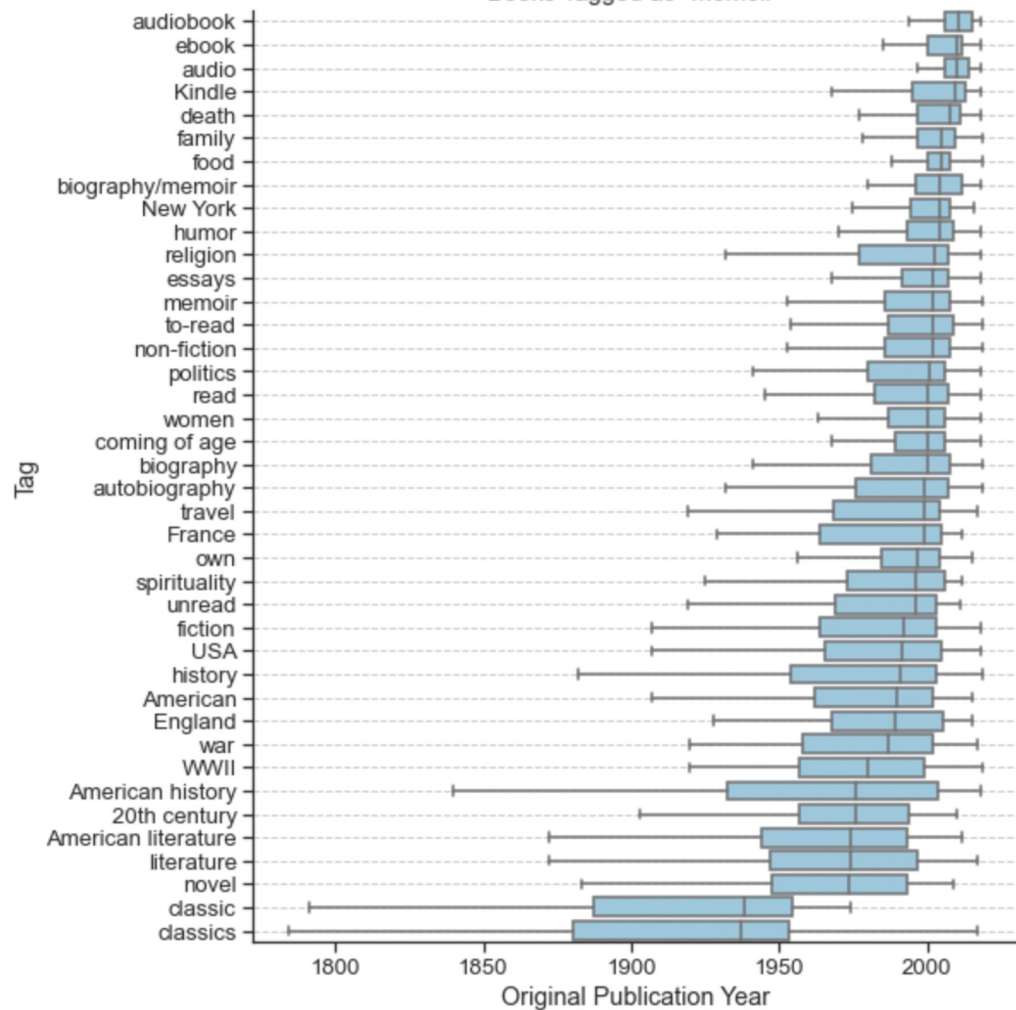We consider our 20 target tags in turn

For each tag, we examine that tag's 40 most commonly co-occurring tags and their publication date distributions

Which aspects of a tag might contribute to its perceived relationship with different historical eras?

Books Tagged as "mystery"

Books Tagged as "memoir"

Change in median publication year
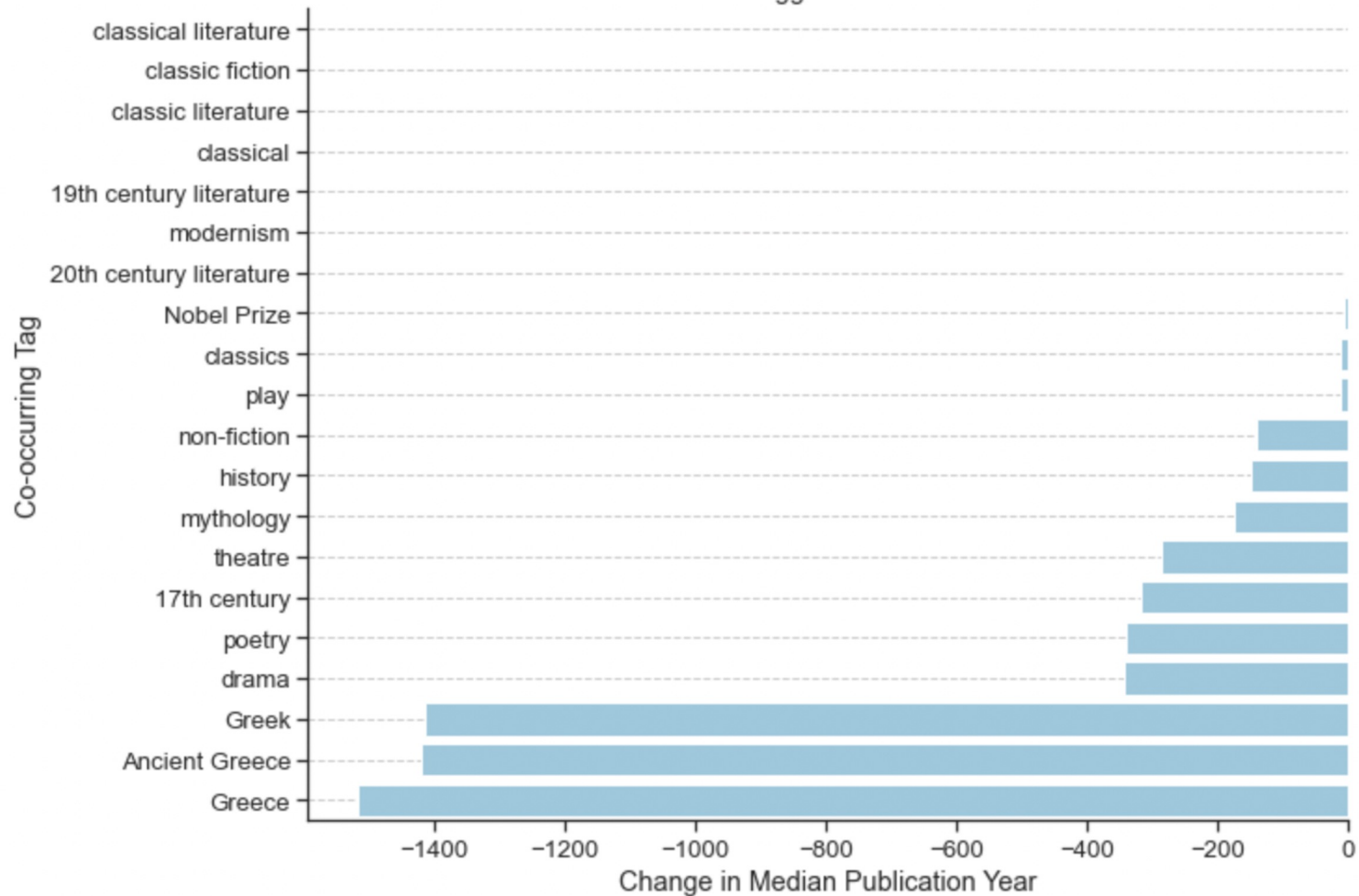
n = median publication year **for Tag A**

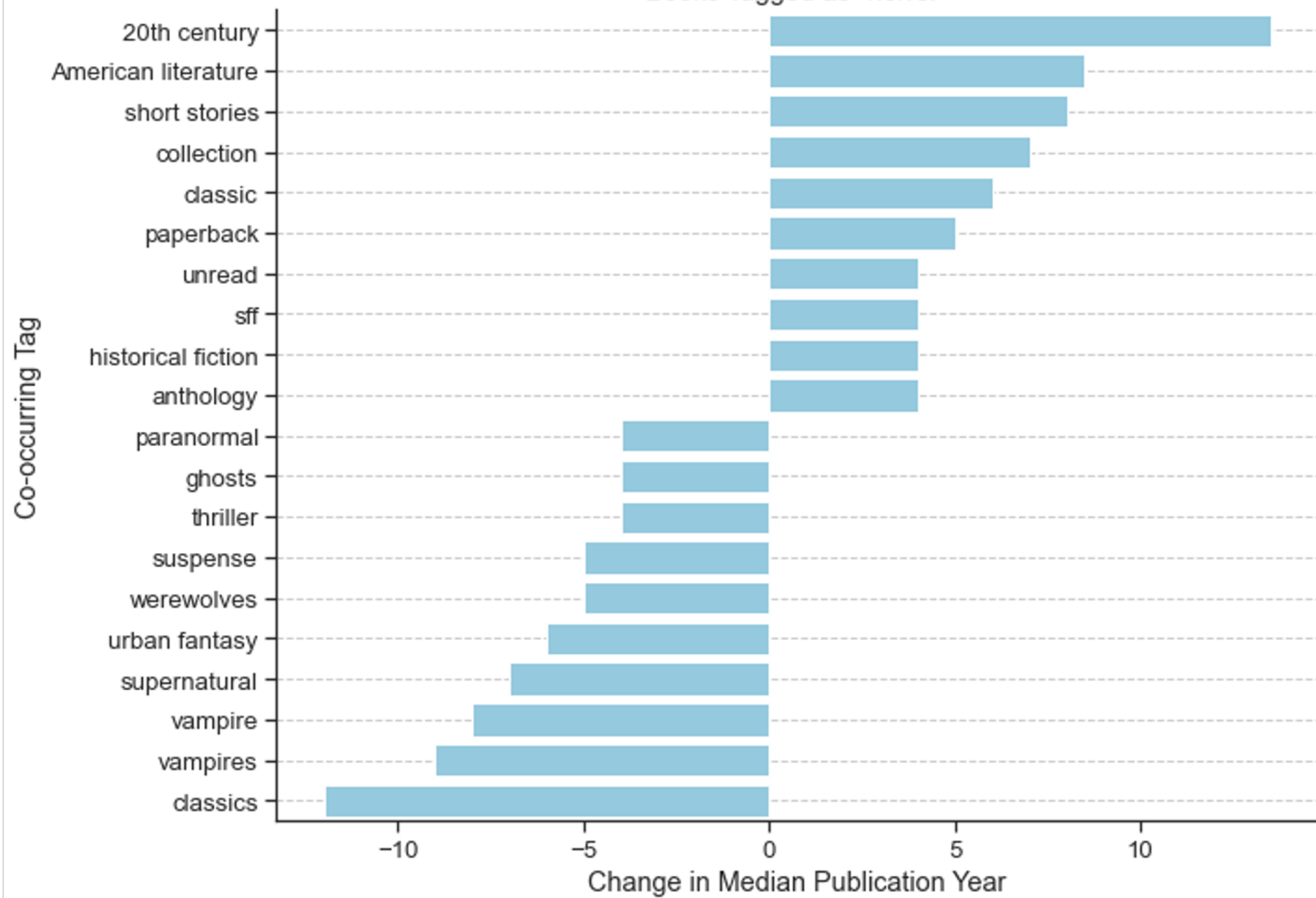m = the median publication year **for Tag A when it co-occurs with Tag B**

z = m − n

z should show us the **relationship** between a co-occurring tag, a target tag, and the median publication date

When the co-occurring tag occurs with the target tag, is the median date for that co-occurring tag **higher** or **lower** than usual?

Books Tagged as "classics"

Books Tagged as "horror"

What do reviewers value?

"What Do Readers Value? Manually Tagging and Quantitatively Measuring 'Aspects' in Goodreads Reviews"
Maria Antoniak, Yujia Gao, Melanie Walsh, David Mimno
work in progress

From star ratings and sentiment scores to values

While online book reviews have received increasing attention from scholars, these reviews are often reduced to star ratings and binarized sentiment analysis scores.

But the text is so much richer and deserves more focus!

Identifying **fine-grained values** in book reviews can help us move beyond overall star ratings and find out what readers value about books with more granularity—teaching us about how readers approach different genres.

Dataset: Mixed-methods for sparse labels

We sample sentences from Goodreads reviews, balancing our dataset by genre, star rating polarity, and book.

Our final dataset includes 20 genres and 500 sentences per genre.

Reviews are drawn from the UCSD Book Graph (Wan & McAuley, 2018; Wan et a., 2019).

Codebook: What do reviewers value?

We create a list of 36 fine-grained values (e.g., characters, writing style, relatability), using topic modeling and collaborative open coding and discussions (Charmaz, 2014).

Our final codebook includes detailed definitions and examples, contributing to a better understanding of online literary reception.

While iterating on the codebook, we annotate a set of 400 sentences.

Category	Values	Example Value Definition
book content	style, pace, characters, romance, plot, setting, believability, complexity, coherence, genre, ethical lessons, thought-provoking themes, fear & violence, creativity, informativeness	**Style:** Writing style, including: repetitiveness, descriptiveness, word choice, tone, clarity, readability. Not discussions of character point of view or narration perspective.
material artifact	illustration, translation, audiobook narration	**Audiobook Narration:** Audiobook narration quality, style, etc.; features and background of the narrator.
formal attributes of book	structure, point-of-view	**Structure:** Organization within the book; order of stories or chapters; alternating themes or other structural patterns.
context	author, book background, recommendations, adaptation, reception, comparisons	**Author:** Any mention of the author of the current book, including: biography and background of the author; statements and judgments specifically about the author; author's writing and thought process.
reviewer experience	suspense, humor, verdict, reviewer identity, journaling, moral taste, relatability, engagement, expectations, surprisal	**Moral Taste:** Expressions of the reviewer's personal moral stance; religious and/or political and/or moral response to the book; e.g., judging author's morals, actions of characters.

Dataset: Mixed-methods for sparse labels

Many of the values we included in our codebook are sparsely distributed in the book review texts.

We use GPT-4 for few-shot generation of an additional 500 positive instances for each value and hand-check these instances for quality.

# Dataset: Mixed-methods for sparse labels

We use these positive instances, balanced with a random sample of instances generated for other values, to fine-tune a RoBERTa-based classifier for each value.

F1, precision, and recall for positive instances are all above 0.9, but this task is easier than a traditional annotation+prediction task.

Our generated sentences have high precision, but can we generate sentences with more linguistic and topical diversity? What is missing from our generated data?

topic modeling + open coding
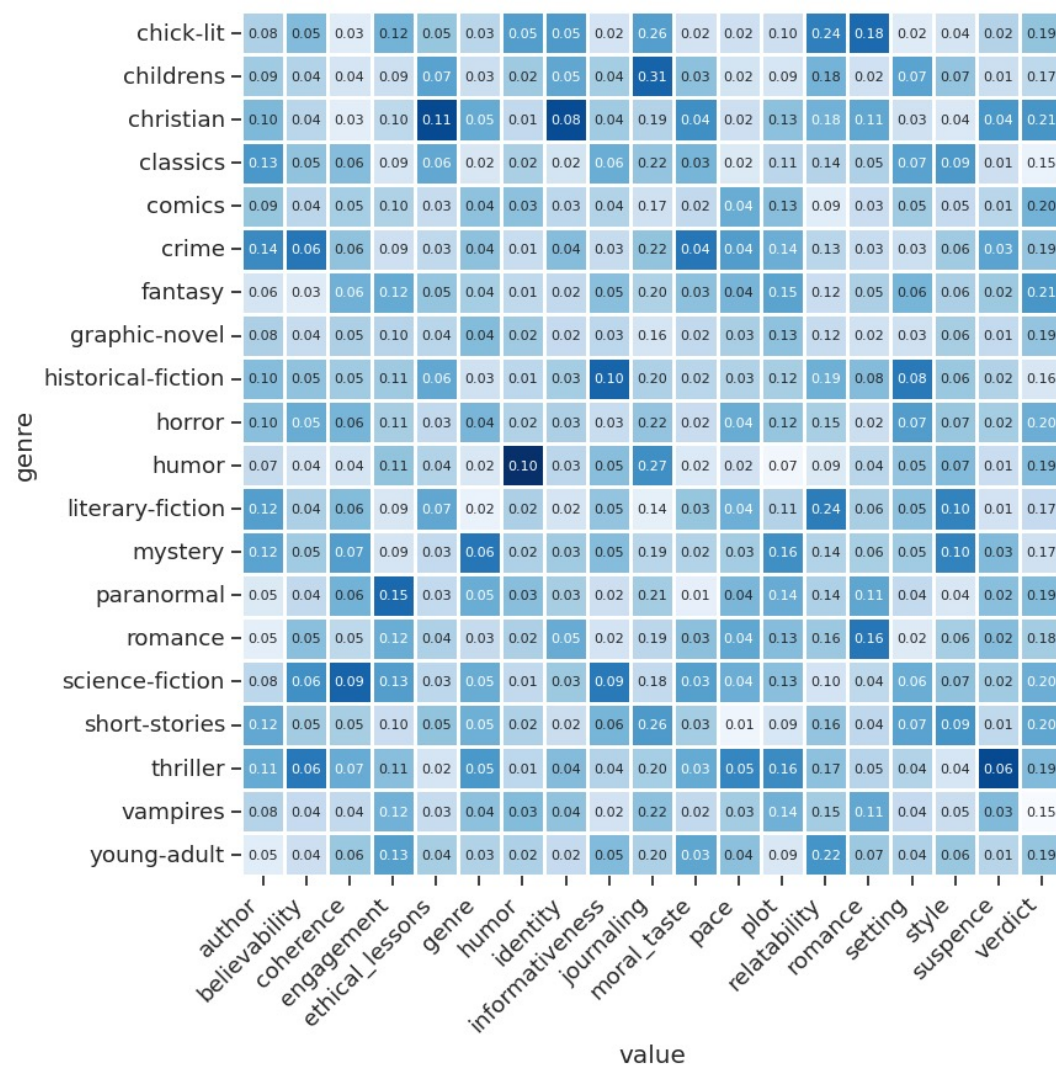to reveal themes

few-shot generation to
expand sparse labels
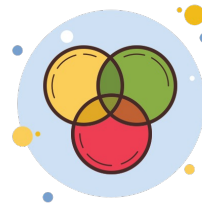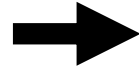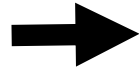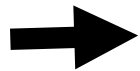
reviewers read books
and write reviews

codebook creation + hand
annotation of small set

fine-tuned prediction to
discover genre-based insights

We find that each genre has a unique value signature, and that value expressions differ across reviews with positive and negative ratings.

genre	author	believability	coherence	engagement	ethical_lessons	genre	humor	identity	informativeness	journaling	moral_taste	pace	plot	relatability	romance	setting	style	suspense	verdict
chick-lit	0.08	0.05	0.03	0.12	0.05	0.03	0.05	0.05	0.02	0.26	0.02	0.02	0.10	0.24	0.18	0.02	0.04	0.02	0.19
childrens	0.09	0.04	0.04	0.09	0.07	0.03	0.02	0.05	0.04	0.31	0.03	0.02	0.09	0.18	0.02	0.07	0.07	0.01	0.17
christian	0.10	0.04	0.03	0.10	0.11	0.05	0.01	0.08	0.04	0.19	0.04	0.02	0.13	0.18	0.11	0.03	0.04	0.04	0.21
classics	0.13	0.05	0.06	0.09	0.06	0.02	0.02	0.02	0.06	0.22	0.03	0.02	0.11	0.14	0.05	0.07	0.09	0.01	0.15
comics	0.09	0.04	0.05	0.10	0.03	0.04	0.03	0.03	0.04	0.17	0.02	0.04	0.13	0.09	0.03	0.05	0.05	0.01	0.20
crime	0.14	0.06	0.06	0.09	0.03	0.04	0.01	0.04	0.03	0.22	0.04	0.04	0.14	0.13	0.03	0.03	0.06	0.03	0.19
fantasy	0.06	0.03	0.06	0.12	0.05	0.04	0.01	0.02	0.05	0.20	0.03	0.04	0.15	0.12	0.05	0.06	0.06	0.02	0.21
graphic-novel	0.08	0.04	0.05	0.10	0.04	0.04	0.02	0.02	0.03	0.16	0.02	0.03	0.13	0.12	0.02	0.03	0.06	0.01	0.19
historical-fiction	0.10	0.05	0.05	0.11	0.06	0.03	0.01	0.03	0.10	0.20	0.02	0.03	0.12	0.19	0.08	0.08	0.06	0.02	0.16
horror	0.10	0.05	0.06	0.11	0.03	0.04	0.02	0.03	0.03	0.22	0.02	0.04	0.12	0.15	0.02	0.07	0.07	0.02	0.20
humor	0.07	0.04	0.04	0.11	0.04	0.02	0.10	0.03	0.05	0.27	0.02	0.02	0.07	0.09	0.04	0.05	0.07	0.01	0.19
literary-fiction	0.12	0.04	0.06	0.09	0.07	0.02	0.02	0.02	0.05	0.14	0.02	0.04	0.11	0.24	0.06	0.05	0.10	0.01	0.17
mystery	0.12	0.05	0.07	0.09	0.03	0.06	0.02	0.03	0.05	0.19	0.02	0.03	0.16	0.14	0.06	0.05	0.10	0.03	0.17
paranormal	0.05	0.04	0.06	0.15	0.03	0.05	0.03	0.03	0.02	0.21	0.01	0.04	0.14	0.14	0.11	0.04	0.04	0.02	0.19
romance	0.05	0.05	0.05	0.12	0.04	0.03	0.02	0.05	0.02	0.19	0.03	0.04	0.13	0.16	0.16	0.02	0.06	0.02	0.18
science-fiction	0.08	0.06	0.09	0.13	0.03	0.05	0.01	0.02	0.09	0.18	0.03	0.04	0.13	0.10	0.04	0.06	0.07	0.01	0.20
short-stories	0.12	0.05	0.05	0.10	0.05	0.05	0.02	0.02	0.06	0.26	0.03	0.01	0.09	0.16	0.04	0.07	0.09	0.01	0.20
thriller	0.11	0.06	0.07	0.11	0.02	0.05	0.01	0.04	0.04	0.20	0.03	0.05	0.16	0.17	0.05	0.04	0.04	0.06	0.19
vampires	0.08	0.04	0.04	0.12	0.03	0.04	0.03	0.04	0.02	0.22	0.02	0.03	0.14	0.15	0.11	0.04	0.05	0.03	0.15
young-adult	0.05	0.04	0.06	0.13	0.04	0.03	0.02	0.02	0.05	0.20	0.03	0.04	0.09	0.22	0.07	0.04	0.06	0.01	0.19

value

Within review texts, we find that certain values tend to co-occur, and value expressions are likely to occur at different parts of the review.

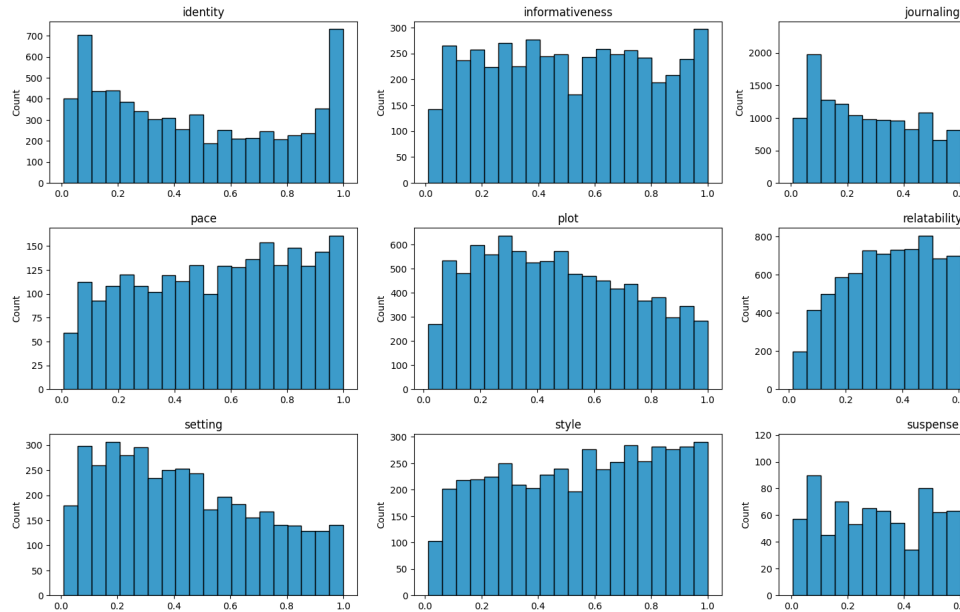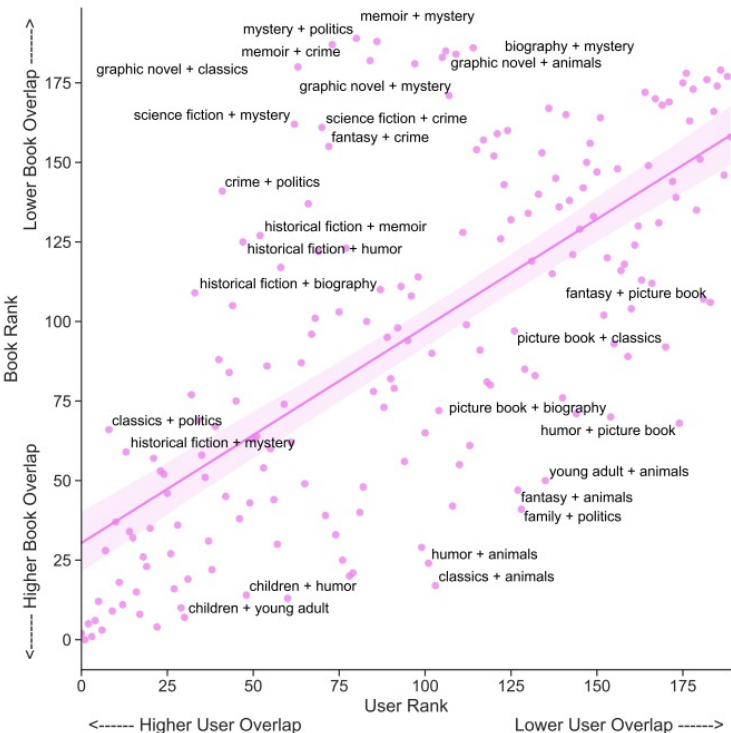Distribution of the relative location of the review aspects

Conclusion

- Tags and book publication dates can be combined to give us **multidimensional views** of how readers use tags in online reading communities

- There are many factors (economic, sociological) that we do not address here (see, e.g., McGrath, 2020)

- Free-form tagging gives individuals creative license to diverge from traditional catalogs

- Goodreads and LibraryThing help shape literary reception—and **reviewers' tags are directly shaping your bookstores and libraries**

Opportunities from Information Science

There is a lot of useful work in Info Sci that DH could benefit from, and that we have relied on in our research.

- ethical approaches to data use

- gathering and handling of internet data

- theories of work, repair, community, design

- online communities

- strong ties to the social sciences

Thank you! Questions?