“Everyone is Gay and Nothing Hurts”: The Presentation of Queer Relationships in Fanfiction

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NLP and LGBTQ Issues

- Existing focus is on identifying and quarantining hate speech in “mainstream” corpora (Dinakar et al. 2012, Djuric et al. 2015, Waseem 2016)
- Less effort into studying queer language within queer-friendly spaces.
A Different Corpus: Archive Of Our Own

Archive Of Our Own (AO3) is a noncommercial database for fanfiction and transformative works, gaining popularity as a source of data in the digital humanities (Milli and Bamman 2016)

- Large--almost 5 million works, more each day
- “Average” writers, contemporary
- Metadata: author annotation in form of authors’ notes and “tags” describing the work in great detail
AO3: A Queer Space

Fanfiction writers are often queer and write queer stories to fix a lack of queer content in traditional media (Lothian et al. 2007).

Community mores are very pro-queer (cishet stories often framed as objectionable), with few open queerphobes.
The Question

Queerness is present in AO3, but there’s still debate over whether this is “good” representation of queer issues.

• Ex. little representation for queer women, fetishization, queer relationships without using explicit queer labels

The problem: AO3 is a context-rich corpus, and traditional NLP techniques are designed to work in a lack of context. Traditional NLP techniques lead to naive conclusions.
Methods: Projecting words onto “semantic axes”

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<table>
<thead>
<tr>
<th>Word</th>
<th>Vector</th>
</tr>
</thead>
<tbody>
<tr>
<td>cat</td>
<td>[0.31, 0.24, 0.07, 0.65 ... ]</td>
</tr>
<tr>
<td>dog</td>
<td>[0.37, 0.29, 0.06, 0.63 ... ]</td>
</tr>
<tr>
<td>presentation</td>
<td>[0.65, 0.93, 0.16, 0.78 ... ]</td>
</tr>
<tr>
<td>poster</td>
<td>[0.57, 0.82, 0.21, 0.73 ... ]</td>
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</table>
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● Goal: measure and inspect how LGBTQ characters and concepts are presented differently across corpora

● Semantic word vectors (Mikolov et al. 2013, Bojanowski et al. 2016)
  ○ Words that occur in similar contexts have similar vectors

![Diagram of semantic axes with words like dog, cat, presentation, and poster]
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- Project word vectors adapted to different corpora on semantic “axes” of interest (An et al. 2018)
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  - Recognition vs illegitimation (*good/bad*)
  - Sameness vs difference (*same/different*)
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Fanfiction data

- 7 most popular fandoms on Archive Of Our Own
  - Marvel
  - Supernatural
  - DC
  - Sherlock Holmes
  - Teen Wolf
  - Star Wars
- 21,000 stories
- 150 million words
Mainstream fiction data

- Corpus of Contemporary American English (COCA)
  - 1990-2017
- Fiction section includes
  - short stories and plays from literary magazines
  - children’s magazines
  - popular magazines
  - first chapters of first edition books
  - movie scripts
- 128 million words
Results
Results

- Sometimes expected: ‘queer’ more toward *good* in fanfiction
Results

- Sometimes expected: ‘queer’ more toward *good* in fanfiction
- Otherwise not: ‘gay’ much more toward *good* in mainstream fiction
The Paradigm Shift

Using only direct linguistic observation ignores social motivation of fanfiction.

- Writing on AO3 skews towards negative subjects overall ("angst")

As a next step, we utilize a social examination of the AO3 author group and the significant advantage of AO3--its user-annotated metadata--to create a new paradigm for studying this space.
Social Analysis

Authors have specific, varied motivations for writing fanfic.

The “vent fic”: stories by queer authors about discrimination, written for emotional catharsis.

“Aspirational” fics: stories by queer authors fantasizing about worlds without discrimination.

(Mostly) identifiable by metadata tags.
Methodology: Sub-Corpora

We isolate two sub-corpora from AO3 based on user-generated metadata tags, “challenges” versus “aspirations”.

Idea: use these sub-corpora as more nuanced baselines.
Methodology: Corpora Selection

“Challenge fic” (6k total):
- “Homophobia”
- “Transphobia”
- “Biphobia”
- “Closeted Character”/“Outing”
- “Slurs”/”Hate Crimes”
- “Internalized Homophobia”
- “Outing”

“Aspiration fic” (7k total):
- “LGBTQ Themes”
- “Coming Out”
- “Gay Character”
- “Lesbian Character”
- “Bi Character”
- “Trans Character”
Results
Results

- General trend that aspirational fics have queer terms closest to *good* overall, fits intuition
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- General trend that aspirational fics have queer terms closest to *good* overall, fits intuition
- “Normative” terms closer to *bad* in aspirational fics than random selection of fanfic, even closer in challenge fics
Results

- Results less clear for this axis
Results

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- In general, terms in challenges closer to *same* than aspirational
Results

- Terms in challenges closer to *same* than aspirational:
Results

- Terms in challenges closer to same than aspirational:
  - “I’m not a queer.”
Results

- Terms in challenges closer to same than aspirational:
  - “I’m not a queer.”
  - ‘I’ close to same in challenge fics
Results

- Terms in challenges closer to *same* than aspirational:
  - “I’m not a queer.”
  - ‘I’ close to *same* in challenge fics.
  - Challenge fics often come from personal experience, “same” as author.
Conclusion

- Language lets us indirectly measure treatment and acceptance of marginalized groups
- Word vectors alone ignore social context unique to marginalized groups
- Metadata allows us to shape input in a way that captures nuance missing from straightforward NLP
Future work

- Manually locate better corpus splits for other semantic axes
- Automatically identify meaningful corpus splits based on word vector variation
- Indirect associations with gender and sexuality made where stories contain queer relationships, but do not mention queer identity labels
Thank you!

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Results

● ‘Queer’, ‘lesbian’, ‘gay’ in general fanfic toward different
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● ‘Queer’, ‘lesbian’, ‘gay’ in general fanfic toward different
  ○ Identity labels often in sharper, negative contexts: “Was it so awful to have a lesbian for a daughter?”
Results

- 'Transgender' unexpected aspirational closer to fake than challenges corpus
- Could expect terms to be more "real" in challenges since occur in more serious contexts, or could expect negative attitudes around them which might tend things toward fake
  - Challenges corpus more real than aspirational for 'transgender', 'queer', 'gay'
  - Challenges corpus more fake than aspirational for 'trans', 'lesbian', 'homosexual'
- Hegemonic terms more toward fake than non-hegemonic terms are (not sure)