



# **Beyond Style: Rethinking Computational Fanfiction Research**

Mia Jacobsen<sup>1\*</sup>, Ross Deans Kristensen-McLachlan<sup>1,2,3</sup>

1 Center for Humanities Computing, Aarhus University, Denmark

2 Department of Linguistics, Cognitive Science and Semiotics, Aarhus University, Denmark

3 TEXT – Center for Contemporary Cultures of Text, Aarhus University, Denmark

\*Corresponding author: Mia Jacobsen mia@cas.au.dk

#### **Abstract**

Computational studies of fanfiction have gained traction in recent years, due to both the abundance of data and the development of contemporary NLP methods and tools. In this position paper, we outline the predominant themes and findings of previous studies of fanfiction and propose fruitful suggestions for future research. Specifically, we identify two primary ways that fanfiction has been approached from a computational perspective: one concerning the style of successful or popular fanfiction; the other concerning gender and power dynamics in fanfiction texts. This existing research, however, has only begun to grapple with the complexities and challenges of working with fan-produced content. We argue that online fanfiction is a complex and, in many ways, unique cultural phenomenon which requires new ways of thinking about the motivations and purposes of textual production. Fanfiction is a dynamic, community-produced, transformative genre, and as long as research neglects this whole picture, studies will remain underdeveloped and insufficient to answer meaningful questions. Furthermore, these new ways of approaching fanfiction need to be based on ethical archiving and research practices that are rooted in the theory from qualitative research, and which show ethical care for the people who create and engage with fanfiction.

### keywords

fanfiction; natural language processing; computational humanities; data ethics; cultural dynamics

### INTRODUCTION

Contemporary research in Natural Language Processing (NLP) has long benefitted from the massive amounts of user-generated text available on micro-blogging sites such as Twitter, Reddit, and Facebook [Singh et al., 2021; Tadesse et al., 2019; Salloum et al., 2017]. However, a regularly overlooked source of online text is *fanfiction*. Fanfiction is a widespread cultural phenomenon, with over 15 million works on the platform Archive of Our Own<sup>1</sup> (AO3) alone, which is just one of several platforms for sharing fan-created content. Also known as *fanfic* or simply *fic*, fanfiction is often defined as fiction stories that center around characters or worlds from a pre-existing canon [Pugh, 2005; Thomas, 2011; Barnes, 2015]. It is written and published (usually online) for free, on platforms where other fans can read, like, and comment on the stories they enjoy.

Historically, fanfiction has been studied from a primarily qualitative perspective using either an ethnographic approach or a literary critical one [Barnes, 2015; Black, 2020; Busse and Hellekson, 2012]. Henry Jenkins' book *Textual Poachers* [1992] was especially influential on the questions and approaches adopted within the field. In his book, Jenkins examines the

<sup>1</sup> https://archiveofourown.org/

power dynamics between creators and fans and how that leads to fan-created pieces of media. He describes fans as active manipulators of meaning who, through engagement with the media and other fans, transform the narrative of their favorite media to serve their own interests, often in opposition to the established narrative of the canon [Jenkins, 1992]. More specifically, Jenkins sees fanfiction as a way for marginalized groups to "pry open space" [Jenkins, 1988, p. 87] for themselves in their favorite media, which is otherwise dominated by straight, white men [Jenkins, 1988]. More recent, qualitative studies similarly find that fanfiction writers incorporate and are in negotiation with both the source text, the conversations and concerns of the community, as well as their own identities, using fanfiction as a space for self-discovery, creative outlet, and community engagement [Bahoric & Swaggerty, 2015; Thomas, 2006; Black, 2006; Jamison, 2013].

Fanfiction is thus the medium through which fans co-create, establish, and distribute the norms, values, desires, and concerns of the community at large. In other words, fanfiction texts are not only fiction texts distributed online for free, but they are also cultural products that originate from a specific socio-cultural context, published on a specific platform with specific affordances, and lose their meaning if removed from this context [Busse, 2017; Tosenberger, 2014; Fathallah, 2020; Pugh, 2005; Black, 2020]. As such, this context is important to keep in mind when studying fanfiction at any scale. However, the reductive view of fanfiction texts as simply *texts* persists, with fanfics being divorced from the wider ecosystem in which they are produced, shared, and read. We wish to argue that quantitative and computational studies of fanfiction risk becoming meaningless if they do not engage with the specific origins of the texts they study.

Moreover, fanfiction is currently undergoing a potentially transformative period with the advent of generative AI. Already, some fanfiction authors are tagging their stories on AO3 with "AI-generated text" and "Co-written with AI". Simultaneously, multiple posts are made that take explicit positions against the use of AI in fanfiction writing, such as *fuck generative ai* by user GreyEnnui. The use of LLMs and generative AI to produce fan content is further problematized when considering the dubious legality with regards to copyright and fanfiction, as well as the often explicit content of the texts [Jacobsen & Kristensen-McLachlan, 2025; Kustritz, 2024; Ashman, 2018]. The question remains whether generative AI tools can produce convincing, unassisted fanfiction, and how much and in what ways the use of AI and LLMs will change the text culture of fandoms. However, to understand this we first need to understand fanfiction as a medium and the dynamics that create it.

In what follows, we provide an overview of the current themes and findings within quantitative fanfiction research, as well as a critical view of the problems and prospects of the field. Specifically, we identify two main themes within quantitative fanfiction research. The first branch of research focuses on fanfiction as literary artifacts, considering the stylistic properties of "successful" fanfiction and notions of quality. This is the dominant approach to fanfiction from a quantitative text analysis perspective but, as we shall see, it is also based on some potentially flawed premises. Alongside this are studies interested in how gender and power are explored in the texts, as well as interactions with cultural differences across fandoms. This perspective aligns most closely with the traditions of qualitative fanfiction research but remains understudied from the perspective of quantitative and computational humanities. We end with an examination of an emergent theme, which concerns the ethical and archival considerations when working with large-scale corpora of fan-generated content.

-

<sup>&</sup>lt;sup>2</sup> Such as *The Ultimate Wand* by user koozakoo, *The Depths of Exile : A Siren's Tale* by user Syiahhhhmacki, and *Obsessed with you (please don't fight me)* by user MeMeAgainAndAI

### I THE WRITING STYLE OF "SUCCESSFUL" FANFICTION

The study of what defines literary quality has a long history across literary theory, linguistics, and philosophy. One of the earliest systematic attempts to define *literariness* comes from the Russian Formalists in the form of *defamiliarization* [Shklovsky 2006[1917]]. On this account literary language is marked by its ability to estrange the reader from habitual perception, making the familiar appear strange and thus newly perceptible. Literature is thus defined less by content and more by its function, the way in which it disrupts automaticity and foregrounds form. Indeed, this notion of *foregrounding* was further developed by the Prague School [Mukařovský 1964[1932]], who argued that literary texts systematically violate linguistic norms so as to draw attention to their own artificiality or "constructedness". The emphasis is hence on stylistic deviation and parallelism, which are taken as cues for readers to adopt a different, more reflective mode of reading.

The mid- to late-20th century saw a shift toward *reader-oriented* theories [Fish, 1980]. These approaches openly challenged the idea that literariness could be located solely in the text, arguing instead that literary quality emerges in the dynamic interaction between text and reader, shaped by context, expectation, and horizon of interpretation. This core emphasis on contextual interaction between reader and text also informs approaches to literariness from the perspective of *linguistic pragmatics* [Black, 2005]. For example, key aspects of relevance theory [Sperber & Wilson, 1986] have been adapted to account for poetic discourse [Pilkington 2006], with literary effects viewed as arising from general principles of communicative inference. Here again, literariness is not an inherent textual property but is instead characterized as the search for weak implicatures and non-propositional effects such as poetic texture, affect, and resonance.

A similar concern with such non-propositional interpretive effects is echoed in *cognitive* stylistics [Stockwell, 2009], particularly in frameworks like Text World Theory [Werth, 1999] and Schema Theory [Semino, 1997]. These approaches draw on insights from cognitive linguistics [Croft & Cruse, 2004; Langacker, 2008] to explain how readers mentally construct and navigate richly textured fictional worlds. From the perspective of cognitive literary theory, literary texts are distinctive not simply because of their formal and stylistic properties per se, but because of how they exploit and stretch the cognitive resources of a reader involved in conceptualization, perspective-taking, and mental simulation.

These definitions provide only a snapshot of some of the most important trends over the last one hundred years of discussions of literariness. The sheer variety and, in many cases, incompatibility of these different approaches suggests that defining literariness is likely an intractable problem. Nevertheless, despite their differences, these perspectives propose the existence of a central dichotomy, namely the opposition between *literary* and *non-literary*. This binary opposition assumes that literary texts are somehow *marked* or set apart from other uses of language, and that this markedness is an indicator of the *quality* of the text.

The dichotomy between literary and non-literary (or quality and not-quality) proposed in these approaches becomes problematic when one considers contemporary fanfiction. These texts inherently exist to be non-publishable [Tosenberger, 2014], but the same frame is carried over, since many computational studies of fanfiction are concerned with the stylistic properties of fan-produced texts and how this relates to the popularity or success of the stories. This research constellation tends to gravitate towards two related questions. Firstly,

how can we use applied NLP and statistics to model stylistic properties of fanfiction? Secondly, how can we use this information to learn about reader and community preferences?

In this section, we outline the traits of fanfiction that have been associated with more successful texts. However, as will become apparent, despite the prevalence of this approach, there is little to no consensus on how *successful* and *unsuccessful* should be understood and operationalized. More often than not, success is operationalized in a way that makes it a measure of popularity. We further argue that this approach fails to engage with fanfiction as cultural products, as the specific dynamics of fanfiction production are left out in favor of an easily appliable machine learning algorithm.

## 1.1 Success as binary

In a study of around 15,000 fanfics based on the fantasy novel series and movie franchise Harry Potter, [Mattei et al. 2020] find that successful texts are longer with shorter sentences, use less frequent words, have a simpler syntactic structure, and include more indicators of direct speech such as second person pronouns and quotation marks. This research assumes a binary view of success, where a text is successful if it has a greater number of reviews than the average for texts of the same length, while unsuccessful texts are fanfics without any reviews. [Leonardi et al. 2024] adopt a similar binary classification task to find the stylistic and lexical features of successful fanfiction. With Harry Potter fanfiction, they find that successful stories – texts with more than 6 reviews – are longer, use longer words, and have a more nominal style than unsuccessful stories – texts with less than 2 reviews. [Nguyen et al. 2024] also split a corpus of fanfiction based on the TV show Supernatural evenly into successful and unsuccessful by setting a success-threshold at 10 likes. They find that successful fanfics are longer with a wider vocabulary and more often have a romantic focus. Although they include different genres of fanfiction through the user-generated tags, they primarily use them as predictors of success which in all three of these cases is more akin to popularity.

There are several confounding factors which potentially impact the analytic value of these results. For example, little attention is paid to the specific effect of genre on the linguistic style or content which could otherwise lead to a broader understanding of the interaction between popularity and style. Additionally, none of the three studies using this binary approach to success acknowledge that older fanfics are more likely to have a greater number of reviews/likes merely because they have been around for longer [Pianzola et al., 2020]. It is unclear, therefore, whether these effects persist when studied over time. Moreover, across these three studies, three different success measures were used while texts from only two different fandoms were included. It is therefore not immediately apparent how dependent these results are on the specific corpus used and the way success is measured.

### 1.2 Success as a continuous measure

The studies above conceptualize success as a binary phenomenon: a fanfic is either successful, or it is not. However, an alternative approach is to consider popularity rather than success, i.e., a continuous measure rather than a discrete one. In a study of 545 fanfiction stories from 11 different fandoms ranging across books, anime, manga, TV series and games, [Girouard & Rubin 2013] investigate the stylistic features of popular fanfiction using the number of likes the fic receives from readers. They find that fanfics with more likes have greater lexical richness, but within the popular group there is less variance than for unpopular fanfics which have more outliers. Similarly, [Zadeh et al. 2022] correlate popularity, i.e., number of likes, with both stylistic features such as length, but also with the fanfics' similarity

to the canon with respect to the emotional arc and the character networks of the texts. Using a corpus of fanfiction from the five most popular fandoms based on books, they find that more popular fanfics are longer and have an emotional arc dissimilar from the canon. However, it depends on the fandom whether similar or dissimilar character networks are preferred.

Another approach to the study of successful fanfiction is combining engagement metrics from the platforms to create new measures for success. [Jacobsen & Kristensen-McLachlan, 2024] use the kudos/hits ratio (K/H-ratio) as a proxy for *reader appreciation*. The K/H-ratio takes the number of likes for a given fanfiction and divides it by the number of hits to get a crude measure of how many people who read a fanfic also liked it. Using this metric with a corpus of fanfiction based on fantasy novel series, they find that fans generally prefer stories with less narrative, less abstract information, and a more conversational style. However, fans also prefer the textual traits that set their fanfiction apart from other fandoms, as all three fandoms included in the study are found to have distinct textual styles that mimic the style of the original source text.

As with the different measures of success, there are several gaps in these studies which are worth addressing, most notably the influence of the community. Common to the studies of successful and popular fanfics is a focus on a singular fandom as a stand-in for all of fanfiction; likewise, groups of fandoms are regularly combined into a homogeneous whole with little analysis exploring how these findings might differ across groups. As with the lacking analysis of the influence of genre on the textual profile of fanfiction, it is worth asking to which degree and in which way the communities influence the writing style of fanfiction, and how that interacts with engagement metrics. This would create a more nuanced understanding of the specific dynamics that are integral to fanfiction. It is not written in a vacuum, rather it is a co-creative effort within and across communities.

### 1.3 Disentangling popularity and appreciation

Finally, some studies seek to disentangle the effect of how success is measured by combining both popularity metrics such as the raw numbers of hits and likes with balanced measures such as the K/H-ratio. In [Jacobsen et al. 2024], *quality* is split into two different proxies using reader reception metrics. The first is *spread* which is a measure of popularity using the number of hits, while the second is *appreciation* which is measured using the K/H-ratio. They find that fanfiction texts that are more readable, have a less nominal style, and a more predictable story arc also have a greater spread. However, fans show the complete opposite pattern when it comes to appreciation. Here, fanfiction stories that are harder to read, have a more nominal style, and a less predictable story arc are more appreciated. Similarly, [Jing et al. 2025] find that fanfiction success can be disentangled into two metrics: *attraction* and *enjoyment*. Using LDA topic modeling to investigate the effect of novelty and sameness on fanfiction success, they find that novelty is negatively correlated with raw engagement metrics, i.e., attraction. However, the fanfiction texts that are the most novel tend to be more appreciated, as measured by the K/H-ratio.

These engagement metrics, however, cannot be taken at face-value if one wishes to understand the textual traits of fanfiction. In a recent paper, [Jacobsen & Kristensen-McLachlan 2025] showed that not only do the textual traits of successful fanfiction stories depend on the chosen measure of success, but genre and community norms might have an even greater role to play than previously expected. In that study, fanfiction texts with different maturity ratings are found to differ with respect to both community engagement and writing style. This means that the linguistic style of fanfiction written to be *Explicit* is significantly

different from the style of fanfiction written for *General Audiences*, despite the texts originating from the same community. Additionally, due to the way the K/H-ratio is calculated, *Explicit* fanfiction is devalued compared to other maturity ratings, because users can only leave one kudos, but if they open a fanfic multiple times it receives multiple hits. In other words, because users engage differently with fanfiction texts depending on the maturity rating, it can create biases when using engagement metrics in studies like these. As such, not only do the norms and values across communities guide the writing style of fanfiction, but it also influences how fans interact with the texts. Moreover, these norms might be more determinant for which texts are successful than the response to any singular textual trait. This means that studies using raw engagement metrics likely misrepresent core features of fanfiction as a genre of writing by not considering other aspects of fanfiction culture that could influence the content and style of the texts.

It is worth mentioning that fanfiction is not a uniquely English-language phenomenon. Several studies have focused on specifically German-language fanfiction [Schmidt et al. 2024; Schmidt et al., 2021; Kleindienst & Schmidt, 2020; Brottrager et al., 2023] to contrast and compare how fan community dynamics differ when compared to research on English-language fanfiction. Their findings show that across fanfiction platforms, user bases, fandoms, and character relationships, fanfics differ with respect to popularity and prevalence of men and women – something explored more in-depth in the following section. Additionally, some researchers are looking towards Chinese web novels, as they constitute another popular but understudied body of online text data which allows for reader/writer interactions and transcultural storytelling in a similar way to fanfiction [Yu & Pianzola, 2024].

Consequently, there is a need to understand and disentangle both the influence of the different ways of understanding success within fanfiction communities as well as understanding how fanfiction texts look across communities, genres, and cultures. Engagement metrics are useful, but they cannot stand on their own. As such, engaging with fanfiction from the perspective of literariness necessitates that researchers engage with questions of robustness and nuance, such as:

- How do results depend on how "success" is conceptualized and measured?
- How dependent are the results on the specific fandoms studied? Are there popular features common to multiple fandoms across cultures?
- How are the different engagement metrics related?
- How dependent are these results on fanfiction genres? Are genres across fandoms more similar to each other than fanfics from their own fandom?
- Does writing within an established fanfiction genre make a text more likely to be popular?
- How dependent on time are these findings? Are early fanfics different from later fanfics? Is change over time steady or does it happen in phases?
- Can we identify "canonical" or "influential" fanfics?
- Is the concept of "canonical" even meaningful in this context?

Answering these questions requires not only a full understanding of the apparatus that surrounds fanfiction, but it also requires a change in perspective of fanfiction from simply texts to cultural products that are in negotiation with the communities that produce it. A promising endeavor is using the contents of the comments to gain deeper insight into what aspects of fanfiction fans' respond positively to, such as in [Neugarten et al. 2024]. It is also notable that this approach so far is in contrast to the predominant themes and questions of

gender and power from qualitative studies of fanfiction [Thomas, 2011; Jenkins, 1992; Barnes, 2015].

## II GENDER, POWER, AND CULTURAL DIFFERENCES

Gender representation in literature with regards to both authors and characters is a complex topic. There are inherent issues with stating biological or universal differences in men's and women's writing styles which might instead arise from unfair tools or historical and sociological factors [Lassen et al., 2024]. However, there is also value in assessing the potential effect of these historical and sociological factors as it pertains to gender stereotypes and equality, which can be estimated using empirical methods and computational tools. For example, [Underwood et al., 2018] find that throughout the 20<sup>th</sup> century, although the presentation of different genders in literature becomes more similar, the proportion of women authors and women characters drops. In the case of fanfiction, while it is often seen as a women-dominated space with the benefit of being published outside traditional market and editorial constraints, it also makes demographics such as gender and age difficult to collect. These demographics usually rely on authors self-reporting in community surveys or adding the information to their author bio – something which most fanfiction authors prefer not to do [Duggan, 2020].

As mentioned earlier, for Henry Jenkins, fanfiction exists as a space where fans with marginalized identities can make room for themselves in their favorite media [Jenkins, 1988, p. 87]. As these marginalized identities are historically left out of popular media, it makes sense that fans would focus on the ways in which their experiences are missing in the source texts. Aligning with this perspective, the second major theme within quantitative fanfiction research concerns the representation of gender in fanfiction texts, with some focus on cross-cultural differences. Specifically, these studies are interested in how much and in what ways character mentions and descriptions either align with or subvert gender expectations more broadly.

For the sake of clarity, it is also worth mentioning that we will be discussing findings primarily related to men and women<sup>3</sup> authors and characters. However, we recognize that gender does not exist as a simple binary. Indeed, we contend that this point is in fact crucial in the context of fanfiction, which regularly deals with groups and individuals more likely to fall outside this gender binary, necessitating the need for a more diverse approach to questions regarding gender.

## 2.1 Character mentions and gender

One of the first and arguably most seminal studies on quantitative text analysis of fanfiction is [Milli & Bamman, 2016]. In this paper, Milli & Bamman investigate whether there is a difference in which characters are mentioned and how often between fanfiction and source texts, and whether there is a difference in how gender is (re)presented. They find that secondary characters receive more attention in fanfiction than in source texts, but there is little to no change for main characters. Additionally, there is more attention allocated to women characters than men in fanfiction, supporting the argument that fanfiction is written by a community of women eager to subvert their favorite media.

This redistribution of attention between characters that Milli & Bamman finds, seems to be driven by co-occurrence patterns. [Brottrager et al., 2023] find that main characters from the

\_

<sup>&</sup>lt;sup>3</sup> Like [Lassen et al 2024], we use the terms "women and men" instead of "female and male" as we examine cultural gender and not biological sex.

Harry Potter books are less likely to co-occur with other main characters in German Harry Potter fanfiction. Instead, minor characters are brought forward through co-occurrence with the main characters. In other words, minor characters are brought forward not necessarily in their own right, but in their potential relationships (platonic or otherwise) with the main characters. As such, the popularity of different relationships within a given fandom might be the driving force behind whether fanfiction allocates more attention to women characters than men. How and to which degree gender subversion is driven by the dominant characters relationships in the fandoms thus becomes worth questioning.

# 2.2 Gender stereotypes in fanfiction

Despite the qualitative studies' insistence on the subversiveness of fanfiction, computational studies show that the story might not be so clear-cut. In a study of gendered violence and fanfiction, [Neugarten, 2024] investigates whether fanfics about heterosexual relationships are more likely to contain violence than other relationship types. The study focuses on fanfiction that centers around characters from Ancient Greek mythology and looks at the prevalence of different types of violence across different relationships, as a way to infer whether fan spaces are perpetuating or subverting the frequent sexual and gendered violence in Greek mythology. They find that heterosexual relationships have the greatest prevalence of all types of violence, meaning that in this specific case, fanfiction is likely perpetuating rather than subverting the gender and power dynamics of the source material. This also seems to be the case for other aspects of Greek myth fanfiction. In a study of the smells and sources of smells in fanfiction pertaining to Greek myth, [Neugarten & van Erp, 2025] find that gender stereotypes are also perpetuated in the smells associated with different characters, where women characters are associated with flowery or fruity smells, and men characters are associated with blood, sweat and smoke.

Similarly, in a study of 600,000 stories written by amateur authors and posted on the platform Wattpad, [Fast et al., 2016] investigate whether these authors reinforce or subvert gender stereotypes and biases. One of the genres included in the corpus is a collection of around 230,000 fanfics. Across the different genres on the platform (including fanfiction), the researchers find that gender stereotypes, in general, are upheld in the texts. Men are more likely to be described as strong and dominant, while women are more often weak and hysterical. Furthermore, in an analysis of the effect of author gender, they find that men and women authors exhibit little to no difference in their writing style with respect to gender stereotypes. Compared to the other genres on Wattpad, fanfiction also has one of the greatest gender imbalances, skewing men for both authors and pronoun use in the texts.

This majority of men is surprising but might be specific to the platform. On other platforms, such as AO3, fans are usually found to be a diverse group of people with regards to both gender and sexual identities [Duggan, 2020; Vadde & So, 2024]. As the identities of the fanfiction authors were central to early qualitative studies, it could suggest that fanfiction on Wattpad is more likely to uphold gender stereotypes because the user base in general is more men skewed than on platforms such as AO3. However, in contrast to Milli & Bamman's study, [Vadde & So, 2024] find that characters in Harry Potter fanfiction are significantly more likely to be men than major characters of the original novels. Additionally, although fanfiction authors often subvert and diversify the characters of the original texts, it is often limited to male characters. In other words, when portraying otherwise canonical straight, cisgender characters as queer with regards to either sexuality or gender identity in their fanfiction stories, it is often limited to men characters. This often focuses the attention of the fandom on the men characters, and as such the presence of female characters is diminished.

Additionally, although main characters in fanfiction are subversive, peripheral characters, in contrast, often remain cisgender and straight, meaning they are used to uphold the heteronormativity of the source texts. The actual diversity and subversiveness of fanfiction is further problematized and nuanced when considering race. Vadde & So find that fanfiction authors are primarily white North Americans, and they write fanfiction with a focus on white characters, again at the expense of the presence of other ethnicities and races.

## 2.3 Cultural differences in gender representation

As mentioned previously, fanfiction is not a uniquely North American phenomenon. In [Schmidt et al. 2024], user base and platform are similarly found to have an effect on the representation of gender, further nuancing the picture. They collect a corpus of fanfiction written only in German from both the German site Fanfiktion.de (FF.de) and from AO3. Comparing both the most popular fandoms and gender representation in the texts across platforms, they find several differences. On Fanfiktion.de the most popular fandoms center mostly around non-German fan objects based on movies and anime such as *Harry Potter*, *Naruto*, *Twilight*, and *One Piece*. However, on AO3, the most popular fandom centers around the German TV Show *Tatort*, followed by Harry Potter and the *Marvel* comics. These differences in platforms are also seen in the gender distributions of the texts. On either platform the most popular fandoms center around men characters, but on FF.de around 60% of character names in fanfiction are men, while over 70% of names are men on AO3. Furthermore, on Fanfiktion.de the most common relationship type is *Generisch* (Generic), while on AO3 so-called M/M *slash fanfic* – fanfiction centered around an erotic relationship between two men characters – is most common.

Specific tropes might also show specific cultural differences, especially considering the dynamic nature of fanfiction. In a study of so-called *Omegaverse* fanfiction, which is a specific trope within fanfiction, [Yang & Pianzola, 2024] investigate the degree of gender power differences across eight specific relationships from different fandoms. As the Omegaverse trope is a type of fanfiction with an inherent power imbalance between the two characters in the relationship due to secondary gender characteristics, they compare the gender power difference in fanfiction across cultures and media types. Specifically, they find that fanfiction texts based on Western TV series and film universes exhibit greater gender power differences than Japanese media fanfiction. Additionally, over time, fans converge on the specific gender representations of the different characters creating less variance and a decreasing power difference over time. In other words, they show that fanfiction is not a monolith but is dependent both on the individual communities, genre tropes more generally, as well as the source material.

It is worth noting, however, that they focus on men/men pairings, and as such other gender dynamics within this trope go unstudied. These findings also underline the importance of understanding the specific nature of the fanfiction corpus one is working with, since something as basic as the platform one gathers fanfiction texts from can have a meaningful impact on the overall content of the corpus. As AO3 is becoming an increasingly prominent source of fanfiction for researchers due to their openness to scraping, researchers need to remain aware of platform-specific norms and how these interact with the user-base and cross-cultural fandoms. Overall, though, gender and power in fanfiction as it pertains to character dynamics is more complicated than merely subversive of or conformist to gender stereotypes. It is clear that some aspects of fanfiction lend themselves well to nuanced and progressive portrayals of gender and power, while other aspects make perpetuating gender biases more likely. To fully understand these aspects and how dependent they are on fan base, platform,

source text, and time, a broader perspective on questions of gender and power are necessary, such as:

- How does fanfiction across platforms differ with respect to writing style, content, and fan base?
- Is fanfiction from different platforms significantly different from each other? If they share any traits, what are those traits?
- Are some fandoms more likely to be perpetuating or subverting gender expectations than others? In what way do they do this?
- Is there an effect of time? Do fans converge on characterizations and representations of gender more generally?
- How does gender representation in fanfiction depend on the cultural origins of the source text, or just on the gender representations in the source text? How much do fans mimic when they mimic the source text?
- How are gender stereotyping and queering related to the gender dynamics of the dominant relationships in the fandom? If a women/women relationship dominates a fandom, is that fandom more likely to engage critically with gender stereotypes, compared to fandoms where men/women or men/men relationships are more popular?
- How are these dynamics linked to engagement? Do fans from different groups prefer subversive fanfiction? What kind do they prefer?
- How representative are the corpora used so far of fanfiction in general?

## III ETHICAL AND ARCHIVAL CONSIDERATIONS

In recent years, the ethical implications of working with freely available, user-generated data have become increasingly important. Users on micro-blogging platforms might theoretically know that they are posting for all to see but actually engage in ways that are closer to how they would interact in private spheres. Considerations of users' expectations when using their data for research are even more prominent when considering fanfiction. As argued in the previous sections, it is clear that fanfiction is a unique textual phenomenon whose context is crucial to keep in mind. In this section, we discuss the aspects of fanfiction that are often overlooked in computational research: The people who produce it, and the ethical implications of uncritically studying fanfiction.

Due to the sensitive nature of fanfiction both with regards to dubious legality and explicit content, it requires researchers to be mindful of how they use and reference the fanworks they study. These spaces often encourage interaction and community-building, and fans often post and engage with others with the expectations of privacy [Busse & Hellekson, 2012], which often brings personal information into the mix. When researchers then bring attention to specific texts, this personal information risks being brought to the attention of a different and larger community of people than the fan originally expected when writing their text or comment. This breach of trust is most notably seen in the response from fans as well as AO3 itself, when users were made aware of the fact the site had been crawled for the purpose of collecting training data for generative AI models. In a blog post from 2023, the organization behind AO3, the Organization for Transformative Works (OTW), write "many fans have voiced concern regarding data scraping (...) as much as we may dislike that it happened. All we can do is attempt to reduce such collection in the future" [Eskici, 2023]. In the comments of the post, many users express deep concern and feelings of theft and invasiveness. Several users also note that allowing AI-generated content on AO3 is similar to allowing plagiarism – an accusation also often used against the legality of fanfiction – as these AI models trained on fanfiction data are stealing the words and ideas of the people who write fanfiction.

It is thus clear users expect to be in control of where and how their fanfiction is broadcast and used. This a reasonable expectation, both when considering the context in which fanfiction is posted, as well as the potential personal implications for fans if their fanfiction is broadcasted on channels which they have no control over, such as in research [Busse, 2018]. Fanfiction is not only constituted of the text itself, but also of the para-texts, author notes, author bio, comments, and more. The paratext is an integral part of the medium – it is what invites users to read the text – but there has so far been little consideration to ethics of archiving such information. Fans risk being outed; having their friends, colleagues, or boss know intimate details about their sexual preferences or gender identities; and, with regards to copyright issues, might even risk DMCA takedowns and legal action [Busse, 2018]. These consequences are even more prominent when considering the fact that many fanfiction writers are children and young people, as well as people from marginalized groups who already face discrimination and harm.

With these ethical implications in mind, for close-reading studies, it has been put forth numerous times that despite the fact that fanfiction is freely available online, one should obtain informed consent from the authors before directly citing and referencing fanfiction texts in scholarly work [Busse & Hellekson, 2012; Neugarten et al., 2025]. If consent is not possible, researchers should refrain from including a link and merely mentioning title and username, so interested parties can find the text themselves [Busse & Hellekson, 2012]. For quantitative studies, however, informed consent from all participating fans is not only impossible but is not necessarily a meaningful way of approaching ethical research practices. Stories are rarely singled out as computational research often focuses on corpus-level findings. In other words, computational studies of fanfiction seek to identify general patterns across texts and arguably are therefore removed from any individual person. Still, "when writing about fans and their creations, it is not ethical to ignore fans' expectations of privacy (...) many fans find unacceptable the notion that their works may be freely perused by outsiders" [Busse & Hellekson, 2012, p. 39]. As this position paper is also a call for more nuanced approaches that are more concerned with the specific, interpersonal dynamics that allow fanfiction to come about, how do we ensure fans do not feel exploited while ensuring that this cultural phenomenon is properly understood?

[Mackinnon, 2022] proposes a framework for ethical methodological research design when working with early web materials and web data created by young people, which she calls *care ethics scaffolding*.<sup>4</sup> Mackinnon argues that the uncritical collection and storage of web materials in web archives is problematic, as it fails to consider the sensitivity of the data and the rights of people to have their data deleted. Instead, she seeks to balance the desire to preserve and understand online phenomena that will otherwise be lost, while minimizing the distance between the researchers and the researched which can otherwise lead to exploitative relationships to people and their data. Although her approach is a qualitative, ethnographic one, the overall proposition of a feminist ethics of care for web data and the people who create it is relevant for computational studies as well. As Mackinnon argues: "We should exercise not only restraint but also resistance toward the tendency to scrape and accumulate web data from social media communities without deliberate intentions to involve those communities" [Mackinnon, 2022, p. 356]. It is an especially important consideration for computational researchers interested in the study of fanfiction. Just because you can scrape as much fanfiction as you want, should you? Specifically for fanfiction research, due to the

-

<sup>&</sup>lt;sup>4</sup> We are grateful to Paul Gooding for drawing this work to our attention and suggesting its importance in the context of fanfic data.

unique and sensitive nature of the medium, texts, and the people who create it, ethical considerations and assessments of the risk of harm to the communities need to be at the forefront of the researcher's mind and methodological design. It is insufficient to tack on an ethics statement at the end of a paper; ethical considerations must come before and inform the questions and approaches adopted in the field.

#### Conclusion

In this position paper, we have presented dominant themes and problems within the field of computational fanfiction research. The first theme approaches fanfiction as literary artefacts and is interested in the writing style of successful fanfiction. We argue, however, that researchers must be wary when using approaches from other disciplines that might not be applicable to fanfiction. Fanfiction constitutes a unique literary phenomenon due to the interactive and co-creative dynamics that create it. These dynamics need to be properly understood when working with fanfiction at any scale. The second theme concerning gender, power, and cultural differences is more closely aligned with the qualitative fanfiction research traditions. This perspective highlights how fanfiction is complex with regards to gender, power, and race, while also illustrating that fanfiction is not only text, but also a medium for community building. Finally, we argue that because fanfiction is a medium for community building, ethical considerations should come before analysis. Fanfiction texts are cultural products with value that are created by people, and the expectations of and the reduction of possible harm towards them should be the main priority of researchers. Computational fanfiction research is not a trivial task. It requires a nuanced approach and understanding of a unique and complex cultural phenomenon.

#### References

- Ashman, J. Pregnancy as Bondage: Impregnating the Cisgender Man in Works of *Sherlock* and *Merlin* Slash Fanfiction. In *The Darker Side of Slash Fan Fiction: Essays on Power, Consent and the Body*. Edited by Ashton Spacy. McFarland & Company, Inc (Jefferson, NC), 2018;140-156.
- Bacon-Schmidt, C. Enterprising Women: Television Fandom and the Creation of Popular Myth. University of Pennsylvania Press (Philadelphia, PA), 1991.
- Bahoric, K., & Swaggerty, E. Fanfiction: Exploring In- and Out-of-School Practices. *Colorado Reading Journal*. 2015;26: 25-31
- Barnes, J. L. Fanfiction as imaginary play: What fan-written stories can tell us about the cognitive science of fiction. *Poetics*. 2015;48: 69-82.
- Black, E. Pragmatic Stylistics. Edinburgh University Press (Edinburgh), 2005.
- Black, R. Language, Culture, and Identity in Online Fanfiction. E-learning and Digital Media. 2006;3(2): 170-184.
- Black, S. R. Adding a Digital Dimension to Fan Studies Methodologies. In *Fan Studies Methodologies*, edited by Julia E. Largent, Milena Popova, and Elise Vist, special issue, *Transformative Works and Cultures*, 2018;33. <a href="https://doi.org/10.3983/twc.2020.1725">https://doi.org/10.3983/twc.2020.1725</a>.
- Brottrager, J., Doat, J., Häußler, J., & Weitin, T. Character Shifts in Harry Potter Fanfiction. Zeitschrift für Literaturwissenschaft und Linguistik, 2023;53(3): 623-654.
- Busse, K. Framing Fan Fiction: Literary and Social Practices in Fan Fiction Communities. University of Iowa Press (Iowa City, IA), 2017.
- Busse, K. The Ethics of Studying Online Fandom. In *The Routledge Companion to Media Fandom*. Edited by Melissa A. Click and Suzanne Scott. Routledge (New York, NY), 2018: 9-17.
- Busse, K. & Hellekson, K. Identity, Ethics and Fan Privacy. In *Fan Culture: Theory/Practice*. Edited by Katherine Larsen and Lynn S. Zubernis. Cambridge Scholars (Newcastle upon Tyne), 2012: 38–56.
- Croft, W. & Cruse, D.A. Cognitive Linguistics. Cambridge University Press (Cambridge), 2004.
- Duggan, J. Who writes Harry Potter fan fiction? Passionate detachment, "zooming out", and fan fiction paratexts on AO3. Transformative Works and Cultures. 2020;34: 1-25.
- Eskici. AI and Data Scraping on the Archive. *Organization for Transformative Works*. https://www.transformativeworks.org/ai-and-data-scraping-on-the-archive/, May 13, 2023.
- Fast, E., Vachovsky, T., and Bernstien, M.S. Shirtless and Dangerous: Quantifying Linguistic Signals of Gender Bias in an Online Fiction Writing Community. Proceedings of the Tenth International AAAI Conference on Web and Social Media, Cologne, May 17-20, 2016.

- Fathallah, J. Digital fanfic in negotiation: LiveJournal, Archive of Our Own, and the affordances of read-write platforms. Convergence. 2020;26(4): 857-873.
- Fish, S. Is There A Text In This Class? The Authority of Interpretive Communities. Harvard University Press (Cambridge, Mass), 1980
- Girouard, V., & Rubin, V. L. Comparative Stylistic Fanfiction Analysis: Popular and Unpopular Fics across Eleven Fandoms. Proceedings of the Annual Conference of the Canadian Association for Information Science, Victoria/BC, June
- Jacobsen, M., Bizzoni, Y., Moreira, P.F., Nielbo, K. Patterns of Quality: Comparing Reader Reception Across Fanfiction and Commercially Published Literature. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Jacobsen, M. & Kristensen-McLachlan R.D. Admiration and Frustration: A Multidimensional Analysis of Fanfiction. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Jacobsen, M. & Kristensen-McLachlan, R.D. I only read it for the plot! Maturity Ratings Affect Fanfiction Style and Community Engagement. Proceedings of the 5th International Conference on Natural Language Processing for Digital Humanities, Albuquerque/NM, May 3-4, 2025.
- Jamison, A. Fic: Why fanfiction is taking over the world. BenBella Books, Inc, 2023.
- Jenkins, H. Star Trek Rerun, Reread, Rewritten: Fan Writing as Textual Poaching. Critical Studies in Mass Communication. 1988;5(2): 85-107.
- Jenkins, H. Textual Poachers: Television fans and participatory culture. Routledge (New York, NY), 1992.
- Jing, E., DeDeo, S., Wright, D. R., & Ahn, Y. Y. Sameness entices, but novelty enchants in fanfiction online. Humanities and Social Sciences Communications. 2025;12(1): 1-10.
- Kleindienst, N. & Schmidt, T. Investigating the Transformation of Original Work by the Online Fan Fiction Community: A Case Study for Supernatural. Digital Practices. Reading, Writing and Evaluation on the Web, Basel, November 23-25,
- Kustritz, A. Identity, Community, and Sexuality in Slash Fan Fiction. Routledge (New York, NY), 2024.
- Langacker, R. Cognitive Grammar: A Basic Introduction. Oxford University Press (Oxford), 2008.
- Lassen, I. M. S., Moreira, P. F., Bizzoni, Y., & Nielbo, K. Literary Canonicity and Algorithmic Fairness: The Effect of Author Gender on Classification Models. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Leonardi, G., Brunato, D., and Dell'Orletta, F. Hits or Misses? A Linguistically Explainable Formla for Fanfiction Success. CLiC-it 2024: Tenth Italian Conference on Computational Linguistics, Pisa, December 4-6, 2024
- Mackinnon, K. Critical care for the early web: ethical digital methods for archived youth data. Journal of Information, Communication and Ethics in Society. 2022;20(3): 349-361.
- Mattei, A., Brunato, D., & Dell'Orletta, F. The Style of a Successful Story: A Computational Study on the Fanfiction Genre. Computational Linguistics CLiC-it 2020. 2020;284.
- Milli, S., & Bamman, D. Beyond canonical texts: A computational analysis of fanfiction. Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing, Austin/TX, November 1-5, 2016.
- Mukarovský, J. Standard language and poetic language. In A Prague School Reader on Esthetics, Literary Structure, and Style. Edited by P. L. Garvin. Georgetown University Press (Washington, DC), 1964[1932]: 17-30.
- Neugarten, J. MythFic Metadata. Gendered Power Dynamics in Fanfiction about Greek Myth. Digital Humanities Benelux Journal. 2024;6: 133-153.
- Neugarten, J., Allaert, M., Yang, X., Mathur, D., & Zhou, X. The Powers That Scrape: Ethical Considerations in Using Fan-Generated Data in the Digital Humanities. Zenodo. June 5, 2025. https://doi.org/10.5281/zenodo.15600729
- Neugarten, J., Dejaeghere, T., Singh, P., Hemmons, A., & Birkholz, J. Catching Feelings: Aspect-Based Sentiment Analysis for Fanfiction Comments about Greek Myth. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Neugarten, J., & van Erp, M. What Fans Think Greek Myth Smells Like: sea, smoke, and flower shampoo. DH Benelux 2025, Amsterdam, June 4-6, 2025. <a href="https://doi.org/10.5281/zenodo.15424192">https://doi.org/10.5281/zenodo.15424192</a>
- Nguyen, D., Zigmond, S., Glassco, S., Tran, B., & Giabbanelli, P. J. Big data meets storytelling: using machine learning to predict popular fanfiction. Social Network Analysis and Mining, 2024;14(1): 1-17.
- Pianzola, F., Acerbi, A., & Rebora, S. Cultural accumulation and improvement in online fan fiction. Proceedings of the Computational Humanities Research Conference, Amsterdam, November 18-20, 2020.
- Pilkington, A. Poetics Effects: A Relevance Theory Perspective. John Benjamins (Amsterdam), 2020.
- Pugh, S. The Democratic Genre: Fan fiction in a literary context. Seren (Bridgend), 2005.
- Salloum, S. A., Al-Emran, M., Monem, A. A., & Shaalan, K. A survey of text mining in social media: Facebook and Twitter perspectives. Advances in Science, Technology and Engineering Systems Journal. 2017;2(1): 127-133.
- Schmidt, T., Grünler, J., Schönwerth, N. & Wolff, C. Towards the Analysis of Fan Fictions in German Language: Exploration of a Corpus from the Platform Archive of Our Own. 2<sup>nd</sup> International Conference of the European Association for Digital Humanities (EADH 2021), Krasnoyarsk, September 21-25, 2021.
- Schmidt, T., Sasse, J., & Wolff, C. Fanfictions-Literatur von Frauen über Männer? Korpusbasierte Analyse der Geschlechterrollen bei Texten und Autor\* innen deutschsprachiger Fanfictions. Digital Humanities im deutschsprachigen Raum 2024, Passau, February 26-March 1, 2024.
- Shklovsky, V. Art as Technique. In The Critical Tradition: Classic Texts and Contemporary Trends. Edited by Richter, David H. Third Edition. Bedford/St. Martin's (Boston), 2006[1917]: 774-784.
- Semino, E. Language and World Creation in Poems and other Texts. Longman (London), 1997.
- Singh, M., Jakhar, A. K., & Pandey, S. Sentiment analysis on the impact of coronavirus in social life using the BERT model. Social Network Analysis and Mining. 2021;11(33). <a href="https://doi.org/10.1007/s13278-021-00737-z">https://doi.org/10.1007/s13278-021-00737-z</a>

- Sperber, D. & Wilson, D. Relevance: Communication and Cognition. Blackwell (Oxford), 1986.
- Stockwell, P. Texture: A Cognitive Aesthetics of Reading. Edinburgh University Press (Edinburgh), 2009.
- Tadesse, M.M., Lin, H., Xu, B., & Yang, L. Detection of depression-related posts in reddit social media forum. *Ieee Access*, 2019:7.
- Thomas, A. Fan fiction online: critical response and affective play through writing. *Australian Journal of Language & Literacy*. 2006;29(3): 226–239.
- Thomas, B. What is fanfiction and why are people saying such nice things about it??. Storyworlds: A Journal of Narrative Studies. 2011;3: 1-24.
- Tosenberger, C. Mature Poets Steal: Children's Literature and the Unpublishability of Fanfiction. *Children's Literature Quaterly*. 2014;39(1): 4-27.
- Underwood, T., Bamman, D., & Lee, S. The transformation of gender in English-language fiction. *Journal of Cultural Analytics*. 2018;3(2).
- Vadde, A., & So, R. J. Fandom and Fictionality after the Social Web: A Computational Study of AO3. *MFS Modern Fiction Studies*. 2024;70(1): 1-29.
- Werth, P. Text Worlds: Representing Conceptual Space in Discourse. Pearson Education Limited (Harlow), 1999.
- Yang, X., & Pianzola, F. Exploring the Evolution of Gender Power Difference through the Omegaverse Trope on AO3 Fanfiction. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Yu, Z., & Pianzola, F. Across the Pages: A Comparative Study of Reader Response to Web Novels. Proceedings of the Computational Humanities Research Conference 2024, Aarhus, December 4-6, 2024.
- Zadeh, Z.S.H., Sabri, N., Chamani, H., & Bahrak, B. Quantitative analysis of fanfictions' popularity. *Social Network Analysis and Mining*, 2022;12(1).