

# **Exploring the Dynamics of Film Critique in Digital Spaces:**

A Dive into ‘Barbie’ (2023) Review Discourses on Letterboxd, Reddit,  
and YouTube

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Bachelor Thesis

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July 1st, 2024



## **Abstract**

**Aim:** User-generated reviews have become a crucial aspect of movie critique, influencing audience decisions, and shaping a movie's reputation. Different platforms provide varied spaces for users to share their views, affecting where the audience chooses to seek information. This study explores the dynamics of film critique across three major digital platforms: YouTube, Reddit, and Letterboxd. It investigates how platform-specific characteristics and norms shape comment engagement using affordance theory, and how they affect sentiment expression, comment length, and comment complexity through the dual-capacity model of media choice.

**Methods:** This study employed a mixed-method approach, analyzing 500 comments from each platform through quantitative social media content analysis. Additionally, qualitative analyses, including sarcasm presence and thematic analysis, provided deeper insights. The sarcasm presence analysis supported the sentiment analysis, while the thematic analysis identified recurring themes and patterns across platforms. An automated topic modeling of the entire sample was conducted to compare with the thematic analysis of 50 comments, assessing its representativeness.

**Results:** Results showed Letterboxd had the highest comment engagement and lowest complexity, while Reddit and YouTube had higher complexity and less engagement. Sentiment expression did not significantly differ, and YouTube comments were the shortest. Sarcasm was more prevalent on Letterboxd, likely skewing its sentiment analysis. Thematic analysis revealed Reddit users emphasized humor, Letterboxd users were critical, and YouTube users focused on cultural commentary.

**Conclusion:** The study found that YouTube, Reddit, and Letterboxd varied in engagement levels and content of 'Barbie' review comments due to their unique characteristics, norms, and culture,

though sentiment expression was unaffected by platforms. This indicates that the dual-capacity model is insufficient to explain platform choices, which are shaped by cultural trends and user behaviours. Practical implications include helping social media users choose platforms for movie discussions, informing movie marketing strategies, and understanding audience reactions. Limitations involve the focus on 'Barbie' and differing community demographics, suggesting future research explore broader movie genres, user demographics, and comment timelines.

**Keywords:** user-generated reviews, film critique, social media platforms, Barbie (2023), social media content analysis

## Contents

1. Introduction.....	6
2. Theoretical Framework.....	9
2.1. Movie Critique.....	10
2.2. Comment Engagement.....	13
2.3. Sentiment Expression.....	17
2.4. Comment Length.....	19
2.5. Comment Complexity.....	22
3. Methods.....	24
3.1. Research Design.....	24
3.1.1. <i>Quantitative Research</i> .....	24
3.1.2 <i>Sarcasm and Thematic Analysis</i> .....	26
3.2. Sampling Strategy.....	27
3.3. Instruments and Data Collection Procedures.....	31
3.4 Data Analysis Plan.....	33
3.4.1 <i>Quantitative Data Analysis</i> .....	33
3.4.2 <i>Qualitative Data Analysis</i> .....	34
3.4.3 <i>Triangulation of Findings</i> .....	34
4. Results.....	35
4.1 Comment Engagement.....	35
4.2. Sentiment Expression.....	36
4.3. Comment Length.....	37
4.4 Comment Complexity.....	37
4.5. Correlations between dependent variables.....	38
4.6. Qualitative Measures.....	39
4.6.1 <i>Presence of Sarcasm</i> .....	39
4.6.2. <i>Thematic Analysis</i> .....	41
4.7. Automated Topic Modeling.....	43
4.7.1 <i>Worldviews and Central Messaging</i> .....	43
4.7.2 <i>Feminism and Representation</i> .....	46
4.7.3 <i>Evaluation of Celebrities</i> .....	47

4.7.4 <i>Dolls as Products and Cultural Icons</i> .....	48
4.7.5 <i>Ken and Patriarchy</i> .....	48
5. Discussion.....	49
5.1. Main Findings .....	49
5.2. Theoretical Implications .....	55
5.3. Practical Implications.....	57
5.4. Limitations and Future Research .....	58
5.5. Conclusion .....	59
6. References.....	61
Appendix A. Thematic Analysis Codebook .....	77
Appendix B. Disclosed Use of AI.....	79
Appendix C. Literature Search Log .....	80

## 1. Introduction

The year is 2023. Right before your eyes, a global phenomenon in pop culture is taking place. On the same day, two major, original films, "Barbie" and "Oppenheimer," with quite distinct settings and target audiences, will be released in theaters. Thus, 'Barbenheimer' is created. On social media, you're encouraged to spend a lot of time and your hard-earned money on a 5-hour 2-in-1 screening. However, there are no similarities between these two films in any manner. How can you be certain that you'll enjoy them both? You choose to base your decision on internet reviews. How might your experience differ depending on whether you scroll through review comments on YouTube, browse a review thread on Reddit, or read the movie reviews on Letterboxd?

In recent decades, the landscape of reviews has undergone significant transformations. With the advent of the internet and various social media platforms facilitating user-generated reviews, consumers voice more trust in product information created by other consumers than in information generated by manufacturers (Cheong & Morrison, 2008). Consequently, the influence over products has shifted from producers to consumers (Malthouse et. al, 2013). A dissatisfied consumer now holds the potential to significantly tarnish a product's reputation, greatly impacting its earnings. This trend extends to consumer-generated reviews of films, where movies have become increasingly risky ventures for studios. The decline of mid-budget movies reflects this trend, as studios are wary of investing in potentially costly flops (Iyer, 2022; McKenzie, 2023). As a result, the film industry predominantly caters to low-budget niche films tailored to specific target audiences, or high-budget blockbusters aiming for massive returns that can exceed \$370 million in production (Yardbarker, 2024). Studios often attempt to replicate past successes, believing that a formulaic approach will guarantee similar achievements. Marvel

Studios, for instance, has a history of using the same formula for its films, which has resulted in a decrease in viewership and engagement (Conte, 2024; Dockterman, 2023). These recent events have shown the futility of this formulaic assumption. There exists a disconnect between what studios believe their audience desires and what the audience actually seeks. To better understand the audience, it's important to examine their feedback and discussions on upcoming and released movies. This insight enables the creation of films more closely tailored to audience preferences, benefiting both movie publishers and viewers. Therefore, this study aims to help in investigating the dynamics of film critique in online spaces by examining differences in reviews of the movie 'Barbie' (2023) across three prominent social media platforms: Letterboxd, Reddit, and YouTube.

The selection of 'Barbie' as the subject of study has been deliberate. The movie emerged as the highest-grossing and most-discussed blockbuster during the summer of 2023, further solidifying its status as a cultural phenomenon and broadening Barbie's fanbase (Business Insider, 2023). Its significance stems from various factors. Firstly, the character of Barbie herself is controversial, viewed by some as a feminist symbol inspiring young girls to pursue their dreams, while others perceive her as perpetuating unrealistic beauty standards and gender/racial stereotypes (Vered & Maizonniaux, 2017). The film, based on Mattel's iconic doll, aimed to make a feminist statement, yet opinions on its success vary (Terry, 2024). Interestingly, despite the traditional demographic for Barbie stories being primarily teenage girls, 'Barbie' became a global, intergenerational event, attracting a diverse audience with almost equal representation of men and women expressing interest in viewing the film according to YouGov (2023). This diversity of viewership contributed to a wide range of perspectives and opinions informed by different beliefs, behaviors, and norms. Barbie's broad success makes it a fitting production to analyse how different movie audiences compile consumer-level critique.

Reddit, YouTube and Letterboxd were selected to analyze the online discussion of the recent film 'Barbie' for several reasons. Letterboxd, recognized as one of the largest movie forums catering specifically to movie enthusiasts (Similarweb, n.d.), and Reddit, functioning as a user-driven forum with diverse communities called 'subreddits' (Singer et al., 2014), provide distinct environments for discussions. In contrast, YouTube operates as a broadcasting platform where content dissemination is influenced by its recommendation algorithm (Arthurs et al., 2018), facilitating a wide audience reach. Despite their differing objectives within social media, all three platforms host discussions about movies. Reddit emphasizes social news aggregation and content rating, Letterboxd focuses on movie reviews, ratings, and curated lists, while YouTube enables users to upload, share, and view videos across various topics.

Clearly, these platforms serve distinct roles within social media, but it remains uncertain whether their movie critique environments also differ. Therefore, my objective is to investigate how these platforms and their respective audiences shape the content and tone of movie discussion.

Eberhard et al. (2019) conducted a study on movie discussion communities on Reddit and discovered that, in contrast to algorithmic movie recommendations, actual users tend to provide more in-depth information about movies. These additional details play a crucial role in finding the perfect movie match. Nevertheless, there remains a notable gap in the studies of movie critique differences across Reddit, YouTube, and Letterboxd using both qualitative and quantitative methodologies. This study's findings are limited in their generalizability as they focus on a single culturally significant movie. Different genres or popularity levels may yield varying review differences. Additionally, the study's scope is confined to its contemporary context, unable to make broad claims about user-generated content and platform usage. The



influence of platform algorithms on review popularity is also beyond this study's scope. The objective is to extract insights that may lay the groundwork for more standardized and generalized research into the distinctions in communication across various social media platforms. Additionally, it is anticipated that the findings will offer an intriguing perspective for communication professionals, film distributors, marketers, content creators, and movie enthusiasts alike. These insights may facilitate a deeper understanding of how to effectively engage audiences on digital platforms, encompassing both the content and format of the message. Furthermore, it is hoped that the study will shed light on the types of user-generated reviews that are likely to resonate on these platforms, including their depth and sentiment. In practical terms, it is hoped that this study will allow for improved communication with the movie fans, having a better understanding of their communication channels. Considering the theoretical and practical relevance, the central research question of this study is:

***RQ: How do the characteristics, norms, and culture of platforms like YouTube, Letterboxd, and Reddit relate to the engagement levels and content of comments about the movie 'Barbie' (2023)?***

## **2. Theoretical Framework**

The theoretical framework of this study aims to explain how the features of online platforms shape movie critique spaces. It involves defining user-generated movie critiques and reflecting on the influence of digital platforms on four specific aspects of movie reviews: engagement and interaction, sentiment and emotions conveyed, comment length, and depth of analysis. This exploration is conducted through the lens of two theoretical perspectives.

The first theory is the affordance theory, initially proposed by Gibson (1966). This theory posits that perception encompasses not only recognizing objects but also comprehending the

actions or behaviors that are possible in relation to those objects. It provides insight into how platforms as environments offer affordances—specific features or capabilities—that shape user behaviors and interactions.

The second theoretical lens used in this study is the dual-capacity model of communication media choice. According to this model, the richness of communication media plays a crucial role in media selection: complex tasks benefit from rich communication channels such as face-to-face interaction, while simpler tasks are suited for leaner forms of communication. Additionally, the model emphasizes that personal preferences, social influences, and symbolic meanings also impact media choice (Sitkin et al., 1992). In the context of this study, it is essential to examine how users' choices regarding comment content affected not only by the communication richness of each platform but also by their respective norms and cultures.

### **2.1. Movie Critique**

For this study, it's essential to define the term 'movie critique', which will be used interchangeably with 'film criticism' and 'movie review'. According to Klevan & Clayton (2011), film criticism involves written analysis that views films as potential achievements and aims to convey their uniqueness and quality, or lack thereof. Movie critiques come in various forms, including those by journalists or professional film critics, but user-generated reviews have gained significant importance in recent times (Lee et al., 2019). This shift implies that a movie's success is no longer solely reliant on its marketing budget and the opinions of critics; instead, social media narratives shape perceptions and expectations even before its release (Lee et al., 2019). Additionally, movie reviews can take different formats, such as images, text, video, or audio. According to Çelik et al. (2022), the format of film criticism may influence a user's purchasing intention, meaning it could impact their decision to watch a movie or not.

It is interesting to consider the motivations driving users to write consumer-level reviews. The reasons for contributing to the discussion might be diverse. Highly engaged members of online communities are more likely to provide reviews driven by intrinsic motivation. In contrast, less engaged members may be motivated by small monetary rewards, which typically result in less effortful reviews (Sun et al., 2017). Moreover, according to Daugherty et al. (2008), factors like enhancing self-esteem, connecting with others, and expressing values strongly influence the creation of user-generated content. Motivations for writing reviews could arise from a desire to assist fellow consumers or warn them; notably, assisting corporations or seeking advice were not commonly considered motivators for writing reviews (Rensink, 2013).

User-generated movie critique possesses certain characteristics. Firstly, it carries a significant amount of experiential credibility, meaning that users, despite lacking official expertise, have firsthand experience with the product (Flanagin & Metzger, 2013). However, it's also marked by reviewers lacking credentials compared to traditional experts. User-generated content holds a sense of trustworthiness as it relies on the 'wisdom of the crowds,' contrasting with the authoritative notion of experts (Fox & Madden, 2006). Another factor to consider is the volume of user-generated movie ratings compared to traditional film critique. Research indicates that a higher volume of user-generated ratings leads to increased credibility, reliance, and confidence in accuracy, effects not observed with expert ratings (Flanagin & Metzger, 2013).

It's intriguing to explore how user-generated movie critique differs from traditional film criticism. It has been assumed that while users consuming reviews are perceived as followers, movie critics are perceived as leaders. In their research on critics, Pang et al. (2022) discovered that critics, who are traditionally seen as independent and unbiased, prioritizing aesthetic excellence in their reviews and possessing 'elite' taste (Debenedetti, 2006), are influenced by

consumer-generated reviews. They strategically align their opinions with popular taste to maintain influence with the general audience, rather than diversifying voices.

It's also intriguing to examine the platforms where most user-generated movie critique is generated and shared, a landscape continually shaped by current social media trends and the popularity of different platforms. According to Yeap et al. (2014), users tend to prefer review sites for electronic word-of-mouth due to perceived source credibility. They distinguish between review sites, which offer more credibility through reviews from recognized experts, and social networking sites, which provide volume but are perceived as less credible. However, overall, digital platforms have been found to facilitate community dynamics and user interaction in movie critique. This is made possible by platform features such as discussion forums, electronic bulletin boards, homepages, instant messaging, and the option for anonymity (Yeap et al., 2014).

Finally, there are certain challenges regarding the quality of user-generated reviews. One prevalent issue is the under-reporting bias, wherein users who are either highly satisfied or dissatisfied with a product are more inclined to leave a review, resulting in a skewed portrayal of the product (Koh et al., 2010). Furthermore, cultural differences may impact the accuracy of reviews; for instance, Koh et al. (2010) found that Western viewers tended to provide more extreme reviews compared to Chinese viewers, who exhibited a more balanced distribution of reviews. This variance could potentially lead to misjudgments regarding a movie's market success. Additionally, there's the issue of social influence bias, where opinions expressed in online reviews may be affected by those expressed in previous reviews. In a study by Askalidis et al. (2017), reviews submitted later in a product's life cycle exhibited temporal trends, suggesting influence by earlier opinions.

Undoubtedly, user-generated reviews, which are increasing in importance and impact, present an incredible opportunity to gain deeper insights into movie spaces, trends, and preferences of movie fans, enabling the industry to refine its marketing strategies effectively. However, user-generated reviews also bring along certain challenges stemming from under-reporting bias, cultural differences, and social influence bias.

## **2.2. Comment Engagement**

The comment engagement examined in this study pertains to the active involvement of consumers in critiquing and assessing films across diverse digital channels. Specifically, the study investigates consumer engagement behaviors, which encompass the proactive engagement of movie enthusiasts in activities such as commenting, liking, sharing, and conversing about movie reviews on social media platforms (Gupta et al., 2024).

User engagement is pivotal for the success and sustainability of a web platform (Lehmann et al., 2012), fostering community interaction and shaping dynamics within communities (Zhang et al., 2017). It's important to recognize that user behaviors vary across different communities and platforms (Fiedler & Sarstedt, 2014), leading to variations in reviews across platforms and communities.

User engagement is typically quantified using engagement metrics that gauge web usage (Lehmann et al., 2012). These metrics encompass factors such as the number of comments, likes, shares, and contributed content. Furthermore, user engagement influences various stakeholders, including brands, content creators, platform users, and moderators. It can impact brand loyalty, satisfaction with the platform, and behavioral intentions (Zheng et al., 2015; Ali et al., 2021).

Review engagement can serve as a measure of audience interaction, indicating the dynamic exchange between the movie review author and their audience. Additionally, it serves

as an indicator of user involvement within the platform, as demonstrated through actions like liking, sharing, and commenting, showcasing active participation within the platform's community. Review engagement can also measure community engagement, reflecting users' involvement in debates and discussions surrounding movies.

Review engagement can be better understood through the affordance theory. At its core, the theory suggests that the affordances of an object or environment suggest possible actions or uses to an observer (Gibson, 1966). In the case of this study, the platforms are considered to be such environments. Their affordances are the action possibilities that the environment offers (Gibson, 1966). The affordances of the platforms are their unique characteristics that influence user behaviors, such as comment engagement. It is then necessary to consider which distinct affordances and characteristics of the platform could potentially enhance or hinder review engagement and how they compare with those of the other platforms.

One of the most significant distinctions between Reddit and the other two platforms is its nested commenting feature. Comments on Reddit can be threaded and organized in response to other comments within the discussion thread. This allows for structured and focused conversations, enabling users to reply directly to specific comments within the thread. In contrast, YouTube and Letterboxd utilize a linear and hierarchical commenting system based on the timestamp of the comment. YouTube's commenting system, in particular, is typically linear, displaying comments in chronological order, with only a single layer of replies available (Arthurs et al., 2018). Users responding to other replies must resort to tagging the addressee, resulting in a more cumbersome and disorganized experience.

That being said, Reddit's reply structure can become somewhat complex, often requiring users to click on the downward arrow to view original replies to the post. Nonetheless, YouTube

tends to have a more cluttered comment section due to its broad audience, which includes users who may not engage seriously and may resort to trolling or spamming.

Compared to YouTube, Reddit and Letterboxd typically host more focused communities (although for Reddit, it depends on the specific subreddit). This distinction arises from YouTube's video recommendation algorithm, which, similar to TikTok, suggests a broad range of video topics to users (Arthurs et al., 2018). Consequently, users may write movie reviews based on exposure to a particular video rather than having a strong passion for movies. This means that much of the video's audience may lack sufficient interest to engage with movie reviews in the comments. YouTube operates as a broadcasting platform, where the video creator often functions more like a traditional one-to-many channel broadcaster. This dynamic may discourage extensive discussion compared to platforms like Reddit, which facilitate many-to-many communication channels.

Especially on Letterboxd, aside from movie listings, one of the main objectives of the platform is to rate and review movies. On Reddit and YouTube, users engage in a variety of activities, primarily related to consuming content: reading entertaining posts and discussions on Reddit and watching video content on YouTube. Consequently, it is likely that Letterboxd's user base engages with reviews on a deeper level.

Moreover, on YouTube, comments—or in this case, reviews—cannot be shared through a link on different platforms, thus making them less easily spread. However, this is not the case on Letterboxd and Reddit. Reddit provides an additional ability to save favorite replies (or, in this case, specifically movie reviews).

However, it is important to consider that YouTube's recommendation algorithm can expose content to a much broader and more diverse audience than Reddit or Letterboxd. This

diversity of viewers, each with different opinions, is likely to foster extensive discussion and high levels of engagement. Additionally, Shahbaznezhad et al. (2021) found that video format posts, which are popular on YouTube, actively encourage users to share their opinions and comments on fan pages. In contrast, photo format content, more commonly seen on Reddit, tends to stimulate passive engagement through likes.

Building on this critical argument, the hypothesis is formulated as follows and is presented in Table 1.

*H1: YouTube leads to the highest comment engagement compared to the other platforms.*

**Table 1**

*Visual Representation of Hypotheses*

	H1	H2	H3	H4
YouTube	H1: YouTube leads to the highest comment engagement compared to the other platforms.			
Reddit		H2: Reddit leads to the highest degree of positive sentiment expression compared to the other platforms.		
Letterboxd			H3: Letterboxd leads to the highest comment length compared to the other platforms.	H4: Letterboxd leads to the highest comment complexity compared to the other platforms.



### 2.3. Sentiment Expression

To define sentiment expression, it's important to recognize that sentiment encompasses various meanings. The Merriam-Webster Dictionary defines sentiment as "an attitude, thought, or judgment prompted by feeling," as well as "a specific view or notion" (2024). Similarly, the Cambridge Dictionary defines it as "a general feeling, attitude, or opinion about something" (2024). In the context of this study, the focus is on sentiment expression in online movie discussions. As previously mentioned, sentiment can encompass views, feelings, and opinions on a topic. Therefore, exploring sentiments through users' sentiment expression can help uncover movie audiences' perceptions and preferences.

Furthermore, sentiment expression is typically explored through sentiment analysis, which aims to determine the attitude of a speaker or writer regarding a topic. This attitude may encompass their judgment of the topic, their emotional state while writing the review, or the intended emotional effect they wish to have on a reader (Gala et al., 2015). Sentiment analysis plays a significant role in understanding audience perceptions and preferences.

In the case of this study, it will be examined how sentiment expression in movie discussion is informed by the characteristics and affordances of digital platforms. Sentiment expression will be examined through the lens of the dual-capacity model of communication media choice, which posits that both deterministic and social constructionist perspectives influence media choice. According to this model, media richness impacts media choice, suggesting that complex and ambiguous tasks necessitate rich communication, such as face-to-face interaction, while simple and straightforward tasks are more suited for lean communication. Additionally, individual circumstances, such as personal preferences, social influences, and symbolic meanings, play a role in media choice (Sitkin et al., 1992). Indeed, the choice of

platform for expressing sentiment is more complex than simply selecting the platform with the best affordances or user interface. Communication on these platforms is significantly influenced by social and contextual variables. Both the affordances and the social and contextual variables contribute to determining which platform is most likely to exhibit the highest level of sentiment expression.

An important aspect to consider is the fear of judgment while expressing sentiment in a review. Letterboxd does not permit disliking or downvoting a review; only likes are visible. On YouTube, it's possible to dislike a comment, or in this case, a review; however, the dislike count remains hidden—the button serves as an outlet for readers to express their frustration. Conversely, Reddit offers the option of downvotes, which offset upvotes. If there are more downvotes than upvotes, the downvotes become visible to anyone viewing the thread. Fear of judgment is one of the reasons people avoid expressing themselves online (Popat & Tarrant, 2023). It is a factor that could potentially affect sentiment expression on Reddit.

On that note, YouTube is likely to fail to foster a tightly-knit community around movies due to the fact that there is a lack of meaningful ties among users (Rotman et al., 2009). The absence of a close-knit community might lead to a lack of trust, causing users to refrain from expressing their feelings in reviews (Blanchard et al., 2011). Conversely, Letterboxd is a platform whose main goal is to connect movie fans, potentially making users feel more understood when expressing their feelings in movie reviews.

Compared to YouTube and Letterboxd, the moderation rules on Reddit are not standardized but rather differ based on the rules and moderators of specific subreddits. This freedom of moderation by subreddit moderators might result in the suppression of users' sentiments if their opinions and feelings do not align with the moderators' beliefs.

However, on Reddit, one aspect likely to encourage sentiment expression is the platform's high degree of anonymity. Research has shown that the level of anonymity influences one's willingness to express opinions (Wu & Atkin, 2018). While Letterboxd and YouTube also offer anonymity options, Reddit users particularly value privacy and anonymity, taking care not to disclose recognizable personal information. Additionally, although Reddit and Letterboxd allow users to add emojis, YouTube offers a much larger catalogue. Emojis have been identified as indicators of negative, positive, and complex sentiments (Wang & Castanon, 2015). While the potential visibility of downvotes might deter sentiment expression due to fear of judgment, the emphasis on anonymity on Reddit could significantly enhance positive effects.

Considering this important argument, the hypothesis is as follows as depicted in Table 1:

*H2: Reddit leads to the highest degree of positive sentiment expression compared to the other platforms.*

#### **2.4. Comment Length**

Examining the length of a review can provide valuable insights into the influence of platform features on review characteristics. In the realm of digital platforms, comment length can be evaluated by the number of characters (Kramer & McLean, 2019) or the number of words (Liu et al., 2014). Word count serves as a particularly effective measure for comment length because, as Chujo (2005) discovered, a broader vocabulary enhances text coverage reliability. Specifically regarding movie reviews, they predominantly consist of personal subjective insights like opinions and emotions (Liu et al., 2014). Consequently, a lengthier movie review is more likely to provide readers with subjective impressions rather than objective facts.

Concerning the impacts, the length of a review can serve as a measure for the appropriate amount of information, indicating the adequacy of information for decision-making (Liu et al.,

2014). In the case of movie reviews, this could involve deciding whether to watch a particular film. The length of the review, or more precisely the information provided, is highly beneficial to users if it's easily accessible without significant search costs (Johnson & Payne, 1985). In this regard, the review's length, and the information it provides help minimize the search costs. According to Shi & Lei (2022), the length of a text influences its lexical richness, which refers to the diversity and variety of words used. This increased diversity offers more subjective insights to consumers, reducing perceived uncertainty during the decision-making process (Liu et al., 2014). Moreover, research has shown that longer reviews positively impact their helpfulness for movies (Liu et al., 2014).

The significance of comment length becomes clearer when viewed through the dual-capacity model of communication media choice, as discussed by Sitkin et al. (1992). The decision to post an extensive review on a particular platform is influenced by both the platform's capabilities and contextual factors like platform norms and culture. It's important to examine which specific traits and norms might guide users' decisions to compose lengthy movie reviews.

Firstly, an apparent yet significant factor to consider is the character limit for comments. While research on platforms like Letterboxd and Reddit regarding comment length is limited, indications of users running out of characters on these platforms are scarce. In contrast, YouTube imposes a 10,000-character limit (Molenaar, 2024; YouTube Title Length Checker, n.d). According to Miller et al. (1958), the average length of function words is 3.13 letters, and for content words, it's 6.47 letters. This suggests that words in sentences typically range from 4 to 7 letters. Therefore, 10,000 characters roughly translate to between 1428 and 2500 words, including spaces (Capitalize My Title, 2022). While this is likely sufficient for most users, there

could certainly be longer movie reviews. Consequently, the 10,000-character limit may restrict users, curtailing the length of their movie reviews.

When considering comment length, aside from character limitations, platform norms can significantly guide user behavior. For instance, on Reddit, the average length of a movie review in a comment may vary depending on the subreddit where the post is made, reflecting the norms of that specific subreddit (Zhou, 2011). Users are likely influenced by the content type prevalent in the subreddit they wish to contribute to. For example, if a subreddit focuses on short, humorous videos, users might be less inclined to post lengthy movie reviews. Additionally, Reddit operates as a forum where comments are typically part of a larger discussion (Medvedev et al., 2019), resulting in shorter comments compared to platforms like Letterboxd. Letterboxd, on the other hand, functions more akin to a personal diary, offering users a space to log watched movies, rate them, and write reviews for themselves and others. Unlike Reddit, there's not necessarily an expectation of discussion; rather, it serves as a personal archive. In contrast, YouTube's norms lean towards shorter movie reviews, as comments are often responses to posted videos, with limited interaction from the video poster due to the platform's broadcast nature. Consequently, comments on YouTube are typically shorter, reflecting the one-sided nature of the interaction.

Finally, there are platform features that incentivize posting longer movie reviews. While all three platforms offer the ability to revisit previous comments on user profiles, Letterboxd, given its structure, allows users to quickly access movie reviews without sifting through various replies. This feature likely encourages users to invest in writing longer movie reviews, as they can view it as a repository of their thoughts and easily revisit them. Considering these platform

features alongside social and contextual factors; the hypothesis is as follows as depicted in Table 1:

*H3: Letterboxd leads to the highest comment length compared to the other platforms.*

## **2.5. Comment Complexity**

In this study, the depth of movie discussion is assessed using the New Dale-Chall Readability Formula (Chall & Dale, 1995). This formula measures text complexity by identifying words that are not present in the Chall Word List as "difficult words." It also takes into account the frequency of difficult words and a higher average sentence length, indicating more complex sentence structures. The ratio of difficult words to the total word count is then calculated, providing a percentage of difficult words. This score is then mapped onto a scale ranging from "very easy" to "professional," offering a relative measure of the text's readability level. Although this approach offers a somewhat limited perspective on text depth, it serves the purpose of this study.

Review complexity serves as an interesting metric for comprehending the attributes of movie reviews across various platforms. Complexity in a text implies it offers valuable insights, critical analysis, and nuanced perspectives, thereby serving as a measure of user engagement, expertise, and critical thinking when evaluating and discussing movies. The complexity of a movie review can significantly influence the perceived helpfulness of the review to the audience (Chua & Banerjee, 2015).

Looking at comment complexity through the framework of the dual-capacity model proposed by Sitkin et al. (1992), akin to previous variables focused on review characteristics, it's intriguing to explore how the average complexity of movie review comments on Reddit, YouTube, and Letterboxd is guided by the affordances of the platform, along with their

respective norms and culture. This study posits that users are driven to engage in movie discussions not solely by the platform's communication channels but also by the community dynamics and the platform's cultivated culture.

Considering the culture and norms of these platforms, YouTube is the most general platform where users receive video recommendations based on an algorithm, without necessarily seeking out those videos. This means they might not be as knowledgeable on the topic as users on other platforms who consciously choose to engage with specific movie listings or posts. Moreover, because the audience may not possess extensive knowledge, individuals with nuanced opinions about the movie might refrain from discussing them, fearing they won't be comprehended by the community.

Reddit, on the other hand, consists of subreddits that typically bring together people informed on a topic. In the case of a movie subreddit, the community is likely very knowledgeable about movies, which might positively relate to the complexity of their movie reviews. However, Reddit's threaded comment format may incentivize users to respond selectively to specific points of discussion, rather than fostering complex critiques.

Letterboxd is a niche platform specifically created for movie fans, so it can be argued that it has the most well-informed community when it comes to movies. It also suggests that Letterboxd's audience is the most appreciative of detailed critiques. This perception could motivate users to write more complex comments to cater to the expectations of other movie enthusiasts.

Given the favorable platform characteristics and culture of Letterboxd, the hypothesis is as follows, outlined in Table 1:

*H4: Letterboxd leads to the highest comment complexity compared to the other platforms.*

### 3. Methods

#### 3.1. Research Design

##### 3.1.1. *Quantitative Research*

This study's research presents the analysis and comparison of an extensive sample of the most popular reviews of the film "Barbie" across three social media platforms. For the purposes of this study, reviews refer to the original responses to posted content in the form of a video on YouTube, a post on Reddit, or a movie listing on Letterboxd. Replies to these original responses will not be included in the analysis besides measuring the interview engagement. Drawing upon the distinct characteristics, affordances, modes of user engagement, norms, and cultures of Letterboxd, Reddit, and YouTube, it is anticipated that differences will be observed in the levels of review interactivity, sentiment and expression, comment length and depth, and thematic content of these reviews.

The study employs a mixed methods approach, selected for its ability to provide a more comprehensive understanding of a phenomenon compared to exclusively quantitative or qualitative research, and for its capacity to triangulate findings (Malina et al., 2011). Quantitative analysis, utilizing a descriptive approach, was applied to address the research questions, aiming to describe specific characteristics of movie reviews and their engagement. Descriptive research helps in understanding the interconnectedness of social systems, events, and relationships, which collectively shape society (Khan & Mohsin, 2022).

Moreover, qualitative aspects were integrated into the study, employing an exploratory approach to expose underlying themes of movie reviews and the utilization of linguistic features within them. The exploratory approach is beneficial for understanding a problem whose nature is uncertain or unknown (Saunders et al., 2019). It aims to generate new insights and understanding,



posing questions and examining phenomena from novel perspectives (Neuman & Robson, 2018; Robson, 2011).

In this study, four dependent quantitative variables were analyzed: comment engagement, sentiment expression, comment length, and comment complexity. Furthermore, the study included the assessment of sarcasm presence, thematic analysis, and automated topic modeling to provide a clearer understanding of the themes and topics discussed in the comments.

For the first variable, 'comment engagement,' the study aimed to determine whether users engaged with the content through simple, effortless actions and more substantial effort and involvement. This variable was assessed by assigning a score to each comment based on its popularity, derived from the number of likes and replies. Replies were weighted more heavily to reflect greater user effort, thus indicating higher engagement.

The second variable was sentiment expression, aimed at examining how emotionally expressive movie reviewers were across different platforms. This variable was operationalized through sentiment analysis. As explained by Gala et al. (2015), sentiment analysis seeks to identify the attitude of a speaker or writer towards a topic. This attitude can be reflected in the individual's judgment or evaluation, affective state (i.e., the emotional state of the author while writing), or the intended emotional impact on the reader. With these motivations in mind, this study categorized movie review comments into positive, neutral, and negative sentiments to determine how expressive users were on various platforms.

The third variable, comment length, aimed to explore the average length of movie reviews across different platforms. This variable was operationalized by counting the number of words in each movie review and comparing the averages between platforms. As noted in the

theoretical framework, counting words is considered one of the most effective methods for measuring text length (Chujo, 2005).

The fourth and final variable was ‘comment complexity’, which aimed to examine the average complexity of reviews on each platform. In this study, complexity was assessed and operationalized using the New Dale-Chall Readability Formula (Chall & Dale, 1995) as seen in the equation (1). This formula rates the readability of text on a scale from 'very easy' to 'professional,' and these ratings were compared across platforms. However, a limitation of this approach is that it might not fully encompass the various interpretations of comment complexity.

$$64 - \left( 0.95 \times 100 \times \frac{n_{wd}}{n_w} \right) - (0.69 \times ASL) \quad (1)$$

where  $n_{wd}$  represents the number of difficult words,  $n_w$  denotes the number of words, and  $ASL$  is the average sentence length.

### ***3.1.2 Sarcasm and Thematic Analysis***

In addition to the variables, two qualitative elements were considered in the findings: thematic analysis and sarcasm. Thematic analysis is a technique used to identify the main themes or topics within a set of texts (Terry et al., 2017). By exploring the topics mentioned in the movie discussion, the study aimed to gain a better understanding of how the characteristics and norms of different platforms guide discussions about 'Barbie' and movies in general. Examining the use of sarcasm on various platforms provided a more comprehensive view of the sentiment expression variable. Due to the prevalence of sarcasm, it can be more challenging for algorithms to accurately measure sentiment expression on certain platforms (Maynard & Greenwood, 2014). Quantitatively exploring sarcasm helped identify potential algorithmic errors and offered insights into how film cultures vary across platforms.

### 3.2. Sampling Strategy

For the quantitative analysis, approximately 800 comments were gathered from each platform. From these, the top 500 English movie-related comments were selected, totaling 1500 comments for analysis. This large sample size ensures a diverse range of perspectives, making the analysis more comprehensive and increasing its statistical power. Consequently, generalizations and comparisons of the findings are more robust and error-resistant.

The most popular comments were collected to standardize visibility bias between platforms and provide a baseline assessment of the original comments. These comments are highly visible within the community and therefore represent the experiences readers have with the platform. Additionally, they attract the most engagement. Replies to the original comments were excluded because the goal was to capture a snapshot of the initial users' opinions of the movie.

Starting with Letterboxd, the first 500 comments in the category 'popular reviews' were chosen based on their 'review activity'. On Reddit, 500 top comments to the post "Official Discussion - Barbie [SPOILERS]" were chosen. The post was submitted to the subreddit 'r/movies', which serves as an inclusive forum for discussions and news related to major film releases (*Movie News and Discussion*, n.d.). The reason for collecting from this thread was that the original poster encouraged a discussion of the movie.

On YouTube, 250 'best comments'—the most popular original replies—to the video titled "Barbie - Movie Review" by Jeremy Jahns and 250 most popular replies to the video titled "this barbie is a bad feminist ❤️👎🌴 (barbie movie review)" by ModernGurlz were chosen. The reason for collecting from two YouTube videos was that Jeremy Jahns primarily has a male audience, while ModernGurlz primarily has a female audience. If all the comments were

collected from only one of these videos, the comments could be skewed by gender. It might be argued that comments on Reddit and Letterboxd could also be biased. However, upon initial assessment of the movie listing on Letterboxd and subreddit on Reddit, there was no indication that these spaces have a stronger affiliation with any specific gender.

Additionally, comments that replied to the video creators instead of reviewing the movie were deleted. Any comments not in English were also ignored.

It is important to note that YouTube's algorithm is different from those of Reddit and Letterboxd in that its 'best comment' section includes some less exposed comments with fewer likes and replies among the very popular comments.

In addition to the content of the data, metadata of the comments were collected in the form of the number of replies to the comment and the number of likes for the comment, as shown in Figure 1 for Letterboxd, Figure 2 for YouTube, and Figure 3 for Reddit.

For the qualitative study, the content of the top 50 popular comments from each platform was considered and analyzed. The reason for using the top 50 comments is that they are the ones users engaged with the most, through liking and commenting, which means these comments are likely to reflect the most popular sentiments of the community.

Figure 1

Depiction of User Interface Elements Used to Measure Engagement Metrics on Letterboxd

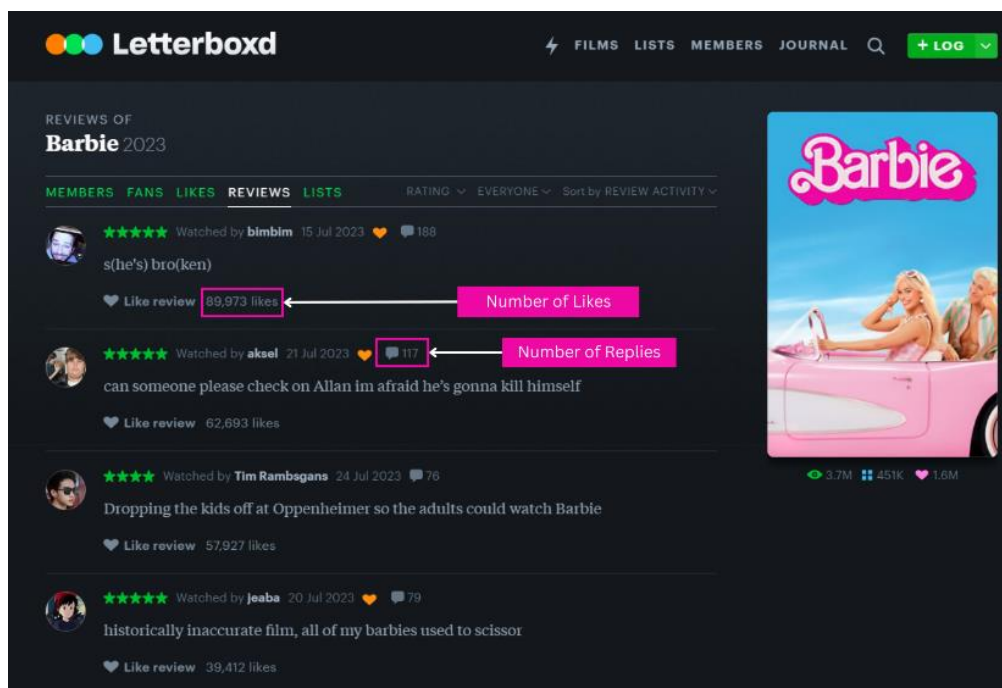
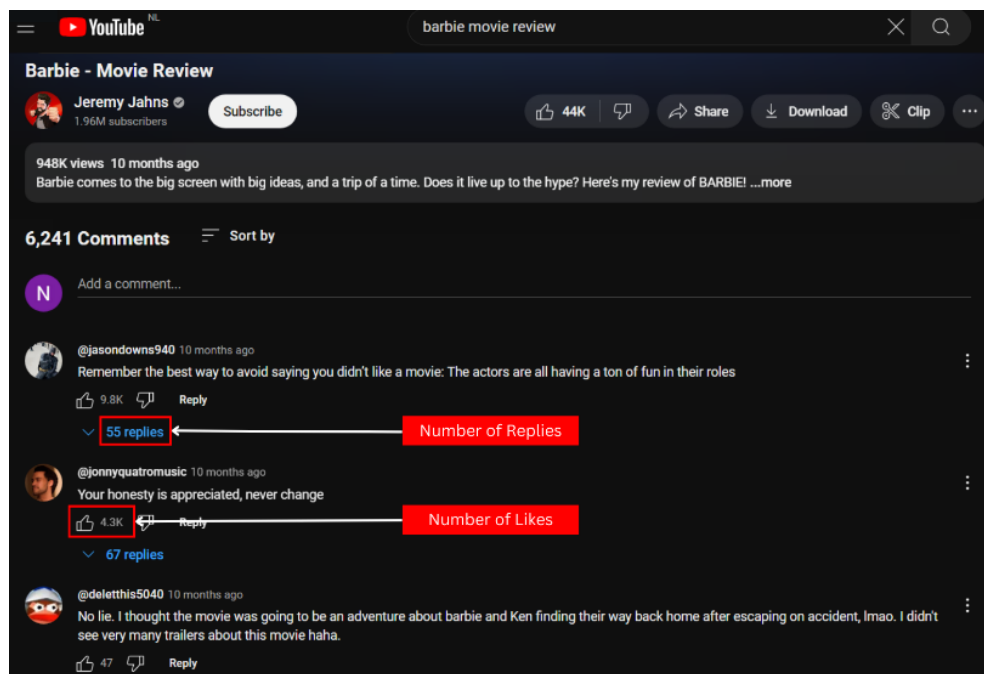


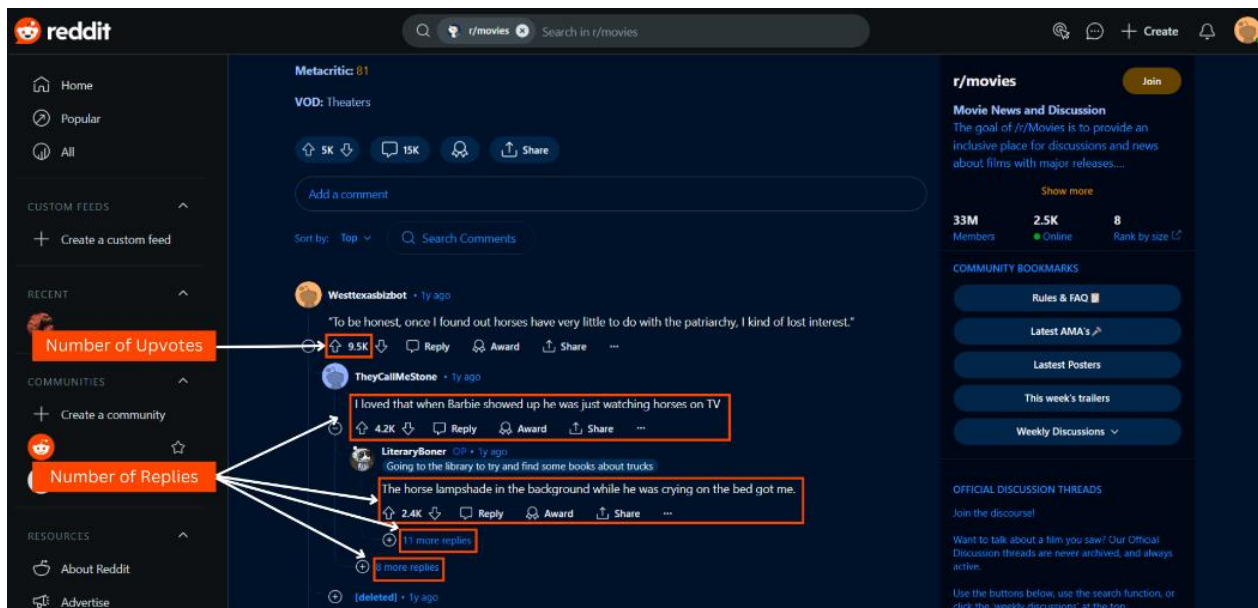
Figure 2

Depiction of User Interface Elements Used to Measure Engagement Metrics on YouTube



**Figure 3**

*Depiction of User Interface Elements Used to Measure Engagement Metrics on Reddit*



Some considerations need to be addressed regarding the representativeness of the sampling data. It is uncertain how diverse the community of users from whom the comments were collected was. However, the selected communities were chosen because the original posts or videos did not appear to be guided by radical opinions or exhibit a strong bias against any particular group.

Content diversity is also important to consider. Since the top popular comments were collected, it is very likely that they were mainly the opinions of highly vocal users, which might differ significantly from the responses of those who are not as outspoken. Also, considering platform bias, each platform has a different algorithm for choosing the most ‘popular’ comments. Although those algorithms might be similar, there are still differences, as evidenced by the fact that much less popular comments show up among the ‘top’ comments on YouTube.

Finally, it was important to consider the sampling period. If the data from each platform were collected widely apart from each other, that could impact the findings. Therefore, the data from all platforms were collected within a span of a week in the second half of May.

### **3.3. Instruments and Data Collection Procedures**

Data for this study was collected differently across each platform. For YouTube, an API-based data collection method was used, utilizing RStudio packages ‘jsonlite’ and ‘httr’. The original comments under the videos were retrieved along with metadata, including the number of likes and replies for each comment.

For Reddit, data was collected manually. The original replies to the post were retrieved along with metadata such as the number of upvotes and the number of replies to each comment. A limitation to note is that the manual collection of upvotes meant they were recorded as shown on the page—rounded to the nearest hundred and then to tens, up until 99 upvotes or fewer.

For Letterboxd, data was collected semi-manually using a JavaScript code that provided the reviews and their metadata, including the number of likes and replies on each page. This information had to be collected page by page using JavaScript.

Data required cleaning post-collection. Any unusual symbols and emojis were removed, and non-English comments were deleted. Additionally, YouTube comments that did not reference the movie but focused solely on the video creator were disposed of. In total, there were 500 cleaned comments remaining from each platform.

For the ‘comment engagement’ variable, a score was assigned to each comment based on the weighted values of its replies and likes. Each reply was given a weight of 1, while each like or upvote was assigned a weight of 0.1. This weighting reflected the differing levels of effort

involved, as liking a review is a quick and easy action, whereas writing and posting a comment requires more effort.

Considering the validity and reliability of using API-based and manual data collection procedures, several aspects were addressed.

For validity, construct validity was achieved by ensuring that the data retrieved through API and manual collection accurately represented the theoretical constructs of interest. This included relevant metrics such as the content of the comments, the number of likes, and the number of replies. Content validity was ensured by collecting data that covered all aspects of the measured constructs: 'comment engagement,' 'sentiment expression,' 'comment length,' and 'comment complexity.' This was achieved by gathering the content of the comments, the number of likes, and the number of replies. Criterion validity was not considered since the metrics used were very straightforward and simplistic. For example, 'comment length' was measured by counting the number of words in a comment. For reliability, Test-retest reliability was not considered because this is a social media content analysis, and the data changes over time.

To address ethical considerations, attention was paid to platform guidelines. While users couldn't provide consent for the collection of their comments, it was acknowledged that by posting publicly, users are aware of the potential for their data to be analyzed. Additionally, no personal information of the users, such as usernames or profile links, was collected. For data security purposes, the data was stored in a password-protected database. Furthermore, the research and data collection procedures were approved by the BMS Ethics Committee on May 8th.



### 3.4 Data Analysis Plan

#### 3.4.1 Quantitative Data Analysis

A One-Way Analysis of Variance (ANOVA) was conducted on the three platforms to assess whether there was a statistically significant difference between them for each numerical variable separately. ANOVA offers the advantage of simultaneously comparing means across multiple groups, thus reducing the risk of Type I error (Stähle & Wold, 1989). The assumption of independence was satisfied. The Breusch-Pagan test (Breusch & Pagan, 1979) indicated that the assumption of homogeneity of variances was not violated. The normality assumption was met, although with some deviation, which is deemed acceptable given the large sample size. Additionally, scale-location plots confirmed that the assumption of homogeneity of residuals was satisfied.

To determine a post-hoc test for further data analysis, Levene's test was conducted to assess whether the variances of the dependent variable were equal across all platforms (Levene, 1960). The test revealed heterogeneity of variances for all three non-categorical variables. Therefore, the Games-Howell test was selected as the post-hoc test because accommodates for unequal variances (Games & Howell, 1976).

For the categorical variable 'sentiment analysis', which comprises three simplified sentiments: "positive," "negative," and "other" (encompassing all sentiments not categorized as "positive" or "negative"), a contingency table was generated, and a Pearson's chi-squared test was performed. The chi-squared test assesses whether a significant association exists between two categorical variables (Pearson, 1900). The assumption of independence is presumed to be met through appropriate study design and random sampling. Means and standard deviations were recorded for each quantitative variable.

### ***3.4.2 Qualitative Data Analysis***

For qualitative data analysis, a manual coding procedure was carried out using an Excel sheet on the top 50 'popular' reviews from each platform. Initially, all comments were read to gain familiarity with the content. Potential themes, concepts, and patterns were identified during this process. Subsequently, a codebook was developed outlining the subcodes categorizing the data (see Table 4). Open coding was then performed systematically, with data being reviewed and labeled with subcodes. Finally, selective coding was applied to identify central concepts that best encapsulate the essence of the data (see Table 4). Because these qualitative analyses were secondary to the primary inferential analysis, they did not undergo a second coder reliability check.

### ***3.4.3 Triangulation of Findings***

Triangulation of quantitative and qualitative findings was employed to achieve a more comprehensive understanding of the results. Specifically, it was used to compare the outcomes of quantitative sentiment analysis with qualitative analysis of sarcasm presence. This was done because the presence of sarcasm in a text can affect sentiment analysis, potentially reducing its reliability. Maynard and Greenwood (2014) discovered in a study of Twitter that implementing rules to address the scope of sarcastic hashtags significantly enhances the performance of sentiment analysis. Additionally, thematic analysis was contrasted with automated topic modeling of all 1500 comments to determine whether the thematic analysis of the top 50 comments per platform accurately reflects the findings of the entire comment section as revealed by the quantified topic modeling.

## 4. Results

In the study's result section, several key points are highlighted. Firstly, it describes the quantitative relationships between the independent variables—namely the characteristics, norms, and cultures of the social media platforms YouTube, Letterboxd, and Reddit—and the dependent variables, which include comment engagement, sentiment expression, sentiment length, and sentiment depth. Following this, the qualitative study's results were outlined, focusing on the presence of sarcasm and topic modeling in the reviews to provide further context to the quantitative findings. Additionally, topic modeling was applied to the entire sample quantitatively to offer a comprehensive overview of the results. Finally, potential correlations between the dependent variables were identified based on the quantitative results.

### 4.1 Comment Engagement

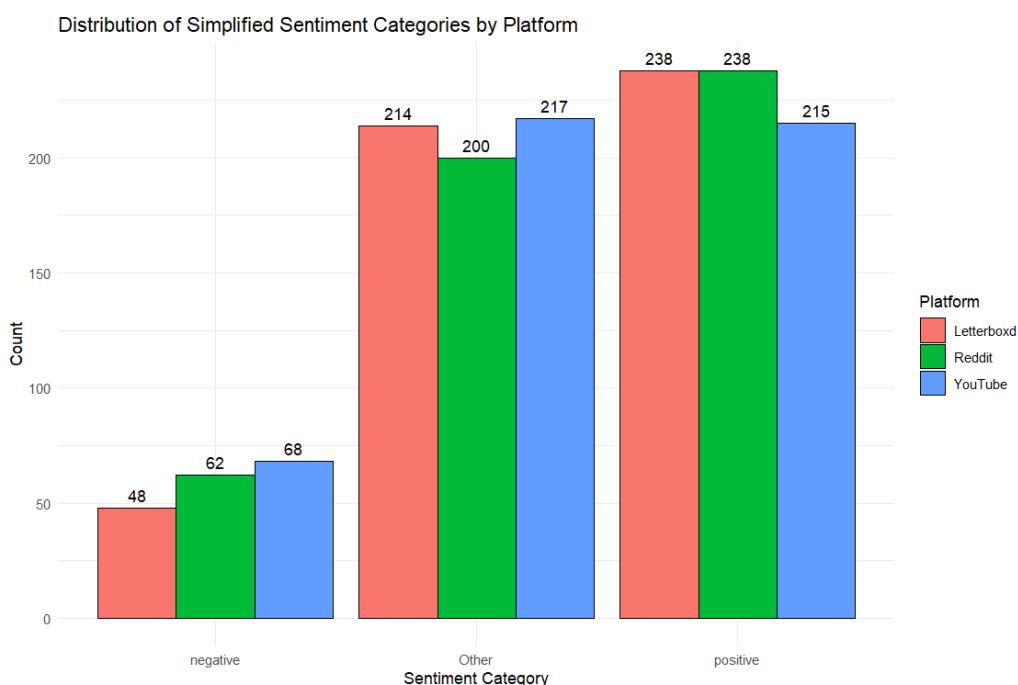
Hypothesis 1 proposed that YouTube leads to the highest comment engagement compared to the other platforms. The comment engagement score, as measured by the comment score, showed significant differences across the three platforms ( $F(2, 1497) = 19.44, p < .001$ ) in the ANOVA test. The Games-Howell post-hoc test indicated that Letterboxd comments ( $M = 175.60, SD = 659.13$ ) had significantly higher engagement scores compared to Reddit comments ( $M = 59.68, SD = 135.09, p < .001$ ) and YouTube comments ( $M = 28.87, SD = 96.14, p < .001$ ). Additionally, Reddit comments had significantly higher engagement scores than YouTube comments ( $p < .001$ ). Therefore, Letterboxd leads in comment engagement scores, followed by Reddit and then YouTube, reflecting higher user interaction and engagement on Letterboxd. As such, the outcome of this study does not support the hypothesis that YouTube leads to the highest comment engagement.

## 4.2. Sentiment Expression

The variable sentiment expression was analyzed as a categorical variable, and a chi-squared test was conducted to assess the significance of differences between the platforms. The assumption of the chi-squared test, with expected frequencies over 5, was met for all cells in the contingency table. The distribution of sentiment categories per platform is illustrated in Figure 4.

**Figure 4**

*Distribution of Simplified Sentiment Categories by Platform*



Hypothesis 2 proposed that Reddit would exhibit the highest degree of positive sentiment expression compared to the other platforms. However, the results of the chi-squared test did not support this hypothesis, indicating that there were no significant differences in sentiment expression across the three platforms ( $\chi^2 = 5.87$ ,  $df = 4$ ,  $p = .210$ ). Table 2 displays the descriptive statistics depicting the distributions of sentiment categories across platforms.

Therefore, based on the chi-squared test results, H2 cannot be rejected, because there is no evidence to support the hypothesis that Reddit leads to the highest sentiment expression compared to the other platforms.

**Table 2**

*Distribution of Sentiment Categories across Platforms*

	Negative	Positive	Other
Letterboxd	9.6%	47.6%	42.8%
Reddit	12.4%	47.6%	40.0%
YouTube	13.6%	43.0/5	43.4%

### 4.3. Comment Length

Hypothesis 3 proposed that Letterboxd leads to the highest comment length compared to the other platforms. For the word count variable, the ANOVA test showed significant differences among the platforms ( $F(2, 1497) = 17.29, p < .001$ ). The Games-Howell post-hoc test showed that YouTube comments ( $M = 65.46, SD = 75.80$ ) had a significantly lower word count compared to both Letterboxd reviews ( $M = 128.35, SD = 228.16, p < .001$ ) and Reddit comments ( $M = 102.91, SD = 170.41, p < .001$ ). There was no significant difference in word count between Letterboxd and Reddit ( $p = .113$ ). Therefore, H3 was partially accepted based on these results, as comments written on Letterboxd tended to be longer than those on YouTube, but there was no reason to assume that Letterboxd's reviews were longer than comments on Reddit.

### 4.4 Comment Complexity

When it comes to the variable comment complexity, Hypothesis 4 proposed that Letterboxd leads to the highest comment complexity compared to the other platforms. The

ANOVA test for readability scores among the three platforms (Letterboxd, Reddit, and YouTube) based on the New Dale-Chall formula yielded a significant result ( $F(2, 1497) = 14.45$ ,  $p < .001$ ). This indicates that there are significant differences in readability scores across the platforms. According to the Games-Howell post-hoc test, Letterboxd reviews ( $M = 21.31$ ,  $SD = 47.86$ ) had a significantly lower complexity compared to both Reddit comments ( $M = 30.18$ ,  $SD = 11.77$ ,  $p < .001$ ) and YouTube comments ( $M = 29.93$ ,  $SD = 14.73$ ,  $p < .001$ ). There was no significant difference in readability between Reddit and YouTube ( $p = .954$ ). These results suggest that Letterboxd has the lowest complexity, indicating that its content is generally more accessible and easier to understand than content on Reddit and YouTube. Therefore, H4 was rejected, as comments written on Letterboxd tended to be less complex than on the other platforms.

#### **4.5. Correlations between dependent variables**

A Pearson's correlation analysis was conducted to examine the relationships between the dependent variables and determine if they might influence each other. However, as shown in Table 3, none of the correlations were significant. Therefore, it can be concluded that there is no significant linear relationship between the dependent variables in this study.

**Table 3***Correlation Matrix of the Dependent Variables*

		Comment Engagement	Sentiment Expression	Comment Length	Comment Complexity
Comment	Pearson's r:				
Engagement	p-value:				
Sentiment	Pearson's r:	-.01			
Expression	p-value:	.649			
Comment	Pearson's r:	-.025	.28		
Length	p-value:	.693	.510		
Comment	Pearson's r:	-.10	-.10	-.28	
Complexity	p-value:	.717	.641	.262	

## 4.6. Qualitative Measures

### 4.6.1 Presence of Sarcasm

Qualitatively mapping sarcasm in the top 50 comments of each platform showed considerable differences in its presence. A chi-square test of independence was conducted to determine whether the presence of sarcasm was independent of the platform. The results were significant, ( $\chi^2 = 32.81$ ,  $df = 4$ ,  $p < .001$ ), suggesting that sarcasm levels are not independent of the platform. In other words, the platform used can influence the expression of sarcasm.

As shown in Table 4, almost no sarcastic comments were found on YouTube, with only 4 possibly sarcastic comments and 3 certainly sarcastic ones. The comments were mixed in sentiment, including remarks on the overall experience of the movie and mentions of funny lines and scenes. An example of such a comment is: "Corporate feminism bad yet decent and funny movie." YouTube.

Overall, most YouTube comments were serious, focusing on expressing users' opinions. In contrast, Letterboxd had 27 certainly sarcastic comments and 6 possibly sarcastic ones. The most popular comment on the platform is certainly a sarcastic one: “s(he's) bro(ken).” Letterboxd.

Letterboxd had the largest number of sarcastic comments, which were mostly short and to the point. Most of these comments focused on themes of feminism, patriarchy, and the character Ken, clearly aimed at an audience that could understand abstract jokes.

Reddit was in-between, with 14 certainly sarcastic comments and 2 possibly sarcastic ones. Much of the sarcasm was connected to specific scenes or lines in the movie, often appreciating their humor. Many comments also praised Ryan Gosling’s acting in a sarcastic but positive way, such as “Ryan Gosling’s experience in the Mickey Mouse Club paid off in this. He IS Ken.” Reddit.

The significant difference in sarcasm between YouTube and Letterboxd suggests that the sentiment analysis of Letterboxd might have been more skewed by sarcastic comments compared to YouTube. Furthermore, it has been noticed that sarcastic comments tend to be shorter, which could impact the dependent variable ‘comment length’ on Letterboxd more.

#### **Table 4**

*Codebook: Presence of Sarcasm*

	<b>Code</b>	<i>YouTube</i>	<i>Letterboxd</i>	<i>Reddit</i>
Straightforward comments with no indication of sarcasm	<b>1. No sarcasm</b>	43	17	34
Comments that might be sarcastic but are ambiguous	<b>2. Possible sarcasm</b>	4	6	2
Comments that are clearly sarcastic based on context and tone	<b>3. Certain sarcasm</b>	3	27	14



#### **4.6.2. Thematic Analysis**

As depicted in Table 5, Reddit generally exhibited a highly positive reception, with 30 comments reflecting this sentiment. This seems to tie in with the fact that 34 Reddit comments discussed humorous and satirical scenes, appreciating their funniness. There was a lot of ‘line quoting’ of funny moments, such as one person commenting: “My favorite underrated line was, 'Do giant hands come out of the sky?' - 'What? No, that would be insane.’” Reddit.

There was also a high appreciation of the movie's message and story. In fact, the perception was so good that there were no comments expressing a negative view of the movie.

On Letterboxd, users were generally more critical, as evidenced by 8 comments expressing a less favorable view. These comments particularly criticized the film’s shallow depiction of feminism and its capitalistic roots and messaging, as shown in this example comment: “What is the Barbie movie? Is it a feminist film? Absolutely not. Feminism cannot coexist with capitalist and commercialist messaging.” Letterboxd.

However, Letterboxd users remained highly engaged with the humorous and satirical aspects of the movie, as indicated by 36 comments. These comments were usually short and to the point, often mentioning the character Ken and making little humorous jokes such as: “Ken meetup in the men's bathroom, see ya there.” Letterboxd.

In contrast, YouTube comments presented a more balanced mix of positive, mixed, and negative reception. There was a notable emphasis on the plot with 13 comments, where users discussed things happening in the movie and how they represent the real world. This ties into the fact that many users also discussed the cultural commentary of the movie with 23 comments. An example of such a comment:

I feel like Barbie showed a pink, pretty, girl power world where matriarchy and feminism rule and men are accessories. When they travel to the real world, we are shown the patriarchy, the men in charge, the exact opposite of the female-empowered Barbieland where the women are treated like objects. The political side of this film showed that both extreme patriarchal and matriarchal worlds extremely hurt the opposite gender.

The comments focused on how the real world differs from Barbieland (a land where Barbie lives in the movie) and the negative and positive sides of each of the worlds. Additionally, 7 comments on YouTube discussed comparisons to other works, mentioning how it is a good turn for Hollywood to have original-script movies be so popular. They also compared ‘Barbie’ to another toy movie, ‘LEGO Movie,’ and to ‘Oppenheimer,’ mentioning how they are planning to see both movies. All in all, there was strong depth to YouTube comments, with deep levels of reflection. It had fewer discussions of humor, satire, and jokes compared to the other platforms, with only 3 comments on this topic, focusing more on deep analysis.

**Table 5**

*Thematic Analysis Codebook*

Code	YouTube	Letterboxd	Reddit
Positive Reception	16	9	30
Negative Reception	3	8	0
Mixed Reception	7	4	0
Humor and Satire	3	36	34
Plot and Story	13	5	8
Cultural Commentary	23	11	5
Technical Aspects	2	3	3
Comparisons	7	5	1
Viewer experience	7	9	7

## 4.7. Automated Topic Modeling

The findings of the algorithmic topic modeling can be categorized into 5 themes: ‘Worldviews and Central Messaging’, ‘Feminism and Representation’, ‘Evaluation of Celebrities’, ‘Dolls as Products and Cultural Icons’, and ‘Ken and Patriarchy’.

### 4.7.1 *Worldviews and Central Messaging*

Beginning with the theme 'Worldviews and Central Messaging', Letterboxd users delved into the overarching worldview and central message conveyed in the Barbie movie (Figure 5, plot 1). They reflected on how the film's themes resonate with them personally, utilizing terms such as "women," "everything," and "world." As one user commented:

the depth and breadth of its central message was something i couldn't have ever anticipated, despite having the utmost faith in greta gerwig at every twist and turn. and even though i'd been looking forward to this film for years (five, in fact), it hit me right when i needed it most.

Meanwhile, Reddit users focused on the movie's depiction of gender dynamics, particularly the differences between men and women in the real world (Figure 6, plot 1). They analyzed how the characters of Ken and Barbie highlight these issues with common words such as “women”, “men”, “feminist” and “people”. In the words of a user:

I don't know if anyone else felt this way, but it just perfectly described the disconnect between men and women to me.

On YouTube, commenters discussed the broader implications of feminism and patriarchy presented in the Barbieland, relating these themes to real-world scenarios. The conversations also touch on the role of motherhood and compare the message in Barbie to the movie Oppenheimer, reflecting on the societal expectations of movies aimed at women (Figure 7, plot 1). This was

highlighted by commonly used words such as “feminism”, “mother”, “patriarchy”, “Oppenheimer”, “message”, “agree”. As per one user's input:

Tbh not every movie catered towards women has to have a groundbreaking feminist message.”

Perceptions of feminism in the movie were varied, including both positive and negative viewpoints.

**Figure 5**

*Letterboxd Topic Modeling*

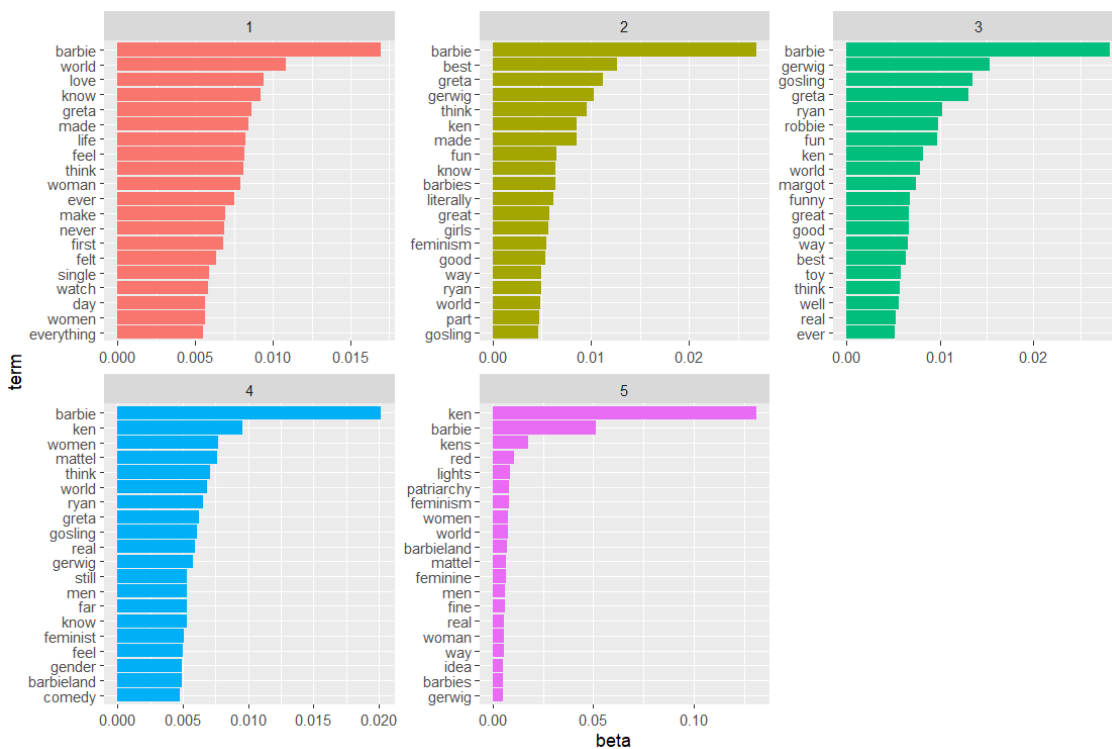


Figure 6

Reddit Topic Modeling

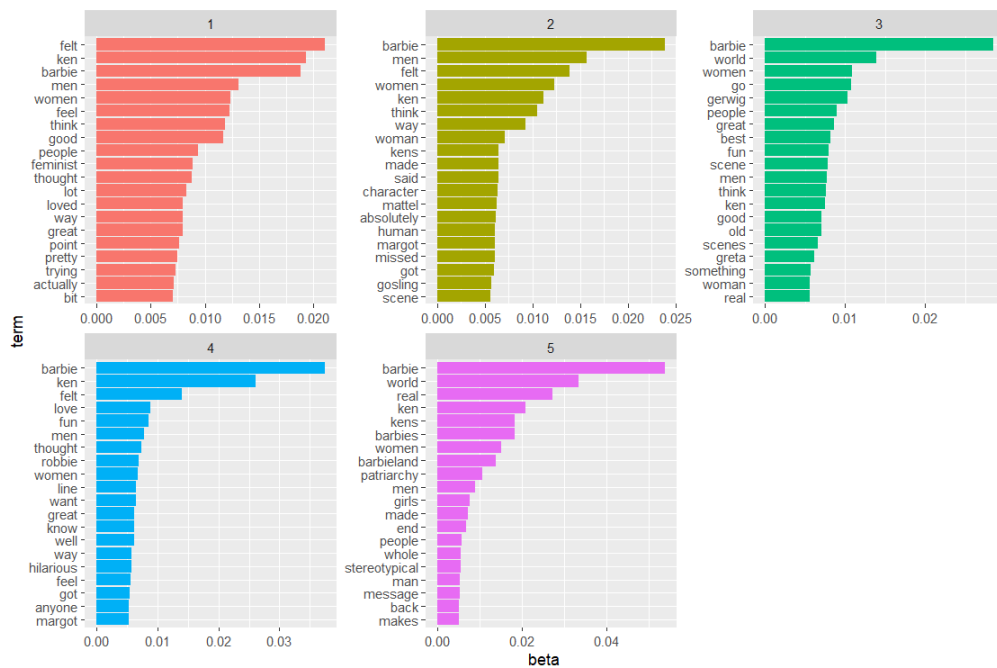
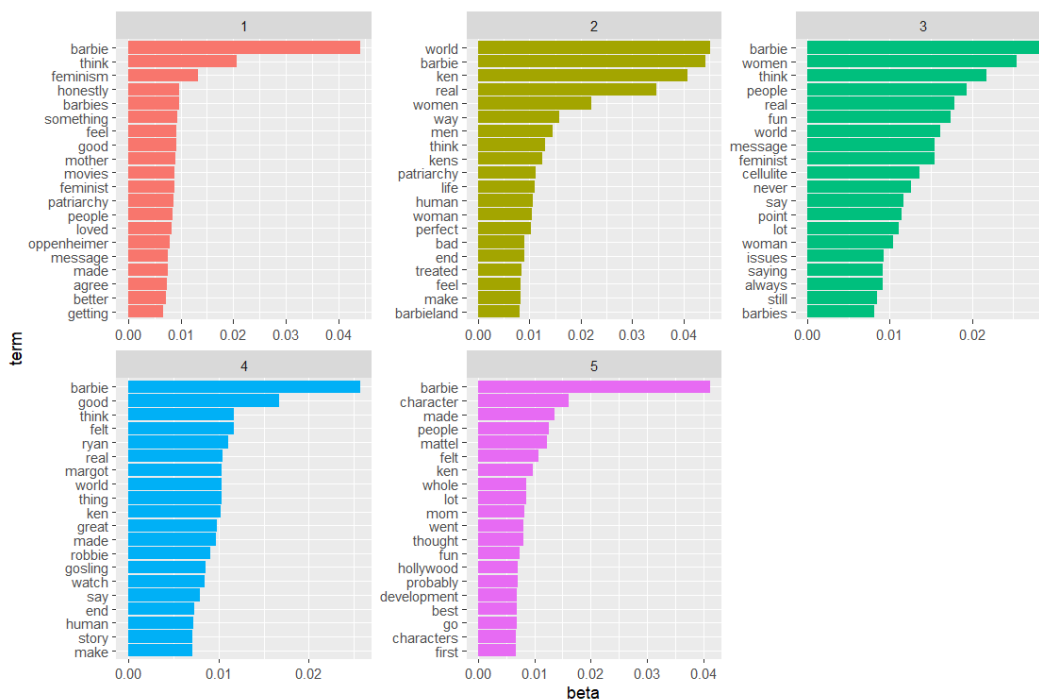


Figure 7

YouTube Topic Modeling



### 4.7.2 *Feminism and Representation*

When it comes to the theme “Feminism and Representation”, Letterboxd users critically evaluated how effectively Greta Gerwig represented feminism in the Barbie movie, with most common words such as "feminism," "girls," "think," and "gerwig" (Figure 5, plot 2). As one user commented:

since everyone is misunderstanding my point i am saying that the movie is feminism for dummies - can feminism only be palatable to audiences when nicely packaged in on the nose pop culture references, girlboss speeches, and pretty visuals? or maybe only when produced by capitalist machines that have actively contributed to the struggles of women , but it's okay because they are making self aware jokes!!)

On Reddit, the focus was on how the characters of Barbie and Ken, as crafted by Mattel, mirror real-world gender roles, with most common words such as "barbie," "men," "women," "ken," "woman," and "mattel" (Figure 6, plot 2). In the words of a user:

Barbie, a plastic doll, is the epitome of incredibly unrealistic beauty standards — and so to have a personification of that concept meet an aging woman for what seems like the very first time, and for Stereotypical Barbie to say, with utmost sincerity, that the lady is beautiful...

YouTube comments explored similar themes, focusing on women’s issues and their portrayal in the movie, such as in the scene where Barbie feared cellulite, interpreting them as broader commentaries on societal pressures and feminist ideals (Figure 7, plot 3). As shown by the most common words such as "message," "cellulite," "feminist," and "issues". As per one user's input:

in my opinion the dealbreaker being cellulite wasn't that barbie was scared of 'being fat' rather that she was scared of imperfection. the barbies are made of plastic- which is smooth, untextured and untarnished- so i would assume even the plus size barbies don't have cellulite as they are portrayed as plastic, untouched dolls without any textural 'flaws'

Users engaged in discussions about the quality of the portrayal of women's issues in the movie.

#### ***4.7.3 Evaluation of Celebrities***

On Letterboxd, there was an appreciation for the performances of the main celebrities involved in the Barbie movie, particularly Greta Gerwig, Margot Robbie, and Ryan Gosling (Figure 1, plot 3). With words such as "gerwig," "gosling," "ryan," "robbie," "margot," and "great" being frequent. As one user commented:

Margot Robbie is beyond perfect in a role she was born to play, while Ryan Gosling is exuberantly hilarious.

This positive sentiment was mirrored on Reddit, where users highlighted specific scenes that showcased actors' talents, often mentioning the comedic and entertaining aspects of their performances, with common words such as "great," "best," "fun," "scene," and "good" (Figure 6, plot 4). Per one user's observation:

Barbie falling over in defeat was a great bit of physical comedy from Margot Robbie.

YouTube comments similarly focused on the performances of Robbie and Gosling, with most frequent words such as "ryan," "margot," "ken," "barbie," "robbie," and "gosling" (Figure 7, plot 4). As per one user's input:

Also can we just appreciate how Margot Robbie and Ryan Gosling just embodied their characters? I hope they both get Oscar noms.

Users generally expressed satisfaction with the performances.

#### ***4.7.4 Dolls as Products and Cultural Icons***

Letterboxd discussions touched on the portrayal of Barbie and Ken as cultural icons and commercial products, with words such as "think," "world," "real," "barbie," "ken," and "mattel" (Figure 5, plot 4). As one user commented:

Is it a commercial for Mattel and Barbie toys? Right down to the product description freeze frames.

YouTube comments focused on the character development and the portrayal of Barbie and Ken by Mattel and Hollywood in a generally positive sentiment (Figure 7, plot 5). Frequent words were "character," "mattel," "thought," "fun," "development" and "Hollywood". In the words of a user:

I thought the mattel guys were hilarious, I wanted more of them. It felt like how kids play with 'villains' who are incompetent just to let the good guys win. I agree that the scenes between Ken and Barbie were the best, though.

Some users were surprised by the negative depiction of Mattel in the movie.

#### ***4.7.5 Ken and Patriarchy***

On Letterboxd, users explored the character of Ken and his portrayal in the movie, discussing themes of patriarchy, with common words such as "ken," "men," "patriarchy," and "kens" (Figure 5, plot 5). As one user commented:

it's the most dissatisfying response to the incel crisis. ken is a lot more compelling than barbie here. the idea of existing in disprivilege in barbieland, where your occupation is beach and the woman you were created to love does not care for your existence, only to discover the real world and the joys of patriarchy just hits



Reddit users analyzed the role of patriarchy in both Barbieland and the real world, discussing stereotypes and their impact on the audience such as girls (Figure 6, plot 5). Frequent words were “barbieland,” “patriarchy,” “girls,” “people,” “stereotypical,” “man,” and “message”.

As per one user's input:

The line at the very beginning of the movie that talks about how little girls only played with baby dolls which only allows them to play as a mother until Barbie came around. I had never thought about it before but it feels so true!

On YouTube, the discussions centered around the portrayal of patriarchy and feminism, with commenters debating the film’s messages about gender equality and societal roles (Figure 7, plot 2). The most frequent words were “world”, “women”, “men”, “patriarchy,” “life,” “human,” “treated,” “barbieland.” Per one user's observation:

The whole movie shows that both matriarchy and patriarchy are stupid. That both men and women can be shitty to eachother when they cling to eachother for self worth without at least trying to figure out who they are outside of a relationship and the work they need to put in themselves as they grow from kids to adults to face reality.

Users particularly focused on discussing how Barbieland relates to the real world.

## 5. Discussion

### 5.1 Main Findings

After presenting the research and its findings, the question “How do the characteristics, norms, and culture of platforms like YouTube, Letterboxd, and Reddit relate to the engagement levels and content of comments about the movie 'Barbie' (2023)?” can be answered. Regarding the quantitative findings, it was interesting to observe which platforms ranked highest and lowest on different characteristics of their movie review comments and which platforms did not

significantly differ from each other. For the qualitative findings, it was interesting to see the popular themes and sentiments regarding the movie 'Barbie' and how they varied between the platforms.

To first consider the comment engagement on the platforms, the assumption of Hypothesis 1 was that YouTube would lead to the highest comment engagement compared to the other platforms. The reasoning was that YouTube's algorithm allows for a very large and broad audience to discover the content, and the diversity of this broad audience can lead to extensive discussions and engagement. Additionally, Shahbaznezhad et al. (2021) found that video format, which is the main form used on YouTube, encourages users to actively engage by sharing their opinions and comments, while other forms of posts encourage more passive engagement. However, we found that Letterboxd was the platform with the highest engagement, followed by Reddit, and lastly YouTube. Thus, the result was much different than expected.

It is interesting to see that Letterboxd, a niche platform with 12 million registered users, generated more engagement than YouTube, which has 933 million users (Wikipedia contributors, 2024; Degenhard, 2023). The reason for this difference could be that Letterboxd is primarily focused on movie ratings and reviews. Its community is passionate about film critique and deeply engaged in reviewing movies. According to the affordance theory, the environment suggests possible uses to the observer (Gibson, 1966). The unique niche of Letterboxd as a movie-focused close-knit community might stimulate high engagement among users. According to Hsu et al. (2012), close community identification can lead to higher engagement.

Secondly, three dependent variables were measured in the context of the comment and its content, the first variable being sentiment expression. The assumption of Hypothesis 2 was that Reddit would lead to the highest degree of positive sentiment expression among the platforms.

The reasoning was that Reddit allows for a high degree of anonymity, which is valued on that platform and could encourage free sentiment expression. Furthermore, Reddit is the only platform that shows the number of upvotes and downvotes next to a comment. However, the results showed that there is no significant difference between the three platforms when it comes to sentiment expression. This is an interesting finding because, in accordance with the dual-capacity model of communication media choice, it was assumed that the differing media richness between the platforms would impact media choice for expressing sentiment (Sitkin et al., 1992).

However, it seems that there is a consistency in sentiment expression across YouTube, Reddit, and Letterboxd, regardless of their media richness options and users' individual circumstances. This suggests that users are not influenced by the platform when expressing their sentiments and do not choose different platforms to express different sentiments. Therefore, it might not be the platform's environment and culture that impact the sentiment of a comment but rather something else. It has been found for example that the cultural background and personal characteristics of users could have a strong impact on their sentiment expression (La et al., 2022).

The second variable directly measuring comments' content was comment length. In Hypothesis 3, we assumed that Letterboxd would lead to the longest comments compared to the other platforms. This assumption was based on the fact that Letterboxd functions as a personal diary for logging movies, rating them, and writing reviews (Mediavilla Aboulaoula & Biltereyst, 2021). As a platform, it encourages longer reviews due to its structure and purpose. The hypothesis was partially accepted, as comments on Letterboxd tended to be longer than those on YouTube. However, there was no significant difference between the length of comments on Letterboxd and Reddit. This is an interesting finding, as we assumed that the 'forum' nature of Reddit would result in shorter comments, more similar to replies than diary entries. It is

important to note that both Letterboxd and Reddit have no character limit, unlike YouTube's 10,000-character limit. Additionally, YouTube's broadcasting nature of one-to-many could have impacted the average length of comments. According to Schultes et al. (2013), there is a prevalence of comments containing offensive statements, insults, irrelevant content, or short emotional shout-outs on YouTube, which might explain the lowest average comment length.

The third and final variable directly measuring comments' content was comment complexity. In Hypothesis 4, we assumed that Letterboxd would lead to the highest comment complexity compared to other platforms. Complexity here refers to the frequency of difficult words used and the average length of sentences. This assumption stemmed from Letterboxd's various text editing and customization options, as well as its unique features for rating movies, timestamping reviews, tagging reviews, and marking spoilers. Additionally, Letterboxd's niche focus on movie enthusiasts likely contributes to hosting the most film-informed community among the three platforms.

However, surprisingly, Letterboxd turned out to have the lowest comment complexity compared to Reddit and YouTube, meaning that the comments there were the most 'simply written'. There was no significant difference between the comment complexity on Reddit and YouTube. Perhaps this difference is due to the prevalence of sarcastic comments observed in the qualitative analysis of Letterboxd. Ironic comments tend to be more challenging for readability formulas to analyze (Bailin & Grafstein, 2001).

By analyzing the presence of sarcasm and conducting thematic analysis, we can paint a picture of the movie critique environments, particularly concerning the 'Barbie' movie.

YouTube's critique environment for 'Barbie' appears to be highly reflective, with users predominantly offering thoughtful opinions that delve into the movie's plot, its real-world

implications, and comparisons with other films. Sarcasm is minimal, and the overall tone of comments leans towards seriousness. This may be attributed to the nature of the content being reflective, such as commentary videos that present opinions and questions for users to respond to. Users engage in reflective discussions in their comments, further enhancing the depth of reflection. Research has shown that YouTube comments can serve as informal spaces for scientific deliberation and forums for collaborative interactions that support lifelong learning (Dubovi & Tabak, 2020). Therefore, it is logical that these comments exhibit a reflective nature.

The critique environment for 'Barbie' on Reddit featured a moderate level of sarcasm, often linked to specific scenes or lines that highlighted humor and wit. Users showed particular enthusiasm for Ryan Gosling's performance as Ken, and the overall perception of the movie was very positive, with frequent quoting of funny lines. One potential explanation for these findings could be Reddit's downvoting system. This system influences the visibility of content within subreddits, where highly upvoted and commented-on posts rise to the top. Positive comments that quote funny lines or describe humorous scenes may be viewed as uncontroversial and thus become more popular, shaping the specific critique environment for 'Barbie' on Reddit (Hiaeshutter-Rice & Hawkins, 2022).

The critique environment for 'Barbie' on Letterboxd was characterized by a significant presence of sarcasm, albeit in somewhat different ways compared to Reddit. While many sarcastic comments humorously remarked on funny lines, characters, and scenes from the movie, others adopted a more negative and satirical tone critiquing various aspects of the film. Users' jokes on Letterboxd tended to be more abstract than those on other platforms.

Overall, the platform took a critical stance, with several comments expressing dissatisfaction with what was perceived as a shallow depiction of feminism and criticisms of

capitalist messaging within the movie. One potential reason for this heightened critique on Letterboxd could be that its users are avid movie watchers and enthusiasts of the art of filmmaking, with considerable experience and a wide range of movie references to draw from when reviewing films. As such, they may hold higher standards and be more inclined to analyze movies critically.

Research by Plucker et al. (2009) suggests that users of film websites often share similarities with professional movie critics rather than casual moviegoers. This alignment with professional critics may contribute to the depth of themes discussed on Letterboxd for movies like 'Barbie', as well as the heightened expression of negative opinions (Plucker et al., 2009).

The automated topic modeling revealed common themes discussed across platforms regarding the movie 'Barbie'. These themes included the movie's worldviews and central messaging, feminism and representation within the film, evaluation of celebrities involved, discussions on Barbie dolls as products and cultural icons, and debates on Kens and representations of patriarchy. These discussions aligned closely with the movie's intended goals. According to Yakalı (2024), the movie aimed to stimulate discussion and foster positive change by commercializing feminist debates and critically engaging with themes of patriarchy and masculinity through satire. The fact that these themes were consistently discussed in comments about the movie suggests that the goal of sparking debate had been achieved.

In summary, this study identified distinct movie critique environments on each platform, likely shaped by their unique characteristics, norms, and cultures.

YouTube had the lowest comment engagement among the platforms, and sentiment expression did not significantly differ across platforms, suggesting that user emotions are not platform-dependent. YouTube's comments were not the longest but had higher complexity

compared to Letterboxd. They were characterized by reflective discussions focusing on plot analysis, real-world implications, and comparisons with other movies, with minimal sarcasm.

Reddit comments showed higher engagement than YouTube's, were longer than YouTube's, and had greater complexity than those on Letterboxd. They often included moderate sarcasm, particularly mentioning specific scenes or lines in a positive tone.

On Letterboxd, comments received the highest engagement and were longer than those on YouTube. However, they were the least complex to read and featured a high degree of sarcasm, both in humorous and critical contexts, including abstract jokes.

Each platform facilitated unique patterns of engagement and content characteristics, yet all contributed to discussions that reflected on themes such as feminism, patriarchy, and capitalism, aligning with the movie's intended messages.

## **5.2. Theoretical Implications**

The findings of this study have several implications for theoretical understanding. Firstly, this study opens new avenues for future research. While Jensen et al. (2021) have discussed the intermediality of Reddit, Letterboxd, and YouTube, no prior studies have specifically compared these platforms' movie critique environments in depth. The data and main findings of this study can provide academic support for research in the field of user-generated movie critique. For instance, studies on media richness and media perception could benefit from understanding how these social media platforms differ in comment content and engagement levels. Additionally, research on emotional expression and communication behavior could use these findings to explore how digital environments influence the way people express and interpret emotions.

The findings of this study suggest that the dual-capacity model of communication media choice may be insufficient to fully explain the preferences for social media platforms in the

context of movie critique. The dual-capacity model primarily focuses on the inherent characteristics of communication media, such as data-carrying and symbol-carrying capacities (Sitkin et al., 1992). However, it fails to adequately address the dynamic and evolving nature of how media are utilized in contemporary contexts.

Regarding sentiment expression, the findings indicate that there is no significant difference between platforms, suggesting that the dual-capacity model alone may not sufficiently explain how sentiment is conveyed in modern digital communication. The model overlooks the influence of emojis, GIFs, and memes, which are integral to contemporary communication and enhance sentiment expression by providing shared cultural references that convey emotions and nuances. Understanding current pop culture trends would provide a more comprehensive explanation of sentiment expression dynamics.

For comment length, the dual-capacity model could partially explain why users prefer shorter comments, especially considering YouTube's limited media richness imposed by comment length restrictions. Cultural preferences for concise communication, influenced by current trends, should also be taken into account.

Regarding comment complexity, internet culture plays a significant role, including the use of irony, sarcasm, and layered meanings in online discourse. These cultural dynamics add complexity to comments, which the dual-capacity model, focused on media capacities, may not fully capture. For instance, despite having high data-carrying and symbol-carrying capacities, Letterboxd scored lower in comment complexity in this study. Understanding cultural nuances and contextual factors is crucial for explaining the characteristics of comments as observed in this research.



### 5.3 Practical Implications

This study also carries practical implications. For social media users and movie fans, this study provides insights into how movie reviews vary across platforms like YouTube, Reddit, and Letterboxd. Users can learn about the typical characteristics of movie review comments they might encounter on each platform, helping them decide where to engage when writing their own reviews or participating in movie discussions.

For movie marketing strategists, the findings offer valuable insights. As highlighted in a study by Niraj & Singh (2015), generating user-generated reviews that are plentiful and positive can significantly boost movie revenues and influence peer-to-peer consumption decisions. User reviews, particularly their aggregate ratings, are crucial in impacting sales on movie review platforms (Deng, 2020). Therefore, incorporating user-generated movie reviews into film marketing strategies is essential. This study provides guidance on which platforms to target and how messages can be tailored to maximize impact on diverse audiences. It illustrates potential engagement levels and feedback in terms of comment length, complexity, sentiment, and thematic content.

For movie publishers and producers, this study aids in understanding how audiences might react to their latest releases on social media platforms such as Letterboxd, Reddit, and YouTube. Using the example of 'Barbie', the study demonstrates how discussions about a movie unfold on these platforms and the recurring themes that emerge. It underscores that the overall sentiment of movie discussions is not dependent on the platform.

#### 5.4. Limitations and Future Research

While this study draws upon existing theories and academic literature and was conducted with a large sample of 1500 units, there are several limitations that should be addressed regarding this study and its findings.

Firstly, focusing on comments about the movie 'Barbie' provided valuable insights due to its significance as a pop-cultural phenomenon, stimulating extensive discussion across various communities. However, a limitation of this choice is the specificity of the movie itself. Exploring comments from a single specific movie makes it challenging to draw broader conclusions about movie critique environments on social media platforms. Future research in this field could benefit from collecting comments from different movie genres or movies varying in popularity to achieve more generalized findings.

Secondly, it's important to acknowledge that the communities from which comments were collected varied across platforms. The choice of specific YouTube videos and Reddit subreddits likely influenced the characteristics of the comments, as different communities have distinct norms and demographics. For future research aiming to comprehensively understand comment characteristics across platforms, it would be advantageous to collect user information (with permission) to better understand demographics and contextual factors influencing comment content.

Thirdly, this study analyzed the top 500 popular comments from each platform. It's crucial to note that the algorithms determining which comments are deemed 'popular' differ between platforms. Therefore, while these top 500 comments represent what users typically see, they may not be directly comparable due to algorithmic variations. Future research could

consider collecting all comments and randomly selecting 500 from each platform to mitigate the impact of algorithmic differences on results.

Lastly, as mentioned earlier, comment characteristics, engagement, and content are influenced by cultural events and trends. This study did not consider the timeline of comment posting in relation to current events and trends. Future research could include timestamps of comments and compare them with cultural events and trends to provide additional context to the characteristics of social media movie discussions.

## **5.5. Conclusion**

This study aimed to answer the question of how the characteristics, norms, and culture of platforms like YouTube, Letterboxd, and Reddit relate to the engagement levels and content of comments about 'Barbie'. To do so, this study analyzed the 500 most popular comments from each platform to draw conclusions on comment characteristics.

The findings revealed that YouTube, Letterboxd, and Reddit each fostered unique environments for movie critiques. YouTube comments showed the least engagement and, while not the longest, were relatively complex, often reflective and focused on the plot, real-world implications, and comparisons to other movies, with minimal sarcasm. Reddit comments were more engaged and longer than YouTube's, moderately sarcastic, and often mentioned specific scenes or lines positively. Letterboxd comments were the most engaged, longer than YouTube's, and the least complex. They were highly sarcastic, using humor and abstract jokes in both positive and critical remarks. Sentiment expression did not significantly differ across the platforms, indicating that users' emotional expressions are not platform-dependent.

This study contributes new directions for research by comparing movie critique environments on Reddit, Letterboxd, and YouTube and filling a gap in the existing literature on

digital movie critique environments. Findings suggest the dual-capacity model may inadequately explain platform choices for sentiment expression, comment length, and complexity, which are shaped more by cultural trends and user behaviors. Practically, these findings offer guidance for social media users selecting platforms for movie discussions, inform movie marketing strategies based on user-generated reviews, and aid movie publishers in understanding audience reactions across different social media environments.

However, the study also acknowledges limitations, such as the specificity of analyzing comments solely from the movie 'Barbie' and variations in community demographics across platforms. Future research could explore a broader range of movie genres, delve into diverse user demographics, and consider the temporal context of comment posting to provide a more comprehensive understanding of social media movie critique dynamics.

## 6. References

- Ali, F., Terrah, A., Wu, C., Ali, L., & Wu, H. (2021). Antecedents and consequences of user engagement in smartphone travel apps. *Journal of Hospitality and Tourism Technology*, 12(2). <https://doi.org/10.1108/JHTT-09-2020-0221>
- Arthurs, J., Drakopoulou, S., & Gandini, A. (2018). Researching YouTube. In *Convergence* (Vol. 24, Issue 1). <https://doi.org/10.1177/1354856517737222>
- Askalidis, G., Kim, S. J., & Malthouse, E. C. (2017). Understanding and overcoming biases in online review systems. *Decision Support Systems*, 97. <https://doi.org/10.1016/j.dss.2017.03.002>
- Bailin, A., & Grafstein, A. (2001). The linguistic assumptions underlying readability formulae: A critique. In *Language and Communication* (Vol. 21, Issue 3). [https://doi.org/10.1016/S0271-5309\(01\)00005-2](https://doi.org/10.1016/S0271-5309(01)00005-2)
- Blanchard, A. L., Welbourne, J. L., & Boughton, M. D. (2011). A model of online trust: The mediating role of norms and sense of virtual community. *Information Communication and Society*, 14(1). <https://doi.org/10.1080/13691181003739633>
- Breusch, T. S., & Pagan, A. R. (1979). A Simple Test for Heteroscedasticity and Random Coefficient Variation. *Econometrica*, 47(5), 1287–1294. <https://doi.org/10.2307/1911963>

Capitalize my title. (2022, July 6). *Capitalize My Title*. <https://capitalizemytitle.com/character-count/10000-characters/>

Carlson, J. R., & Zmud, R. W. (1999). Channel expansion theory and the experiential nature of media richness perceptions. *Academy of Management Journal*, 42(2).  
<https://doi.org/10.2307/257090>

Çelik, Z., Kabak, A., & Uslu, A. (2022). The Effect of Text, Image and Video-Based Product Review Presentation Formats on Online Purchasing Intention. *Anadolu Üniversitesi Sosyal Bilimler Dergisi*, 22(2). <https://doi.org/10.18037/ausbd.1136341>

Chall, J. S., & Dale, E. (1995). Readability Revisited: *The New Dale-Chall Readability Formula*. Brookline Books. <https://books.google.nl/books?id=2nbuAAAAMAAJ>

Cheong, H. J., & Morrison, M. A. (2008). Consumers' Reliance on Product Information and Recommendations Found in UGC. *Journal of Interactive Advertising*, 8(2).  
<https://doi.org/10.1080/15252019.2008.10722141>

Chua, A. Y. K., & Banerjee, S. (2015). Understanding review helpfulness as a function of reviewer reputation, review rating, and comment complexity. In *Journal of the Association for Information Science and Technology* (Vol. 66, Issue 2).  
<https://doi.org/10.1002/asi.23180>

- Chujo, K. (2005). Understanding the role of text length, sample size, and vocabulary size in determining text coverage. *Reading in Foreign Language, 17*(1).
- Conte, N. (2024, May 22). CHARTeD: Marvel's box office rise (and fall?). *Visual Capitalist*.  
<https://www.visualcapitalist.com/charted-marvel-box-office/>
- Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science, 32*(5).  
<https://doi.org/10.1287/mnsc.32.5.554>
- Daugherty, T., Eastin, M. S., & Bright, L. (2008). Exploring Consumer Motivations for Creating User-Generated Content. *Journal of Interactive Advertising, 8*(2).  
<https://doi.org/10.1080/15252019.2008.10722139>
- Debenedetti, S. (2006). The Role of Media Critics in the Cultural Industries. *International Journal of Arts Management, 8*(3).
- Degenhard, J., (June 27, 2023). Number of YouTube users worldwide from 2020 to 2029 (in millions) [Graph]. In *Statista*. Retrieved June 27, 2024, from  
<https://www.statista.com/forecasts/1144088/youtube-users-in-the-world/>

- Deng, T. (2020). Investigating the effects of textual reviews from consumers and critics on movie sales. *Online Information Review*, 44(6). <https://doi.org/10.1108/OIR-10-2019-0323>
- Dockterman, E. (2023, October 6). How Marvel lost its way. *TIME*.  
<https://time.com/6319815/marvel-cinematic-universe-future/>
- Dubovi, I., & Tabak, I. (2020). An empirical analysis of knowledge co-construction in YouTube comments. *Computers and Education*, 156.  
<https://doi.org/10.1016/j.compedu.2020.103939>
- Eberhard, L., Posch, L., Walk, S., & Helic, D. (2019). Evaluating narrative-driven movie recommendations on reddit. *International Conference on Intelligent User Interfaces, Proceedings IUI, Part F147615*. <https://doi.org/10.1145/3301275.3302287>
- Fiedler, M., & Sarstedt, M. (2014). Influence of community design on user behaviors in online communities. *Journal of Business Research*, 67(11).  
<https://doi.org/10.1016/j.jbusres.2014.06.014>
- Flanagin, A. J., & Metzger, M. J. (2013). Trusting expert versus user-generated ratings online: The role of information volume, valence, and consumer characteristics. *Computers in Human Behavior*, 29(4). <https://doi.org/10.1016/j.chb.2013.02.001>



Fox, S., & Madden, M. (2006, October 5). *Riding the waves of "Web 2.0."* Pew Research Center.

Retrieved April 22, 2024, from <https://www.pewresearch.org/internet/2006/10/05/riding-the-waves-of-web-2-0/>

Gala, N. N., Rapp, R., Bel-Enguix, G., & Gala, N. N. (2015). Language Production, Cognition, and the Lexicon. *Language Production, Cognition, and the Lexicon*, 48.

Games, P. A., & Howell, J. F. (1976). Pairwise Multiple Comparison Procedures with Unequal N's and/or Variances: A Monte Carlo Study. *Journal of Educational Statistics*, 1(2), 113–125. <https://doi.org/10.2307/1164979>

Gibson, J. J. (1966). *The senses considered as perceptual systems.* Houghton Mifflin.

Gupta, S., Deodhar, S. J., Tiwari, A. A., Gupta, M., & Mariani, M. (2024). How consumers evaluate movies on online platforms? Investigating the role of consumer engagement and external engagement. *Journal of Business Research*, 176.

<https://doi.org/10.1016/j.jbusres.2024.114613>

Hiaeshutter-Rice, D., & Hawkins, I. (2022). The Language of Extremism on Social Media: An Examination of Posts, Comments, and Themes on Reddit. *Frontiers in Political Science*,

4. <https://doi.org/10.3389/fpos.2022.805008>

- Hsu, C. P., Chiang, Y. F., & Huang, H. C. (2012). How experience-driven community identification generates trust and engagement. *Online Information Review*, 36(1).  
<https://doi.org/10.1108/14684521211206971>
- Iyer, N. (2022, October 23). *The demise of Mid-Budget cinema*. Independent Magazine.  
<https://independent-magazine.org/2022/10/22/the-demise-of-mid-budget-cinema/>
- Jensen, S. K., Mousavi, N., & Tornborg, E. (2021). Intermediality and social media. In *Intermedial Studies*. <https://doi.org/10.4324/9781003174288-16>
- Johnson, E. J., & Payne, J. W. (1985). EFFORT AND ACCURACY IN CHOICE. *Management Science*, 31(4). <https://doi.org/10.1287/mnsc.31.4.395>
- Khan, K. K., & Mohsin Reza, M. (2022). Social Research: Definitions, Types, Nature, and Characteristics. In *Principles of Social Research Methodology*.  
[https://doi.org/10.1007/978-981-19-5441-2\\_3](https://doi.org/10.1007/978-981-19-5441-2_3)
- Klevan, A., & Clayton, A. (2011). The language and style of film criticism. In *The Language and Style of Film Criticism*. <https://doi.org/10.4324/9780203817315v>

- Koh, N. S., Hu, N., & Clemons, E. K. (2010). Do online reviews reflect a product's true perceived quality? An investigation of online movie reviews across cultures. *Electronic Commerce Research and Applications*, 9(5). <https://doi.org/10.1016/j.elerap.2010.04.001>
- Kramer, B., & McLean, S. (2019). L2 reading rate and word length: The necessity of character-based measurement. *Reading in a Foreign Language*, 31(2).
- La, L., Xu, F., Ren, Q., Zhen, F., & Lobsang, T. (2022). Understanding Consumers' Sentiment Expressions in Online Reviews: A Hybrid Approach. *Journal of International Consumer Marketing*, 34(4). <https://doi.org/10.1080/08961530.2021.1982807>
- Lee, C., Xu, X., & Lin, C. C. (2019). Using online user-generated reviews to predict offline box-office sales and online DVD store sales in the O2O era. *Journal of Theoretical and Applied Electronic Commerce Research*, 14(1). <https://doi.org/10.4067/S0718-18762019000100106>
- Lehmann, J., Lalmas, M., Yom-Tov, E., & Dupret, G. (2012). Models of user engagement. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 7379 LNCS. <https://doi.org/10.1007/978-3-642-31454-4>
- Levene, H. (1960) Robust Tests for Equality of Variances. In: Olkin, I., Ed., Contributions to Probability and Statistics, *Stanford University Press*, Palo Alto, 278-292.

- Liu, Z., Hong, L., & Liu, L. (2014). An investigation of online review helpfulness based on movie reviews. *African Journal of Business Management*, 8(12).  
<https://doi.org/10.5897/ajbm11.2628>
- Malina, M. A., Nnrreklit, H. S. O., & Selto, F. H. (2011). Lessons learned: Advantages and disadvantages of mixed method research. *Qualitative Research in Accounting and Management*, 8(1). <https://doi.org/10.1108/11766091111124702>
- Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing customer relationships in the social media era: Introducing the social CRM house. *Journal of Interactive Marketing*, 27(4). <https://doi.org/10.1016/j.intmar.2013.09.008>
- Maynard, D., & Greenwood, M. A. (2014). Who cares about sarcastic tweets? Investigating the impact of sarcasm on sentiment analysis. *Proceedings of the 9th International Conference on Language Resources and Evaluation, LREC 2014*.
- McKenzie, J. (2023). The economics of movies (revisited): A survey of recent literature. *Journal of Economic Surveys*, 37(2). <https://doi.org/10.1111/joes.12498>
- Mediavilla Aboulaoula, S., & Biltereyst, D. (2021). Corona cinephilia: A qualitative audience study on cinephile places, spaces and the impact of COVID-19 on urban cinephilia in the

city of Ghent, Belgium. In Ghent University, *Volume 18, Issue 2* [Journal-article].

<https://www.participations.org/18-02-24-aboulaoula.pdf>

Medvedev, A. N., Lambiotte, R., & Delvenne, J. C. (2019). The Anatomy of Reddit: An Overview of Academic Research. In *Springer Proceedings in Complexity*.

[https://doi.org/10.1007/978-3-030-14683-2\\_9](https://doi.org/10.1007/978-3-030-14683-2_9)

Miller, G. A., Newman, E. B., & Friedman, E. A. (1958). Length-frequency statistics for written English. *Information and Control*, *1*(4). [https://doi.org/10.1016/S0019-9958\(58\)90229-8](https://doi.org/10.1016/S0019-9958(58)90229-8)

Molenaar, K. (2024, March 18). *The full guide to YouTube character limits*. Influencer Marketing Hub. <https://influencermarketinghub.com/youtube-character-limits/>

*Movie news and discussion*. (n.d.). <https://www.reddit.com/r/movies/>

Neuman, W. L., & Robson, K. (2018). *Basics of social research: Qualitative and quantitative approaches* (4th ed.). Pearson Canada Inc.

Newell, E., Jurgens, D., Saleem, H. M., Vala, H., Sassine, J., Armstrong, C., & Ruths, D. (2016). User migration in online social networks: A case study on Reddit during a period of community unrest. *Proceedings of the 10th International Conference on Web and Social Media, ICWSM 2016*. <https://doi.org/10.1609/icwsm.v10i1.14750>

- Niraj, R., & Singh, J. (2015). Impact of user-generated and professional critics reviews on Bollywood movie success. *Australasian Marketing Journal*, 23(3).  
<https://doi.org/10.1016/j.ausmj.2015.02.001>
- Norman, D. A. (2016). Affordance, conventions, and design. In *Security and Privacy: Volume III*. <https://doi.org/10.1145/301153.301168>
- Pang, J., Liu, A. X., & Golder, P. N. (2022). Critics' conformity to consumers in movie evaluation. *Journal of the Academy of Marketing Science*, 50(4).  
<https://doi.org/10.1007/s11747-021-00816-9>
- Parker, E. B., Short, J., Williams, E., & Christie, B. (1978). The Social Psychology of Telecommunications. *Contemporary Sociology*, 7(1). <https://doi.org/10.2307/2065899>
- Pearson, K. (1900). On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling. *The London, Edinburgh, and Dublin Philosophical Magazine and Journal of Science*, 50(302), 157–175.  
<https://doi.org/10.1080/14786440009463897>
- Plucker, J. A., Kaufman, J. C., Temple, J. S., & Qian, M. (2009). Do experts and novices evaluate movies the same way? *Psychology and Marketing*, 26(5).  
<https://doi.org/10.1002/mar.20283>

- Popat, A., & Tarrant, C. (2023). Exploring adolescents' perspectives on social media and mental health and well-being – A qualitative literature review. *Clinical Child Psychology and Psychiatry*, 28(1). <https://doi.org/10.1177/13591045221092884>
- Reddit. (June 27, 2023). Average daily active users (DAU) of Reddit in June 2021 and December 2022 (in millions) [Graph]. In *Statista*. Retrieved April 11, 2024, from <https://www-statista-com.ezproxy2.utwente.nl/statistics/1324264/reddit-daily-active-users/>
- Rensink, J. M. (2013). What motivates people to write online reviews and which role does personality play? : a study providing insights in the influence of seven motivations on the involvement to write positive and negative online reviews and how five personality traits play a role. <http://essay.utwente.nl/63536/>
- Robson, C. (2011). *Real world research: A resource for social scientists and practitioner-researchers* (3rd ed.). Blackwell.
- Rotman, D., Golbeck, J., & Preece, J. (2009). The community is where the rapport is - On sense and structure in the youtube community. *C and T 2009 - Proceedings of the 4th International Conference on Communities and Technologies, 2009-January*. <https://doi.org/10.1145/1556460.1556467>

Saunders, M., Lewis, L., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.

Schultes, P., Dorner, V., Lehner, F., Association for Information Systems, & University of Passau. (2013). Leave a Comment! an In-Depth analysis of user comments on YouTube. *Wirtschaftsinformatik Proceedings 2013*.

<https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1041&context=wi2013>

Sentiment. 2024. In *dictionary.cambridge.org*. Retrieved April 26, 2024 from <https://dictionary.cambridge.org/dictionary/english/sentiment>

Sentiment. 2024. In *Merriam-Webster.com*. Retrieved April 26, 2024 from <https://www.merriam-webster.com/dictionary/sentiment>

Shahbaznezhad, H., Dolan, R., & Rashidirad, M. (2021). The Role of Social Media Content Format and Platform in Users' Engagement Behavior. *Journal of Interactive Marketing*, 53. <https://doi.org/10.1016/j.intmar.2020.05.001>

Shi, Y., & Lei, L. (2022). Lexical Richness and Text Length: An Entropy-based Perspective. *Journal of Quantitative Linguistics*, 29(1). <https://doi.org/10.1080/09296174.2020.1766346>



Similarweb. (n.d.). *Letterboxd.com Traffic Analytics, Ranking & Audience [May 2024]* |

*SimilarWeb*. <https://www.similarweb.com/website/letterboxd.com/#overview>

Singer, P., Flöck, F., Meinhart, C., Zeitfogel, E., & Strohmaier, M. (2014). Evolution of reddit:

From the front page of the internet to a self-referential community? *WWW 2014*

*Companion - Proceedings of the 23rd International Conference on World Wide Web*.

<https://doi.org/10.1145/2567948.2576943>

Sitkin, S. B., Sutcliffe, K. M., & Barrios-Choplin, J. R. (1992). A Dual-Capacity Model of

Communication Media Choice in Organizations. *Human Communication Research*, 18(4).

<https://doi.org/10.1111/j.1468-2958.1992.tb00572.x>

Stähle, L., & Wold, S. (1989). Analysis of variance (ANOVA). *Chemometrics and Intelligent*

*Laboratory Systems*, 6(4), 259–272. [https://doi.org/https://doi.org/10.1016/0169-](https://doi.org/https://doi.org/10.1016/0169-7439(89)80095-4)

[7439\(89\)80095-4](https://doi.org/https://doi.org/10.1016/0169-7439(89)80095-4)

Sun, Y., Dong, X., & McIntyre, S. (2017). Motivation of user-generated content: Social

connectedness moderates the effects of monetary rewards. *Marketing Science*, 36(3).

<https://doi.org/10.1287/mksc.2016.1022>

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook*

*of qualitative research in psychology*, 2(17-37), 25.

Terry, P. E. (2024). Ken the Movie: Allyship and When KENough is not Enough. *American Journal of Health Promotion*, 38(1), 8–11. <https://doi.org/10.1177/08901171231210075>

*The “Barbie” movie turning into a global phenomenon helped boost sales for the plastic doll – but not by as much as you might expect.* (n.d.). Retrieved April 2, 2024, from <https://www.businessinsider.nl/the-barbie-movie-turning-into-a-global-phenomenon-helped-boost-sales-for-the-plastic-doll-but-not-by-as-much-as-you-might-expect/>

Vered, K. O., & Maizonniaux, C. (2017). Barbie and the straight-to-DVD movie: pink post-feminist pedagogy. *Feminist Media Studies*, 17(2). <https://doi.org/10.1080/14680777.2016.1178158>

Wang, H., & Castanon, J. A. (2015). Sentiment expression via emoticons on social media. Proceedings - 2015 IEEE International Conference on Big Data, *IEEE Big Data 2015*. <https://doi.org/10.1109/BigData.2015.7364034>

Wikipedia contributors. (2024, June 21). *Letterboxd*. Wikipedia. <https://en.wikipedia.org/wiki/Letterboxd>

Wu, T. Y., & Atkin, D. J. (2018). To comment or not to comment: Examining the influences of anonymity and social support on one’s willingness to express in online news discussions. *New Media and Society*, 20(12). <https://doi.org/10.1177/1461444818776629>

- Yakalı, D. (2024). "He is just Ken:" deconstructing hegemonic masculinity in Barbie (2023 Movie). *Frontiers in Sociology*, 9. <https://doi.org/10.3389/fsoc.2024.1320774>
- Yardbarker. (March 5, 2024). Costs of the most expensive film productions worldwide as of March 2024 (in million U.S. dollars) [Graph]. In *Statista*. Retrieved April 06, 2024, from <https://www-statista-com.ezproxy2.utwente.nl/statistics/273416/most-expensive-film-productions-worldwide/>
- Yeap, J. A. L., Ignatius, J., & Ramayah, T. (2014). Determining consumers' most preferred eWOM platform for movie reviews: A fuzzy analytic hierarchy process approach. *Computers in Human Behavior*, 31(1). <https://doi.org/10.1016/j.chb.2013.10.034>
- YouGov. (July 27, 2023). Share of moviegoers who would prefer to watch "Barbie" in theaters in the United States 2023, by gender [Graph]. In *Statista*. Retrieved April 06, 2024, from <https://www-statista-com.ezproxy2.utwente.nl/statistics/1403573/barbie-moviegoers-share-watch-theaters-gender-us/>
- YouTube Title Length Checker*. (n.d.). Character Counter.  
<https://charactercounter.com/youtube#:~:text=YouTube%20comment%20character%20limit,the%20other%20YouTube%20characters%20limits>
- Zhang, J., Hamilton, W. L., Danescu-Niculescu-Mizil, C., Jurafsky, D., & Leskovec, J. (2017). Community identity and user engagement in a multi-community landscape. *Proceedings*

*of the 11th International Conference on Web and Social Media, ICWSM 2017.*

<https://doi.org/10.1609/icwsm.v11i1.14904>

Zheng, X., Cheung, C. M. K., Lee, M. K. O., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology and People*, 28(1). <https://doi.org/10.1108/ITP-08-2013-0144>

Zhou, T. (2011). Understanding online community user participation: A social influence perspective. *Internet Research*, 21(1). <https://doi.org/10.1108/10662241111104884>

## Appendix A

## Thematic Analysis Codebook

Table 1A

*Thematic Analysis Codebook*

<b>Subcode</b>	<b>Code</b>	<i>YouTube</i>	<i>Letterboxd</i>	<i>Reddit</i>
Positive review	<b>Positive Reception</b>	16	9	30
Praises acting				
Praises				
visuals/cinematography				
Enjoyed soundtrack/music				
Criticizes plot	<b>Negative Reception</b>	3	8	0
Dislikes acting				
Dislikes				
visuals/cinematography				
Criticizes directions				
Mentions plot twists	<b>Mixed Reception</b>	7	4	0
Story complexity				
Character development				
Predicability				
Finds the film funny	<b>Humor and Satire</b>	3	36	34
Mentions specific				
humorous scenes				
Clever wordplay				
Comments on				
satire/parody elements				
Mentions plot twists	<b>Plot and Story</b>	13	5	8
Story Complexity				
Mentions specific scenes				
(non-humorous)				
Character Development				

Mentions pop culture references	<b>Cultural Commentary</b>	23	11	5
Historical accuracy/inaccuracy				
Societal commentary				
Comments on special effects	<b>Technical Aspects</b>	2	3	3
Cinematography techniques				
Dance choreography				
Editing and pacing				
Compares to other films	<b>Comparisons</b>	7	5	1
References to other works by the same director/actors				
Comparisons to original source material				
Personal connection to the film	<b>Viewer experience</b>	7	9	7
Emotional impact				
Viewing environment (e.g. Theater experience)				

## **Appendix B**

### **Disclosed Use of AI**

During the preparation of this research, the author used ChatGPT 3.5 to correct the form and grammar of sentences, as English is not the author's native language. After using this tool, the author reviewed and edited the content as needed and took full responsibility for the final work.

## Appendix C

### Literature Search Log

<b>Date</b>	<b>Database</b>	<b>Search String</b>	<b>Total Hits</b>	<b>Remarks</b>
29.03.2024	Scopus	((“movie critique” OR “movie discussion”) AND "online")	3	~ 1 relevant article
29.03.2024	Scopus	((“user engagement” OR “online user engagement”) AND (“movie” OR “movie critique”))	44	~ 5 relevant articles
29.03.2024	Google Scholar	("sentiment expression" AND ("movie critique" OR "social media"))	1980	~ 15 relevant articles
4.04.2024	Google Scholar	("text length" AND ("movie critique" OR "social media"))	6870	~ 20 relevant articles
4.04.2024	Scopus	("readability" AND ("movie critique" OR "social media"))	240	~ 3 relevant articles
4.04.2024	Scopus	("sentiment expression" AND ("sarcasm" OR "irony"))	7	~ 3 relevant articles
7.04.2024	Google Scholar	("YouTube" AND ("community" OR "comments"))	3.140.000	~ 40 relevant articles
7.04.2024	Google Scholar	("Reddit" AND ("community" OR "comments"))	1.590.000	~ 34 relevant articles
8.04.2024	Google Scholar	("Letterboxd" AND ("community" OR "comments"))	333	~ 2 relevant articles
8.04.2024	Google Scholar	((“Letterboxd” OR “YouTube” or “Reddit”) AND (“recommendation algorithm” OR “comment algorithm”))	750	~ 8 relevant articles