

The Role of Contemporary Digital Cultures in Constituting a Public Sphere: An Analysis of IMDb User Participation

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Abstract: This paper explores how IMDb, a prominent movie review website, aggregates user-generated movie evaluations to form an integrated public sphere. In contemporary digital cultures, online platforms like IMDb play a significant role in shaping public opinion. This paper aims to analyze the extent to which such platforms constitute a public sphere by examining user interactions and content dissemination. The analysis focuses on the impact of user participation on public discourse within IMDb, using the example of the movie *Joker*, which was highly rated by IMDb users.

Keywords: Digital culture, public sphere, IMDb, online communities, user-generated content, public participation, movie reviews

1. Introduction

This paper attempts to describe how IMDb, a movie review website, gathers the movie-viewing evaluation data published by individual users to become an integrated public range of reception and dissemination in the context of significant data penetration into online communities in the contemporary era and discusses the influence of the relevance of different users' participation in IMDb on the wavelength of this class. The *Joker* movie was ranked in the Top 10 of 2019 by IMDb users, indicating sustained popularity according to the IMDb Pro MOVIE meter. These rankings derive from page views by our collective web and mobile audience, exceeding 200 million unique monthly visitors, rather than from critical reviews or box office earnings. According to this poll, it shows that mobile electronic web users construct a public sphere that differentiates them from real life, and through online engagement collections, which, furthermore, have higher impact intensity and propagation speed than the former, but are harder to control the consequences.

2. Methodology

Using netnography and qualitative audience research methods, this study investigates user participation on IMDb. Data was collected from user comments, ratings, and reviews, particularly focusing on the *Joker* movie. Users on IMDb primarily engage as individuals, providing a relatively undiluted form of public participation. The IMDb comment section for *Joker* illustrates how user reviews can reflect a diverse public scope.

Netnography is a qualitative research method that adapts ethnographic techniques to study online communities and digital interactions. It involves observing and analyzing social behaviors, discussions, and cultural phenomena within virtual spaces like social media platforms, forums, and blogs. Researchers immerse themselves in these digital environments to capture authentic insights into participant behaviors, motivations, and social dynamics. Through techniques such as content analysis, thematic coding, and participant observation, netnography uncovers rich qualitative data that illuminates how individuals engage, communicate, and form identities online.

Qualitative audience research methods encompass a broader range of approaches beyond netnography, including in-depth interviews, focus groups, and participant observation. These methods explore subjective experiences, perceptions, and interpretations to understand audience attitudes, preferences, and behaviors in various contexts. Unlike quantitative methods that prioritize numerical data, qualitative research emphasizes depth and context, offering nuanced insights into complex social phenomena. Researchers use these methods to explore cultural meanings, social interactions, and the influence of media on audience identities and behaviors. By combining rigorous methodological

frameworks with interpretive analysis, qualitative audience research provides valuable perspectives for understanding audience engagement and the broader societal implications of media consumption.

3. General patterns of User Engagement and Influence

Users in the network field are mainly individuals[1], and the degree of participation is relatively intuitive and undiluted. As mentioned in the netnography, Qualitative audience research[2]. Observers are necessary to explore more details that can be analyzed as a clear, measurable statistic.

Users emerge in web pages based on the same experience. For example, in the comment section of IMDb, Joker movie is the popular band connecting users. In the original Fieldwork, the scoring mechanism is the platform reflecting the diversity of public scope after the movie-watching experience based on the movie. By the end of 2019, there were 8,655 comments about Joker on the IMDb website, among which 5,336 received a favorable rating of 10 stars and 399 received a negative rating of 1 star, with an average score of 8.7 stars. Users who comment must be registered and logged on to the site. It is the basic right of IMDb users to express their opinions in the comments section. Freedom of speech tends to diversify the ratings and can be dominated by much subjective consciousness. The most helpful comment out of a possible 10 came from JF50010 in September 2019. *'As a viewer that actually went to TIFF and witnessed this film and didn't want to believe the hype, it is an absolute masterpiece, and Phoenix is a certified legend.* He reminded us that the standalone origin tale is flawless throughout and bears resemblance to the finest Joker origin comics of the past. From the original comics to the plot, they all gave their own comments, which were echoed by observers. 6,394 out of 7,245 found this helpful. Nearly 88.2% of observers agreed with the user's praise of the movie. In contrast, there are 1-star reviews, with the most helpful comments coming from user Berge Jason on October 24, 2019. *'For something that was supposed to be gritty and real it had a lot of convenient scenes to help push the plot along.'* Given their own evaluations in terms of authenticity and personal emotion, 105 out of 183 found this helpful. 57.3% of the observers agreed with the user's critical view of the movie.

Through examples of individual user reviews, we observed that most of the reviews focused on movie themes, scene Settings, actors' performances, and relevance to reality. Since IMDb's comment section does not set background restrictions for comment users, so users can score at will, is this reckless and irresponsible? In such a network public community, users need to distinguish between appearance and privacy, and the participants and lurker in the user can be mutual transformation, in the above 10 stars and 1 star review, agree with positive comments users than agree with negative comments 60.9 times higher than that of the user, but given the comments only accounts for 16% of total users. That IMDb does disregard status as prerequisite exactly, while the reviews from 1 to 10 stars building a notion of the public as inclusive. However, those assembly and expression of freedom will put an excuse for some of the hate speech directed at directors and actors, especially in a Joker movie that reflects de-class life and struggling with reality. In such controversies, lurkers deliberately observe statements that match their own psychological expectations; it turns active users to passive spectators constructing a public sphere to satisfy their sense of identity. In highly liquidity online data exchanges, specific ratings are also limited transmission and amplification of both private or public choice. As a result, from the individual's point of view, specific comments on the content have their clear expression, association of content, protection mechanism of anonymous comments, and identity of both lurkers and participants.

After that, to maintain the public scope and make it achieve harmonious and sustainable development, it is necessary to construct the credibility mechanism. The IMDB dataset is stored in a highly organized and structured format, containing extensive information on each movie and its cast. This enables a wide range of data analysis opportunities. [3]. The formula used to calculate the Top Rated 250 Titles employs a Bayesian estimate:

The weighted rating (WR) is computed as follows: $(v \div (v+m)) \times R + (m \div (v+m)) \times C$, where:

R represents the movie's average rating (mean) = (Rating),

v signifies the number of votes received by the movie = (votes),

m denotes the minimum votes required for inclusion in the Top 250 (currently 3000),

C indicates the average vote across all entries in the dataset (currently 6.9). Only votes from regular voters are considered for inclusion in the Top 250 rankings.

IMDb Users

573,688 IMDb users have given a weighted average vote of 8.7 / 10

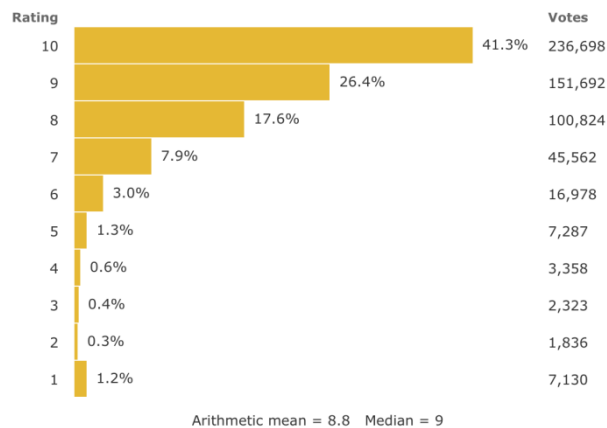


Figure 1: The user voting rating of IMDB dataset

On the basis of open algorithms, IMDb is willing to share data with the public and categorize user portraits by gender and age. The user voting rating of IMDB dataset is shown in Figure 1. Only votes from regular voters are considered for the Top 250 list. The chart above shows that 41.3% of users give a high score of 10, aligning with most comments. It highlights the significant influence of herd mentality in the public sphere, especially noticeable among male users in middle-age demographics.

IMDb stands as one of the largest online databases for exploring information about movies, TV series, and video games. It includes details on casting characters for each film, biographies of entertainment industry figures, movie reviews, and plot summaries. The majority of its content is user-generated, fostering user engagement through ratings, reviews, and other valuable movie-related insights. [4]. This undoubtedly proves that the review section of IMDb is a synthetic artificial collection of participants with different states and requirements, and the domain name itself has become synonymous with the scoring mechanism to limit the public span of those participants. However, IMDb's review limit is in danger. Most IDs can register comments. Although its scoring mechanism is complete, the monitoring mechanism is almost unsupervised or delayed. As far as web reviews are concerned, users' speeches are only a single category discrete influence. In the low-score comment area (less than 4 stars), hate speech, life attack and boring vents appear from time to time. In mutually insulting speeches, we do not see any protection for the privacy of network users, and some users, even regarded the behavior of exposing privacy has become a deformed attraction to earn illegal data.

To deal with above problems, it is essential to establish a back-office department that supervises data traffic and uses it in the promotion. Consumers have always proven to be effective marketers due to their firsthand product experience, enabling them to provide personalized and relevant reviews. Consequently, review websites have gained immense popularity, allowing users to easily post reviews about individuals, products, businesses, or services at their convenience. These platforms generate revenue through advertisements, ensuring reviews and ratings remain unbiased. Users can opt to post reviews anonymously, enhancing the impartiality of feedback on any product. Shoppers can readily access a wealth of information shared by numerous consumers across various categories including businesses, restaurants, movies, and healthcare providers. Previous studies leveraging user-generated content have explored the influence of customer reviews on product demand. Luca conducted a notable study using Yelp data on restaurant reviews, revealing a causal link between restaurant ratings on Yelp and increased revenue. Specifically, a 1-star rating increase correlates with a 5-9% rise in restaurant revenue, primarily impacting independent establishments rather than chain restaurants. Additionally, the study observed a decline in market share among chain restaurants as Yelp's influence grows. In this study, we construct a social network representation of IMDb movies, where nodes denote movies connected only if a reviewer has commented on both. Edge weights are determined by the number of shared reviewers. The resultant network is an undirected, weighted graph. Analysis reveals a power-law distribution, small-world properties, and a scale-free nature, comprising closely interconnected nodes. Subsequently, the network is partitioned into smaller clusters or communities sharing similar movie characteristics. These communities encompass diverse genres, reflecting varied reviewer interests. This finding is crucial for applications like recommender systems, which aim to enhance user experience through data filtering and personalized results. The network's structure and community makeup

significantly influence recommender system efficacy. This approach facilitates the restriction of recommendations to specific categories defined by communities, which proves more effective than relying solely on genre tags. Genres often offer static and inconsistently standardized information. Leveraging communities enables recommender systems to diversify recommendations and avoid over-specialization in any single category. Moreover, by utilizing interaction data rather than just item properties, these systems mitigate issues like cold starts and data sparsity. They also capture temporal shifts in user interests inherent to social networks. Ongoing research will explore the implications of these findings on recommender system design and performance, with results slated for future publication.

4. Intensively comparative between User and Expert Reviews

Launched in 1990, IMDb stands as one of the largest online databases, encompassing movies, television programs, video games, biographies of cast and crew, reviews, and plot summaries. If IMDb values public participation and ratings by unlimited users, Rotten Tomatoes embodies the experts' opinion. The site was started by Senh Duong, a Vietnamese-American who set out to make it easy for people to read the reviews in the American media. Rotten Tomatoes' ratings are strictly limited to professional critics. Only those who contribute to the media or are registered members of the film critics association are eligible to score. It's not exactly a score because rotten tomatoes don't have a score. After reading a critic's review of a movie, the staff assesses its positivity or negativity, classifying positive reviews as "fresh" and negative ones as "rotten." They then calculate the percentage of positive reviews out of the total, known as the Tomatometer. A movie is 80% fresh, which means 80% of critics think it's good. By rotten tomatoes' standards, if the film is less than 60% fresh, it's a bad movie.

Compared to the rotten tomato's algorithm on IMDb, it has more to do with the impact of the reviewers themselves. It also demonstrates the extent of the influence of the expert effect. Users in the review section of Rotten tomatoes are categorized not by gender or age, but by occupation, and most of them are engaged in work related to mass media, such as professional readers, newspaper editors, web entrepreneurs. Unlike the hybrid community IMDb, the reviewers at rotten tomatoes have a layered selection mechanism, allowing observers to distinguish the reference value of comments based on their professional sections. As Matthew Lickona from San Diego Reader commend on October 4, 2019 *'If there is a meaningful difference between performing and acting, Joaquin Phoenix surely exemplifies the former here, creepily contorting as the Clown Prince of Crime in Todd Phillips' timely, toxic take on the Making of a Murdering Madman.* Like Matthew from a well-known newspaper, many of the critics on rotten tomatoes are affiliated with an accredited institution, and their content is complete, giving them the feel of expert analysis. But is those true professors?

Various timeframes were analyzed to determine if appearances in People magazine were part of routine promotion or contributed to sustained popularity of actors. Findings indicate that appearances within three months before a film's release, rather than during promotional periods, do not significantly impact box office earnings. Specifically, appearances preceding promotional efforts were found to be more influential. Elberse (2007) distinguishes between economic reputation, based on past box office success, and artistic reputation, gauged by accolades like Academy Awards. Austin (1983) notes that distributors and exhibitors differentiate between critical acclaim and mass appeal, highlighting the understudied cumulative celebrity power derived from popularity rather than acting prowess.

One finding from this study is that celebrity personality traits, which resonate with audiences over time, wield greater influence than recent, often orchestrated publicity. Persistent celebrity influence fosters positive public associations with stars, potentially enhancing their impact on film success beyond mere publicity. Notably, the study suggests that boosting celebrity appearances and interviews during promotional periods alone does not substantially boost movie revenues. Instead, sustained popularity of actors in the 21 months preceding promotions emerged as a pivotal factor in box-office earnings. Overall, audience reactions appear more driven by enduring popular appeal rather than studio-driven promotional campaigns. This study introduces a novel method to gauge the influence of users, potentially professors, on the review process, with implications for how movie executives recruit and promote personnel. Further investigation is needed to assess the impact of celebrity media on both reviews and careers. As competition for major roles intensifies and actor tenures shorten, celebrities must balance their acting and public personas to extend their careers. Future research could explore the origins of celebrity status and elucidate strategies for gaining and sustaining popularity among critics and mass audiences on platforms like IMDb or Rotten Tomatoes.

5. Social conditions related to participation

In the Joker film review, IMDb normal user interest to speak with the passage of time gradually decreased, but the expert reviews will be in a certain 3 months to continue the influence of voice, their critics compared to network users in the community to pay more attention to social reality, the impact on the audience, rather than the film content itself. Social monitoring platforms utilize dictionary-type systems that assign specific values to words. Even driven by machine-learning algorithms, these systems function akin to large spreadsheets categorizing words into coded buckets, which then generate visual representations. Yet, digital language within cultural contexts is intricately interconnected, drawing deeply from history and locality. Terminology evolves swiftly, and language is playfully used for cultural expression, signaling group affiliations, perspectives, roles, and identities. Netnography reflects a chronicle—a sensitivity attuned to social and historical contexts. A netnography crafted today differs significantly from one on the same topic a year later, capturing the human experience within specific contexts. Online engagement mirrors contemporary existence, where participation is as natural and essential as breathing. This ephemeral yet vital aspect defines contemporary culture, where online interaction mirrors the rhythmic inhale and exhale of connection.

6. Discussion

User reviews on IMDb can significantly impact public perception, with highly rated reviews often swaying public opinion. The freedom of speech on such platforms can lead to a diverse range of ratings, although it also opens the door to hate speech and privacy issues. Therefore, the social factors of movies are also one of the important values of audience participation. While such values are held in the hands of a small elite with status and voice, the upper echelons of the media create an electronic culture of authority that can control the thoughts of the main audience to achieve their desired trends. Behind this behavior is an important source of the profitability of movie tickets and its cash-ability, it also provides the public with certain resource sphere value for the selection and reference of being an audience.

IMDb's scoring mechanism and user participation create a dynamic public sphere that reflects contemporary digital cultures. However, the platform must address issues related to monitoring and managing user-generated content to maintain a credible and inclusive public discourse. IMDb's scoring mechanism and user participation play a pivotal role in shaping a dynamic public sphere that mirrors contemporary digital cultures. However, to uphold a credible and inclusive public discourse, the platform faces critical challenges related to monitoring and managing user-generated content. This policy proposal outlines strategic recommendations to address these issues effectively.

(1) Enhanced Moderation Tools and Algorithms

IMDb should invest in advanced moderation tools and algorithms capable of efficiently screening user-generated content. These tools should prioritize real-time analysis to detect and mitigate instances of spam, hate speech, and misinformation. Implementing machine learning algorithms could assist in recognizing patterns and identifying problematic content swiftly, thereby reducing the burden on human moderators and ensuring a quicker response to emerging issues.

(2) Strengthened Community Guidelines

Clear and comprehensive community guidelines are essential for guiding user behavior and content creation on IMDb. Enhancements should include specific prohibitions against hate speech, harassment, and other forms of discriminatory or harmful content. IMDb should engage with community stakeholders, including users and industry experts, to develop these guidelines collaboratively. Regular updates and transparent communication about guideline changes can foster a sense of accountability and trust among users.

(3) Promoting User Accountability

To foster a responsible user community, IMDb should introduce measures to enhance user accountability. This includes requiring users to verify their identities or establish reputation-based systems that reward positive contributions and penalize violations of community guidelines. Encouraging constructive feedback and dialogue through structured commenting systems can promote respectful interactions and discourage abusive behaviors.

(4) Transparency in Content Moderation

Transparency is crucial in content moderation to maintain trust and credibility among users. IMDb should publish clear policies on content removal, suspension, and appeals processes. Providing explanations for content decisions and notifying users affected by moderation actions can enhance transparency and accountability. Moreover, establishing a dedicated channel for users to report content violations and receive timely responses is essential for maintaining an open and responsive platform environment.

(5) Educational Initiatives

Educational initiatives are pivotal in promoting user awareness and responsible engagement on IMDb. The platform should develop educational resources, such as tutorials and FAQs, to educate users about community guidelines, copyright laws, and best practices for contributing content. Collaborating with educational institutions and industry partners can broaden the reach of these initiatives and ensure they resonate with diverse user demographics.

(6) Collaboration with Industry and Regulatory Bodies

Collaborating with industry associations and regulatory bodies can strengthen IMDb's approach to content management and regulatory compliance. Engaging in dialogue with stakeholders from the entertainment industry, academia, and civil society can provide valuable insights into emerging trends and regulatory expectations. Participation in industry forums and adherence to industry standards can demonstrate IMDb's commitment to responsible content governance and proactive compliance with legal requirements.

(7) Continuous Monitoring and Adaptation

Effective content management requires continuous monitoring of user behavior and emerging digital trends. IMDb should establish a dedicated team for monitoring and analyzing user interactions and platform data. Regular audits and assessments of content policies and moderation practices can identify areas for improvement and ensure alignment with evolving community expectations and industry standards.

7. Conclusion

In conclusion, IMDb's role in fostering a dynamic public sphere through its scoring mechanism and user participation is undeniable. However, addressing issues related to content management is imperative for maintaining credibility and inclusivity in public discourse. By implementing enhanced moderation tools, strengthening community guidelines, promoting user accountability, ensuring transparency, investing in educational initiatives, collaborating with stakeholders, and continuously monitoring and adapting practices, IMDb can effectively navigate these challenges. This comprehensive approach not only safeguards the integrity of IMDb's platform but also enhances user experience and upholds its commitment to promoting a responsible and inclusive digital community.

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