

Flying chairs, heated takes: a discourse analysis of audience comments on the São Paulo Mayoral debate across five major YouTube news channels

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Abstract. The 2024 São Paulo mayoral election sparked intense political discourse, particularly following a highly publicized altercation during a live debate on September 15. The incident, in which candidate José Luiz Datena struck Pablo Marçal with a chair, led to widespread discussion on social media, particularly on YouTube. This study investigates the dynamics of online discourse surrounding this event, focusing on audience engagement and sentiment across five major YouTube news channels: UOL, Folha de São Paulo, CNN Brasil, Poder360, and Itatiaia. Using a discourse analysis approach adapted from Teixeira et al. (2018), we collected and categorized 500 top-ranking YouTube comments, classifying them into four primary categories: Humor, Support, Criticism and Protest, and Neutral. A second layer of analysis further refined support and criticism, differentiating between pro-Datena, pro-Marçal, and general political dissatisfaction. Our findings reveal that humor was the dominant response across all platforms, suggesting a tendency toward memefication and satire in Brazilian digital political discourse. However, significant polarization was observed, with Datena receiving both overwhelming support and the highest level of criticism across outlets. Media framing influenced audience reactions, as outlets with in-depth coverage fostered broader critiques, while those with shorter, sensationalist clips amplified polarized sentiments. This study contributes to research on political communication and social media discourse by demonstrating how digital platforms mediate political controversies and shape public perception. The results highlight the role of algorithmic content curation in reinforcing ideological divides and fostering emotionally charged interactions. By offering a systematic analysis of audience reactions, this study provides insights into the evolving nature of digital political engagement in Brazil and lays the groundwork for future research on media framing and discourse analysis in online environments.

Keywords. Social media and politics, Discourse analysis, YouTube, Mayoral election, Political polarization.

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1. Introduction

Brazil is the largest country in South America and has a population of nearly 213 million inhabitants¹. Internet usage there grew rapidly, with 84% of the population aged 10 online at least once in the last three months (nic.br, 2023b; União Internacional de Telecomunicações, 2020). This represented a significant increase from

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¹https://tinyurl.com/5e4n8b85

a 34% share in 2008, highlighting the dramatic expansion of internet access in the country. Access quality in Brazil is unequally distributed, according to Castello, 2024, with wealthier regions in the South and Southeast having better access than the Northeast, North, and Central-West regions, which experience slower and less reliable internet connections. This disparity reflects long-standing socioeconomic and infrastructural differences across the country.

São Paulo is the wealthiest and most populous state in Brazil, with over 45 million residents², and also has the best connectivity (nic.br, 2023a). It is located in the southeastern region of the country. The state is home to Brazil's main industries and serves as a focal point for political and economic events that hold national significance and impact. The mayoral election in the state's capital, also named São Paulo, is often seen as a proxy for national political trends, foreshadowing potential alignments, movements, and rising political stars.

The 2024 mayoral election was deeply divided in the initial round. For weeks during the campaign leading to October 6, three candidates remained close in the polls³, repeatedly exchanging leads while holding between 20% and 30% of voter's intentions each. The incumbent mayor, Ricardo Nunes of the centrist MDB party, and personally aligned to far right former president Jair Bolsonaro, sought reelection. His direct challengers were Guilherme Boulos of the left-wing PSOL party, with ties to current president Lula, and Pablo Marçal of the PRTB, a populist outsider and former career coach who resisted categorization.

José Luiz Datena, of the center-right PSDB party, a well-known Brazilian television host of sensationalist crime shows, was among the candidates polling low⁴. Datena, in spite of being a household name, held a dubious reputation as a candidate, after announcing his candidacy for public office and then withdrawing four times over the past few decades, besides shuffling affiliations among eleven parties⁵.

On Sunday, September 15th, the debate broadcasted exclusively on TV Cultura took an unexpected turn after Mr. Marçal provoked Mr. Datena by referencing a sexual harassment allegation against him, which Mr. Datena dismissed as unproven and slanderous. The altercation escalated, with Mr. Datena referring to Mr. Marçal as a "little bandit" and Mr. Marçal calling Mr. Datena a "coward." Debate footage next shows Mr. Datena approaching Mr. Marçal and striking him with a chair, leading to the debate's interruption and Mr. Datena's expulsion from the premises.

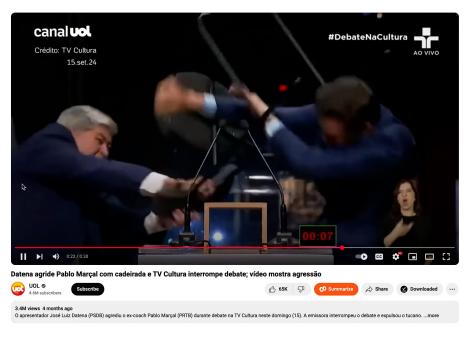


Fig. 1 - Moment when José Luiz Datena hits Pablo Marçal with a chair during transmission

²https://tinyurl.com/m2w2fvwt

³https://tinyurl.com/mtxmv3y2, https://tinyurl.com/56vk5r7c

 $^{^4}$ https://tinyurl.com/yt4fc29p

⁵https://tinyurl.com/2p8y9zvd

The incident garnered widespread attention and sparked discussion across various social media platforms, with different camera angles and video clips of varying lengths circulating widely. It also became a national news story, portrayed either as a deplorable example of the state of political debate in Brazil or as a quasicomedic sketch, with protagonists and antagonists assigned and placed in direct conflict within spontaneous narratives. The varied responses piqued our research interests as an interdisciplinary group featuring computer science and communication scholars.

This study investigated the dynamics of online discourse in Brazil, focusing on how viewers and internet users engage with and shape debates on digital platforms. Specifically, the research examines how the online community reacts to and participates in discussions sparked by controversial or noteworthy incidents, as reflected in their comments and interactions on platforms such as YouTube.

The research methodology employed a multifaceted approach. First, the study examined how five distinct media outlets reported on YouTube the "Cadeirada" (Chair strike) incident as it became known. This enabled a comparative analysis of how different media sources framed the event and potentially influenced public perception. Second, the research collected and analyzed viewer comments accompanying these media publications on YouTube. Specialized tools and a tailored script were developed to gather and organize the data from the YouTube API. Furthermore, a pre-existing classification methodology was refined and applied to categorize the different types of online discourse observed in the viewer comments. This systematic approach enabled the researchers to identify patterns, trends, and dominant themes within the online conversation. By visualizing and presenting these findings, the study aims to stimulate further discussion and understanding of online discourse patterns in Brazil.

The remainder of this paper is organized as follows. Background and related work are presented in Sections 2 and 3. Section 4 describes the methodology used, and Section 5 presents a visual analysis of one case study about a political episode that happened in Brazil in 2024. Section 6 presents our final remarks and goals for future research.

2. Background

The selection of channels prioritizes companies headquartered in Brazil, centered in the Southeast region. It is important to highlight that the channels collected on YouTube did not have broadcasting rights, being the only official images of the debate, from a single channel, TV Cultura (as previously mentioned). Next, we provide a brief description of the channels to situate their scale and relevance. UOL is considered "the largest Brazilian content, technology, services, and payment methods company" having started its activities in 1996. Folha de São Paulo defines itself as "one of the largest and most influential national daily newspapers" and is part of the Folha Group, one of the main Brazilian media conglomerates⁸, with non-editorial connections to UOL. CNN's national branch presents itself as "the first news channel in the country to debut first on digital and then on television", having begun broadcasting in 2020. Poder 360 is an internet-native vehicle launched in 2017, a spinoff of a blog by journalist Fernando Rodrigues previously hosted on UOL¹0. Ultimately, Radio Itatiaia is the neighboring state's main radio station and one of the three most important in the country, founded in 1952 and featuring a mix of news, commentary, and sports¹¹1.

The video collection process involved: 1) Defining a search string "datena agride pablo marçal com cadeirada" (translation: datena strikes pablo marçal with a chair); 2) Inputting it into YouTube in early November 2024; 3) Selecting videos posted by journalistic or media company sources to maintain journalistic ethical balance. We arbitrarily set a limit of five videos and excluded videos from the original broadcaster, TV Cultura. The collected posts came from the five YouTube channels: UOL, Poder 360, Rádio Itatiaia, Folha de São Paulo, and CNN Brasil. 4) Collect information about the selected posts, videos, their production, and metadata such as title, duration, updated number of views, and channel SocialBlade ranking. 5) Organize a chart sorted by the video's number of views. 6) Collect and organize comments using our scripts for further analysis. A summary of the findings related to the posts is presented below.

⁶https://tinyurl.com/zr6jyrt6

⁷https://tinyurl.com/4b72485x

⁸https://tinyurl.com/4hrmz8h8

⁹https://tinyurl.com/dka9p375

¹⁰ https://tinyurl.com/4swzedrd

¹¹https://tinyurl.com/yc5shc69

YT Channel name	Channel SB Rank	Shortened URL	Title and translation	Views	Duration (seconds)
UOL	364	https://shorturl.at/g3Wyj	Datena agride Pablo Marçal com cadeirada e TV Cultura interrompe debate; vídeo mostra agressão / TV Cultura debate interrupted as Datena assaults Pablo Marçal with a chair; video footage captures the attack	3,4M	30
Folha de São Paulo	724	https://shorturl.at/3UCl4	Datena agride Marçal com cadeirada durante de- bate da TV Cultura / Datena attacks Marçal with a chair during TV Cultura debate	935K	21
CNN Brasil	287	https://shorturl.at/B3fTC	Datena ataca Marçal com cadeira durante debate na TV Cultura CNN Brasil / Datena attacks Marçal with a chair during a debate on TV Cultura CNN Brasil	460K	28
Poder 360	668	https://shorturl.at/c9HYq	Assista aos bastidores da cadeirada de Datena em Marçal / Watch behind the scenes of Datena's chair in Marçal	447K	368
Itatiaia	557	https://shorturl.at/wgK4t	VEJA O MOMENTO QUE PABLO MARÇAL É AGREDIDO POR DATENA EM DEBATE DA TV CULTURA / WATCH THE MOMENT PABLO MARÇAL IS ATTACKED BY DATENA IN A TV CULTURA DEBATE	122K	28

Outside of CNN, none of the media companies that published these videos specializes in television or television news, in spite of having a YouTube channel and live broadcasts. This mostly explains the lack of a news story format and the presence of a video snapshot in 4 of the 5 videos. In these, the duration ranges from 21 to 30 seconds and is centered on the provocations that Mr. Marçal makes moments before being attacked. Little is shown after the chair is thrown as well.

The video edited by Poder 360 has a duration of a little more than six minutes and takes a different approach, as it adds other moments outside the debate broadcast. Edits videos made by the candidate's advisors on the debate corridors and some views, apparently, of spectators who are in the audience at a higher point of view than the transmission. There are no voiceovers, nor narrative captions, or subtitles, and the picture frame shifts from horizontal to vertical according to the source. Although technically simple, it provides a sense of the moments that preceded the chair attack itself, allowing the viewer to observe that the provocations made by the candidate Marçal had already been causing friction backstage. This suggests that the accusations thrown at Mr. Datena were premeditated, although the Poder 360 video does not make a conclusion or evaluation that points to this. The style is similar to videos made by fans at music concerts that combine an edition of hundreds of shots made independently. Here we have an attempt to offer viewers a backstage view that seeks to complement and visually explain what other vehicles have not been able to do.

The titles focused on the denotative characteristics of the actions depicted, avoiding value judgments or addressing the public identity of the candidates. This approach is justified as the media coverage targets an audience already familiar with the municipal election campaign. Based on an analysis of these videos, we can confirm that all news and media companies have adopted a balanced stance regarding the events that transpired during the debate, even if Poder 360's approach could be defined as richer than the others, as is featured more background shots.

3. Related Work

YouTube's algorithms have transformed the ways information is curated and consumed, reshaping cultural and sociopolitical dynamics. Rieder et al., 2018 provide a foundational analysis of the platform's ranking mechanisms, demonstrating how visibility is modulated by a combination of user engagement metrics, platform priorities, and cultural context. Their study identified three key patterns in ranking: stability, "newsy" content spikes, and hybrid morphologies. Stable patterns reflect long-standing popular content, while "newsy" spikes capture sudden bursts of interest in trending topics. The hybrid patterns, combining features of both, illustrate how YouTube dynamically adapts recommendations to reflect user behavior and external events. This nuanced understanding of algorithmic patterns shows that YouTube is not a passive distributor of content but an active mediator of attention. Further, the study revealed a preference for YouTube-native content—often from independent creators—over mainstream media outlets. This preference underscored the platform's role in fostering alternative narratives, including controversial or niche voices, by rewarding content that maximizes watch time and engagement. The privileging of native content highlights how the algorithm aligns with

YouTube's commercial goals of increasing user retention and advertising revenue, often at the expense of neutrality or diversity.

Complementing this technical analysis, Bishop, 2020 delves into the emergence of algorithmic "experts" who guide creators on how to optimize visibility on YouTube. These experts act as intermediaries, decoding the platform's opaque recommendation system and offering strategies to navigate it effectively. However, their advice is often grounded in a meritocratic narrative that overlooks structural inequalities in content creation and visibility. For instance, creators who lack resources or access to data analytics tools may struggle to compete, despite employing the same optimization techniques. Bishop also critiques the subjective and selective nature of algorithmic expertise. While these experts frame their strategies as objective and data-driven, they often reinforce the biases embedded within YouTube's algorithm, such as prioritizing advertiser-friendly content. This dynamic further entrenches inequalities by privileging certain types of content—typically mainstream or sensational—over others, limiting the diversity of voices on the platform. The study calls for a more critical understanding of how YouTube's ecosystem shapes creator behavior and amplifies certain narratives, contributing to broader discussions on algorithmic accountability. These studies show that YouTube's algorithm is not neutral—it actively shapes what content gets seen and how creators and audiences interact with the platform.

YouTube's recommendation system is designed to increase user engagement by suggesting content similar to what users have previously watched, aiming to maximize viewer satisfaction. This real-time feedback loop tailors videos to match individual interests, considering factors such as watch time, engagement (likes, comments, shares), relevance, and user history ¹² In 2024, YouTube began testing an endless scroll feature for full-length videos, similar to TikTok's format, allowing users to swipe up to discover new content. This change aims to enhance content discovery and support audience growth for new creators. However, it raises concerns about diminishing creators' control and prioritizing immediate engagement over community-building and quality ¹³.

YouTube's role in political discourse and polarization has been a topic of global research. García Marín, 2023 examined how YouTube's recommendations vary across topics, finding that while the algorithm doesn't consistently push users toward extreme content, some themes, like COVID-19 and far-right politics, are more polarizing. Their findings align with studies like Bail, 2022, which show that YouTube can deepen political polarization by reinforcing ideological preferences. However, other research, like Rasmussen and Petersen, 2022 suggests that YouTube often steers users toward more mainstream content, acting as a moderating force in some cases. In the U.S., researchers found that YouTube's algorithm amplifies political biases by showing content that aligns with users' existing beliefs. The platform amplified his conservative and reactionary messages while sidelining content from other candidates, contributing to the spread of polarized narratives. These findings illustrate how YouTube's algorithm can adapt to different political contexts, influencing public opinion and voter behavior.

In Brazil, the 2018 presidential elections provided a vivid example of how YouTube's algorithm influences political discourse. Reis et al., 2020 highlight how the platform's recommendation system acted as a powerful tool for disseminating conservative narratives, with a strong bias toward Jair Bolsonaro's campaign themes. Through a systematic analysis of over 764,000 video recommendations, their study showed that content aligned with Bolsonaro received disproportionate visibility, dominating search results and reinforcing anti-leftist and anti-human rights rhetoric. This was achieved through "semantic galaxies" — clusters of interconnected videos that created echo chambers favoring Bolsonaro's messaging while marginalizing opposition voices. The study revealed that algorithmic recommendations are shaped by a combination of user activity, platform design, and external campaign strategies, including the use of bots and coordinated digital marketing. Channels such as Jovem Pan News and Verdade Política played pivotal roles in amplifying Bolsonaro's visibility, further illustrating the interplay between traditional media, digital influencers, and YouTube's algorithms. Similarly, another study by Reis et al., 2019 emphasized that YouTube's algorithm was instrumental in prioritizing videos critical of Bolsonaro's opponents, such as Fernando Haddad and Lula, even when the search terms directly referenced those candidates. This suggests that the platform's recommendation system was not neutral but actively modulated visibility in ways that favored specific political ideologies.

De Albuquerque and Rodas, 2022 explored how YouTube's recommendation algorithm contributes to polit-

 $^{^{12}} https://tinyurl.com/2r652yv6$

¹³https://tinyurl.com/3mktwc55

ical radicalization by creating "information systems" customized for each user. Their study shows that the algorithm keeps users on the platform longer by suggesting content that matches their preferences. During the 2018 Brazilian elections, this led to the promotion of far-right ideas, especially those supporting Jair Bolsonaro. The researchers conducted an experiment simulating new users and found that even when starting with non-political content, the algorithm eventually directed users to political and polarizing videos, reinforcing echo chambers and spreading false information. The study explains that YouTube's system connects different topics to guide users toward specific types of content. This process creates a kind of "synthetic reality" where users are exposed mainly to ideas that the platform thinks will keep them engaged. This behavior benefits YouTube financially, as it increases ad revenue, but it also risks undermining democracy by limiting diverse perspectives and amplifying extreme views.

4. Research Methodology

To perform a comparative analysis of the different sources of media, we used, as a basis, the research methodology presented by Teixeira et al., 2018. In their work, the authors proposed a taxonomy for discourse analysis to help understand the intent and types of Twitter (now called X) users' conversations about political scandals. Since our focus is on YouTube comments, we made some refinements.

Our study examines five distinct media outlets that reported on YouTube about the "Cadeirada" (Chair strike) incident. The selection criteria were based on popularity and influence, regional representation, and journalistic credibility, prioritizing channels with significant audience engagement in Brazil. To ensure unbiased analysis, we excluded videos from TV Cultura, the original broadcaster of the debate, to focus on secondary media framing. This approach allows a comparative analysis of how different media sources shaped public perception of the event.

Our methodology for analyzing and comparing comments from different YouTube channels is structured in steps. The process begins with data collection, carried out individually for each channel, ensuring the information is organized independently. Each channel's 100 most relevant comments were then selected and subjected to peer review. Finally, the resulting data was uploaded to an interactive online dashboard, which provided visual tools to facilitate comparative analysis between channels. These steps are detailed below.

For **data gathering**, we used a script written in Python, whose main purpose is to consume Google's YouTube Data API, receiving the comments of a given video and saving the gathered data in a CSV format. We used CSV, Requests, and Re libraries to develop the script, using requests to communicate with Google's API and get the raw data, to which we applied regex and replace functions to regularize the CSV file, ensuring its integrity. Finally, we used the CSV library to persist the gathered data in a CSV file, with its main advantage being that it has total compatibility with spreadsheets such as Excel, allowing for better data analysis in the future. The script is available on our GitHub¹⁴ and can be used for collection in other contexts. You must download the script and insert the video link with your YouTube API Key, for which you can expect a response to your request in a formatted CSV file.

Following the steps of Teixeira et al., 2018, in the **data selection**, we focused on the 100 most influential comments of each channel (CNN, FolhaSP, Itatiaia, Poder 360, UOL). The query parameters included the 100 most relevant comments per video, as ranked by YouTube's algorithm, ensuring a focus on the most engaged discussions. The script also collected metadata such as timestamps, user engagement metrics (likes and replies), and comment text. While using YouTube's ranking system provides valuable engagement-driven insights, it also introduces selection bias, as comments with fewer engagements may be overlooked. Future research may explore alternative selection methods, such as random sampling or timeframe-based collection, to enhance representativeness.

Then, comment categorization was done using an online and collaborative spreadsheet. Two reviewers separately analyzed each comment, classifying it into one of the four proposed categories: Humor, support, criticism and protest, and neutral. In the context suggested in this work of discourse analysis, the category "News" introduced in the original work is not applicable. The News category was relevant in the context of X, since users would mention facts by liking them to news on the web, which is not something that occurs in YouTube channels. *Humor* refers to comments in a joking tone. *Support* refers to those who promote one of the speakers

¹⁴https://github.com/DAVINTLAB/DG0-2025

(or candidates in our case study). *Criticism and protest* are those comments that present dissatisfaction with an exposed fact or situation. *Neutral* are comments that are indifferent or the position could not be inferred from the comment.

After the primary classification, a second level of categorization was introduced to identify the polarization of support and criticism. Support was further classified into pro-Datena and pro-Marçal, while criticism was divided into critiques of Datena, critiques of Marçal, and general dissatisfaction with the political climate. This refinement allowed for a deeper understanding of how different audience segments reacted to the event and how media framing influenced discourse. The results provide insight into echo chambers within digital political discussions, aligning with prior research on political discourse on social media.

To help the **content analysis**, we have developed an interactive dashboard with some simple visualizations that are available online¹⁵. First, you need to upload the files, both the file containing all the data gathered and the spreadsheets with the classifications; you can submit as many files as you want, just make sure to have both files so the app can work in its intended way. Then, you can analyze a variety of charts that include charts such as a stacked bar chart displaying the classification proportions in the files, a detailed pie chart for each video displaying its in depth classifications, a bar chart for the comments per video and a dashboard that allows to identify the top users commenting in each video as well as the users who commented on the most amount of videos, helping identify potential bots or spams. The dashboard ensures that results are accessible and interpretable, reinforcing transparency in data presentation. Future improvements may include natural language processing (NLP) techniques to complement manual classification and enhance scalability.

This methodology presents some limitations. The reliance on YouTube's ranking system means that less-engaged comments may not be included. Manual classification introduces subjectivity, even though we used multiple reviewers and inter-rater agreement metrics to mitigate this issue. Additionally, the analysis focuses on five media outlets, which may not fully capture the broader discourse on YouTube. To address these challenges, we ensured transparency in classification, maintained strict reviewer independence, and incorporated a validation process. Regarding ethics, we strictly adhered to research guidelines by only analyzing publicly available comments, not storing any personally identifiable information, and following ethical standards for digital data collection and content analysis.

5. Case Study

The selected time frame for collection corresponds to December 5th, 2024. As mentioned in the methodology, the top 100 comments in each video were selected, and the comparison focuses on those comments. This stacked bar chart illustrates the categorization of YouTube comments by type (Neutral, Criticism and Protest, Support, and Humor) across different news outlets (CNN, FolhaSP, Itatiaia, Poder360, UOL).

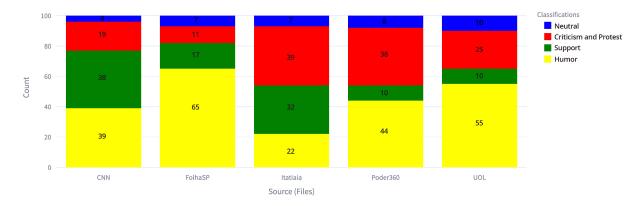


Fig. 2 – Categorization of YouTube comments by type.

The chart reveals a relatively consistent distribution of comment types across all five news outlets (CNN, FolhaSP, Itatiaia, Poder360, and UOL). Each outlet features all four categories: Humor, Support, Criticism, and Protest, and Neutral. However, slight variations exist, particularly in the proportions of Criticism and Protest,

 $^{^{15}{}m Link}$ omitted due to double-blind review.

and Humor. Criticism and Protest (red category) are prominently represented in all outlets but slightly more prevalent in Itatiaia and Poder360, indicating that these platforms might have attracted more viewers dissatisfied with the incident or its coverage. The Humor category (yellow) consistently accounts for a significant portion of comments across all platforms, but for Itatiaia, and it is higher in Folha SP and UOL. This may indicate that the public generally perceived the event as comical or absurd in most outlets. Another conjunction relates to the fact that Folha SP and UOL are the channels that are most popular and garnered the highest number of views in the respective videos. This aligns with the conclusions on Teixeira et al., 2018, which observed humor's prevalence during controversial events. Humor often serves as a way for online audiences to navigate discomfort with contentious or absurd events. In this case, the physical altercation during a live debate likely struck viewers as both shocking and ludicrous, leading to widespread joking commentary. The methodological framework's inclusion of humor captures the way contentious events, especially in the political arena, are quickly "memefied" in the digital sphere. The predominant presence of humor suggests that, regardless of the media outlet, viewers engaged in a shared cultural practice of trivializing the event, perhaps as a critique of the political figures or as a means of diffusing tension. This was more visible in the highest viewed videos, suggesting a trend in humorous behavior in mainstream outlets.

The Support category (green) maintains a balanced presence across platforms but appears marginally lower in Poder360 and UOL, suggesting these outlets might have less content or framing that aligns with supportive narratives. The Neutral category (blue) has a minor presence across all outlets, signifying that most users engaged in subjective discourse rather than neutral observations.

The Criticism and Protest category is the second most prominent, reflecting a significant portion of viewers expressing dissatisfaction, either with the actions of individuals in the incident or the broader context. We also analyzed the focus of the comments (pro-Datena, pro-Marçal, or general), but we will delve into this section later in this analysis. The smaller presence of Support and Neutral comments suggests limited backing for specific actors or purely factual discussions. This could indicate polarization, with viewers gravitating toward humor or critique rather than neutrality or outright support.

Each media outlet likely influenced the tone of the comments based on how they framed the incident in their video titles, descriptions, and focus. For instance, Poder360's more detailed coverage, including "behind-thescenes" footage, may have attracted a higher proportion of critical or investigative discourse, as viewers reacted to contextual revelations rather than just the chair-throwing moment. On the other hand, outlets like UOL and Itatiaia, which focused on concise clips of the altercation, may have encouraged comments emphasizing humor or immediate emotional reactions.

The dominance of Criticism and Protest in outlets like Itatiaia, suggests that their audience may perceive the event as emblematic of broader issues, such as the decline of political discourse or the sensationalism of media coverage. Conversely, CNN Brasil, despite being known for its international credibility, exhibits similar trends to domestic outlets, showing that even global brands may not escape the polarized and humor-driven engagement patterns of local audiences in such events.

The substantial representation of Criticism and Protest reflects widespread dissatisfaction among viewers, either directed at the individuals involved in the altercation or the broader political and media landscape. This aligns with the study's methodology, which emphasizes identifying critical patterns in online discourse. Viewers may have used the comment sections not only to critique the behavior of the candidates but also to express frustration with what the incident symbolized an erosion of professionalism in politics or sensationalism in media coverage. The prominence of criticism in certain outlets suggests that specific audiences are more likely to express discontent.

The differing proportions of comment categories across outlets may point to the formation of echo chambers. Each platform's audience appears to engage with the incident in ways that reflect their broader ideological leanings and expectations of content from that outlet. The findings also suggest that while media outlets strive for balanced reporting, their framing decisions—such as what to highlight in video titles or how much context to provide—play a significant role in shaping public perception and discourse. Outlets like Poder360, with richer contextual content, may foster more critical and layered discussions, while concise clips from UOL and CNN might lead to quick, emotionally driven reactions. The data also highlights cultural nuances in Brazilian digital discourse. The strong presence of humor highlights a tendency to approach political controversies with a mix of irreverence and satire, a recurring theme in Brazilian online interactions. This cultural lens enriches

the findings by connecting them to broader behavioral patterns in the country's digital ecosystem.

While we were working on the general classifications, we also noticed that it would not be possible to get an accurate grasp of the political discourse polarization if we did not understand who the audience was supporting and criticizing. So, differently from our inspired methodology from Teixeira et al., 2018, we had to create a second step - after the categorization of Humor, Support, Criticism and Protest, and Neutral, we moved to understand where the polarization was in each channel.

For the support distribution, we had two sub-categories: supporting Datena and supporting Marçal. The support distribution across the five news outlets (CNN, FolhaSP, Itatiaia, Poder360, and UOL) highlights significant polarization in audience alignment with either Datena or Marçal. One important factor to mention in this part of the analysis is that we ware considering percentages to get a grasp of the general climate among videos, but we may also need to consider the absolute numbers, as different videos received a distinct proportion of "support" categorized comments. For CNN, we categorized a total of 38 support comments, Folha SP 17, Itatiaia 32, and Poder 360 and UOL 10 comments.

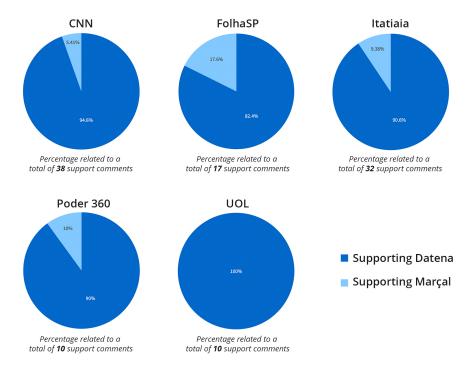


Fig. 3 – Support distribution.

At CNN, a striking 94.6 percent of comments expressed support for Datena, while only 5.4 percent backed Marçal. This overwhelming preference for Datena suggests that either the framing of CNN's content or the platform's general audience heavily leans toward his narrative.

FolhaSP displayed the highest percentage of Marçal supporters, but it still follows the general trend from the other channels. With 82.4 percent of the comments supporting Datena and 17.6 percent favoring Marçal, this relatively higher proportion of support for Marçal compared to CNN indicates that FolhaSP's audience encompasses a broader range of opinions, possibly influenced by the outlet's content presentation or a more diverse audience demographic.

At Itatiaia, the polarization was strong, with 90.6 percent of comments supporting Datena and only 9.4 percent favoring Marçal. Similarly, Poder360 showed a significant lean toward Datena, with 90 percent of comments expressing support for him and 10 percent backing Marçal. These patterns align closely with the trend observed on CNN, where audiences predominantly sided with Datena.

UOL had an interesting 100 percent support to Datena. This particular piece of data, however, represents only 10 percent of the total comments in the categorized section. This means that we cannot affirm that UOL has more viewers inclined to Datena, since the sample is too small. On the other hand, when compared to CNN's

data, out of 38 comments in the support category, 32 were classified as in support of Datena. In terms of absolute numbers, it is more significant than UOL's.

Overall, the analysis reveals that Datena dominated the support across all platforms, with his backing ranging from 82.4 percent (FolhaSP) to 94.6 percent (CNN). This consistent pattern indicates either his broader appeal or the influence of media framing in shaping audience perceptions. On the other hand, Marçal received his highest support from FolhaSP (17.6 percent), which also emerged as the least polarized outlet. It is also worth mentioning that, out of the 500 analyzed comments, roughly 1/5 represented support (totaling 107), and the vast majority supported Datena, totaling almost 20 percent of the entire base analyzed. This means that the most popular and supported comments overall were supporting the candidate who hit his opponent with a chair during the live transmission. That, however, did not offer him a significant advantage in the Mayoral run. In an electoral poll performed after the event, Marçal lost 2 percent of his preference, and Datena got 2 percent more - but that could also be part of the error margin present in the poll ¹⁶. The online repercussion was not enough to change tides for the candidate.

Looking into the Criticism and Protest category, we also created sub-classifications to help us understand the role of polarization in the discourse. In the comments, we noticed not only that the audience was supporting one or the other candidate, but also generally criticizing the situation and the political climate. For this reason, we decided to create three sub-categories: criticizing Datena, criticizing Marçal, and general critics. The next images represent the comparison of each media channel.

The distribution of criticisms across media outlets reveals key insights into audience polarization and dissatisfaction. At CNN, the majority of comments (52.6 percent) were general criticism, while 26.3 percent targeted Marçal. Criticism for Datena accounted for 21.1 percent of comments, indicating a mix of dissatisfaction with both candidates and the broader political context. This suggests that CNN's framing of the event resonated negatively with viewers, especially regarding Datena's actions, though there was also notable criticism of Marçal and the overall situation.

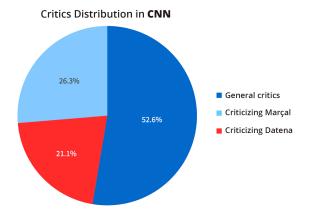


Fig. 4 – CNN distribution of criticisms.

FolhaSP showed a more unbalanced criticism distribution, with 45.5 percent General, 18.2 percent at Datena, and 36.4 percent categorized as criticism towards Marçal. This slightly higher proportion of criticism of Marçal suggests that FolhaSP's audience might be more inclined to critique the overarching political climate and the specific candidate.

¹⁶https://tinyurl.com/3km7dzdb

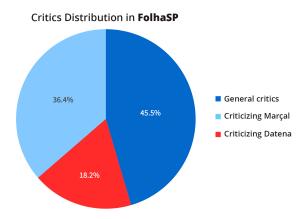


Fig. 5 - FolhaSP distribution of criticisms.

At Itatiaia, criticism was more evenly distributed among the three categories. Criticism of Datena accounted for 30.8 percent, Marçal received 33.3 percent, and general criticism made up 35.9 percent of comments. This even split indicates a less polarized audience compared to other outlets, with dissatisfaction spread equally across candidates and the broader situation. Itatiaia's audience appears to have a more diverse set of opinions, reflecting varied reactions to the event. Another important observation here is related to the origin of Itatiaia as a news channel - differently from the others, it is from the state of Minas Gerais (also the state where Pablo Marçal is originally from). Even though the Mayoral elections were in São Paulo, because it is the largest city in Brazil, their outcomes are influential on the whole country. However, the origin of the news channel might have influenced the audience type, while we cannot affirm it for certain, it could be another explanation for this outcome.

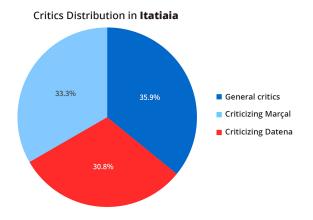


Fig. 6 – Itatiaia distribution of criticisms.

Poder360 followed a similar pattern to FolhaSP, with 23.7 percent of comments criticizing Datena, 36.8 percent targeting Marçal, and 39.5 percent expressing general criticism. Poder360's audience displayed significant dissatisfaction with the political context, suggesting that the outlet's coverage encouraged broader critiques rather than focusing narrowly on the candidates.

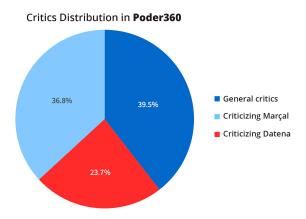


Fig. 7 – Poder360 distribution of criticisms.

UOL's audience exhibited the highest number of general criticism, with 20 percent of comments criticizing Datena, 20 percent targeting Marçal, and another 60 percent offering general criticism. The high proportion of general criticism shows that the audience was not leaning towards a specific candidate - instead, they were more generally upset about the political context.

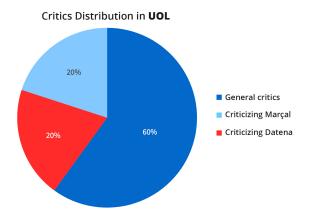


Fig. 8 – UOL distribution of criticisms.

General criticism was most prevalent on UOL, CNN and FolhaSP where broader dissatisfaction with the political climate was evident. Folha SP' and Poder 360's audiences had a slightly higher dissatisfaction towards Marçal, though. These findings suggest that media framing played a significant role in shaping audience reactions, with certain outlets encouraging a broader critique of the situation while others focused attention on individual candidates.

The combined analysis of support and criticism shows a complex reaction from the audience toward Datena and Marçal. Datena received more support than Marçal across all platforms, with outlets like CNN, UOL, and Itatiaia showing over 90 percent supportive comments for him. This mix of reactions suggests that while many people support Datena, likely because of his public persona or political alignment, others were dissatisfied with his actions during the debate, such as the chair-throwing incident. The event likely divided viewers, with some defending him and others strongly opposing his behavior.

According to the theoretical framework, digital platforms like YouTube play a key role in shaping these reactions. Media outlets frame events in ways that influence how audiences perceive them, and YouTube's algorithms amplify content that gets strong reactions, whether positive or negative. This means Datena's dramatic actions during the debate likely drew both supporters who agreed with him and critics who disapproved. Interestingly, on platforms like CNN and UOL, many comments also criticized the overall situation or the state of politics rather than just the candidates. This shows that some viewers were frustrated with the broader

political climate, not just the individuals involved.

In simpler terms, the mix of strong support and criticism for Datena reflects how polarizing figures create both loyal fans and vocal opponents. The way media outlets reported the event and how YouTube promoted content played a big role in shaping these reactions. It highlights how digital platforms encourage debates that often focus on the most dramatic or controversial aspects of events.

6. Final Remarks

This study explored how people engaged with a controversial political debate during São Paulo's 2024 mayoral election by analyzing YouTube comments across five major news outlets. We used a refined version of Teixeira et al., 2018 methodology to categorize comments into Humor, Support, Criticism and Protest, and Neutral, with additional sub-categories for support and criticism. The findings showed strong audience engagement, characterized by a mix of humor, support, and criticism, reflecting the polarized nature of the incident and the broader political climate in Brazil.

The first goal was to understand how audiences engaged with political discourse on YouTube. Humor emerged as the dominant category, showing how people used jokes and satire to respond to the absurdity of the chair-throwing incident. This aligns with Teixeira et al., 2018, who found that humor plays a key role in helping people process political controversies. Platforms like YouTube amplify this tendency by providing space for playful, yet meaningful, public discussions, as Herring, 2005 explains in the context of computer-mediated discourse.

The second objective was to identify patterns of support and criticism. Datena consistently received the most support, with over 90 percent of supportive comments on outlets like CNN and UOL. However, he also faced the highest level of criticism across all platforms. This mix of support and criticism highlights a polarized reaction where some audiences align with Datena's public persona while others strongly disapprove of his actions during the debate. This finding reflects research by Reis et al., 2019 and Reis et al., 2020, which showed that digital platforms often amplify such ideological divides. It also underscores the performative nature of online political discourse, where people express loyalty but are not afraid to voice disapproval.

The third objective examined how media framing shaped audience responses. The way outlets presented the debate significantly influenced the tone of the comments. For example, Poder360's in-depth coverage, including behind-the-scenes footage, generated a more balanced criticism ratio among general, Datena, and Marçal, while CNN and UOL's shorter, more sensational clips amplified polarized reactions focused on the candidates' behavior. This reflects findings by Rieder et al., 2018, who demonstrated how platforms amplify emotionally charged content to drive engagement. These framing decisions highlight the power of media in shaping public discourse.

This study aligns with key ideas from computer-mediated discourse analysis Herring, 2005 and content analysis Bardin, 1977. These frameworks emphasize how technology, language, and social dynamics shape online discourse. By refining Teixeira et al., 2018 taxonomy to include sub-categories for support and criticism, we captured the nuances of how people reacted to the debate. YouTube's design, which allows for detailed discussions compared to platforms like X, made it possible to identify more complex audience behaviors. The study also supports research by Bishop, 2020 and De Albuquerque and Rodas, 2022 on how algorithms amplify polarized narratives and create echo chambers, which further fueled the mix of humor, support, and criticism.

The case allowed other interesting analyses and developments with regard to the way in which the vehicles and, consequently, their audiences position themselves. The five different channels using images from the same broadcast, only varying the time and format of the cuts of the same event, subjectively reveal their communication strategies. Another interesting finding in this particular part of the analysis was the fact that Folha SP, which is the largest media channel in São Paulo (and its audience is presumably mostly from the state), had the highest number in the Humor category. Itatiaia, the channel from another state, Minas Gerais, had a more critical approach in the audience comments. It is almost as if the population from São Paulo did not believe in its candidates and the seriousness of the Mayoral election, preferring to laugh about it, rather than criticize it. Instead of the traditional way of showing discontentment with protest, results indicate that they preferred humor to demonstrate it. However, a potential limitation of this study is the ideological orientation of each

analyzed YouTube channel, which may attract audiences with specific political leanings. Thus, the comments reflect the viewpoints of each platform's audience rather than a representative sample of the general electorate.

Overall, this study shows how digital platforms like YouTube are not just neutral spaces but actively shape political discourse through their design and media content. It highlights how humor and polarization dominate online discussions, offering valuable insights into the dynamics of Brazil's digital public sphere and laying the groundwork for future research.

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