Tracking Exposed Special Report: French Elections 2022

The visibility of French candidates on TikTok and YouTube Search Engines

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Foreword

Tracking Exposed has been investigating social media platforms’ algorithms and their impact on society since 2016. This report investigates how political discussion unfolds on TikTok and YouTube during elections. Using the 2022 French presidential election as a case study, we study how the platform logics of TikTok and YouTube manage political content and candidate presence on each platform.

This research draws on Tracking Exposed’s deep experience in monitoring social media platforms during electoral campaigns, including during the 2017 Argentinian elections, the Italian elections in 2018, the 2021 Dutch elections in collaboration with De Volkskrant, and the post-election debate in the United States in early 2021.

This study of the 2022 French election analyzes platform behavior during electoral campaigning, pointing to the potential limits of air and speech time definitions and enforcement on social media. The complexity of the intertwining of political and social actors, individuals, and the technical infrastructure of platforms makes it difficult to implement regulation or understand how platforms might be affected by policies. This highlights the need for broader transparency around the algorithmic distribution of content, especially during sensitive events.

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~ Tracking Exposed
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Summary of Key Findings

- Content relating to the 2022 election in general or featuring its candidates received large-scale engagement on TikTok and YouTube. This shows that despite TikTok’s claim to be solely an entertainment platform, it is also a major channel for political content, alongside YouTube. In fact, content related to the 2022 French election received more than one billion views on TikTok.

- Election-related search results on YouTube mostly featured political content from institutional media actors such as television and radio channels (80%), while on TikTok, they represented only a small percentage of content (10%). Instead, TikTok results were mostly composed of individual users posting political content (35%, compared to less than 2% on YouTube) or alternative and independent content producers (46%, 6% on YouTube).

- Presidential candidates were not equally represented in the search results of YouTube and, even more so, on TikTok. Overall, candidate presence on TikTok was more volatile than on YouTube, and this research shows that this fluctuation can be partially explained by platform-specific characteristics. YouTube’s more equal representation of candidates is partly due to their policy to promote “authoritative voices”, which tend to respect the airtime law more diligently. TikTok seems to be less curated in this sense, and appears to be driven purely by engagement through its algorithm, leaving room for manipulation.

- Ultimately, the analysis highlights the complexity of defining candidate airtime on social media, both conceptually and operationally. It informs the debate as to whether platforms should have dedicated policies ensuring fair candidate exposure during electoral periods, rather than adapting existing regulations on TV and radio.

- Candidate popularity on social media does not directly translate into voting intentions. E.g. The popularity of Lassalle or Zemmour was registered to be higher compared to Mélenchon in this analysis, but was not similarly reflected in the election results.
Background

Tracking Exposed is an independent non-profit that has investigated the effects of social media platforms’ algorithms on society since 2016. The team is expert in monitoring elections; most recently, we analyzed how Dutch politicians used micro-targeted advertising on Facebook in the lead up to their 2021 elections. We have also investigated filter bubbles and polarization on YouTube in the context of the U.S. 2020 elections and on Facebook during the 2018 elections in Italy.

In the last 10 years, social media platforms have become a key space where political discussion takes place, especially during election times. What makes them particularly interesting to study in this context is the interaction between user content, political advertising, platform policy, and algorithms. Platforms’ policies and algorithms directly impact whose and which content is prioritized. Additionally, users may decide to use platforms differently depending on the type of discussion they are interested in participating in. For example, a user may use TikTok to share satirical political content, and YouTube as a source for candidate comparison. Certain actors might also exploit platform affordances to spread mis- and disinformation campaigns or deploy devious targeted advertising. Understanding the relationship between users, platforms, and political campaigns is key to analyzing the way information spreads on a platform.

Drawing on Tracking Exposed’s expertise on algorithmic accountability, including algorithmic audits, this new report tracks candidate airtime on YouTube and TikTok during the 2022 French elections. We use both quantitative and qualitative methods to account for the ambiguities of political content and airtime.
Introduction

Presence in the informational ecosystem is essential to win an electoral campaign. That's why media coverage is usually regulated, to ensure that voters are not disproportionately exposed to a particular candidate, which could potentially influence their vote. During France's 2022 presidential elections, airtime on television and radio was carefully regulated by Autorité de régulation de la communication audiovisuelle et numérique (ARCOM) to ensure that each candidate received a similar amount of exposure.

ARCOM regulates airtime in the name of political pluralism. It defines speaking time as “all speeches by a candidate, as well as speeches in support of his or her candidacy.” Airtime encompasses speaking time, in addition to any direct coverage of the political candidate, save for those that are explicitly against him or her.

Regulation was most strict in the 2 weeks leading up to the election, during which time it was required that each candidate receive equal airtime to prevent the manipulation of information, which may have “disturbed public order” or influenced someone's ballot decision.

While it is possible to regulate airtime on radio and television given their centralized structures and unique program, it is much harder to measure on social media platforms. Platforms involve a multiplicity of actors, opaque algorithms, and financial incentives that influence what type of content is uploaded and how it circulates through the platform. At the same time that social media content creators have more freedom as to what they post, their content is simultaneously moderated based on the policies of whichever platform they choose to post on.

It is also difficult to determine what is even considered airtime on social media. Videos take many different forms, such as memes, clips of speeches, news media, personal opinion videos, satire and so on. On top of this, a candidate's “speaking time” does not necessarily correspond with a user's engagement with a post. A video featuring a candidate does not always translate into views for that candidate.

A recent article by Le Monde investigated candidate airtime on YouTube and Twitch during the French elections, arguing that for many young French voters, the internet is a main source of information in election times. The article specifically measured the amount of speaking time and corresponding views each candidate received using an automated voice recognition tool. In this case, researchers analyzed a select list of news media channels to determine if they gave equal airtime to all candidates. This research still begs the question about how platform logics, including algorithmic promotion of content, impact a candidate's visibility on a particular platform.

Our report focuses on YouTube and TikTok's respective search engines, where we use Tracking Exposed's custom scraping software to collect election-related videos recommended by each platform's algorithm. We ask, is political discussion happening on
YouTube and TikTok? If so, what is the presence of each candidate on the two platforms, and what types of content are the platforms’ algorithms prioritizing?

For the purposes of our research, we built a loose definition of candidate presence drawn from ARCOM’s definition of airtime. Our definition includes any time a candidate is substantially represented either visually or aurally, such as clips of speeches or talk show appearances, but excludes videos that compare multiple candidates or feature a third party speaking in favor of a candidate. While more strict than ARCOM's definition, we found this necessary because of the fluid nature of content types on social media compared to radio or television.

Investigations into platform logics regarding airtime are an important step in creating transparency within these companies’ products, which is crucial considering the power they have in facilitating political discourse. Our case study on the French elections informs the debate regarding the need and possibility to regulate social media in electoral contexts, especially concerning candidate presence. This report can provide a framework for expected platform behavior and potential airtime regulation in other election contexts, particularly within Europe and the U.S.
Methodology

This report uses a qualitative and quantitative approach to assess whether social media platforms should and could be regulated in the context of elections. It relies on Tracking Exposed's open-source software to collect data from TikTok and YouTube. We began collecting our data in the lead up to the French elections, spanning over 4 months: from the 15th of January 2022 up to the second round of elections on the 24th of April 2022. We queried YouTube and TikTok with 10 neutral election-related terms in French, such as “french election” and “presidential election”, and collected the videos containing one or more query weekly. Additionally, we included queries mentioning specific candidates’ names such as “Emmanuel Macron” and “Valérie Pécresse” in the same time period.

Using this data, we conducted a quantitative analysis to assess what candidates were mentioned the most within neutral queries. To understand what type of political discussion takes place on YouTube and TikTok, we also systematically categorized a representative sample of around 25% of all collected videos for each platform. We qualitatively analyzed these videos to assess how candidates were portrayed, by which users, and how. To do so, we considered candidate presence by loosely building up from the French definition of speaking and airtime coverage given by ARCOM.

We considered a video “coverage” if it featured a single candidate prominently at a visual or audio level, such as speeches, interviews, rallies, talk shows, or general appearances. Notably, we did not consider videos in which multiple candidates or other political supporters of the candidate appeared as coverage. This is due to the fluid nature of internet content hinging on irony, short snippets, and memes. Such a definition enabled us to consider how candidates were represented on social media in a way more conforming to platform dynamics. In addition to content, we also categorized the channel that published it, differentiating between institutional media, users, alternative, or independent media outlets, and official candidate and party pages.

Dataset and methodological details

Our dataset is composed of videos appearing in the search results for broad political queries, scraped from TikTok and YouTube using Tracking Exposed's open-source software and independent scraping. We launched the searches through a ‘clean’ web browser, without any past behavior or stored data, either as France-based researchers or after setting our location to France through the use of VPNs and Residential IPs. We queried the following terms daily from the 15th of January up to the second round on the 24th of April:
Table 1. List of neutral search keywords related to French Election 2022

<table>
<thead>
<tr>
<th>Neutral search queries</th>
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<tbody>
<tr>
<td>campagne 2022</td>
</tr>
<tr>
<td>campagne présidentielle</td>
</tr>
<tr>
<td>candidats 2022</td>
</tr>
<tr>
<td>election présidentielle</td>
</tr>
<tr>
<td>france élection présidentielles</td>
</tr>
<tr>
<td>france élections présidentielles</td>
</tr>
<tr>
<td>politique élection 2022</td>
</tr>
<tr>
<td>programme présidentielle</td>
</tr>
<tr>
<td>programme élection 2022</td>
</tr>
<tr>
<td>qui voter 2022</td>
</tr>
<tr>
<td>élection présidentielle</td>
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</tbody>
</table>

Table 2. List of candidates included in the search query

<table>
<thead>
<tr>
<th>Candidates included in queries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anne Hidalgo</td>
</tr>
<tr>
<td>Christiane Taubira</td>
</tr>
<tr>
<td>Emmanuel Macron</td>
</tr>
<tr>
<td>Eric Zemmour</td>
</tr>
<tr>
<td>Fabien Roussel</td>
</tr>
<tr>
<td>Florian Philippot</td>
</tr>
<tr>
<td>Francois Asselineau</td>
</tr>
<tr>
<td>Hélène Thouy</td>
</tr>
</tbody>
</table>

Additionally we considered candidate-related queries, including the following candidates:

We collected the first page of results for each query. This means 12 results per query for TikTok, and 20 for YouTube. By repeating this daily with multiple independent computers, we ended up with a dataset of 96,182 videos: 66,184 for YouTube and 29,998 for TikTok. Of those, 15,200 were unique search results: 1,709 for YouTube and 2,111 for TikTok.

Additionally, we called on YouTube's API to enrich our dataset with additional metadata, and to assess whether the API results were representative of the search results observed on the browser. We calculated the overlap between YouTube's API and our independently collected
data by querying the API for the same time frame and queries. We then analyzed where the same videos were returned. The results showed that data obtained through YouTube's API roughly coincided with the data we obtained through our open-source scraping software: of 3,206 videos (before considering only search results), 23.83% (764) were obtained through scraping only, while results exclusive to YouTube's API were 1.81% (58). The overlap between content returned both by YouTube's API and our scraping software was 74.34% (2384).

For TikTok, we also scraped the number of views each received by the most popular hashtags related to the 2022 elections. This required listing the most frequently occurring hashtags from our dataset of TikTok videos retrieved from election-related search queries. Then, we identified those that were exclusively related to the 2022 French Elections (see Table 3 on next page). Notably, we did not include generic hashtags (e.g., #politique) or candidates names (e.g., Zemmour), as the content indexed through them could pre-date the elections. Following this logic, we kept generic hashtags related to presidential elections in French (#électionPrésidentielle), as TikTok was not widely spread within France when the previous elections took place in 2017.

We collected the number of views generated by each of these hashtags, as displayed on the hashtag page (https://www.tiktok.com/tag/...). In order to estimate the number of views generated by all the videos containing these hashtags, we could not simply sum them up. Indeed, some videos contained several of these hashtags, and their view count would therefore be counted multiple times. To account for that we introduced a discount factor based on hashtag co-occurrences.

Given our set S of hashtags exclusively related to the 2022 elections, the co-occurrence factor of a hashtag A is the average number of hashtags from S of the videos from our dataset which contain the hashtag A. To evaluate the unique views generated by all the hashtags from S, we divide the the view count of each hashtag by their co-occurrence factor. After summing them up, we obtain an estimate of 1.3 billion views.

Considering that the list of hashtags is not exhaustive (a large portion of content related to the 2022 elections does not contain any of the hashtags from our set S), we can assert that this estimate is a lower-bound of all the views generated by content related to this election.
<table>
<thead>
<tr>
<th>Hashtag</th>
<th>View Count (in millions)</th>
<th>Co-occurrence Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>presidentielle2022</td>
<td>788.8</td>
<td>1.34</td>
</tr>
<tr>
<td>electionpresidentielle2022</td>
<td>62.6</td>
<td>1.73</td>
</tr>
<tr>
<td>présidentielle2022</td>
<td>70.2</td>
<td>1.22</td>
</tr>
<tr>
<td>présidentielle</td>
<td>71.1</td>
<td>1.31</td>
</tr>
<tr>
<td>zemmour2022</td>
<td>265.9</td>
<td>1.6</td>
</tr>
<tr>
<td>presidentielles2022</td>
<td>63.2</td>
<td>1.67</td>
</tr>
<tr>
<td>campagnepresidentielle</td>
<td>6.9</td>
<td>1.44</td>
</tr>
<tr>
<td>présidentielle</td>
<td>21.3</td>
<td>1.0</td>
</tr>
<tr>
<td>marine2022</td>
<td>145.2</td>
<td>1.93</td>
</tr>
<tr>
<td>taubira2022</td>
<td>26.5</td>
<td>1.46</td>
</tr>
<tr>
<td>poutou2022</td>
<td>4.4</td>
<td>3.2</td>
</tr>
<tr>
<td>marinelepen2022</td>
<td>94.5</td>
<td>2.06</td>
</tr>
<tr>
<td>candidat2022</td>
<td>2.3</td>
<td>3.4</td>
</tr>
<tr>
<td>jeanlassallepresident</td>
<td>28.3</td>
<td>1.84</td>
</tr>
<tr>
<td>macron2022</td>
<td>46.9</td>
<td>2.05</td>
</tr>
<tr>
<td>electionspresidentielles</td>
<td>9.7</td>
<td>2.0</td>
</tr>
<tr>
<td>pecresse2022</td>
<td>24.8</td>
<td>2.0</td>
</tr>
<tr>
<td>jlm2022</td>
<td>60.6</td>
<td>2.0</td>
</tr>
<tr>
<td>melenchon2022</td>
<td>127.8</td>
<td>2.05</td>
</tr>
</tbody>
</table>

*Table 3. Number of views on election-related hashtags, adjusted based on co-occurrence*
Quantitative analysis focused on the videos in our neutral queries dataset which mentioned candidates in their related text, both in absolute terms and on a weekly average. For YouTube, we counted a video if it featured the candidate in its title or keywords, while for TikTok we examined the video description (which is the most analogous to a video title on YouTube) and its keywords. We considered the name of a candidate and its relative party or movement, including potential variations. For example, to account for Jean-Luc Mélenchon, we considered both its potential misspelling (“melanchon”), and the name of the movement associated with him (“france insoumise” and “insoumis”).

However, quantitative analysis can only partially establish what a video is about and why it mentions a candidate. To this end, qualitative analysis aimed to assess how candidates were covered on TikTok and YouTube. This meant considering both how they were represented and by which channel or user. To do so, we watched and manually analyzed a random sample of 25% of the unique videos, 528 for TikTok and 427 for YouTube. The analysis involved four researchers, starting first with an exploratory analysis followed by a thorough categorization of content.

To verify the validity of the analysis, we relied on standardized measures such as intercoder reliability, a score measuring analytical consistency across different researchers (in this case, Krippendorff’s alpha = 0.87).

The codebook guiding qualitative analysis was comprised of four categories: content, type, candidate, and channel.

At the initial level, we divided content by its political or non-political nature. We considered a video as political content if it was related to any political issue, both national and international. This included videos related to the 2022 French political elections, its candidates, and/or its issues, such as individual voting intentions, coverage of programs, or debates among candidates. Additionally, we considered content political if it was indirectly connected to the 2022 French Elections, such as general reminders of voting procedures and rights, or international coverage of the elections. Finally, political videos not related to the 2022 French elections were also considered political content. This was to have a broad assessment of the proportions of political content in our database.

The content deemed as political was then coded based on its type. We distinguished videos featuring candidate presence from everything else, based on a definition of coverage we tailored specifically for social media. If a video prominently featured a single political candidate for the election, we categorized the video as such; this meant either: a) showing the candidate visually, and/or b) featuring audio of the candidate. We considered as coverage: excerpts from talk shows, interviews, political rallies, candidate-centered news reports, formal and informal content, daily activities (such as a candidate bowling, for example) and so on. We did not consider as coverage videos such as user-commentaries on the elections or candidates, personal political opinions, and comparisons among candidates or programs.
Once a video was categorized as covering a candidate, we coded the featured candidate as the name of the politician featured in the video. If more than one candidate was present with the same relevance, such as for neutral comparisons, non-slanted TV shows, and so on, it was not coded for a specific candidate, but as ‘multiple candidates’.

The content categorized as candidate presence underwent a second round of analysis, this time focusing on the channel uploading the content. This was based on name and reputation, verification (i.e., blue check mark), number of followers, and uploaded content. We distinguished between four types of channels: traditional media outlets; independent media, journalists, and content creators; candidate and party pages; and personal pages.

Traditional media outlets included the TikTok and YouTube pages of established media, such as France 24 or Europe 1; mostly verified channels with a relevant number of followers.

We also differentiated between independent media, journalists, and content creators. This included independent news and political commentators, unofficial political pages, or news and politics pages catering to a specific public. While this included some verified and notorious pages, such as the commentator @hugodecrypte with more than 2 million followers, it also included smaller pages such as those supporting specific candidates (@demainaveczemmour) or outlets covering politics in general (@politique_france_best_of).

Candidate and party pages referred to the official channels of the candidates and/or their parties, such as Jean Lassalle's official TikTok page (@jeanlassalleoff).

Finally, personal pages captured users who posted political videos on their personal channel to either promote their point of view, discuss the elections, or more generally post political content about one candidate.

In addition to coding videos following these four categories, we paid attention to the typology, style, and tone of the content—especially in relation to the platform. We noted in what light candidates were portrayed, what style such videos had and, more generally, how this related to broader platform logics around the circulation of content. For example, we paid particular attention to ironic and memetic content. On this note, in order to avoid potential researcher bias, we relied on ‘metapragmatic indicators’ and considered as ironic only content showing pertinent hashtags and/or keywords: e.g. #irony, #laugh, and/or smiley faces.

Finally, it should be noted that our analysis may have been affected by a number of factors. First and foremost, our data collection did not include the entirety of videos produced in relation to the French elections. As described above, our data sets featured videos containing a finite number of selected queries: as such, it is likely that many videos using different keywords were not picked up by our iterations. Most importantly, considering only search queries means that we did not collect data from For You Pages, homepages, or feeds. While this might partially contrast with standard patterns of usage, queries are the only ways with
which systematic data collection is possible, with the added value of allowing for a constant data collection environment (e.g., non-personalized).

Additionally, it should be taken into account that the time span of the data collection may have impacted the data composition, considering that the second round of elections only involved two candidates, Emmanuel Macron and Marine Le Pen. Similarly, as our collection started early in the campaign, our data also included prospective candidates such as Christiane Taubira, who retired before becoming an official runner-up. We mitigated this in two ways: by focusing our analysis on aggregate data, which does not crucially affect the validity of our findings, and by including a longitudinal analysis accounting for the distribution of candidates’ results.

A final potential limitation concerns the qualitative analysis: due to the heterogeneity of topics, visual compositional styles, and actors involved in the videos, we found it particularly challenging to assess which ones were to be considered as political and, especially, as candidate presence videos. This point is particularly interesting and significant for the purpose of the present analysis, as it prompts further reflections on how to define airtime and political coverage on social media, both conceptually and operationally.
Findings

1) More than 1 billion views on election-related content on TikTok

Our findings show how TikTok is indeed a political platform, even if it is despite their will. Content related to the 2022 French Elections on TikTok has been viewed more than 1 billion times in under four months.

TikTok claims to be a platform for entertainment not used for political purposes. Specifically, it states on its site that it does not allow political ads “that promote or oppose a candidate, current leader, political party or group, or issue at the federal, state, or local level – including election-related ads, advocacy ads, or issue ads”. However, when we estimate the number of views generated solely from content related to the 2022 French Elections, it is over 1 billion—depicting the large scale of political engagement on TikTok.

Regardless of how the platform identifies itself, this metric shows that users are both uploading and engaging with political content on it. Indeed, the popularity of these hashtags reflects the platform’s embeddedness in political discourse. As previously mentioned, while most of these videos represent political content, in some instances political hashtags were used to favorably index unrelated content. This hints at the centrality of political issues and content on the platform. In other words, users knowingly hijack political hashtags because they assume they have a broad reach and high views, suggesting that users view TikTok as a political platform.

2) Different platform policies translate into different channel ecologies

Political content on TikTok is predominantly uploaded by independent creators, while on YouTube it is overwhelmingly produced by institutional and traditional media.

Coverage videos on TikTok and YouTube differ not only with respect to candidate occurrences. In fact, the type of user creating this type of content varies greatly across the two platforms. For one thing, YouTube is home to institutional and traditional media, represented for example by France 24, Europe 1, RMC, and Sud Radio, which are also the most recurrent channels in our data set (see figure 1). In fact, institutional and traditional media author more than 83% of the videos on the platform, compared to less than 10% on TikTok. Conversely, political discussion on TikTok is composed mostly of alternative or independent content creators (46%) and personal profiles posting about the elections (35%). This includes, for example, pages discussing politics for Millennials (@millennialspolitics), accounts supporting...
specific candidates (@mlp.2022), as well as independent journalists, content creators, and political commentators (@hugodecrypte).

This difference in authors is reflected in the content as well, as traditional media tend to follow more standardized production practices. This is particularly evident from YouTube videos, often aiming for the same coverage—or even broadcasting the same content—as in television and radio formats (Figure 1). This leads to a higher degree of interviews, talk-shows, and overall live appearances. In contrast, personal profiles and independent content creators frequently feature more content from appearances in rallies or snippets with the candidates from traditional media, often presented by the creator of the channel (see Figure 2). Overall these differences lead to more homogenous content on YouTube when compared to TikTok, due to a combination of platform affordances and content creators.

Overall this finding suggests that platform policies have an effect in regulating the distribution of content. YouTube's efforts to raise "authoritative voices" when considering news or politics is reflected in our dataset and analysis, as YouTube mostly features institutional media such as radio or television, while TikTok's results are overwhelmingly from users and independent content creators.

![Proportion of channel type by platform](image)

*Figure 1. Proportion of channel type by platform*
Figure 2. One of the most recommended videos from institutional media on YouTube

Figure 3. The majority of content on TikTok is user-generated. Depicted: @hugodecrypt, an independent news commentator
3) The visibility of candidates varies, with TikTok being more volatile and YouTube more stable.

Our quantitative analysis shows that political content on TikTok and YouTube features electoral candidates differently over time. While YouTube is more consistent in its weighting of candidates, TikTok is less so.

Searching for general terms and keywords, such as ‘Election Presidentielle 2022’ (see Table 1 and 2 in Methodology), we were able to collect a vast variety of videos focused on the elections, as well as ones involving political candidates. However, the visibility of the different candidates varies considerably. Firstly, it varies by time. This is especially noticeable when approaching the second round of the elections on the 24th of April, during which time the two remaining candidates, Emmanuel Macron and Marine Le Pen, receive more prominence. Further fluctuations can be observed across the platforms: in fact, candidate popularity on TikTok is more volatile than on YouTube and privileges different political actors. For example, TikTok gave disproportionate weight to Éric Zemmour up until the second round and presents a brief spike in content covering Christiane Taubira on the first week of March, coinciding with her victory in the Left primaries. Conversely, YouTube results show a more balanced representation of candidates, that is also more consistent over time.

Figure 4 and Figure 5 show the occurrences of candidate mentions on both platforms and their evolution over time. Excluding the spike around Taubira, TikTok’s most featured candidates are, in order: Éric Zemmour, Emmanuel Macron, Marine Le Pen, and Jean-Luc Mélenchon. The most covered candidates on YouTube are the same, but arranged in a different order: first Emmanuel Macron, followed by Marine Le Pen and Éric Zemmour with roughly similar coverage, and Jean-Luc Mélenchon.

Notably, Macron, Le Pen, and Mélenchon scored more than 20% of the votes during the first electoral round, while Zemmour around 7%. The disproportionate weight given to Zemmour appears to be consistent with previous research on algorithmic bias. Polarizing content tends to be overrepresented for its tendency to generate more engagement and reactions, whether positive or negative. It is important to note that this bias has also been observed in traditional media, which offered disproportionate coverage to Zemmour, particularly in the first months.

Aside from a quantitative analysis, to assess the visibility of candidates we performed a qualitative analysis considering individual videos. Our qualitative analysis reveals that the majority of political content on both platforms heavily features ‘candidate presence’, either visually or in the form of audio excerpts. However, the weight given by platforms to different candidates varies, with YouTube distributing coverage more equally than TikTok.
Figure 4: Prevalence of candidate terms in neutral election searches on YouTube

Figure 5: Prevalence of candidate terms in neutral election searches on TikTok
TikTok and YouTube distribute content based on algorithmic recommendation systems; the videos returned following a search query make no exception. By qualitatively analyzing the videos returned as a result of a selection of political queries, we quantify the presence of candidates in the search results.

A closer inspection of the ‘candidate presence’ category on TikTok reveals that the video occurrences per candidate are not equal, as shown in Figure 4. As we can see, Marine Le Pen is the most represented candidate with almost 15% of the overall content. Following Le Pen, we find Mélenchon, Zemmour, Macron and Jean Lassalle; their coverage percentage within the sample is around 10% each. Dropping to around 5%, we find Philippot, Jadot, and Dupont-Aignan.

On YouTube, the graph of the occurrences per candidate depicts a slightly different situation as compared to TikTok. While the top candidates appear to be roughly the same, their order is to some extent reversed: here, Macron is in the first position, immediately followed by Zemmour. Then there are Le Pen and Jadot, both displaying the same amount of occurrences. After Mélenchon, we find a group of politicians all featuring the same number of videos: Pécresse, Dupont-Aignan, Lassalle, and Roussel.

The difference between platforms is, first and foremost, noticeable in the different coverage of candidates. This is exemplified by the amount of videos in which the first and the second candidates appear in. On YouTube, the difference between Emmanuel Macron and Éric Zemmour, respectively the first and second candidate by number of appearances, is limited. Conversely, on TikTok the difference is starker. Our analysis highlights how Marine Le Pen features in significantly more videos than the second and third candidates, Jean Lassalle and Emmanuel Macron.

This directly translates into a skewed coverage of candidates. On TikTok, Marine Le Pen is disproportionately represented in search results when compared to other runner-ups. However, this does not happen only for politicians gathering a large amount of votes. When considered in relation to the results of the first round of voting, Zemmour, Lassalle, and Pécresse received the same visibility as Macron and Mélenchon, despite scoring significantly less votes. On YouTube, candidates are more equally represented. For example, Jean Lassalle and Marine Le Pen are featured in a similar number of results.

Overall this represents a broader trend for both platforms. On YouTube, candidates are represented in a more balanced way, with no significant differences among their distribution. TikTok has instead a higher difference between the number of videos, highlighting a more sparse representation of candidate visibility. Thus, platform logics result in different visibility for candidates.
Figure 4. Occurrences of ‘candidate presence’ videos per candidate on TikTok

Figure 5. Occurrences of ‘candidate presence’ videos per candidate on YouTube
4) Defining airtime on social media is complex, both conceptually and operationally

Defining airtime on social media is challenging, as it involves different platforms, affordances, publics, and broader media ecologies.

Our qualitative analysis considers the content of political videos in the dataset. Our findings underline how political content on both platforms consistently features a candidates’ appearance, either visually or vocally. YouTube videos feature candidates 40% of the time, and TikTok 55% of the time.

Analyzing candidate occurrences in the video titles of search results provides a good overview of platform dynamics. However, it does not guarantee that the videos can accurately be categorized as candidate airtime. To understand if and how candidates appeared in these videos, we performed a qualitative analysis on a sample of 25% of the total content, which included search results for candidates’ names and neutral queries.

Our findings indicate that both platforms do indeed have a substantial amount of political videos. Contextually, we observe that the difference between the two platforms is small: 91% of the search results on YouTube are political content, against the 86% on TikTok. This finding is not particularly surprising, due to the political nature of the queries. However, a closer look at the video types reveals that around half (54.87% on TikTok, 40% on YouTube) of the political videos are candidate presence videos, according to the operational definition we proposed in the Methodology. This means that political content on both platforms prominently features video or audio snippets from the candidates running in the elections.

Among the rest of the content, we find videos not related to any political issues, including cases of homonymy connected to the word ‘campaign’ (e.g. the campaign in a video game) and instances of hashtag hijacking. Notably, the contingent popularity of certain hashtags is leveraged to prompt the amplification of unrelated content. In the context of our analysis, we observe that hashtags related to the French election campaign are exploited to push a variety of content, such as posts related to contingent issues (e.g. the Covid-19 vaccination) as well as advertisements. As we will show, this might be due to the popularity of hashtags related to political content.

Political conversation and campaigning on TikTok and YouTube take different forms. Platform affordances, such as political hashtags, are used to index fitting political content or to gain visibility despite being unrelated. The nature of political content on both platforms varies, from commentaries by users to traditional media rebroadcasts. Additionally, criteria defining a candidate’s appearance on social media could lean on both views and occurrences.

All of this concurs to underline the difficulties in conceptualizing and implementing airtime on social media platforms, such as TikTok and YouTube. Considering that about half of the political content on YouTube and TikTok features a candidate's presence, and given that
airtime is a regulated metric for both traditional and social media in France, it is necessary to further develop this regulation with regards to social media in a way that accounts for platform dynamics.

5) Candidate popularity on YouTube and TikTok does not directly translate into voting intentions

Our findings indicate that irony is a distinctive marker of political videos found on TikTok. While driving engagement on the platform, however, its ironic nature means it does not directly translate into voting intentions.

As we have seen in the previous sections, videos related to the French election present differences among platforms, in particular regarding the content type and occurrence of candidates. While both platforms host videos depicting ‘candidate presence’, we have seen that TikTok features more videos that fall under this category than YouTube (see section 2 of Findings). If we consider candidate occurrences, we find that YouTube tends to have a more even distribution of candidate representation than TikTok. This result is also consistent with our finding that YouTube’s political videos overwhelmingly come from traditional media channels, which tend to respect the airtime law more diligently. At a general level, these discrepancies point at different platform logics regulating content production and dissemination on the two platforms.

Consistent with its mission to ‘inspire creativity and bring joy’, TikTok favors the circulation of user generated content by means of an intuitive video creation and sharing workflow. Offering a ‘virtual playground’, the platform contributes to fostering a culture of ironic political engagement. Our analysis shows that humoristic content is prominent on TikTok. As described in Methodology, the humoristic intent of this content is derived by the caption and/or the hashtag used like ‘meme’ or ‘irony’, followed by a qualitative validation of both the videos and its comments. Among the videos featuring candidates like Jean Lassalle and Valerie Pécresse, we find a lot of memetic and ironic content, such as compilations of funny moments, memes, parodies, and funny edits. This might partly explain the mismatch in results we detect on the two platforms, as well as why some candidates—such as Pécresse and Lassalle—seem to have received a disproportionate amount of coverage.

In this context, it is also important to note that candidate popularity on social media does not directly translate into voting intentions. As seen above, candidates who scored less than 8% of the votes, like Lassalle or Zemmour, actually received considerable popularity and attention on social media in terms of occurrences and views in the context of coverage videos. This reinforces how conceptualizing airtime on social media might require taking into account the specificities of how platforms drive content production and engagement.
Discussion

Social media political content varies greatly. The type of content, the authors, the format, and the tone all influence the multiple ways discussions related to elections unfold on digital platforms. While these differences are relevant when considering a single platform, they are magnified when comparing different social media, like we did with TikTok and YouTube.

Several factors contribute to this complexity. Different authors post content with different intentions, ranging from traditional media channels to small independent content creators, as well as users posting their personal opinions on their own profiles. This led to a proliferation of the ways in which the 2022 French Elections were discussed: from serious analysis to ironic content and from ferocious partisanship to balanced discussions.

At a general level our analysis indicates that, in relation to the French election, political content includes not only news and debate connected to the campaign but also more polarized videos, overtly supporting or demoting the different candidates. Additionally, our data shows that around half of all political content can be labeled as candidate presence, broadly defined as videos featuring a single candidate prominently at a visual or audio level. A closer look at the political actors reveals that their occurrences on TikTok appear to be more volatile than on YouTube, resulting in a more sparse and skewed distribution of visibility. This finding seems to be particularly relevant in the case of TikTok, where the popularity of certain candidates does not necessarily mirror voting intentions—as seen in the case of Zemmour and Lassalle.

Further results indicate that platform-level characteristics had a role in shaping the debate around the 2022 French Elections on TikTok and YouTube. This was reflected in our data, as for example in the penchant for memetic distribution on TikTok. However, some dynamics may be less visible. For example, different platforms have different socio-demographics for what concerns both users and content creators. In this context, TikTok's appeal to younger audiences may have shaped the political debate, fostering user-generated ironic content. This statement appears to be consistent with previous claims, pointing at irony and humor as the preferred channel for young TikTok users to comment on political events and, at a general level, on news and issues.

These considerations overall indicate that the distribution of political content on platforms is nested into a broader media ecosystem, creating feedback loops between traditional and social media that might affect different issues and candidates differently. This complexity is hard to unpack. What content is posted, by whom, how it is structured – the intertwining of those factors is exacerbated by the opacity of social media platforms, making it challenging to consider digital content and its circulation.
All of this underlines how airtime on social media is difficult to conceptualize, implement, and enforce, as reflected in our report. The results of a purely quantitative analysis, based on the analysis of aggregated content and its distribution, obfuscated some dynamics easily underlined by more qualitative, hands-on approaches. This includes the complexity related to both how platforms are structured, and how they relate to the broader information ecology at play during politically charged periods, such as elections.

All of this combined highlights the difficulties of implementing airtime regulation on social media. In our case, for example, user-driven content, memes, and ironic videos represented a consistent part of the political discussion on TikTok; conversely, YouTube videos often mirrored live TV content, representing but an extension of traditional media outlets. Along this line, TikTok showed rapidly shifting trends in the weeks leading up to the elections, while YouTube had a more balanced presentation of candidates over the whole period.

Additionally, different content is not only distributed by hard to scrutinize and opaque algorithms, but it is affected by this very distribution due to the feedback loops and accumulation logics typical of social media systems. This underlines the need for the transparency from platforms and for the open audit of algorithmic systems: to allow for a better understanding of how platforms manage the distribution of sensible political content, and, in doing so, have a direct effect on the electoral outcomes of entire countries. This holds especially true given the intricacies of regulation and different stakeholders involved.

“Social media are increasingly used to get news and form political opinions. YouTube and TikTok are no exceptions. Keeping those platforms accountable on these topics is more crucial than ever. Even if the Chinese platform claims to be mostly entertaining, when it reaches this massive number of active users, it must face the responsibility of driving such sensitive content, as traditional media and other platforms try to do.”

~ Salvatore Romano, Head of Research, Tracking Exposed

“Our analysis highlights how challenging is to conceptualize, measure, and regulate airtime on social media, due to the different media ecosystems underpinning the platforms. We hope that our work triggers wider and serious reflections around the importance of transparent policies regarding the ways political content is distributed and managed by platforms especially during elections.”

~ Giulia Giorgi, Post-Doc Researcher, Tracking Exposed
“The results of our analysis underline how, in the context of the 2022 French Elections, YouTube’s search results overwhelmingly represented traditional media channels, such as radio and television; conversely, TikTok’s conversation mostly leaned on users and alternative or independent content creators. This shows how the implementation of clearer platform policies might mitigate the spread of dis- and misinformation, especially during sensitive events such as elections.”

~ Ilir Rama, Post-Doc Researcher, Tracking Exposed

“Algorithms are not neural. When recommendation algorithms are used to distribute political content during electoral campaigns, their biases can threaten the democratic process. Although the enforcement of airtime neutrality constraints – similar to those that exist on TV and radio – might be impractical on social media, platforms should at least be required to be transparent about the reach they provide to the different candidates.”

~ Marc Faddoul, co-director, Tracking Exposed

“Platform policies and design have a direct impact on what content is uploaded and how it circulates, the significance of which our analysis cannot emphasize enough, especially during election times. Future regulation, with particular regards to airtime, needs to account for competing platform logics, rather than searching for a one-size-fits-all approach.”

~ Natalie Kerby, Researcher, Tracking Exposed
Conclusion

Political debates increasingly take place online. This is all the more important during elections, whereby political content on social media platforms contributes to steering public opinion and voting behavior. In this context, besides traditional channels, video-platforms like YouTube and TikTok are responsible for spreading news and visual content around the candidates and their programs. Like other social media, they do so through their algorithmic infrastructure. However, such algorithms are opaque and hard to scrutinize – which is particularly relevant in sensitive contexts like political elections and campaigns.

In this report we assessed the political conversation around the 2022 French Elections on social media, focusing on how political candidates are portrayed on TikTok and YouTube.

To do so we used our own definition of airtime, inspired by how it is defined by the French regulator for communication and media, the Autorité de régulation de la communication audiovisuelle et numérique. While the definition of airtime is technically already applied to social media, it is but an extension of rules and norms devised for television, radio, and print. This transposition, however, does not account for the characteristics of digital platforms, such as the algorithmic distribution of content, or the stark differences between social media's infrastructures and content.

Our analysis underlines how recommendation algorithms and, in turn, the self-regulation of platforms have an effect in determining which content is shown to individuals. The data collected through Tracking Exposed's open-source software show how both platforms heavily feature political content; however, this content varies greatly: from YouTube's connection to traditional media outlets to TikTok's user-driven memetic engagement with politics.

Ultimately, this report highlights the difficulties of considering air and speech time on social media, both in how it is defined and applied. Should the content of users as well as institutional media count as speech time? Is it more relevant to consider the sheer number of videos featuring a candidate or the number of views said video receives?

Most importantly, this uncertainty translates into how platform's algorithms manage content on digital platforms. YouTube and TikTok covered elections in widely different ways. YouTube promoted traditional media outlets, and represented candidates more consistently over time: TikTok's political discussion was instead fueled by users and independent content creators, and candidates were featured in a more volatile way. Giving different visibility to political actors can amplify or reduce traditional media reach. This is but a way in which social media's algorithms and traditional media create a feedback loop - a co-influence affecting the informational sphere.
Platforms with cross-national relevance like TikTok and YouTube should invest more resources in providing transparent policy and algorithmic accountability to ensure the assessment of their societal impact, particularly during electoral campaigns, and in the absence of regulation. In this context, YouTube took steps to improve its transparency. YouTube’s API provides a relatively accurate picture of its search engine results, and its policies about sensitive content such as elections are clearly stated and reflected on the algorithmic distribution of content. However, it does not allow one to scrutinize personalization patterns. Conversely, TikTok does not provide any form of public data. This point appears to be especially relevant—especially when political content on the platform can reach more than one billion views in four months.

Our investigation aims at contributing to the debate around how algorithms and platform policies can affect the distribution of political content during sensitive events. While taking the 2022 French Election under examination, our considerations around algorithmic transparency can be extended to similar cases.
About Tracking Exposed

Tracking Exposed is a European non-profit organisation defending digital rights through algorithmic investigations.

For more than 5-years, its team has been pioneering new methodologies to scrutinise the most influential recommender systems, such as those of YouTube, Facebook, Amazon, PornHub and TikTok. The code is released as free software, enabling anyone to use, extend or review it.

Tracking Exposed's infrastructure and methodologies have been validated in several peer-reviewed publications, and the works of the team have received coverage on major media outlets. Some of its reports have been cited in a United Nations report, a house testimony and a US Congress official letter to YouTube's CEO.

Tracking Exposed is also developing YouChoose.ai, an alternative recommendation system for YouTube which empowers users and content creators.

Tracking Exposed was born in Italy and its legal nonprofit is registered in France. The organization is funded through various grants and foundations, including from the NGI Atlantic, the Mozilla Foundation or Reset.tech.

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~ Tracking Exposed