

AUDITING FOR MISINFORMATION

Observing Facebook's Compliance With its Own Claims Over Misleading Ads

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BPE Senior Thesis
December 2019

Contextualizing Misinformation:

Originally, an audit was something conducted by an independent third party to review the validity of accounts and certify that companies hold to their responsibilities as fiduciaries. The purpose of an independent third-party is to surveil firms for bad behavior that could create negative externalities. Otherwise, it mirrors a sports game with no referee to guarantee players follow the rules of the game. It is an auditors' role to monitor activities that the audited may be incentivized towards but are not in the interest of society. A company "cooking the books", for example, causes asymmetric information, a negative externality. Given the great responsibility placed on auditors to monitor firms, the government deems it appropriate for even the auditors to get audited by the PCAOB. Broadly speaking, while this model has worked to ensure companies adhere to their fiduciary duty it lacks effective application to handle the negative externalities of the Internet Age. More specifically, the current regulatory environment for the handling of misleading information has been neglected. Consequently, misinformation is taking a toll on public trust in civic institutions and may be eroding the very fabric of American democracy. Therefore, it is important to take a sincere look at the systems currently in place that are meant to safeguard against exactly this sort of problem. If there is not a formal auditor for the more complex platforms present today, then what is to safeguard the public trust in democracy in the face of misinformation?

Granted, misinformation and foul play online is difficult to track and regulate, even for companies with tremendous resources like Facebook. At the same time, it is important to note that the system in place does not rely on a government entity to track what companies like Facebook allow on their platforms. For context, the head of the Federal Communication Commission said, "Currently, the FCC imposes strict transparency requirements on companies

that operate broadband networks—how they manage their networks, performance characteristics, and the like, yet consumers have virtually no insight into similar business practices by tech giants.”ⁱ Facebook has managed to effectively shield itself from the standards enforced upon media companies and publishers by hiding behind section 230 of the Communications Decency Act, which states that platforms are not responsible for content that users post on their sites.ⁱⁱ This is changing, however, particularly after the Cambridge Analytica scandal¹ which popularized the idea that political advertising on Facebook’s platform could have a major impact on public sentiment. In fact, according to a Pew research study, 64% of American adults believe fake news stories cause a great deal of confusion (citation required). Moreover, aside from news stories, potent misinformation in the Cambridge Analytica scandal came from advertisements from unverified Facebook accounts.

In spite of the recent misinformation transgressions, the current regulatory environment still allows Facebook to self-regulate and relies on it to produce *Transparency Reports*, that are never verified by a third party for accuracy. Facebook, for instance, provides updates on its efforts to combat misinformation and other content that violates its *community guidelines* via Facebook Newsroom, a separate website.ⁱⁱⁱ Additionally, Facebook offers its own compliance standards for its digital products. Among these standards is the Newsfeed Values which offers the reader an idea of what the Newsfeed seeks to achieve as a product and what Facebook is and is not responsible for censoring.

¹ As recently as 2016, Mark Zuckerberg dispelled the idea that fake news and propaganda played a part in the result of the 2016 American election. The company was forced to revisit these claims after it was revealed in 2017 that a Russian-based influence operation purchased \$100,000 of ads preceding the election. With time, the danger of a centralized, unregulated, and algorithmic platform became more apparent. This was emphasized by the Cambridge Analytica scandal in which data from millions of Facebook accounts were harvested without consent and used for Ted Cruz’s presidential campaign.

With the benefit of unlimited resources, time, and legal immunity from the Computer Fraud and Abuse Act², I would have theoretically liked to evaluate every claim that Facebook makes in its Transparency Reports, Newsfeed Values, and periodic updates on Facebook Newsroom. For the purpose of this study, however, I narrowed my ambitions to tackle whether Facebook upheld its claims on a few key issues surrounding sensitive advertising and misinformation. For the remainder of this study, I will be drawing on claims from each of these publications to uncover potential discrepancies between Facebook's claims and its behavior. Specifically, I decided that I would focus on the "Ads About Social Issues, Elections or Politics in the US"^{iv} because of its relevance in "providing additional steps [Facebook is] taking to protect elections and prepare for the US 2020 election."^v

The Framework for my Analysis:

1. First, I will analyze a **normative claim** about the goals or values from one of the aforementioned Facebook publications and use it as a premise.
2. Secondly, I will review the **actions that Facebook said it would take** or guidelines it said it would follow to achieve that end goal.
3. Finally, I will use **evidence from multiple sources**—including further reporting from Facebook, reporting from the press and a proprietary data analysis, to determine whether Facebook had indeed followed through executing the guidelines it set for itself to achieve its high-level goals and values.

Normative claim: One of the paramount claims in the Newsfeed Values is that 'Authentic Communication' is central^{vi} [**Appendix**] More specifically, the second principle in Facebook's publishing News Feed Values is 'Accurate, Authentic Content'. In an attempt to manifest

² The **Computer Fraud and Abuse Act (CFAA)** is a United States cybersecurity bill that was enacted in 1986 as an amendment to existing computer fraud law (18 U.S.C. § 1030). I would be able to get more information on Facebook's practices through web scraping, but that would violate the CFAA, and is punishable by up to 3 years in prison.

authentic communication, Facebook announced a monumental update for “Ads About Social Issues, Elections or Politics in the US” on August 28th of 2019.^{vii} **[Appendix]**. I found that all of the policy revisions outlined in the update center on this idea of promoting ‘accurate, authentic content. More specifically, the update states, “People should know who is trying to influence their vote and advertisers shouldn’t be able to cover up who is paying for ads.” The update starts by stating that Facebook has taken measures in the past few years to ensure more transparency and authenticity in ads about social issues, elections or politics, including a multi-factor authentication process for political advertisers.^{viii} It also cites the creation of the Ad Library, which makes said advertisements publicly available for seven years. Finally, the update included additional steps that Facebook would be taking to prepare for fighting misinformation preceding the US 2020 election.

Actions Facebook said it would take in the update included:

- a) More enhancements to the Ad Library, such as making it easier to track and compare spending of US presidential candidates.
- b) Expanding their policy to prohibit ads that expressly discourage people in the US from voting, a commitment Facebook made as part of a recent civil rights audit (Murphy, p.20 2019).^{ix}
- c) Requiring all Pages for national candidates or elected officials to go through Page Publishing Authorization, which requires that Page administrators turn on two-factor authentication and verify their primary country location so that Facebook can confirm these Pages are using real accounts and are located in the US.
- d) Exposing more information about a Page, such as the business or organization behind it.

- e) Requiring advertisers to submit additional information to avoid having misleading ‘paid for’ by disclaimers on Facebook’s platform, and pausing ads from organizations that fail to do so.

Addressing Claim A:

The majority of these claims were relatively simple to verify. The first claim, that Facebook would make it easier to track spending of US presidential candidates, is difficult to prove either way because ‘easier’ is an elastic term. That being said, I was able to pull up the ad spending of a presidential candidate within three clicks on the Ad Library interface. While the first claim is not overly enforceable, I would venture to say that the Ad Library currently provides an interface that makes it easy to track presidential spending.

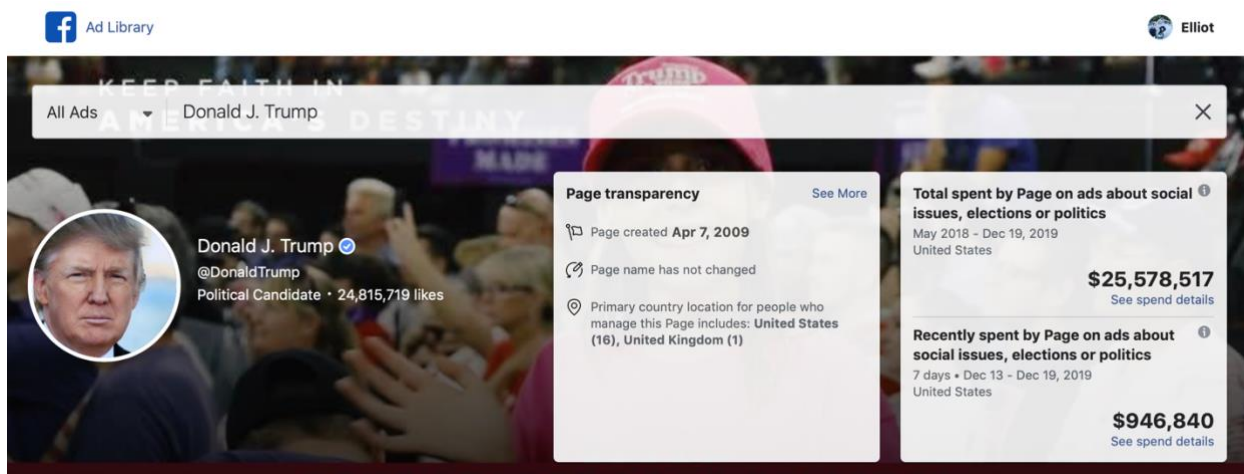


Exhibit A: Political ad spending for a candidate via the Ad Library

Addressing Claim B:

As stated in Claim B, Facebook made a commitment to ban ads that expressly discourage people in the US from voting. The policy is described in detail in the Facebook Civil Rights Audit by Laura Murphy. (Murphy, p.20 2019)^x The audit describes Facebook’s **New Policy Against “Don’t Vote” Ads**, which acknowledges the role that Facebook had in voter

suppression during the 2016 Presidential Election. The new policy prohibits voter suppression [Defined in Appendix] and seeks to counteract similar behavior through a few key changes. These changes include “requiring verification of the identity and location of anyone purchasing a political ad and requiring political ads to be transparent in identifying who sponsored the ad.” In addition, Facebook claims to have constructed new reporting channels for state election authorities so that they can inform Facebook if they see misinformation about voting. The audit reported that Facebook expected this policy to go into effect preceding the 2019 gubernatorial election. Facebook has not offered an update as to whether they’ve been successful in implementing this policy or if any progress has been made on their efforts to establish a reporting channel between election authorities and Facebook staff. There is a contradiction that needs to be mentioned here. Claim B, “to expand policy to expressly prohibits ads that aid in voter suppression” would not be a true expansion of anything because in the progress report cited “requiring verification of the identity and location of anyone purchasing a political ad and requiring political ads to be transparent in identifying who sponsored the ad.” as being a change that Facebook made in 2018.

Addressing Claim C:

Claim C was much more straightforward. The verification for national candidates and elected officials is almost exactly the same as that required of other political advertisers. The landing page for what is required for Page Publishing Authorization can be found below in Exhibit B.^{xi}

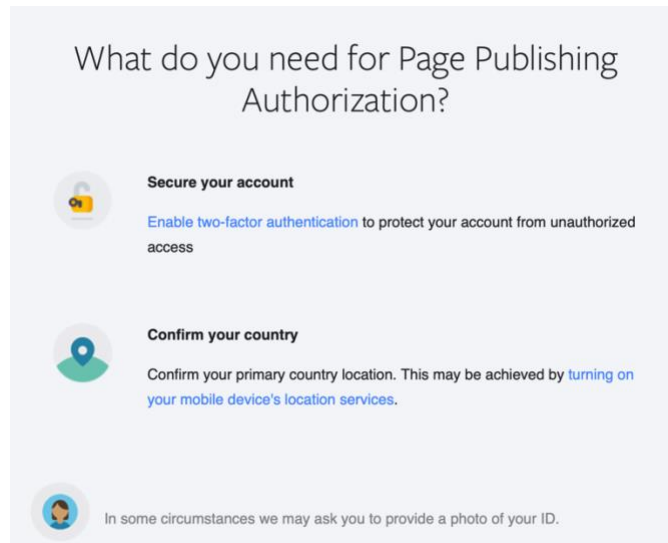


Exhibit B: New prerequisites for Page Publishing Authorization

Addressing Claim D:

Claim D, that Facebook would expose more information about a Page, such as the business or organization behind it is partially demonstrated by the information currently provided within the Ad Library as shown in [Exhibit C].

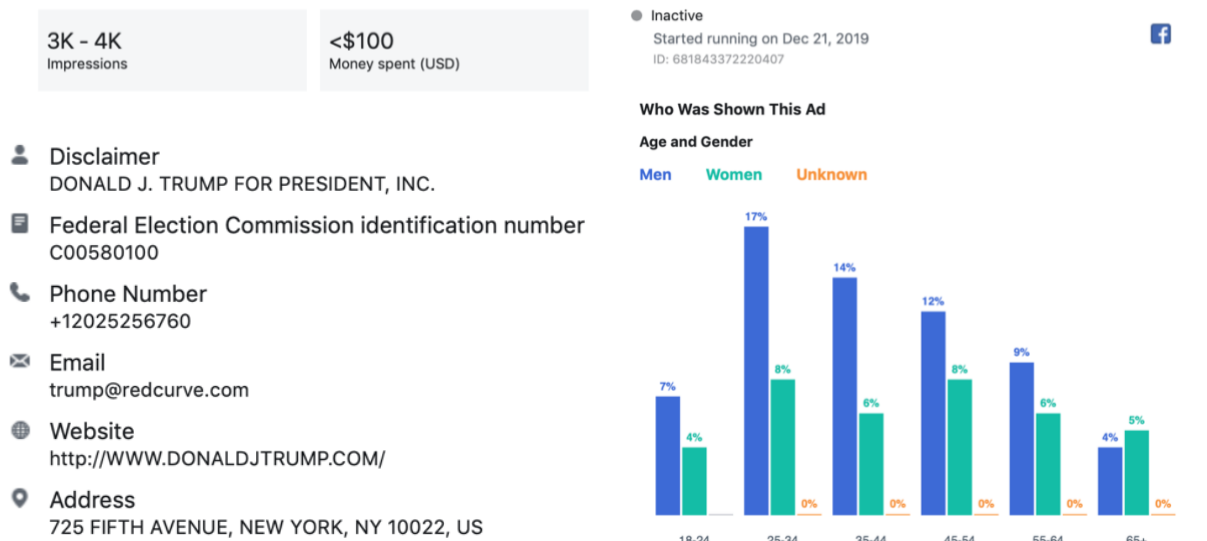


Exhibit C: Some of the information that can currently be found in the Ad Library

Civil Rights groups believe Facebook should go even further in disclosing additional data about these ads, such as “targeting criteria used by advertisers, which are critical to the analysis of election manipulation and discrimination.”^{xi} It’s unclear whether this information was a product of efforts following the August 28th update to Ads About Social Issues, Elections or Politics in the US; however, it is clear that Facebook’s Ad Library is now offering data on the gender, age, and location of the audience, but still does not offer insight as to the categories that advertisers used to target users.







Addressing Claim E:

Claim E was, by far the most difficult to verify and arguably the most important. In 2018, Facebook started requiring political advertisers to place a “Paid for by” disclaimer on their ads to communicate who is responsible for them. Despite these requirements, there were a number of cases where advertisers attempted to put misleading “Paid for by” disclaimers on their ads. Regarding the issue of misleading ‘paid for by’ disclosures, Facebook stated, **“starting mid-September, advertisers will need to provide more information about their organization before we review and approve their disclaimer. If they do not provide this information by mid-October, we will pause their ads [...] it will help us confirm the legitimacy of an organization and provide people with more details about who’s behind the ads they are seeing.”**^{xii}

In the above quotation, Facebook implied that they both review the “Paid for by” disclaimers and that additional authorization requirements would allow Facebook to find misleading ads and pause them.^{viii} As stated above, Facebook, gave its advertisers until mid-October to submit additional information before they would pause their ads. A newer version of

the update published on October 16th, stated that Facebook would be extending their internal deadline to November 7th, 2019 to take down non-compliant ads. Therein lies the question of how to know if Facebook actually followed through in pausing advertisements from advertisers who failed to submit the additional documentation by November 7th, 2019.

Using the Facebook Ad Library, I attempted to review the political advertisements that Facebook chose to pause due to misleading “Paid for by” disclosures. Ideally, Facebook would have reported this data in one of its many Transparency Reports, but the most recent one failed to mention this change and Facebook’s effectiveness in removing them. The Ad Library allows developers to view whether ads that fit a given keyword are active, how long they ran for, when they ran, what it looked like, and who it was funded by. A complete guide on how to use the Ad Library API can be found in **[Appendix]**. My hypothesis was that the amount of pausing would have increased since August of 2019. Unfortunately, the API only allows 5,000 ads to be processed at a time. Given that there are over five million ads in the library total, I knew that I would not be able to find the total amount of advertisement that were paused, but that I could delve more specifically into an issue with fewer advertisements and see whether ads without a disclaimer were still run following November 7th, 2019.

Although there is no disclaimer, this ad was posted before November 7 th	This is a violation since it does not provide a disclaimer and was posted after November 7 th
<p>● Inactive Started running on May 16, 2019 ID: 2142977709326490</p> <p> This ad ran without a disclaimer. ⓘ</p> <p> STAT Sponsored</p> <p>The latest attempt to spotlight Gilead Sciences and its business practices shifted to Congress in a sometimes contentious hearing on Truvada's cost.</p> 	<p>● Inactive Nov 24, 2019 - Nov 27, 2019 ID: 717017395460099</p> <p> This ad ran without a disclaimer. ⓘ</p> <p> Jarrin Jackson Sponsored</p> <p>The America First Platform - Immigration, Degeneracy, the Swamp</p> 
<p>Exhibit E: Facebook violates its claim to remove advertisements surrounding election, political, or social issues past November 7, 2019</p>	

Considering Facebook’s claim that political and social issue-based ads were supposed to be paused by November 7th, 2019, the ad displayed on the left in **[Exhibit E]** would not be a violation because it ran before the policy was in place. Contrarily, the ad on the right would be an example of an error on Facebook’s part for **either** failing to categorize that the ad as being about a sensitive issue or correctly categorizing it, but not requiring further documentation past November 7th. When an ad that is sensitive in nature runs without the correct categorization, it remains unclear who paid for it. The number of ads that Facebook miscategorized and did not require the disclaimer for remains unclear. It is certain that there are errors. **[For more examples of errors see Appendix]**

Addressing Further Related Issues:

A separate but related issue is how Facebook handles misinformation in advertisements that are correctly categorized as being sensitive or political. In particular, I want to address Facebook's handling of advertisements for a drug called Truvada. Though it was not referenced in Facebook's August 28th update, I felt that the Truvada case was important to cover because it was exactly the kind of misinformation that Facebook was trying to avoid by increasing the requirements for documentation from its advertisers. Furthermore, it is an example of how mishandling of misinformation can have a tangible negative impact on real people. Truvada is a brand name within a class of drugs called PrEP, which are 99% effective at preventing HIV transmission.^{xiii}3 Using Facebook ads, law firms and personal injury lawyers have been trying to recruit clients for a class-action lawsuit filed in May of 2019 against Gilead Sciences, Truvada's manufacturer. The advertisements led viewers to falsely believe that taking PrEP drugs would result in kidney damage, low bone density and other serious side effects.⁴ New York City's deputy health commissioner for disease control cited misinformation as preventing HIV-negative transgender people from accessing PrEP drugs.^{xiv} "Our worst nightmare is coming true, because these ads are definitely sending us back," said Peter Staley, an esteemed HIV activist. According

³ Pre-exposure prophylaxis (**PrEP**) is an HIV prevention strategy where HIV-negative individuals take anti-HIV medications before coming into contact with HIV to reduce their risk of becoming infected. The medications work to prevent HIV from establishing infection inside the body.

⁴ The class-action lawsuit is based on the allegation that Gilead withheld the release of emtricitabine/tenofovir alafenamide (Descovy) for PrEP -- a new drug with statistically fewer bone and kidney side effects in clinical studies -- to maximize sales of Truvada. But that's not the message actual PrEP users are getting. Instead, they are concerned that the message conveyed by clinicians and public-health leaders alike -- that "PrEP is safe" -- may not be true.

to a report from the CDC, only about 18% of the “1.2 million people who could benefit from PrEP” have received a prescription for the medication.”^{xv}

This incident prompted over 50 LGBTQ and public health organizations to sign an open letter to Mark Zuckerberg, pleading with Facebook, to take down the law firms’ ads which are “are causing significant harm to public health.”^{xvi} Facebook responded to this incident saying, “While these ads do not violate our ad policies nor have they been rated false by third-party fact-checkers, we’re always examining ways to improve and help these key groups better understand how we apply our policies,” the spokesperson wrote.^{xvii}

A quick review of Facebook’s ad policies revealed that these advertisements did in fact violate subsection 23 of its Restricted Content policy under Advertising Policies. [See **Exhibit F**]

23. Misleading Claims

Ads must not contain deceptive, false, or misleading claims like those relating to the effectiveness or characteristics of a product or service or claims setting unrealistic expectations for users such as misleading health, employment or weight-loss claims.

Exhibit F: Facebook’s policy on misleading claims about effectiveness of a product or service

As seen above in [**Exhibit F**], Facebook’s advertising policy prohibits misleading claims about the effectiveness of a product which were the case in ads like those shown below in [**Exhibit G**].

Launched October 2019

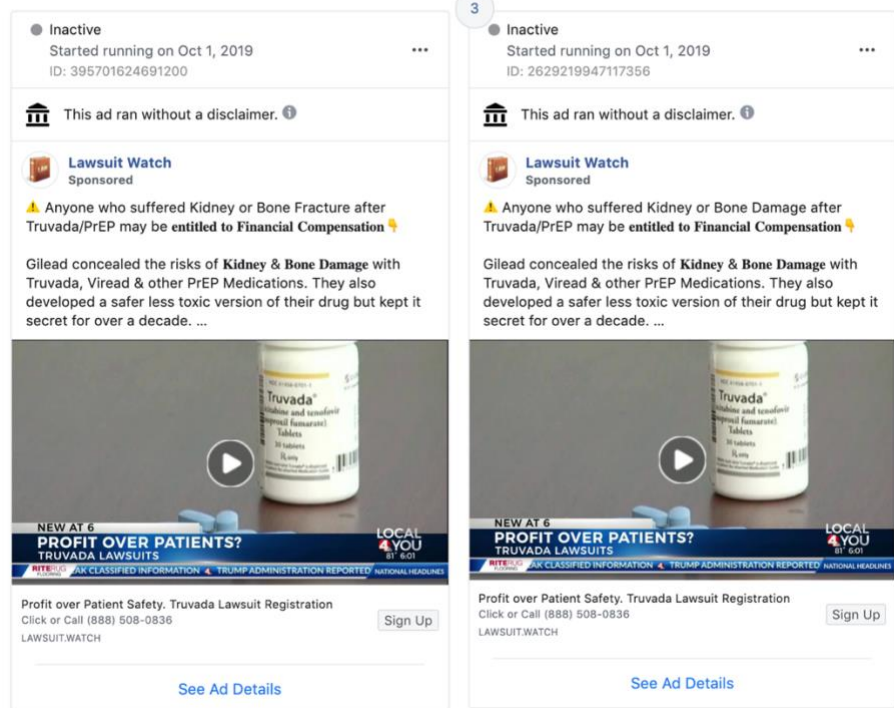


Exhibit G: Example of advertisements which effected LGBTQ communities

Without releasing other public documentation on the matter, Facebook either took down or stopped allowing ads containing misinformation about Truvada. I took the liberty of personally reviewing all advertisements in the Ad Library that were returned for the keyword ‘Truvada’. Out of 120 ads that included the keyword Truvada, there were 82 advertisements that falsely claimed Truvada was very dangerous. Facebook actively removed a total of 12 ads. Out of the 12 ads that were taken down, 10 included misinformation about Truvada. The remaining two ads were removed because the advertiser had failed to disclose the fact that the ads were political or sensitive in nature. Therefore, out of the 82 ads that included misinformation, only 10 were taken down. The remaining 72 ads ran until the ad delivery stop time specified by the advertiser.

Following the Cambridge Analytica scandal Facebook and other platforms started creating archives like the Facebook Ad Library to maintain transparency. Upon inspecting data from the Ad Library using Python, I came across one more thing that felt suspicious. The advertisements in the library typically include the ad delivery stop time; however, many of the advertisements for Truvada that had included misinformation return null values for ad delivery stop time. In other words, Facebook stopped disclosing when the ads were taken offline. Given that the Ad Library API was created in the name of transparency, this action was careless at best, and malicious at worst. Examples of the null values in the ad delivery stop time column can be seen below in [Exhibit H].

creation_time	ad_delivery_start_time	ad_delivery_stop_time	funding_entity	page_id
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-09	2019-09-09	NaT	A Case for Women LLC	1025055787535714
2019-09-08	2019-09-08	NaT	A Case for Women LLC	1025055787535714
2019-09-08	2019-09-08	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714
2019-09-07	2019-09-07	NaT	A Case for Women LLC	1025055787535714

Exhibit H: Unexpected null values for Truvada related advertisements

Conclusion:

[Exhibit I] serves to organize some of the key takeaways from this study. The midsection of the infographic shows Facebook's efficacy in meeting the claims on the left, while the evidence for the conclusion can be found on the right.

Actions Facebook said it would take:		My Findings
A	More enhancements to the Ad Library, such as making it easier to track and compare spending of US presidential candidates	Facebook made it easy to view the political spending of a candidate within just three clicks.
B	Expanding their policy to prohibit ads that expressly discourage people in the US from voting, a commitment Facebook made as part of a recent civil rights audit (found on page 20 here)	While Facebook did expand official policy to prohibit voter suppression, this was supposed to already be existing policy, as of 2018.
C	Requiring all Pages for national candidates or elected officials to go through Page Publishing Authorization, which requires that Page administrators turn on two-factor authentication and verify their primary country location so that Facebook can confirm these Pages are using real accounts and are located in the US	It is true that Facebook now requires two-factor authentication and country location verification. In fact, I went through this process to test and can confirm both of these steps.
D	Exposing more information about a Page, such as the business or organization behind it	While its unclear what was offered before the update, Facebook does offer the organization or 'funding entity' behind advertisements.
E	Requiring advertisers to submit additional information to avoid having misleading 'paid for by' disclaimers on Facebook's platform, and pausing ads from organizations that fail to do so	Facebook required organizations with sensitive ads to submit more documentation, but not all sensitive ads were correctly categorized as such, leaving sensitive ads without a disclaimer.
Other adjacent questions evaluated in the paper:		
1	Did Facebook's new requirement from advertisers to provide more documentation past November 7th, 2019 effectively combat misinformation?	Facebook was unable to effectively combat misinformation, as shown by false Truvada advertisements on the platform past November 7th, despite the new documentation requisite.
2	Did Facebook reflect its stated value of 'accurate, authentic communication' throughout the incident with Truvada advertisements?	Facebook failed to maintain transparency about its handling of the issue with the public and on the Ad Library.

Exhibit I: Main takeaways from the study

The aforementioned Civil Rights Audit led by Laura Murphy is a step in the right direction, but it's worth noting that Facebook, had invited that particular audit, possibly tainting its validity. Furthermore, while rigorous, many of the audit's conclusions were based off Facebook policy changes without observing Facebook's execution of said policies. Within the

miniature audit that is this study, what Facebook says about its policies were used as only one half of the equation.

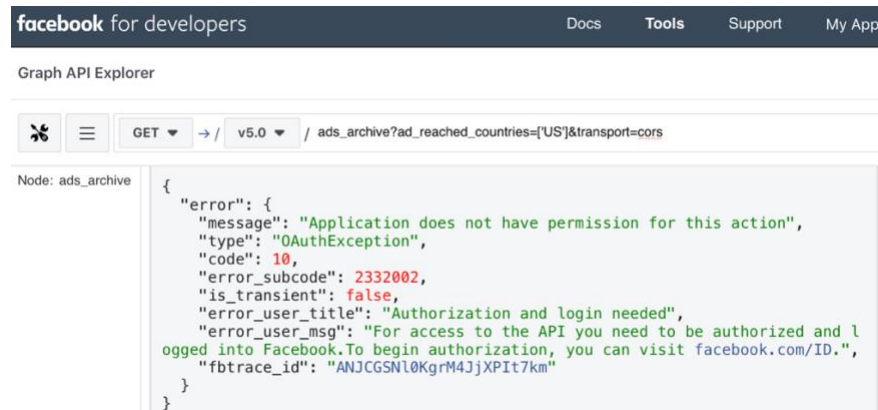
Claim A, C, and D were relatively straight forward to confirm by checking further updates posted by Facebook in conjunction with using the updated versions of the interfaces. Contrarily, claims B and E proved to be more complex. For example, claim B includes an expansion **to** a policy that Facebook was cited as already having in place by (Murphy, pg. 20, 2019). This series of facts points to very few conclusions, all of which are deserving of further inquiry. Either, Facebook was careless in its update and claimed that it would start doing something it was already doing, or that the audit was false in claiming that Facebook had already reformed its policy. Claim E was not fully executed as shown by the examples above, but it's still difficult to say the extent to which Facebook blundered. Facebook's misadventure with Truvada and LGBTQ activist groups point to a severe structural misalignment in how ads are censored and how Facebook maintains transparency to the public with its Ad Library. Making organizations posting political or social issue ads submit additional documentation was supposed to be a safeguard against misinformation. The fact that this failed so conspicuously following the alleged implementation of the new policy should call into question Facebook's preparedness to face misinformation preceding the 2020 US Election. The takeaways point back to a broader theme, a regulatory void for platforms that have a responsibility to combat misinformation in a prompt and transparent way.

Appendix:

i. Methodology for Querying the API

While this process may sound fairly straight forward, it is much more difficult to implement in practice. To access any of Facebook's API's one must start by making a Facebook for Developers account. Making an account requires only to agree to the Facebook for Developers *Platform Policy*, which asserts that the user must abide by community guidelines. After performing a multi-factor authentication⁵, the account took 1-2 business days to be verified for use by Facebook. After the account was verified, I was prompted to 'make an application'. Making an application is required to set up a unique ID number that Facebook can use to track the queries⁶ that are made using its APIs. To access and manipulate data from Facebook's Ad Library Facebook offers multiple different methods, none of which are intuitive.

All methods require using the Facebook Graph API Explorer⁷ to gain an access token⁸. Though the API explorer has a query option, it was not useful because it requires code to be in HyperText Transfer Protocol, a computer programming language that I'm not familiar with. I attempted using it in conjunction with the few sample queries for the explorer that were used on Facebook's site; however, when I tried querying the Ad Library I was met with the following error message:

The screenshot shows the Facebook Graph API Explorer interface. At the top, there's a navigation bar with 'facebook for developers' and links for 'Docs', 'Tools', 'Support', and 'My App'. Below this, the title 'Graph API Explorer' is visible. The main area shows a query input field with a GET method, a version dropdown set to 'v5.0', and a query string: 'ads_archive?ad_reached_countries=[US]&transport=cors'. Below the input field, the response is displayed as a JSON object. The response indicates an error: 'Application does not have permission for this action', with a type of 'OAuthException' and a code of 10. It also includes an error_subcode of 2332002 and a message about authorization and login being needed. The error_user_title is 'Authorization and login needed', and the error_user_msg is 'For access to the API you need to be authorized and logged into Facebook. To begin authorization, you can visit facebook.com/ID.'. The fbtrace_id is 'ANJCGSN10KgrM4jXPit7km'.

After visiting facebook.com/ID, I realized that the Facebook for Developers account required additional authorization before it would be granted access to the Ad Library. This required a confirmation of address location and confirmation of identity. To confirm the address location, I

⁵ Multi-factor authentication is an authentication method in which a computer user is granted access only after successfully presenting two or more pieces of evidence to an authentication mechanism. In this case it required a code that was sent to the cell-phone associated with the account.

⁶ A query, in this context, is a question that is being asked to the API. One way to think about an API is that as an intermediary for communication between multiple applications. In this study, queries will be made from the application that I made through the API to Facebook's Ad Library. This process allows for the transference of data.

⁷ Facebook's Graph Explorer is an application that includes a query option and access token (see appendix.)

⁸ An **access token** is an opaque string that identifies a user, app, or Page and can be used by the app to make graph **API** queries.

was sent a six-digit code by mail that I then had to input on the website. After that, I had to go to a notary and fill out an identification form found in the appendix. Finally, I had to upload the form on the website. After my identity was confirmed, I was allowed the access token to query the Ad Library, but it was still unclear how to run specific queries along the parameters set in the Ad Library documentation. Example queries in the documentation were offered primarily in cURL, a programming language that can be used in the terminal⁹, but returns data that is in JSON (a format which is not easily manipulated). Online I found a converter that offers the ability to input code in cURL and output its equivalent in Python, another coding language which is more useful for me to manipulate data. I took this output and ran the example query in Jupyter Notebook¹⁰. After tweaking the parameters of the query and affixing the access token, I was able to return a dictionary¹¹ of the advertisements that fit my query:

```
import urllib3
import facebook
import requests

params = (
    ('search_terms', '\'california\''),
    ('ad_type', 'POLITICAL_AND_ISSUE_ADS'),
    ('ad_reached_countries', '["US"]'),
    ('access_token', token),
)

response = requests.get('https://graph.facebook.com/v5.0/ads_archive', params=params)
response.text
```

After determining the correct process for querying the API, I was able to form more eloquent queries that provided data crucial for addressing my research question.

ii. What is an API?

- a. An **application programming interface (API)** is an interface or communication protocol between a client and a server intended to simplify the building of client-side software. It has been described as a “contract” between the client and the server, such that if the client makes a request in a specific format, it will always get a response in a specific format or initiate a defined action.
- b. In plainer English and at risk of glossing over some of the nuances, an API is a tool that companies can provide developers (people who code). This tool allows developers to access frequently updated data about the product or service offered by a company. For example, one could use the Yelp API to extract data of all the restaurants in New York above a certain rating. Another example would be to access the CitiBike API to extract data on how long it takes for the average user’s commute in the morning. Therefore, it is a way of acquiring data, but it does not provide the analysis for the developer.
- c. If this explanation remains opaque to the reader, please refer to the following video: <https://www.youtube.com/watch?v=s7wmiS2mSXY>

⁹ The **terminal program**, or emulator, provides a text-based interface for typing basic commands.

¹⁰ Jupyter Notebook is a digital environment which allows programmers to code in languages like Python.

¹¹ **Dictionary** in Python is an unordered collection of data values, used to store data values like a map, which unlike other Data Types that hold only single value as an element, Dictionary holds **key:value** pair. Key value is provided in the dictionary to make it more optimized. Each key-value pair in a Dictionary is separated by a colon :, whereas each key is separated by a ‘comma’.

iii. **Additional information required by Facebook following the August 28, 2019 update**

In addition to providing their US street address, phone number, business email and a business website matching the email, they must provide one of the following:

1. Tax-registered organization identification number (i.e. EIN)
2. A government website domain that matches an email ending in .gov or .mil
3. Federal Election Commission (FEC) identification number

iv. **Facebook Newsfeed Values**

- a. <https://about.fb.com/news/2016/06/building-a-better-news-feed-for-you/>

v. **Authentic Communication**

- a. <https://about.fb.com/news/2016/06/building-a-better-news-feed-for-you/>
- b. The strength of our community depends on authentic communication. The feedback we've gotten tells us that authentic stories are the ones that resonate most. That's why we work hard to understand what type of stories and posts people consider genuine — so we can show more of them in News Feed. And we work to understand what kinds of stories people find misleading, sensational and spammy, to make sure people see those less.

vi. **Complete guide to the Ad Library API**

- a. <https://www.facebook.com/business/help/2405092116183307?id=288762101909005>
- b. [https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=US&impression_search_field=has_impressions_lifetime&q=politics&publisher_platforms\[0\]=facebook](https://www.facebook.com/ads/library/?active_status=all&ad_type=political_and_issue_ads&country=US&impression_search_field=has_impressions_lifetime&q=politics&publisher_platforms[0]=facebook)

vii. **Facebook's expanded Voter Suppression Policy:**

Expanded Voter Suppression Policy: Through the civil rights audit, Facebook strengthened its voter suppression policy in 2018, so that the policy now prohibits:

- Misrepresentations about how to vote (including statements that you can vote using an app);
- Misrepresentations about voting logistics, methods, or requirements;
- Misrepresentations about whether a vote will be counted; and
- Threats of violence relating to voting, voter registration, or the outcome of an election.

viii. **Examples of Facebook ad Errors:**

Launched October 2019

● Inactive
Started running on Oct 1, 2019
ID: 395701624691200

 This ad ran without a disclaimer. 

 **Lawsuit Watch**
Sponsored

⚠️ Anyone who suffered Kidney or Bone Fracture after Truvada/PrEP may be **entitled to Financial Compensation** 📌

Gilead concealed the risks of **Kidney & Bone Damage** with Truvada, Viread & other PrEP Medications. They also developed a safer less toxic version of their drug but kept it secret for over a decade. ...



Profit over Patient Safety. Truvada Lawsuit Registration
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Started running on Oct 1, 2019
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ID: 813428395518309

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 **Herrera Studio**
Sponsored

FATHERS Queer Art Shop is having a soft little opening. Take a sneak peak and put in orders or pre-orders for one-of-a-kind queer art. Framed prints, Popper Tops, Truvada Pill Cases and more. Prices include S/H to the US too!
<https://www.iftheylived.org/merch/>



Original Truvada Pill Case \$25.00
Vito2020 Gay President Shirt \$25.00
Gay Agenda by Kasper Koczab and Terry Fury \$25.00

Herrera Studio [Shop Now](#)

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● Inactive
Oct 9, 2018 - Oct 16, 2018
ID: 469740820213815

 This ad ran without a disclaimer. 

 **Schmidt National Law Group**
Sponsored

Gilead, the leading pharmaceutical giant that produces drugs to combat HIV and Hepatitis C, is back in the hot seat over Viread and Truvada. Both medications were sold as safe and effective while new evidence has come to light that Gilead may have known about their drugs' causing kidney disease and kidney failure early on in testing phases. The kidney damage claim is associated with how the drug is processed i...



THE PROTEST CAME ABOUT FOLLOWING AN LA TIMES ARTICLE THAT EXPOSED GILEAD'S PATENT MANIPULATION OF ITS BEST-SELLING HIV DRUGS CONTAINING TENOFOVIR.

Gilead back in the hot seat for Viread & Truvada's damaging kidney side effects
WWW.NATIONALINJURYADVOCATES.COM [Learn More](#)

[See Ad Details](#)

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