

Hate speech, Censorship, and Freedom of Speech: The Changing Policies of Reddit

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Abstract

This paper examines the shift in focus on content policies and user attitudes on the social media platform Reddit. We do this by focusing on comments from general Reddit users from five posts made by admins (moderators) on updates to Reddit Content Policy. All five concern the nature of what kind of content is allowed to be posted on Reddit, and which measures will be taken against content that violates these policies. We use topic modeling to probe how the general discourse for Redditors has changed around limitations on content, and later, limitations on hate speech, or speech that incites violence against a particular group. We show that there is a clear shift in both the contents and the user attitudes that can be linked to contemporary societal upheaval as well as newly passed laws and regulations, and contribute to the wider discussion on hate speech moderation.

keywords

content moderation, hate speech, topic modeling

I INTRODUCTION

The peculiarities of online hate speech as compared to traditional, offline hate speech has made it necessary to rapidly develop and implement laws regulating offensive speech online [Brown, 2018]. The characteristics of online communities mean that it is much easier for fringe ideals to gain foothold and for members of such communities to spend their online lives in echo chambers of hate [Shaw, 2011], often targeting a specific group of people based on some real or perceived characteristic such as race, sex, sexuality, religion, and political beliefs.

The EU's 2016 Code on Countering Illegal Hate Speech Online (Code) introduced voluntary legislation that saw Twitter, Google, Facebook, and Microsoft commit to regulating hateful speech or speech that incites violence on their platforms. By 2020, each platform had stringent guidelines and flagging systems to remove reports of hate speech [Aswad, 2016]. [Anu Bradford, 2019] would attribute this shift in practices to what she defined as “The Brussels Effect”, or the regulatory power of the EU in certain markets to affect the standards of markets through their institutional capacity, willingness to create stringent rules, the relative market size of Europe, and the focus on inelastic targets and non-divisible processes; meaning that EU regulations target aspects of the market that do not change, unlike capital or profit, and aspects that cannot be easily divided into separate processes to manage different standards of production.

Regarding the digital economy, [Bradford, 2019] identified two areas where the Brussels Effect was in full force, specifically, the areas of data protection and hate speech. She was able to identify both the *de facto* and *de jure* aspect of the Brussels Effect in terms of data protection, as the EU had passed the 2016 binding General Data Protection Regulation (GDPR) that forced a change in tech companies practices around the collection of user data. However, the *de facto* and *de jure* aspect of the Brussels Effect on hate speech remained unexplored, as the EU had not passed any binding legislation around hate speech regulation in the digital economy. At the time of writing her book; only the voluntary Code was in effect; although currently, the binding version of the Code, The Digital Services Act (DSA) has been adopted and is in the process of being fully implemented at a later date. While Bradford posited that the EU did indeed have some impact on hate speech in the digital economy, the non-binding nature of the Code rendered it difficult to make any definitive arguments.

While the Code has been criticized by several scholars (see e.g. [Aswad, 2016], [Portaru, 2017], and [Alkiviadou, 2019] for both the privatization of hate speech making multinational private companies the arbiters of what constitutes legal and illegal hate speech and vague outcome reports [Portaru, 2017] - for the outcome report itself see [Jourova, 2016]), it has clearly facilitated change in how social media platforms deal with the datafication of hate (see e.g. [Aswad, 2016]; [Laaksonen et al., 2020]). As there is no universally accepted definition of hate speech [Nemes, 2010] [Laaksonen, 2020] the private actors have little choice but to come up with their own definitions leading to vastly different policies on different social media platforms [Alkiviadou, 2019]¹. It is undeniable that the Code has greatly affected the content policies of all major social media platforms.

The overall effectiveness of the Code, in the changes it was able to invoke in its signatory companies, demonstrates the EU's regulatory power in the realm of regulating hate speech online, attributable to the Brussels Effect. However, curiously enough, major American technology companies outside the scope of the Code have presented a distinct shift in philosophy surrounding their content policies and overall stance on hate speech since the adoption of the Code in 2016 (see e.g. [Aswad, 2016], [Bradford 2019]). This offers the opportunity to make the argument that the EU's impact on hate speech practices is not only a result of their regulatory power, but a result of their normative power as well.

To highlight this phenomenon, it is only necessary to look at the Content Policy updates from the American online forum website, Reddit, to see how this shift has occurred. In 2015, Reddit expressed ambivalence towards the topic of hate speech, and rather demonstrated their commitment to libertarianism when it concerned violent speech. This is reflective of the general American political philosophy concerning hate speech, which ultimately enshrines offensive language in the First Amendment right to freedom of speech offered by the American constitution. In regards to offensive content, Reddit moderators state specifically, "It's ok to say 'I don't like this group of people.' It's not ok to say, 'I'm going to kill this group of people'" [Reddit - [u/spez], 2015a]. They also cited their commitment to preventing "the speech police knocking down their door" [Reddit - [u/spez], 2015a]. By 2020, Reddit's stance on hate speech would transform completely. They would state: "Everyone has a right to use Reddit free of

¹ It should be noted that Bertaglia et al (2021) created a hate speech dataset where categories were based on actual provisions and case law and which was annotated by law students. Hopefully this paper gains more traction and influences other dataset creators in the future.

harassment, bullying, and threats of violence. Communities and people that incite violence or that promote hate based on identity or vulnerability will be banned” [Reddit - [u/spez], 2020].

The change in Reddit Content policy represents a shift in practices from Reddit as a company, and this change necessitates the question of if general Reddit users have shifted their philosophy surrounding hate speech in line with the company. For this reason, this paper utilizes topic modeling of comments made by general Reddit users on Reddit admins’ posts informing them of Content Policy updates to determine the general topics brought up in reaction to changing standards of what can and cannot be posted on the website. This is done in order to determine if and how the general philosophy of Reddit users has shifted on the topics on censorship and freedom of speech. We will first explain the context of the five content policy updates used for the analysis in this paper before presenting the data and methods used to conduct this analysis. We will then explore the results, before commenting on the change in the general lexicon of Reddit users and what it means for the future of social media platforms and further regulations of violent speech online.

II BACKGROUND

For a more comprehensive investigation of the Reddit data we qualitatively outline the content of each Reddit update utilized in the analysis for this paper. The Content Policy updates utilized in this paper begin in 2015, and end in 2020. The first update was made by the Reddit admin u/spez² in 2015 entitled, “Let’s Talk Content. AMA³.” in r/announcements⁴ [Reddit - [u/spez], 2015a]. This is the first time Reddit admins post about content restrictions on the website. An excerpt from this post reads:

As Reddit has grown, we've seen additional examples of how unfettered free speech can make Reddit a less enjoyable place to visit, and can even cause people harm outside of Reddit. Earlier this year, Reddit took a stand and banned non-consensual pornography. This was largely accepted by the community, and the world is a better place as a result (Google and Twitter have followed suit). Part of the reason this went over so well was because there was a very clear line of what was unacceptable.

[Reddit - [u/spez], 2015a]

This post displayed ambivalence towards hate speech, and focused more on content of a sexual nature, perhaps due to the rise on the #metoo movement which gained traction in 2013 and influenced several influential social media platforms’ content policies (see e.g. [Klonick, 2021]). Twitter and Google, along with Facebook, had been under immense pressure at the time by German government officials to better their standards around the content posted on the site (see e.g. [Alkiviadou, 2019]). Notably, these companies would later become voluntary signatories to the EU’s Code. This Reddit post was more of an open dialogue between users of Reddit and Reddit admins in preparation for their new Content Policy. Several researchers have pointed out the “laxness” of Reddit’s content policies [Massanari, 2017][Gaudette et al., 2020]. Incidentally, the #metoo movement and subsequent steps taken by social media platforms has had no impact on the prevalence of sexism in general [Archer et al., 2020], something that is echoed in many of the steps taken to combat hate speech online [Portaru, 2017].

² When referring to users on Reddit, the username is traditionally preceded by a u/

³ Ask Me Anything

⁴ Communities on Reddit are known as subreddits and are denoted with an r/ preceding the community name.

The second post utilized for analysis in this paper is also from 2015 by Reddit admin u/spez in the r/announcements subreddit, where they introduced a “quarantine” function, which would essentially prevent subreddits that violated their new Content Policy from growing. An excerpt from the update read:

One new concept is Quarantining a community, which entails applying a set of restrictions to a community so its content will only be viewable to those who explicitly opt in. We will Quarantine communities whose content would be considered extremely offensive to the average redditor... Our most important policy over the last ten years has been to allow just about anything so long as it does not prevent others from enjoying Reddit for what it is: the best place online to have truly authentic conversations.

[Reddit - [u/spez], 2015b]

Again, it is possible to see the general ambivalence around the concept of hate speech. There is a focus on “offensive content”, but at this point in time, Reddit admins mostly concern themselves with a general enjoyment of the website for users. The third post extracted for the analysis in this paper is from 2017, made by u/landoflobsters in r/modnews entitled, “Update on site-wide rules regarding violent content”. It is important to note that this post was made one year after the introduction of the EU’s Code. An excerpt from this post reads:

In particular, we found that the policy regarding “inciting” violence was too vague, and so we have made an effort to adjust it to be more clear and comprehensive. Going forward, we will take action against any content that encourages, glorifies, incites, or calls for violence or physical harm against an individual or a group of people; likewise, we will also take action against content that glorifies or encourages the abuse of animals. This applies to ALL content on Reddit, including memes, CSS/community styling, flair, subreddit names, and usernames.

[Reddit - [u/landoflobsters], 2017]

This post is the first time Reddit addresses violent speech, or in other words, hate speech. Specifically, they begin to update their restrictions around speech that incites violence against a particular individual or group of people.

The fourth post employed for analysis in this paper comes a year later, in 2018 with the title, “Revamping the quarantine function,” made by u/landoflobsters in r/announcements. An excerpt from this post reads:

On a platform as open and diverse as Reddit, there will sometimes be communities that, while not prohibited by the Content Policy, average redditors may nevertheless find highly offensive or upsetting. In other cases, communities may be dedicated to promoting hoaxes (yes we used that word) that warrant additional scrutiny, as there are some things that are either verifiable or falsifiable and not seriously up for debate (eg, the Holocaust did happen and the number of people who died is well documented).

[Reddit - [u/landoflobsters], 2018]

While they do not mention hate speech in this update, the concept of removing hate speech can be identified in them announcing that subreddits dedicated to Holocaust denial, or other “hoaxes” are subject to a quarantine.

As for the effectiveness of quarantining Reddit communities, [Chandrasekharan et al., 2021] examined two quarantined subreddits, The Red Pill⁵ (r/theredpill, a misogynist community) and The Donald (r/the_donald, a racist community encouraging anti-Muslim content in particular). They found that although the influx of new users decreased significantly, despite the condition of exiting the quarantine being a significant reduction in sexist/misogynist and racist content, the offensive content levels remained at similar levels. Therefore quarantining worked to keep the hate from spreading, but did not alter the behavior of those who were already members of these communities nor did quarantining make them flee to other platforms [Chandrasekharan et al, 2021] or keep them from brigading [Gaudette et al, 2020]. Brigading is a practice where members of a specific Reddit community are encouraged to upvote specific, often offensive, content outside of the community itself to make it more visible to other users.

The final post utilized in this analysis announces Reddit's current Content Policy made by u/spez in r/announcements in 2020. An excerpt from this post states:

From our conversations with mods and outside experts, it's clear that while we've gotten better in some areas—like actioning violations at the community level, scaling enforcement efforts, measurably reducing hateful experiences like harassment year over year—we still have a long way to go to address the gaps in our policies and enforcement to date. These include addressing questions our policies have left unanswered (like whether hate speech is allowed or even protected on Reddit), aspects of our product and mod tools that are still too easy for individual bad actors to abuse (inboxes, chats, modmail), and areas where we can do better to partner with our mods and communities who want to combat the same hateful conduct we do.

[Reddit - [u/spez], 2020]

Here, Reddit clearly takes a stance on hate speech, and declares its commitment to the regulation and removal of hate speech on their platform. Four years after the adoption of the EU's Code, the general sentiment of Reddit admins concerning hate speech have demonstrated a clear shift in philosophy. The next step is to see how Reddit users have responded to these posts in the comments, and what these responses mean in terms of the philosophy of the general Reddit user.

It is likely that the demand for swift action against online hate speech has at least partly contributed to the increase in publications related to this in the field of Natural Language Processing (NLP), as evidenced by not only the numerous publications on the topic (see e.g. [Tontodimamma et al., 2020]), but also workshops specifically targeting hate speech and offensive speech such as OffensEval, NLP4IF, WOA, TRAC, TA-COS, and ALW1. Typically the focus in these workshops and publications is on accurately detecting hate speech (e.g. [Zampieri et al, 2019] and [Chuang et al., 2021]) as well as accurately determining the category of different types of hate speech / offensive language (e.g. [Zampieri, 2021] and [Lemmens et al, 2021]), or even identifying the targets of offensive language (e.g. [Lemmens et al, 2021], [Shvets et al, 2021]). Usually this involves supervised machine learning and even the creation of language models fine-tuned for hate-speech (e.g. [Pàmies et al, 2020] [Caselli et al., 2021]).

Academic studies concerning hate speech on Reddit tend to have either a legal and cultural or an automatic detection perspective. Very few, however, focus on the actual content moderation,

⁵ Red pills are a reference to the movie "The Matrix" (1999) where the protagonist is given a choice between a blue pill and a red pill. The red pill will make him see the world for what it is and the blue pill will allow him to keep his delusions. "Incels" believe that they have been given the proverbial red pill and can see women for "what they really are". They are male supremacist with extreme resentment towards women, often advocating sexual violence.

and even fewer utilize NLP methods. A paper by [Shen and Rosé, 2019] does just this by investigating user responses to Reddit’s quarantine policy⁶. They employ an LDA-model with 10 topics on the first month of comments from the 2018 content policy announcement [Reddit - [u/landoflobsters], 2018]. Their findings closely align with ours in terms of topic proportions as well as interpretations.

In another paper focusing on Reddit comments that violate “macro norms”, [Chandrasekharan and Gilbert, 2019] collected comments that had been removed by moderators for violating Reddit’s content policies or a particular subreddit’s own rules. Their paper mostly focuses on the creation of this dataset for automated content moderation purposes, but nonetheless, shows that there are a number of norm violations that 85 out of 100 examined subreddits tend to remove. Among these are the use of misogynistic slurs, racist and homophobic hate speech, posting pronographic links, personal attacks, as well as claiming that another user is “too sensitive”.

Our paper intends to demonstrate how NLP methods can be utilized to facilitate discussions around the broader politics and philosophies that guide hate speech regulation online, as well as capture what the public’s general stance on the issue is as well. The democratic right to freedom of speech and the protection of vulnerable groups are equally important concerns, and our intention is to clarify some specifics of the debate for the sake of providing accurate and unbiased information that combats the polemics of “cancel culture”, a deeply divisive concept in current political discourse [Vogels et al., 2021], that so often makes accountability and censorship, when it comes to hate speech, indistinguishable.

III DATA AND METHODS

Using the Reddit API Wrapper (PRAW⁷) for Python, all comments on each of the aforementioned five posts were scraped. The information we gained contained the username of each poster of the comment, the body of the comment made, and the upvote count of the comment. This data is available on GitHub⁸ as separate csv files for each project and filtered using TAD to remove empty comments. The code for scraping is also available in the same repository.

We originally used a Latent Dirichlet Allocation (LDA) -based topic model for our data, but switched to a structural topic model (STM⁹) [Roberts et al., 2019] to gain insight into how much the score of each comment influences the topics in our data as STM allows for the inclusions of covariates. Without covariates the STM yields a Correlated Topic Model (CTM). Additionally, STM has shown better results in benchmark We focused on the 2015 AMA [Reddit - [u/spez], 2015a], the 2018 content policy update [Reddit - [u/landoflobsters], 2018], and the 2020 content policy update [Reddit - [u/spez], 2020]. These three best reflect the evolution of content policy change on Reddit and gives us the best chance to objectively determine whether the attitude towards hate speech moderation and what should and should not be allowed in greater detail. We use the two additional posts for additional qualitative analysis.

For STM we determined that the best compromise between semantic coherence, exclusivity, and held-out likelihood measures was around 50 topics for the 2015 data, 27 for the 2018 data

⁶ In our dataset this is the 2018 announcement by u/landoflobsters.

⁷ <https://github.com/praw-dev/praw>

⁸ <https://github.com/esohman/Waseda-DH>

⁹ This R code is also available on GitHub on <https://github.com/esohman/Waseda-DH>.

(see Figure 1), and 75 for the 2020 data. We used comment upvote scores as covariates. The STM package for R includes some built-in tools for pre-processing that include lower-casing, removal of punctuation, stopwords, and numbers, as well as stemming. Rare tokens are also removed. For example for the 2015 data there were originally 17988 terms of which 9364 were removed which is the equivalent of removing 9364 tokens out of 381422, i.e. tokens that appear only once in the data. As our data set is fairly small, we decided to keep all tokens that appeared more than once.

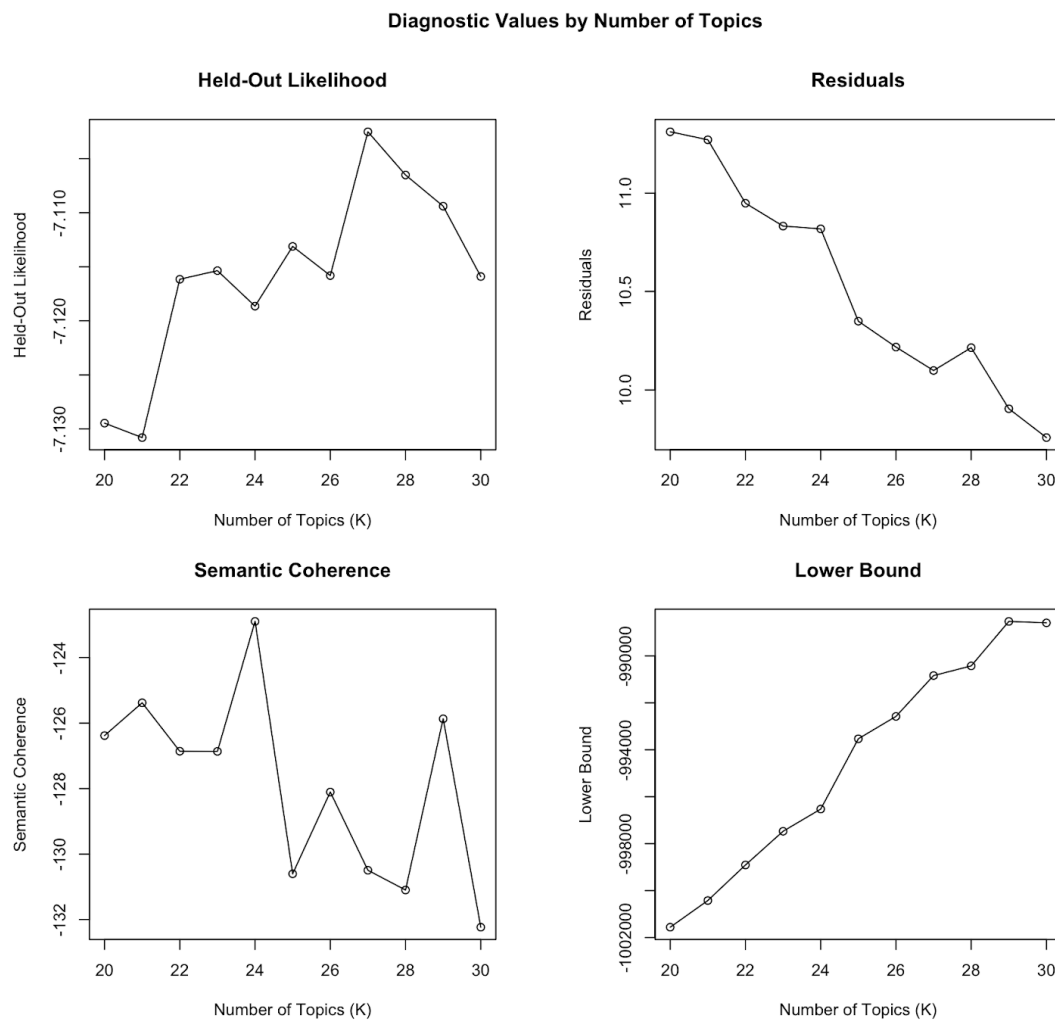


Figure 1. Coherence measures for the Content Policy 2018 with STM.

The three corpora examined using topic modeling after STM’s pre-processing looked as follows:

Corpus	# of documents ¹⁰	# of terms	# of tokens
AMA 2015	18241	8624	372058
Content 2018	7978	5580	130692
Content 2020	32042	10298	472349

Table 1. Size of final corpora.

IV RESULTS

¹⁰ Documents here roughly correspond to individual comments, terms are unique tokens, and tokens the total number of tokens.

The most salient topics for each of the three STM are examined in this section. All topics and their FREX weighted¹¹ words can be viewed in the appendix. Here we only list the most representative topics and group them by common themes. We present these in chronological order starting with the initial AMA on Content Policy in 2015, continuing to the Content Policy update in 2018, and finishing with the Content Policy update in 2020.

The topics that emerge from the 2015 AMA [Reddit - [u/spez], 2015] revolve around the need for more transparency around bans and rules (see topics 5, 18, 30, 31, 34, 40, 48), the need for rules around brigading subreddits (see topics 1, 13, 14, 24, 25, 40), and separating valid criticism from real threat (see topics 4, 16, 21, 47 plus doxxing: topic 9). There is also a secondary discussion going on that deals with censorship in general (topics 4, 8, 10, 11, 27) and Reddit as a corporation and how potential revenue influences decisions on content policy (topic 36, 39, 45).

Topic 24 Top Words:

Highest Prob: harass, group, anyth, peopl, bulli, individu, other
 FREX: intimid, bulli, silenc, behavior, individu, group, harass
 Lift:<URL>,<URL>, <URL>, oklet, intimid, hive-mind
 Score: harass, bulli, group, intimid, individu, silenc, abus

Topic 27 Top Words:

Highest Prob: speech, free, freedom, express, protect, allow, say
 FREX: speech, freedom, free, express, consequ, unfett, principl
 Lift: farewell, fetter, <URL>, <URL>, <URL>, <URL>, triggeredteehe
 Score: speech, free, freedom, express, protect, unfett, consequ

Topic 30 Top Words:

Highest Prob: subreddit, rule, allow, encourag, enforc, mani, break
 FREX: rule, subreddit, encourag, break, enforc, warn, guidelin
 Lift: banana, haikus, hiaku, ponzi, removedban, throwingpotatosatclown, doot
 Score: subreddit, rule, encourag, enforc, break, allow, guidelin

Topic 34 Top Words:

Highest Prob: will, content, offens, sens, violat, see, defin
 FREX: violat, decenc, content, sens, will, list, common
 Lift: silo, decenc, login, usefulbot, checkbox, futhermor, advisori
 Score: content, will, decenc, violat, sens, nsfw, common

The 2018 update's most salient topics revolve around the quarantine function, and general Reddit users backlash against what is perceived as censorship. Specific topics are free speech and censorship (see topics 1, 3, 7, 15, 20), banning violent content and propaganda (topics 4, 14), as well as the logistics of quarantined subreddits (topics 23). The conversation on Reddit as a corporation is also still active (topics 8, 9) as is the issue with brigading (topic 10). There are also many references to politics and political actors (topics 4, 5, 6, 12, 19) and racism (topics 15, 16, 17, 22). A meta discussion relating to both free speech and censorship as well as propaganda can be inferred from topic 20.

Topic 3 Top Words:

Highest Prob: ban, speech, hate, free, read, first, exact
FREX: voat, hate, echochamb, ban, hill, speech, infest
Lift: brightest, durr, lib, alan, articul, banning", blackpeopletwitt
Score: ban, speech, hate, free, read, voat, first

Topic 23 Top Words:

Highest Prob: sub, quarantin, can, communiti, user, content, list

¹¹ *FREX* shows how common AND exclusive a word is for a particular topic, i.e. it is the highest probability words weighted for exclusivity. *Lift* is calculated by dividing the topic-word distribution by the empirical word count probability distribution. *Score* is calculated as $\beta_{\{v, k\}} (\log \beta_{\{w, k\}} - 1 / K \sum_{\{k'\}} \log \beta_{\{v, k'\}})$ where $\log \beta$ is a K by V matrix containing the log probabilities of seeing word v conditional on topic k (Roberts et al., 2019).

FREX: quarantin, nsfw, accident, revenu, sub, heads-, search
Lift: “ban”, accident, accross, blank, canari, commentspost
Score: quarantin, sub, content, user, communiti, offens, list

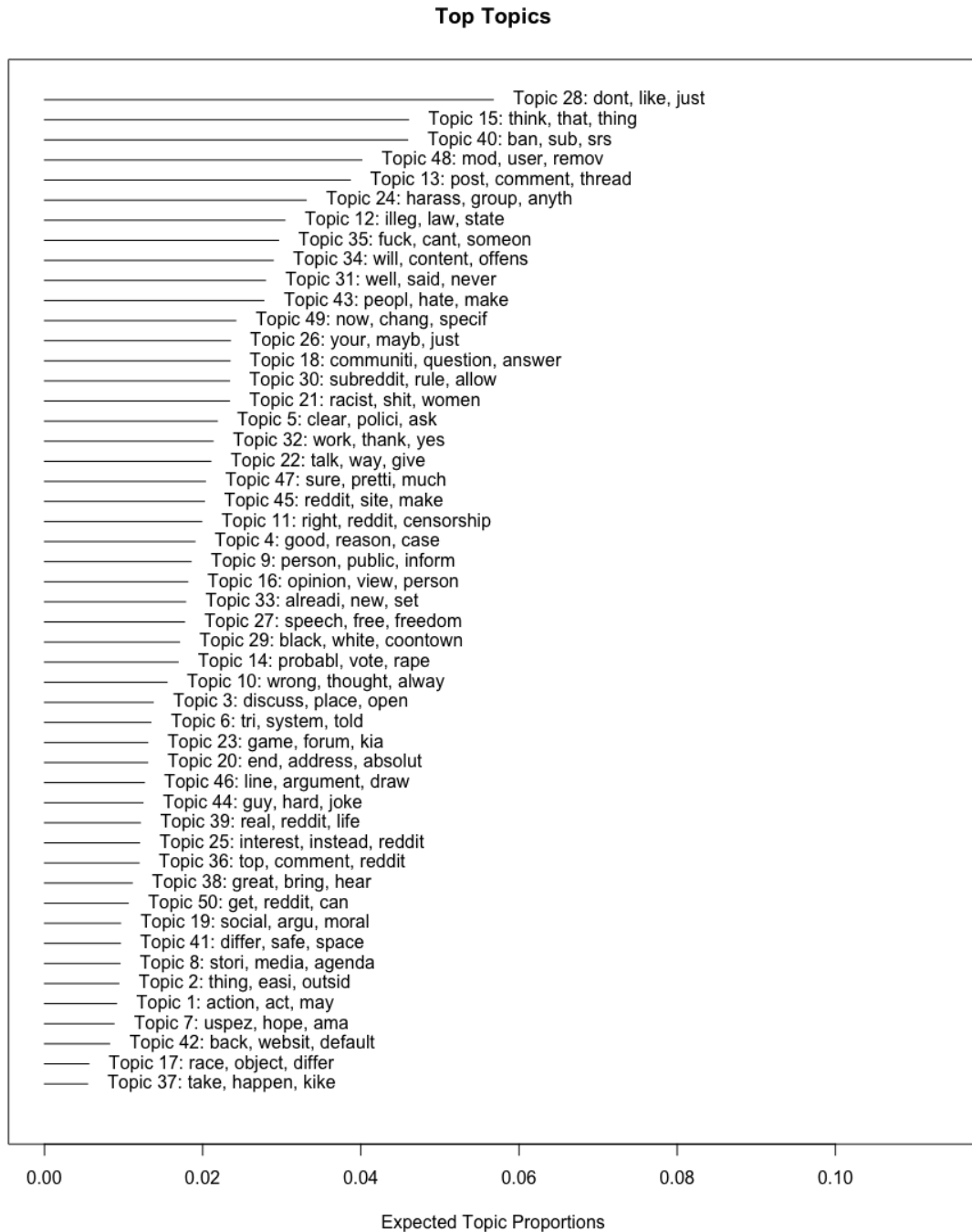


Figure 2. Expected topic proportions for AMA 2015 with STM.

Top Topics

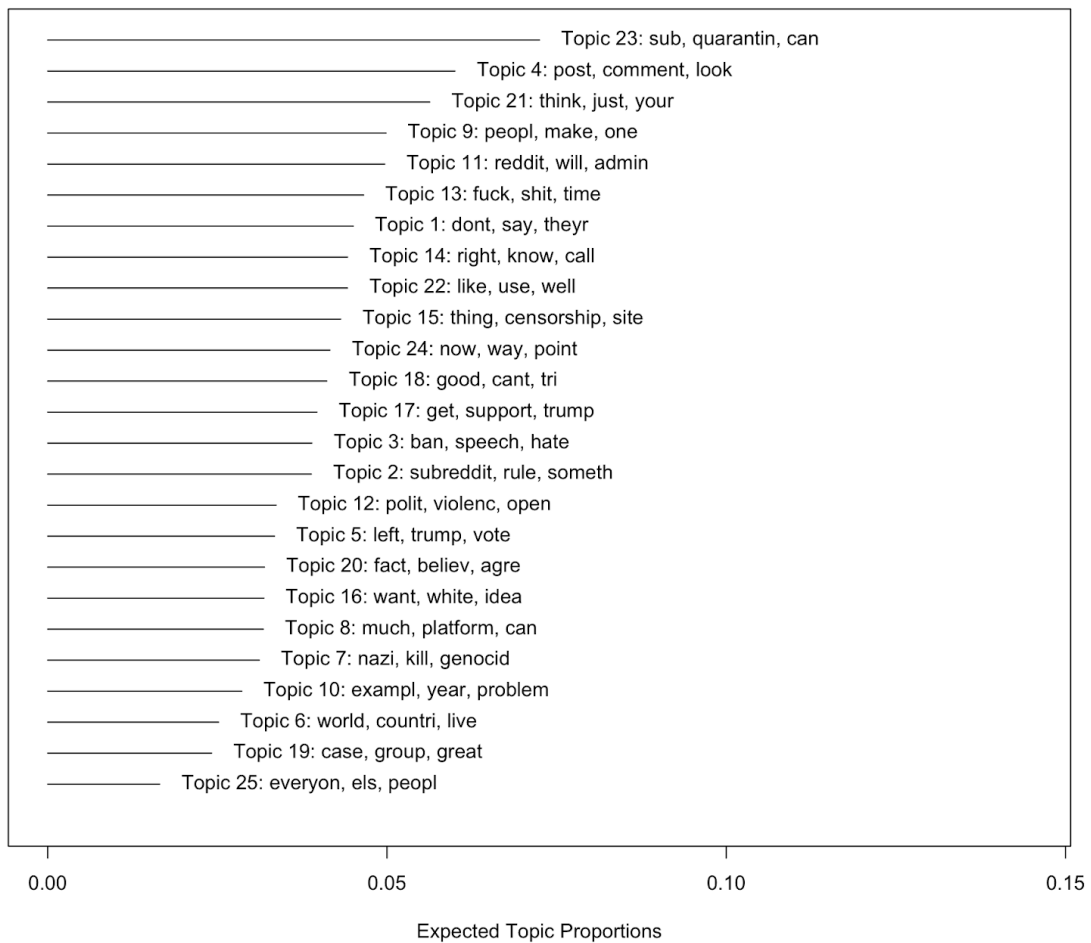


Figure 3. Content Policy 2018 post topic proportions with STM.

The 2020 Content Policy update’s most salient topics express the collective desire of Redditors to create safety for marginalized groups (topics 11, 17, 19, 29, 32, 34, 35, **37**, 40) taking into account the power of Reddit as a tool for discrimination (topics 2, 16, 17, 22, 39, 63). There is also very specific talk around racism and to a lesser extent sexism (topics 46, 48, 68, 74) and rule enforcement (topic 27). Some old topics re-emerge like the discussion on banning subreddits (12, 15, 52) as well as censorship in general (36, 61). A new but very prevalent topic is that of Chinese propaganda on the platform, often specifically regarding the subreddit r/Sino (topics 5, 6, 7, 50).

Topic 5 Top Words:

Highest Prob: great, squar, tiananmen, forward, 李洪志, 法輪功, tibet
FREX: squar, tiananmen, 李洪志, 法輪功, tibet, 天安門, 天安门
Lift: tibet, abduct, anti-protect, anti-rightist, anti-riot, baggag, epoch
Score: 李洪志, 法輪功, 天安門, 天安门, great, falun, tiananmen

Topic 7 Top Words:

Highest Prob: china, countri, system, parti, cultur, america, democrat
FREX: ccp, cancel, own, democraci, tencent, parti, econom
Lift: conspiratori, militar, anti-asian, asset, ccp, cpc, denmark
Score: china, democrat, system, countri, america, cultur, parti

Topic 37 Top Words:

Highest Prob: major, group, protect, rule, hate, minor, promot
FREX: group, minor, major, protect, promot, global, margin
Lift: “disenfranchised”, “hangfs”, “killallnrs”, “major”, “protect, disability”, hate“
Score: group, major, protect, rule, ident, hate, minor

Top Topics

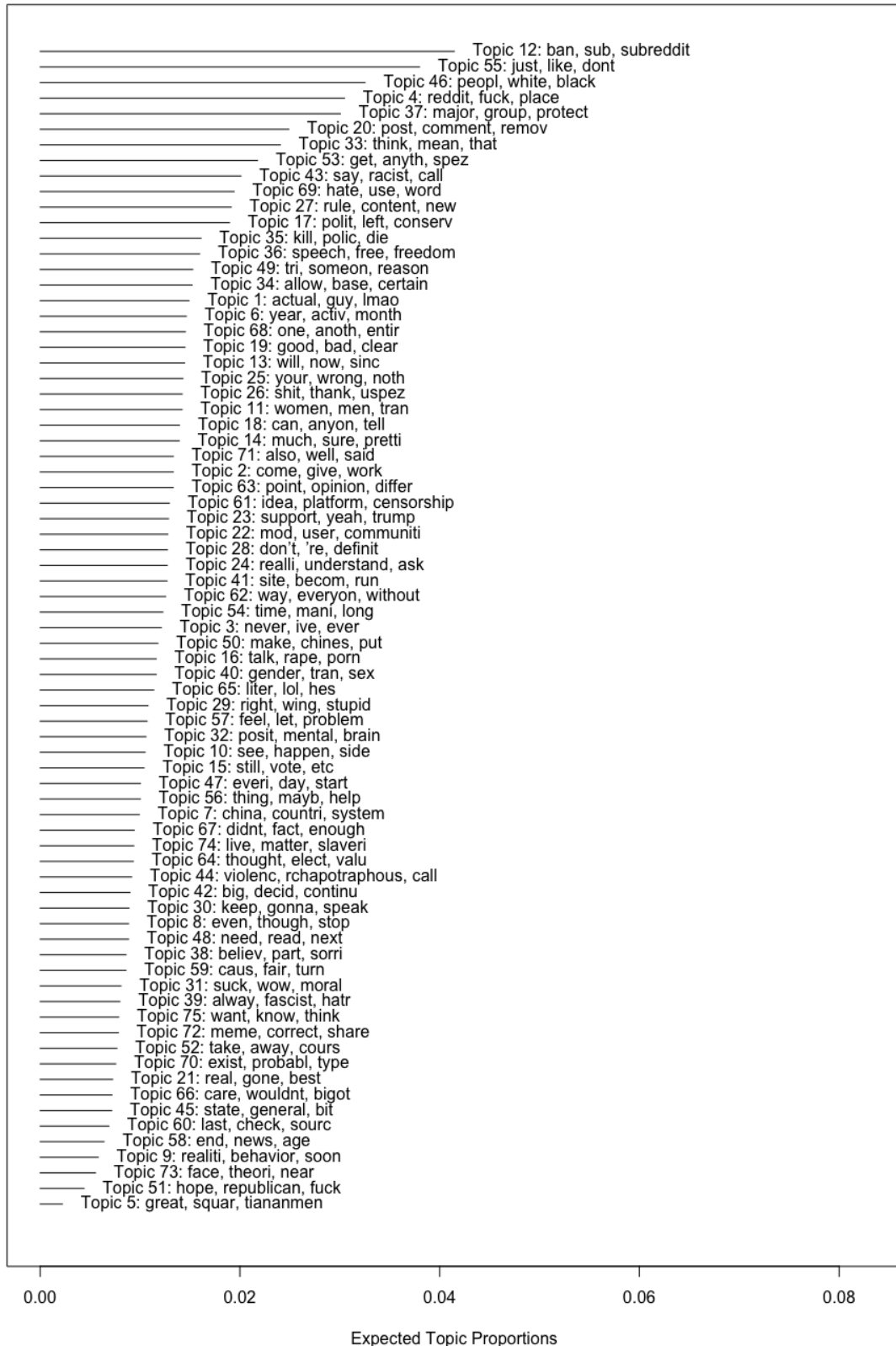


Figure 4. Expected topic proportions of the 2020 Content Policy update.

V ANALYSIS

The top salient topics from both Content Policy posts in 2015 reflect an openness of Reddit users to rules around banning certain kinds of topics or subreddits dedicated to “brigading”, a form of harassment on the website where users from one subreddit enter another to flood the comment and post section with harassment or other irrelevant content. The general openness of users to more rules would support the assertion [Bradford, 2019] makes about hate speech regulation and the EU in the digital economy; that the EU has the strictest rules that the platforms respond to, unlike other regulators like Russia and China that also have strict rules that seem to repulse the most popular platforms. One year after the major signatories adopted the EU’s Code, Reddit would also find themselves clarifying what violent speech meant in terms of acceptable content on the site.

A look at the update on rules around violent content in 2017 suggests that when the topic of violent speech is introduced by the admins, general users are able to engage with this topic, and provide examples of a real problem within the Reddit community concerning violent speech; in this case, violent speech directed towards women by incels, who blame women and society for their inability to find a sexual partner. Violent speech would remain a problem that necessitated a solution, without much controversy, although the regulation of some other types of hate speech showed some resistance. It seems as though the “incel problem” was less controversial in 2017, as incels were fringe private citizens with generally distasteful views. This would change, however, for general Redditors once politics were introduced into the discussion.

The most notable shift is from the top salient topics in the post regarding quarantines in 2018, to the top salient topics in the post announcing Reddit’s current hate speech policy in 2020. 48.93% of Reddit users are American [Clement, 2021], and 2018 marked the second year of 45th President Donald Trump’s time in office. The post from 2018 remarked upon “hoax” subreddits, and directly mentioned subreddits dedicated to Holocaust denial (topic 7). At that time, r/The_Donald was a controversial subreddit at the time that was dedicated to Donald Trump and fostered far-right discourse and conspiracy theories (topics 5, 17). Holocaust denial is only one of many conspiracies parroted by the far-right in America [Southern Poverty Law Center, 2021]. It would later be quarantined in 2019 [Haskins, 2019], then fully banned in 2020.

A Reddit spokesperson told *Vice* news that ‘we are sensitive to what could be considered political speech, however, recent behaviors including threats against the police and public figures is content that is prohibited by our violence policy. As a result, we have... quarantined the subreddit' [Haskins, 2019]. The backlash against the initial post about revamping the quarantine system and applying them more liberally can be understood as an initial reaction against the perceived suppression of political views. With the majority of Reddit users being American, this would reflect a distaste for anything that could potentially violate the concept of freedom of speech in the First Amendment of the American Constitution. Ultimately, the subreddit dedicated to Donald Trump, would, in fact, stay unquarantined for a full year before finally receiving consequences.

In the 2018 update there is an ongoing discussion where a minority, but a significant minority, of Reddit users seem willing to ban violent speech even if it meant censorship. This minority would become the majority by 2020. It was not until 2020, when the US experienced the largest civil rights movement in its history, Black Lives Matter, a movement against the asymmetrical treatment and killings of black Americans by the police, that Reddit moved to protect groups of people in their formal content policy (visible in topics 43 & 46 in particular). At this point in time, Twitter had begun to flag then-President Donald Trump’s tweets for

incitement of violence as he responded to the civil rights movement with a call to retaliatory violence against protestors who had looted and rioted in certain areas [Twitter, 2021]. It is arguable that at this point, social media platforms themselves began to label the philosophy of Donald Trump as intrinsically violent. In 2018, users may not have agreed, but by 2020, as shown by the topics brought up by Reddit users, they too had come to the same conclusion.

VI DISCUSSION

How the EU has been able to impact normative behavior surrounding hate speech online is insufficiently explained through the Brussels Effect in the digital economy. While [Bradford, 2019] makes a compelling argument for the regulatory power of the EU in the online realm, the changes observed in Reddit moderation and admin teams' attitude toward regulation of offensive content offer a deeper, perhaps unintentional consequence of the interaction of differing political actors in the internet realm. The US Supreme Court views hate speech as a fundamental aspect of the democratic right to freedom of speech. In 2017, the US Supreme Court ruled on *Matal vs. Tam*, a case concerning the trademark registration of the band name, "The Slants"; stating that the "reclaiming" of the derogatory term for Asians was protected under free speech:

The Government has an interest in preventing speech expressing ideas that offend. And, as we have explained, that idea strikes at the heart of the First Amendment. Speech that demeans on the basis of race, ethnicity, gender, religion, age, disability, or any other similar ground is hateful; but the proudest boast of our free speech jurisprudence is that we protect the freedom to express "the thought that we hate."

[*Matal vs. Tam*, 2017]

The freedom to express hateful opinions is part of a larger American philosophy that the US Supreme Court previously discussed in the 1974 case of *Miami Herald Publishing Co. v. Tornillo*, with the ruling that "the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public".

The philosophy of Reddit's aforementioned content policy update in 2015 mirrors the general sentiments of the Court on the topic of hate speech. The Court refers to this philosophy as the "freedom to express 'the thought that we hate'", while Reddit states that "people have more open and authentic discussions when they aren't worried about the speech police knocking down their door" [Reddit - [u/spez], 2015a]. This philosophy would also be mirrored in the discourse of general Reddit users in the replies to this update; topic three highlights this concern in the highest probability terms and FREX terms: "discuss, place, open, reddit, plan, polic(y/ies), restrict / authent, conflict, worri, plan, discuss, door, restrict"

The EU takes an opposite approach to hate speech, viewing violent language as a threat to democratic freedom as a whole, as evidenced by the ECHR's ruling in [*Refah Partisi (The Welfare Party) and Others v. Turkey*, where it was asserted that it was allowable for there to exist "some compromise between the requirements of defending democratic society and individual rights". Reddit's most recent content policy update in 2020 would reflect the European philosophy of compromise as opposed to the American philosophy of unregulated discussion: "it's our responsibility to support our communities by taking stronger action against those who try to weaponize parts of Reddit against other people" [Reddit - [u/spez], 2020].

The reason why Reddit is notable in the discussion of the EU's ability to impact norms in the online sphere is because Reddit is currently outside the scope of EU legislation, binding and

non-binding. The differing philosophies of the US and EU on hate speech centers around the meaning of individual rights in the context of a free and democratic society. Thus, this conflict can be understood as a tension around the meaning of human rights between the EU and the US; with the EU's introduction of hate speech regulation online as a distinct effort to influence human rights norms in American tech companies who operate in an environment that holds contrary opinions.

[Risse and Sikkink, 1999] would identify the processes through which human rights norms are ultimately progressed from "commitment to compliance". Because political actors ultimately rely upon the recognition from, and interaction with, other political actors; it then becomes possible for different norms of human rights to be socialized into other regions. This process of socialization embodies three separate processes. The first process is "instrumental adaptation", where actors, upon mounting pressure from other actors, make "tactical concessions" in the human rights realm, whether that involves making formal commitments or signing binding treaties. The second process involves "argumentative discourses" that involve, "shaming and denunciations, not aimed at producing changing minds with logic, but on changing minds by isolating or embarrassing the target" [Risse and Sikkink, 1999]. The third and final process concerns "institutionalization and habitualization", in which the norms being diffused are viewed by the actor as the "normal thing to do".

The evolution of Reddit's content policy is evidence of the third process of the EU's concentrated effort to socialize American tech platforms to its own conception of human rights and hate speech, to remarkable success. While Reddit and other tech platforms are not distinct political actors as originally envisioned by Risse and Sikkink (1999), it is possible to argue that the two did not anticipate the prevalence of social media in daily life in 1999, and today, several arguments have been made for tech platforms to be considered as distinct political entities [Helberger, 2020][Gilardi, 2021].

In 2015, the EU would see the first processes of argumentation, specifically, naming and shaming, when German Justice Minister Heiko Maas threatened Facebook with regulations on a parliamentary level if the company neglected to address the growing prevalence of hate speech on the platform [DW, 2015]. Instrumental adaptation would begin for American tech platforms in the dialogue that began between the EU and US social media sites following Maas' public callout, that eventually birthed the 2016 Code on Countering Illegal Hate Speech Online [Oltermann, 2016] that made the removal of hate speech standard practice. It can easily be argued that the EU was effective in socializing platforms to hate speech norms, as nearly every major American tech platform holds some level of restriction on offensive language. However, scrutiny of the effectiveness of the Code in socializing *users* of these platforms to European norms around hate speech is difficult; as platforms like Facebook, Twitter, and Google do not offer the opportunity for users to directly interact with changing content policy. With the option for users to directly interact with changing policy, Reddit creates the unique opportunity to examine the shifting dialogue within and between users as hate speech removal becomes standard in American tech companies.

Conclusion

When considering the prevalence of an expressed need to protect marginalized groups in the top salient topics from 2020; while the debate in general may not fully reflect a complete commitment to European standards over American ones, it is clear that the ideas that motivated the EU's Code in the first place have entered the consciousness of internet users. In other words, the standards of hate speech removal on platforms, as first enshrined in the Code, has been accepted by a good portion of users as normal; offering not only evidence for the EU's

regulatory power in this realm, but its power in shaping the norms of the internet to their conception of individual rights. After the banning of Donald Trump and related accounts by Reddit and several other platforms, a spokesperson for Angela Merkel, chancellor of Germany at the time, released this statement in response: "...the fundamental right [of freedom of expression] can be interfered with, but along the lines of the law and within the framework defined by the lawmakers. Not according to the decision of the management of social media platforms" [Bermingham, 2021]. While the debate continues surrounding which actor has the right to remove content from platforms; Merkel's comment and the results of this analysis make one thing clear: hate speech removal is now standard practice in the minds of moderators and policymakers and in the minds of users as well.

Future Work

Scraping general user data and topic modeling what they say about content policy updates and the freedom of speech and censorship can be extended to other social media platforms under the scope of the EU, as well as outside the scope of the EU, as has been done here. Furthermore, sentiment analysis could be utilized to not only discover what topics are being brought up by users in response to hate speech regulation, but also to analyze the sentiments attached to each topic.

Future work would include sentiment analysis of the body of the comments on each Reddit post and using these sentiments over time as covariates in the STM. We would also like to explore statements, their topics and sentiments, at different points in time on other social media platforms.

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References

- Reddit - [u/spez]. Let's talk content. AMA [Online forum post in r/modnews]. *Reddit*, 2015a. https://www.reddit.com/r/announcements/comments/3djjxw/lets_talk_content_ama/
- Reddit - [u/spez]. Content Policy Update [Online forum post in r/announcements]. *Reddit*, 2015b. https://www.reddit.com/r/announcements/comments/3fx2au/content_policy_update/
- Reddit - [u/spez]. Update to Our Content Policy [Online forum post in r/announcements]. *Reddit*, 2020. https://www.reddit.com/r/announcements/comments/hi3oht/update_to_our_content_policy/
- Reddit - [u/landoflobsters]. Update on site-wide rules regarding violent content [Online forum post in r/modnews]. *Reddit*, 2017. https://www.reddit.com/r/modnews/comments/78p7bz/update_on_sitewide_rules_regarding_violent_content/
- Reddit - [u/landoflobsters]. Revamping the quarantine function [Online forum post in r/announcements]. *Reddit*, 2018. https://www.reddit.com/r/announcements/comments/9jf8nh/revamping_the_quarantine_function/
- 15-1293 Matal v. Tam, (Supreme Court of the United States June 19, 2017). https://www.supremecourt.gov/opinions/16pdf/15-1293_1o13.pdf, 2017.
- Alkiviadou, N. Hate speech on social media networks: towards a regulatory framework?. *Information & Communications Technology Law*, 2019; 28(1), 19-35.
- Archer, A. M., & Kam, C. D. Modern Sexism in Modern Times Public Opinion in the #Metoo Era. *Public Opinion Quarterly*, 2020; 84(4), 813-837.
- Aswad, E. The Role of US Technology Companies as Enforcers of Europe's New Internet Hate Speech Ban. *HRLR Online*, 2016; 1, 1.
- Bertaglia, T., Grigoriu, A., Dumontier, M., & van Dijck, G. Abusive Language on Social Media Through the Legal Looking Glass. In *Proceedings of the 5th Workshop on Online Abuse and Harms (WOAH 2021)* (pp. 191-200), 2021.
- Bradford, A. *The Brussels effect: How the European Union rules the world*. Oxford University Press, USA, 2020.
- Bermingham, P. Merkel among EU leaders questioning Twitter's Trump ban. *Politico.eu*, 2021, January 11. <https://www.politico.eu/article/angela-merkel-european-leaders-question-twitter-donald-trump-ban/>
- Calderón, C. A., de la Vega, G., & Herrero, D. B. Topic modeling and characterization of hate speech against immigrants on Twitter around the emergence of a far-right party in Spain. *Social Sciences*, 2020; 9(11), 188.
- Caselli, T., Basile, V., Mitrović, J., and Granitzer, M. HateBERT: Retraining BERT for Abusive Language Detection in English. In *Proceedings of the 5th Workshop on Online Abuse and Harms (WOAH 2021)*, pages 17–25, Online, 2021. Association for Computational Linguistics.

- Chandrasekharan, E., & Gilbert, E. Hybrid approaches to detect comments violating macro norms on Reddit. *arXiv preprint arXiv:1904.03596*, 2019.
- Chandrasekharan, E., Jhaver, S., Bruckman, A., & Gilbert, E. Quarantined! examining the effects of a community-wide moderation intervention on reddit. *arXiv preprint arXiv:2009.11483*, 2020.
- Chuang, Y-S., Gao, M., Luo, H., Glass, J., Lee, H-I., Chen, Y-N., and Li, S-W. Mitigating Biases in Toxic Language Detection through Invariant Rationalization. In *Proceedings of the 5th Workshop on Online Abuse and Harms (WOAH 2021)*, pages 114–120, Online. Association for Computational Linguistics, 2021.
- Clement, J. Reddit: Traffic by country. *Statista*, 2021. <https://www.statista.com/statistics/325144/reddit-global-active-user-distribution/>
- Deutsche Welle. German Justice Minister tells Facebook to curb hate speech. DW.COM. (2016, July 17). <https://www.dw.com/en/german-justice-minister-tells-facebook-to-curb-hate-speech/a-19406616>
- Gaudette, T., Scrivens, R., Davies, G., & Frank, R. Upvoting extremism: Collective identity formation and the extreme right on Reddit. *New Media & Society*, 2021; 23(12), 3491-3508.
- Ganesh, B. The ungovernability of digital hate culture. *Journal of International Affairs*, 2018; 71(2), 30-49.
- Gilardi, F. Digital Technology, Politics, and Policy-Making (Elements in Public Policy). Cambridge: Cambridge University Press, 2022.
- Haskins, C. Reddit Quarantined r/The_Donald for ‘Threats of Violence.’ *Vice*, 2019, June 26. https://www.vice.com/en/article/a3x88a/reddit-quarantined-r-the_donald-for-threats-of-violence
- Helberger, N. The Political Power of Platforms: How Current Attempts to Regulate Misinformation Amplify Opinion Power, *Digital Journalism*, 2020; 8:6, 842-854, DOI: 10.1080/21670811.2020.1773888
- Jourová, V. Code of Conduct on countering illegal hate speech online: First results on implementation. *European Commission*, 2016.
- Klonick, K. Content moderation modulation. *Communications of the ACM*, 2020; 64(1), 29-31.
- Laaksonen, S. M., Haapoja, J., Kinnunen, T., Nelimarkka, M., & Pöyhtäri, R. The datafication of hate: expectations and challenges in automated hate speech monitoring. *Frontiers in Big Data*, 3, 2020.
- Lemmens, J., Markov, I., and Daelemans, W. Improving Hate Speech Type and Target Detection with Hateful Metaphor Features. In *Proceedings of the Fourth Workshop on NLP for Internet Freedom: Censorship, Disinformation, and Propaganda*, pages 7–16, Online. Association for Computational Linguistics, 2021.
- Massanari, A. # Gamergate and The Fapping: How Reddit’s algorithm, governance, and culture support toxic technocultures. *New media & society*, 2017; 19(3), 329-346.
- Nemes, I. Regulating hate speech in cyberspace: Issues of desirability and efficacy. *Information & Communications Technology Law*, 2002; 11(3), 193-220.
- Oltermann, P. Germany to force Facebook, Google and Twitter to act on hate speech. *The Guardian*, 2016, December 17. <https://www.theguardian.com/technology/2016/dec/17/german-officials-say-facebook-is-doing-too-little-to-stop-hate-speech>
- Pàmies, M., Öhman, E., Kajava, K., & Tiedemann, J. LT@ Helsinki at SemEval-2020 Task 12: Multilingual or Language-specific BERT?. In *Proceedings of the Fourteenth Workshop on Semantic Evaluation* (pp. 1569-1575), 2020.
- Portaru, A. Freedom of expression online: The code of conduct on countering illegal hate speech online. *RRDE*, 2017; 77.
- Rehurek, R., & Sojka, P. Gensim–python framework for vector space modelling. *NLP Centre, Faculty of Informatics, Masaryk University, Brno, Czech Republic*, 3(2), 2011.
- Risse, T., & Sikkink, K. The socialization of international human rights norms into domestic practices: introduction. *Cambridge Studies in International Relations*, 1999;66, 1-38.
- Roberts ME, Stewart BM, Tingley D. “stm: An R Package for Structural Topic Models.” *Journal of Statistical Software*, 2019;91(2), 1–40. doi: 10.18637/jss.
- Shaw, L. Hate Speech in Cyberspace: bitterness without boundaries. *Notre Dame JL Ethics & Pub. Pol’y*, 2011;25, 279.
- Shen, Q., & Rose, C. The discourse of online content moderation: Investigating polarized user responses to changes in reddit’s quarantine policy. In *Proceedings of the Third Workshop on Abusive Language Online* (pp. 58-69), 2019.
- Shvets, A., Fortuna, P., Soler, J., and Wanner, L. Targets and Aspects in Social Media Hate Speech. In *Proceedings of the 5th Workshop on Online Abuse and Harms (WOAH 2021)*, pages 179–190, Online. Association for Computational Linguistics, 2021.
- Southern Poverty Law Center. Holocaust Denial. *Southern Poverty Law Center*, 2021. <https://www.splcenter.org/fighting-hate/extremist-files/ideology/holocaust-denial>
- Tontodimamma, A., Nissi, E., Sarra, A., & Fontanella, L. Thirty years of research into hate speech: topics of interest and their evolution. *Scientometrics*, 2021; 126(1), 157-179.
- Twitter Inc. Permanent suspension of @realDonaldTrump. *Company Blog*, 2021, January 8. https://blog.twitter.com/en_us/topics/company/2020/suspension.html
- Vogels, E., Anderson, M., Porteus, M., Baronavski, C., Atske, S., McClain, C., Auxier, B., Perrin, A., Ramshankar, M. Americans and ‘Cancel Culture’: Where Some See Calls for Accountability, Others See Censorship, Punishment. *Pew Research Center*, 2021. <https://www.pewresearch.org/internet/2021/05/19/americans-and-cancel-culture-where-some-see-calls-for-accountability-others-see-censorship-punishment/>.
- Zampieri, M., Nakov, P., Rosenthal, S., Atanasova, P., Karadzhov, G., Mubarak, H., ... & Çöltekin, Ç. SemEval-2020 task 12: Multilingual offensive language identification in social media (OffensEval 2020). *arXiv preprint arXiv:2006.07235*, 2020.

ANNEX 1

Topic list for 2015 AMA:

Topic 1 Top Words:

Highest Prob: action, act, may, particular, term, form, equal
FREX: action, associ, justifi, act, sentenc, equal, thus
Lift: calappd, calappth, calrptr, calrptrd, courtroom, hankin, omit
Score: action, act, associ, justifi, discrimin, form, equal

Topic 2 Top Words:

Highest Prob: thing, easi, outsid, busi, fit, main, horribl
FREX: easi, anonym, horribl, fit, stick, togeth, replac
Lift: --thinly-veil, <URL>, searchal, sibl, uchesterhiggenbothum, woosh, ▲┐┐┐
Score: busi, easi, horribl, anonym, section, fit, main

Topic 3 Top Words:

Highest Prob: discuss, place, open, reddit, plan, polic, restrict
FREX: authent, conflict, worri, plan, discuss, door, restrict
Lift: ayyyi, pages—, reddit—, vocabulari, authent, site”, prolong
Score: discuss, open, authent, plan, restrict, conflict, worri

Topic 4 Top Words:

Highest Prob: good, reason, case, subject, decis, standard, need
FREX: court, good, standard, suprem, decis, lack, subject
Lift: prurient, concur, excretori, <URL>, <URL>, literari, miller
Score: good, court, standard, case, subject, decis, reason

Topic 5 Top Words:

Highest Prob: clear, polici, ask, seem, respons, exact, sinc
FREX: polici, ask, clear, friend, respons, offici, sort
Lift: <URL>, <URL>, <URL>, <URL>, <URL>, piggyback, ofpeopl
Score: polici, ask, clear, respons, friend, sort, intend

Topic 6 Top Words:

Highest Prob: tri, system, told, can, live, sometim, time
FREX: tri, told, reflect, system, sometim, unfortun, convinc
Lift: chucklefuck, gamemast, <URL>, lobbingspotatoesatclown, pnp, rck, rome
Score: tri, system, told, sometim, unfortun, reflect, period

Topic 7 Top Words:

Highest Prob: uspez, hope, ama, surpris, gonna, worst, drama
FREX: ama, uspez, advic, shitstorm, yishan, gonna, surpris
Lift: pre-prepar, rblog, spaz, theyeticaptain, umdri, uusersimul, <URL>
Score: uspez, ama, hope, gonna, surpris, worst, afraid

Topic 8 Top Words:

Highest Prob: stori, media, agenda, push, chan, toxic, leak
FREX: reurop, riot, stori, agenda, chan, kotakuinact, leak
Lift: fondl, gerstmann, relent, reurop, rioter, tendril, tenuous
Score: reurop, agenda, media, stori, chan, gamerg, leak

Topic 9 Top Words:

Highest Prob: person, public, inform, name, pictur, post, doxx
FREX: photo, pictur, name, imgur, confidenti, inform, pic
Lift: astronaut, cereal, collag, gaf, isntt, slimgur, super-leet
Score: name, public, pictur, imgur, inform, doxx, photo

Topic 10 Top Words:

Highest Prob: wrong, thought, alway, mind, side, human, correct
FREX: thought, alway, happi, board, wrong, correct, dark
Lift: shade, sheepl, highi, <URL>, <URL>, <URL>, hubri
Score: thought, alway, wrong, side, correct, happi, human

Topic 11 Top Words:

Highest Prob: right, reddit, censorship, censor, privat, speak, govern
FREX: bastion, right, speak, govern, censorship, amend, censor
Lift: ayyyyy, <URL>, inalien, ngger, spraypaint, speach, unworthi
Score: right, bastion, govern, censorship, privat, censor, amend

Topic 12 Top Words:

Highest Prob: illeg, law, state, link, copyright, host, reddit
FREX: copyright, illeg, weed, dmca, law, download, drug
Lift: buysel, cali, cloudflar, contributori, dcma, fatsham, feloni
Score: illeg, copyright, law, materi, drug, host, legal

Topic 13 Top Words:

Highest Prob: post, comment, thread, look, read, time, downvot

- FREX: downvot, thread, read, post, upvot, comment, respond
Lift: lake, mach, scoop, <URL>, rredditaltern, shore, topthi
Score: post, comment, thread, downvot, upvot, read, look
- Topic 14 Top Words:
Highest Prob: probabl, vote, rape, subscrib, get, less, might
FREX: karma, vote, probabl, nah, subscrib, rape, solut
Lift: cannib, certif, font, fuzz, gilberto, <URL>, irreconcil
Score: vote, rape, probabl, karma, subscrib, solut, altern
- Topic 15 Top Words:
Highest Prob: think, that, thing, theyr, doesnt, problem, everyon
FREX: that, theyr, think, everyon, better, agre, problem
Lift: compound, <URL>, litig, flippiti, hah, usupcaci, that
Score: that, think, thing, theyr, better, doesnt, everyon
- Topic 16 Top Words:
Highest Prob: opinion, view, person, polit, attack, feel, disagre
FREX: echo, opinion, chamber, oppos, attack, view, viewpoint
Lift: 'grey, 'safe, 'sensitivity', "content, anti-porn, area", content-neutr
Score: opinion, view, attack, polit, chamber, echo, viewpoint
- Topic 17 Top Words:
Highest Prob: race, object, differ, one, use, measur, valu
FREX: basketbal, object, measur, player, notion, cluster, race
Lift: analys, ascertain, classificatori, heurist, non-sickle-cel, pan, solar
Score: race, biodivers, subspeci, haplogroup, basketbal, object, genet
- Topic 18 Top Words:
Highest Prob: communiti, question, answer, reddit, tool, can, issu
FREX: communiti, answer, question, process, communic, forward, tool
Lift: decentr, patch, spook, akron, doucher, gasolin, honorari
Score: communiti, answer, question, tool, communic, process, reddit
- Topic 19 Top Words:
Highest Prob: social, argu, moral, respect, justic, ration, challeng
FREX: moral, social, respect, warrior, challeng, rude, killer
Lift: beginn, india, medicin, nudg, vitamin, <URL>, fempiresrd
Score: moral, social, respect, justic, argu, ration, killer
- Topic 20 Top Words:
Highest Prob: end, address, absolut, nobodi, one, easili, get
FREX: christ, sick, absolut, end, jesus, rcandidfashionpolic, address
Lift: apathet, ipv, nazareth, putrid, telephon, tract, veneer
Score: end, address, jesus, absolut, somebodi, christ, nobodi
- Topic 21 Top Words:
Highest Prob: racist, shit, women, serious, men, lol, sjw
FREX: men, shit, trp, lol, women, sjw, hilari
Lift: -colour, chromosom, fedora, gasthekek, gsm, non-smok, pussypass
Score: racist, shit, women, men, lol, sjw, serious
- Topic 22 Top Words:
Highest Prob: talk, way, give, let, anyon, know, wouldnt
FREX: anyon, give, talk, wouldnt, let, bother, doubt
Lift: ceown, <URL>, <URL>, <URL>, <URL>, <URL>, <URL>
Score: anyon, give, hodor, talk, wouldnt, let, way
- Topic 23 Top Words:
Highest Prob: game, forum, kia, level, play, video, miss
FREX: warlizard, kia, game, journal, holi, level, play
Lift: errand, gearbox, jabroni, pray, rfirespez, simciti, "master
Score: game, kia, journal, forum, ethic, level, warlizard
- Topic 24 Top Words:
Highest Prob: harass, group, anyth, peopl, bulli, individu, other
FREX: intimid, bulli, silenc, behavior, individu, group, harass
Lift: <URL>, <URL>, <URL>, <URL>, oklet, intimid, hive-mind
Score: harass, bulli, group, intimid, individu, silenc, abus
- Topic 25 Top Words:
Highest Prob: interest, instead, reddit, decid, topic, popular, hand
FREX: popular, instead, topic, interest, select, hand, parent
Lift: eta, illuminati, super-downvot, tryhard, antithesi, lectur, demmian
Score: topic, interest, instead, popular, hand, decid, news
- Topic 26 Top Words:
Highest Prob: your, mayb, just, offend, love, bullshit, okay
FREX: okay, your, mayb, asshol, love, idiot, bullshit
Lift: disk, reptil, sopa, stimuli, unhing, clifford, being

- Score: your, mayb, bullshit, love, idiot, asshole, offend
- Topic 27 Top Words:
 Highest Prob: speech, free, freedom, express, protect, allow, say
 FREX: speech, freedom, free, express, consequ, unfett, principl
 Lift: farewell, fetter, <URL>, <URL>, <URL>, <URL>, triggeredteehe
 Score: speech, free, freedom, express, protect, unfett, consequ
- Topic 28 Top Words:
 Highest Prob: dont, like, just, want, realli, see, say
 FREX: dont, realli, want, like, care, ill, see
 Lift: hatebrigad, nato, shhhhhhhh, uchristaliaferro, brazilian, discord, utc
 Score: dont, like, want, just, realli, see, say
- Topic 29 Top Words:
 Highest Prob: black, white, coontown, kill, rcoontown, man, die
 FREX: nigger, coontown, die, black, commit, white, roof
 Lift: plastic, cya, flush, haunt, hippi, <URL>, munch
 Score: black, white, coontown, kill, crime, nigger, supremacist
- Topic 30 Top Words:
 Highest Prob: subreddit, rule, allow, encourag, enforc, mani, break
 FREX: rule, subreddit, encourag, break, enforc, warn, guidelin
 Lift: banana, haikus, hiaku, ponzi, removedban, throwingpotatosatclown, doot
 Score: subreddit, rule, encourag, enforc, break, allow, guidelin
- Topic 31 Top Words:
 Highest Prob: well, said, never, didnt, use, shadowban, guess
 FREX: never, well, spez, shadowban, shadow, said, didnt
 Lift: <URL>, <URL>, <URL>, <URL>, <URL>, <URL>, title-text
 Score: well, said, shadowban, never, didnt, nice, shadow
- Topic 32 Top Words:
 Highest Prob: work, thank, yes, keep, wont, edit, yeah
 FREX: thank, donger, bot, wont, edit, yeah, check
 Lift: blowjob, toast, \ /, donger, dork, entryism, musician
 Score: thank, yeah, yes, wont, bot, edit, spam
- Topic 33 Top Words:
 Highest Prob: already, new, set, sourc, tag, like, add
 FREX: tag, rall, sourc, nsfl, already, overwritten, <URL>
 Lift: ofnv, hintus, possib, <URL>, useraposs, overwritten
 Score: tag, nsfw, sourc, <URL>, useraposs, already, nsfl
- Topic 34 Top Words:
 Highest Prob: will, content, offens, sens, violat, see, defin
 FREX: violat, decenc, content, sens, will, list, common
 Lift: silo, decenc, login, usefulbot, checkbox, futhermor, advisori
 Score: content, will, decenc, violat, sens, nsfw, common
- Topic 35 Top Words:
 Highest Prob: fuck, cant, someon, call, tell, arent, stop
 FREX: fuck, cant, stupid, sorri, tell, anymor, liter
 Lift: outta, ping, sbinp, setuid, existenti, ghostfac, liveleak
 Score: fuck, cant, stupid, liter, tell, call, arent
- Topic 36 Top Words:
 Highest Prob: top, comment, reddit, pao, ceo, click, certain
 FREX: <URL>, ceo, pao, join, due, ellen, top
 Lift: <URL>, lactos, preferenti, trumped-, unjustifi, updoot, <URL>
 Score: overwrit, <URL>, <URL>, greasemonkey, <URL>-monkey, <URL>, safari
- Topic 37 Top Words:
 Highest Prob: take, happen, kike, overthi, nutshel, overv, rmurica
 FREX: kike, happen, overthi, take, overv, nutshel, rmurica
 Lift: kike, overthi, overv, happen, take, nutshel, rmurica
 Score: overthi, kike, take, happen, overv, nutshel, rmurica
- Topic 38 Top Words:
 Highest Prob: great, bring, hear, intent, threaten, person, organ
 FREX: threaten, hear, great, bring, repetit, disturb, touch
 Lift: pester, thankyou, washington, big-budget, derek, duck-siz, horse-s
 Score: threaten, great, hear, bring, articl, organ, intent
- Topic 39 Top Words:
 Highest Prob: real, reddit, life, lose, move, corpor, internet
 FREX: holocaust, denial, digg, lose, corpor, traffic, powermod
 Lift: atroc, bbss, monetari, fetus, latent, mattress, rbadcopnodonut
 Score: real, corpor, lose, holocaust, digg, traffic, life
- Topic 40 Top Words:

- Highest Prob: ban, sub, srs, brigad, fph, link, harass
 FREX: brigad, srd, srs, ban, fph, proof, evid
 Lift: -someth, gasthekik, nineti, askmen, <URL>, evas, <URL>
 Score: ban, sub, fph, srs, brigad, link, harass
- Topic 41 Top Words:
 Highest Prob: differ, safe, space, terribl, describ, race, one
 FREX: safe, space, differ, terribl, amaz, describ, scare
 Lift: down, reedit, arisen, biologist, breastplat, combust, either-
 Score: differ, safe, space, race, subspeci, terribl, speci
- Topic 42 Top Words:
 Highest Prob: back, websit, default, hate, time, reddit, recruit
 FREX: back, largest, chimpir, reput, ralli, fester, blah
 Lift: antebellum, captain, crank, litter, paosuekjp, peel, phrenolog
 Score: back, websit, default, rvideo, blah, hate, chimpir
- Topic 43 Top Words:
 Highest Prob: peopl, hate, make, fat, fun, hurt, suicid
 FREX: fat, hate, fun, suicid, shame, overweight, rfatlog
 Lift: lulz, glutton, <URL>, mow, nutrit, pothead, rfeministfrequ
 Score: peopl, hate, fat, fun, suicid, rfatpeopleh, fatpeopleh
- Topic 44 Top Words:
 Highest Prob: guy, hard, joke, total, get, hey, cool
 FREX: guy, rekt, cool, hey, joke, hard, ton
 Lift: <URL>, lighten, rekt, grape, neon, parliament, shrekt
 Score: guy, rekt, joke, cool, hard, hey, sjws
- Topic 45 Top Words:
 Highest Prob: reddit, site, make, money, advertis, will, gold
 FREX: contradict, money, profit, bet, gold, buy, advertis
 Lift: anti-x, dubya, monit, pepsy, pro-x, upkeep, ess
 Score: site, money, reddit, advertis, gold, profit, contradict
- Topic 46 Top Words:
 Highest Prob: line, argument, draw, societi, continu, racist, ratheism
 FREX: ratheism, line, draw, nazi, genocid, emot, rchristian
 Lift: craze, invers, man-children, <URL>, repar, unapologet, unmanag
 Score: line, ratheism, draw, argument, nazi, societi, belief
- Topic 47 Top Words:
 Highest Prob: sure, pretti, much, racism, caus, sound, can
 FREX: pretti, sure, sound, slope, slipperi, sexism, safeti
 Lift: deafen, ditto, endeavor, hate-centr, institutionalingrain, nauseat, pond
 Score: pretti, sure, racism, sound, slope, slipperi, logic
- Topic 48 Top Words:
 Highest Prob: mod, user, remov, moder, admin, can, sub
 FREX: mod, delet, remov, moder, report, user, account
 Lift: banter, cetera, flub, <URL>, modqueu, oneself, relinquish
 Score: mod, user, moder, remov, delet, admin, account
- Topic 49 Top Words:
 Highest Prob: now, chang, specif, year, pleas, two, help
 FREX: pleas, hes, specif, now, ago, chang, wait
 Lift: flip-flop, flop, <URL>, turtl, bingo, rcrackertown, dworkin
 Score: specif, now, chang, year, pleas, hes, ago
- Topic 50 Top Words:
 Highest Prob: get, reddit, can, mean, complet, someth, isnt
 FREX: complet, get, mean, general, someth, deal, lot
 Lift: mysoginist, discont, scholarship, eras, complet, disabl, general
 Score: get, complet, reddit, mean, general, someth, can

ANNEX 2

Topic list for 2018 Content Policy:

- Topic 1 Top Words:
 Highest Prob: dont, say, theyr, need, anyth, claim, liber
 FREX: theyr, extremist, dont, safe, eye, refut, wors
 Lift: neglect, quash, rob, bob, favourit, -touch, aight
 Score: dont, say, theyr, need, liber, violat, safe
- Topic 2 Top Words:

- Highest Prob: subreddit, rule, someth, ask, that, respons, guy
 FREX: subreddit, rall, joke, rpopular, humor, rule, ask
 Lift: rebuttel, rpopular, subredit, anyhow, balloon, bark, blackout
 Score: subreddit, rule, rall, break, joke, moder, ask
- Topic 3 Top Words:
 Highest Prob: ban, speech, hate, free, read, first, exact
 FREX: voat, hate, echochamb, ban, hill, speech, infest
 Lift: brightest, durr, lib, alan, articul, banning”, blackpeopletwitt
 Score: ban, speech, hate, free, read, voat, first
- Topic 4 Top Words:
 Highest Prob: post, comment, look, link, see, still, mod
 FREX: link, post, delet, rthedonald, comment, repli, front
 Lift: “genocid, anti-semet, atleast, baizous, boner, ceddit, cherry-pick
 Score: post, comment, link, delet, page, mod, downvot
- Topic 5 Top Words:
 Highest Prob: left, trump, vote, statement, elect, presid, republican
 FREX: republican, hillari, berni, candid, fox, kavanaugh, clinton
 Lift: benghazi, counti, creepi, disservic, fragility”, gateway, hmmm
 Score: trump, hillari, vote, left, republican, clinton, kavanaugh
- Topic 6 Top Words:
 Highest Prob: world, countri, live, state, capit, capitalist, social
 FREX: institut, slaveri, modern, initi, usa, capitalist, educ
 Lift: institut, anti-vaxx, await, british, circus, coloni, conflict-driven
 Score: countri, capit, capitalist, world, educ, america, modern
- Topic 7 Top Words:
 Highest Prob: nazi, kill, genocid, fascist, holocaust, peopl, million
 FREX: genocid, nazi, fascist, mao, palestinian, holocaust, fascism
 Lift: albeism, arabia, axi, bastard, ceausescu, ceausescu, cth
 Score: nazi, genocid, fascist, kill, famin, ethnic, jew
- Topic 8 Top Words:
 Highest Prob: much, platform, can, privat, social, protect, compani
 FREX: compani, gold, protect, privat, platform, slope, pressur
 Lift: alter, bakeri, chariti, confront, freez, fuckwit, guardian
 Score: privat, compani, platform, social, protect, govern, media
- Topic 9 Top Words:
 Highest Prob: peopl, make, one, actual, said, never, happen
 FREX: make, money, thought, ’re, though, fun, happen
 Lift: blackjack, dementia, facebookinstagramtwitt, fascin, feelingsens, rsanctionedsuicid, vial
 Score: peopl, make, ’re, never, talk, money, actual
- Topic 10 Top Words:
 Highest Prob: exampl, year, problem, side, either, issu, brigad
 FREX: aaron, exampl, harass, insult, brigad, last, late
 Lift: againsthatessubreddit, constitu, constrain, euro, orient, seeth, streak
 Score: exampl, brigad, year, side, harass, insult, last
- Topic 11 Top Words:
 Highest Prob: reddit, will, admin, see, even, sure, keep
 FREX: reddit, thank, admin, keep, will, continu, next
 Lift: rcanada, rstopadvertis, ad-friend, afloat, apocalyps, beard, bogeyman
 Score: reddit, admin, will, thank, keep, step, sure
- Topic 12 Top Words:
 Highest Prob: polit, violenc, open, rpolit, ignor, chamber, echo
 FREX: chamber, echo, poster, rpolit, violenc, rtd, open
 Lift: abhor, alho, anti-lgbt, aswel, <URL>, confisc, corps
 Score: violenc, rpolit, polit, echo, chamber, open, ideolog
- Topic 13 Top Words:
 Highest Prob: fuck, shit, time, liter, everi, get, yeah
 FREX: god, lsc, ass, shit, fuck, bullshit, yeah
 Lift: villag, abet, accid, aggreanc, ala, bingo, cellshhttparchiveisvpax
 Score: fuck, shit, liter, everi, time, bullshit, god
- Topic 14 Top Words:
 Highest Prob: right, know, call, mean, doesnt, just, propaganda
 FREX: russian, propaganda, wing, troll, faggot, victim, spread
 Lift: wink, ayup, lick, boat, breadlin, castil, clear-cut
 Score: right, propaganda, call, russian, spread, wing, mean
- Topic 15 Top Words:
 Highest Prob: thing, censorship, site, view, censor, allow, seem
 FREX: desktop, access, censor, site, mobil, censorship, toxic

- Lift: comcast, applaus, benjamin, bowti, bumpi, duck, foul
Score: censorship, mobil, site, censor, access, view, websit
- Topic 16 Top Words:
Highest Prob: want, white, idea, peopl, black, major, okay
FREX: fragil, jone, skin, okay, white, want, idea
Lift: anyone', fee, latino, mayocid, psyop, -group, alley
Score: white, want, black, idea, oppress, okay, race
- Topic 17 Top Words:
Highest Prob: get, support, trump, word, stupid, man, pleas
FREX: retard, nigga, orang, mate, dick, rid, lmao
Lift: armenian, automatiskt, beta, bless, bold, dairi, denna
Score: trump, support, get, stupid, pleas, retard, man
- Topic 18 Top Words:
Highest Prob: good, cant, tri, lol, take, got, arent
FREX: yike, lol, got, keto, good, arent, guess
Lift: calori, inabl, interbre, mutil, "chines, botshill", bow
Score: lol, good, got, tri, cant, arent, big
- Topic 19 Top Words:
Highest Prob: case, group, great, also, even, term, job
FREX: case, fine, owner, particular, basi, impli, refer
Lift: cancel, jeong, kotkin, valeri, ann, coulter, enoch
Score: case, slave, term, group, great, standard, basi
- Topic 20 Top Words:
Highest Prob: fact, believ, agre, power, definit, must, accept
FREX: must, fact, truth, agre, truli, equal, valu
Lift: abnorm, dint, falsehood, hypothesi, interrog, orwel, overus
Score: believ, agre, fact, power, truth, must, definit
- Topic 21 Top Words:
Highest Prob: think, just, your, realli, bad, can, someone
FREX: your, bad, realli, tldr, think, defend, sad
Lift: cringey, gallop, gish, glorious, goup, helperbot, lone
Score: your, think, opinion, bad, realli, someone, just
- Topic 22 Top Words:
Highest Prob: like, use, well, racist, don't, stop, racism
FREX: shill, misogyni, racist, block, poseidon, like, spacedick
Lift: alright, bluewav, bookmark, ftfi, jimmi, poseidon, shill
Score: like, don't, racist, use, well, stop, racism
- Topic 23 Top Words:
Highest Prob: sub, quarantin, can, communiti, user, content, list
FREX: quarantin, nsfw, accident, revenu, sub, heads-, search
Lift: "ban", aboutjson, accident, accross, blank, canari, commentspost
Score: quarantin, sub, content, user, communiti, offens, list
- Topic 24 Top Words:
Highest Prob: now, way, point, differ, come, let, chang
FREX: feminist, femin, now, women, turn, men, male
Lift: anti-tran, cannib, condescend, desies, femin, globalist, honey
Score: now, way, men, chang, let, come, point
- Topic 25 Top Words:
Highest Prob: everyon, els, peopl, like, way, know, say
FREX: everyon, els, consequ, mine, arm, daughter, depend
Lift: antagon, cobra, cousin, hanniti, joo, milleni, oklahoma
Score: everyon, els, opium, streisand, peopl, fuck, gofundm

ANNEX 3

Topics of 2020 Content Policy update:

- Topic 1 Top Words:
Highest Prob: actual, guy, lmao, absolut, shut, ill, ass
FREX: shut, rbigchungus, lmao, trash, asshol, holi, soyboy
Lift: boooooooooo, cop-, groundwork, jerkofftomymom, latt, moli, oppression"
Score: guy, actual, lmao, absolut, shut, ass, asshol
- Topic 2 Top Words:
Highest Prob: come, give, work, back, money, fight, kid

- FREX: digg, give, asylum, come, money, fund, ton
Lift: alexa, alrighti, argentium, de-human, defundreddit, disaistr, fark
Score: give, back, come, money, work, award, illeg
- Topic 3 Top Words:
Highest Prob: never, ive, ever, man, person, seen, life
FREX: ive, never, hey, seen, dumbest, ever, listen
Lift: drip-f, <URL>, kneejerk, rapper, self-respect, sheep”, statistics”
Score: never, ive, seen, man, ever, hey, life
- Topic 4 Top Words:
Highest Prob: reddit, fuck, place, websit, bullshit, leav, done
FREX: reddit, websit, leav, place, fuck, yea, bullshit
Lift: kristallnacht, mfw, party’, puta, rexxit, <URL>, assho
Score: reddit, fuck, websit, place, leav, bullshit, done
- Topic 5 Top Words:
Highest Prob: great, squar, tiananmen, forward, 李洪志, 法輪功, tibet
FREX: squar, tiananmen, 李洪志, 法輪功, tibet, 天安門, 天安门
Lift: tibet, abduct, anti-protect, anti-rightist, anti-riot, baggag, epoch
Score: 李洪志, 法輪功, 天安門, 天安门, great, falun, tiananmen
- Topic 6 Top Words:
Highest Prob: year, activ, month, ago, basic, wont, wait
FREX: didn’t, yall, ago, gamer, year, rwojak, month
Lift: rhongkong, rtrump, aha, cofound, gamer, hategroup, <URL>
Score: year, ago, month, rsino, donald, wait, didn’t
- Topic 7 Top Words:
Highest Prob: china, countri, system, parti, cultur, america, democrat
FREX: ccp, cancel, own, democraci, tencent, parti, econom
Lift: conspiratori, militar, anti-asian, asset, ccp, cpc, denmark
Score: china, democrat, system, countri, america, cultur, parti
- Topic 8 Top Words:
Highest Prob: even, though, stop, pretend, doubt, chanc, unlik
FREX: someone’, uundeletepar, <URL>, ripreddit, <URL>, <URL>, doubt
Lift: chungu, gottem, indubit, les, lmaooooo, ripreddit, someone’
Score: even, though, stop, pretend, doubt, unlik, chanc
- Topic 9 Top Words:
Highest Prob: realiti, behavior, soon, repeat, essenti, ahead, dare
FREX: soon, hello, touch, horseshit, mask, essenti, incorrect
Lift: bane, blockad, crucial, fidel, tiananmen, tumor, wahhhh
Score: realiti, behavior, soon, repeat, touch, dare, ahead
- Topic 10 Top Words:
Highest Prob: see, happen, side, love, god, stand, hear
FREX: side, hear, bless, love, lefti, god, happen
Lift: amen, cumrad, bless, leisur, seibel, semper, side
Score: see, side, happen, love, god, hear, stand
- Topic 11 Top Words:
Highest Prob: women, men, tran, male, space, feminist, safe
FREX: exclusionari, men, feminist, women, misogynist, safe, misogyni
Lift: “biolog, bachelorbacheloret, commiser, gendercriticalguy, inventori, lipstick, mansplain
Score: women, men, tran, feminist, male, space, femin
- Topic 12 Top Words:
Highest Prob: ban, sub, subreddit, got, chapo, slave, cth
FREX: subreddit, sub, ban, evas, got, mad, chapo
Lift: campshttpsiimgurcomwetfjjpg, deadlyfetish, lad, otoh, surreal, thediddl, trans-friend
Score: ban, sub, subreddit, chapo, got, slave, owner
- Topic 13 Top Words:
Highest Prob: will, now, sinc, open, appar, rest, longer
FREX: shitpost, blah, offici, now, will, pack, sinc
Lift: 🙄, aye, dab, devolut, downstream, fullscreen, <URL>
Score: now, will, open, sinc, offici, appar, rest
- Topic 14 Top Words:
Highest Prob: much, sure, pretti, obvious, lie, full, funni
FREX: pcm, cumtown, redditor, fragil, fbi, satir, sure
Lift: banter, boooooo, goat, hmmm, moulderin, offmychest, pcm
Score: sure, pretti, lie, much, fragil, obvious, troll
- Topic 15 Top Words:
Highest Prob: still, vote, etc, repli, popular, rgendercrit, worri
FREX: rchodi, worri, strang, rgendercrit, misogynyfetish, hillari, rcommun

- Lift: deadey, kurd, oust, pinch, rabuseporn, rbanfemalehatesub, rbanmalehatesub
 Score: still, vote, repli, rgendercrit, popular, worri, bet
- Topic 16 Top Words:
 Highest Prob: talk, rape, porn, argu, consent, video, child
 FREX: kink, consensu, porn, rape, fantasi, fetish, talk
 Lift: dimorph, gentl, hentai, irrit, ampute, charm, cnc
 Score: rape, porn, talk, consent, kink, fantasi, child
- Topic 17 Top Words:
 Highest Prob: polit, left, conserv, liber, far, leftist, ideolog
 FREX: lean, left, polit, agenda, left-w, liber, leftist
 Lift: lean, swallow, adguardhttpadguardcom, bla, boon, breather, chrome
 Score: left, polit, leftist, liber, conserv, chamber, echo
- Topic 18 Top Words:
 Highest Prob: can, anyon, tell, find, pleas, els, somewher
 FREX: somewher, anyon, tell, can, find, els, pleas
 Lift: 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼, emir, <URL>, misogynist, oman, oprah
 Score: can, anyon, pleas, tell, find, els, somewher
- Topic 19 Top Words:
 Highest Prob: good, bad, clear, already, must, faith, final
 FREX: faith, bad, already, reddit—, good, clear, riddanc
 Lift: “view, anti-corpor, bad, groomer, pickl, reddit—, shoo
 Score: good, bad, faith, clear, already, final, spectrum
- Topic 20 Top Words:
 Highest Prob: post, comment, remov, made, account, edit, thread
 FREX: post, comment, report, account, button, link, remov
 Lift: tuesday, hyperlink, <URL>, threshold, -day, alliter
 Score: post, comment, report, account, thread, link, remov
- Topic 21 Top Words:
 Highest Prob: real, gone, best, learn, told, voic, pick
 FREX: gone, bootlick, voic, folk, left-lean, learn, 🐼 🐼 🐼 🐼 🐼
 Lift: parad, blaze, calvin, diversifi, foreskin, gone, hairi
 Score: gone, real, learn, best, voic, pick, told
- Topic 22 Top Words:
 Highest Prob: mod, user, communiti, power, action, taken, rthedonald
 FREX: rthedonald, mod, mute, inact, communiti, awe, trip
 Lift: pigpoopballsjpg, rireland, spook, stinki, эро, 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼 🐼
 Score: mod, user, communiti, rthedonald, team, power, abus
- Topic 23 Top Words:
 Highest Prob: support, yeah, trump, nazi, evid, today, easi
 FREX: bro, doj, yeah, booster, <URL>, counterproduct
 Lift: “fair, “watchredditdie”, 🐼 🐼 🐼 shut, autogynephilia, awww, bernard, blanchard
 Score: trump, nazi, yeah, support, evid, beauti, bro
- Topic 24 Top Words:
 Highest Prob: realli, understand, ask, ignor, serious, respons, honest
 FREX: understand, realli, ask, serious, went, ignor, interest
 Lift: pseudo, bark, frail, urgh, went, understand, curios
 Score: realli, understand, ask, ignor, serious, honest, interest
- Topic 25 Top Words:
 Highest Prob: your, wrong, noth, there, critic, dude, what
 FREX: cunt, your, wrong, noth, karen, dumpster, truli
 Lift: apach, cht, tramra, cunt, dumpster, felicia, zoom
 Score: your, wrong, noth, dude, what, critic, youv
- Topic 26 Top Words:
 Highest Prob: shit, thank, uspez, question, least, answer, dumb
 FREX: unwordcountbot, dumb, liar, answer, question, uspez, thank
 Lift: 🐼 🐼 🐼, archiveorg, rgaymarriag, shove”, trashy, yorker, “pleas
 Score: shit, thank, uspez, question, answer, piec, dumb
- Topic 27 Top Words:
 Highest Prob: rule, content, new, admin, polici, moder, break
 FREX: enforc, content, break, moder, broke, new, violat
 Lift: “nuh, “violent, content”, defianc, instaban, non-nest, pikabu
 Score: rule, content, admin, new, moder, polici, break
- Topic 28 Top Words:
 Highest Prob: don`t, `re, definit, `ve, doesn`t, can`t, isn`t
 FREX: don`t, can`t, isn`t, aren`t, `re, doesn`t, haven`t
 Lift: “just, populist, rehabilit, “certain, “expand, action”, aren`t

- Score: 're, don't, definit, 've, doesn't, isn't, can't
- Topic 29 Top Words:
 Highest Prob: right, wing, stupid, realiz, most, lgbt, none
 FREX: stupid, wing, right, kinda, lul, lgbt, realiz
 Lift: auth-centr, ditto, drophet, <URL>, neoliberalist, persuas, privatis
 Score: right, wing, stupid, realiz, lgbt, kinda, extremist
- Topic 30 Top Words:
 Highest Prob: keep, gonna, speak, cri, respect, pay, worth
 FREX: gonna, fan, boot, keep, speach, speak, observ
 Lift: angrier, ccps, chuckl, mma, quicker, recov, richard
 Score: keep, gonna, cri, speak, pay, figur, eye
- Topic 31 Top Words:
 Highest Prob: suck, wow, moral, statement, evil, dick, boy
 FREX: suck, cock, brave, authent, wow, lectur, moral
 Lift: "blm", "deplatform", aros, booo, brave, cock, comed
 Score: suck, wow, dick, evil, moral, statement, couldnt
- Topic 32 Top Words:
 Highest Prob: posit, mental, brain, effect, chang, articl, scienc
 FREX: dysphoria, consensus, scientif, studi, indic, health, brain
 Lift: gender-affirm, genealog, academi, accredit, adderal, anthropologist, anti-depress
 Score: transit, mental, studi, brain, scienc, posit, dysphoria
- Topic 33 Top Words:
 Highest Prob: think, mean, that, doesnt, cant, isnt, theyr
 FREX: sad, yup, doesnt, that, mean, weird, rfuckyoukaren
 Lift: hahahahahahaha, repar, rfuckyoukaren, yup, anthropomorph, breakfast, inkl
 Score: that, mean, doesnt, think, theyr, cant, yes
- Topic 34 Top Words:
 Highest Prob: allow, base, certain, human, rememb, skin, color
 FREX: rblackpeopletwitt, send, verifi, bpt, rwhitepeopletwitt, april, forearm
 Lift: bpt, verifi, black-, check-mark, non-black, nonwhite-, rblackworldord
 Score: skin, allow, rblackpeopletwitt, color, rememb, club, verifi
- Topic 35 Top Words:
 Highest Prob: kill, polic, die, death, murder, genocid, communist
 FREX: tanki, islam, holocaust, janni, communism, polic, iirc
 Lift: holocaust, janni, lenin, patrol, strongest, unbridl, "religion
 Score: kill, polic, genocid, cop, murder, communist, death
- Topic 36 Top Words:
 Highest Prob: speech, free, freedom, privat, law, allow, govern
 FREX: amend, privat, speech, free, law, freedom, servic
 Lift: amend, government, megacorpor, non-fre, opress, pepperidg, roam
 Score: speech, free, freedom, privat, law, amend, compani
- Topic 37 Top Words:
 Highest Prob: major, group, protect, rule, hate, minor, promot
 FREX: group, minor, major, protect, promot, global, margin
 Lift: "disenfranchised", "hangfs", "killallnrs", "major, "protect, disability", hate"
 Score: group, major, protect, rule, ident, hate, minor
- Topic 38 Top Words:
 Highest Prob: believ, part, sorri, miss, christian, due, level
 FREX: haha, buddi, impli, bibl, sorri, believ, ironi
 Lift: buddi, delici, funniest, autogynephil, breathtak, crucifi, deprec
 Score: believ, sorri, part, christian, miss, jesus, level
- Topic 39 Top Words:
 Highest Prob: alway, fascist, hatr, societi, fascism, win, toler
 FREX: ruin, fascism, scam, win, lurk, paradox, hatr
 Lift: cutur, extinct, flippant, holotyp, missionari, mussolini, playbook
 Score: alway, hatr, fascist, fascism, societi, win, toler
- Topic 40 Top Words:
 Highest Prob: gender, tran, sex, woman, terf, femal, peopl
 FREX: transphob, lesbian, vagina, genit, terf, feminin, transphobia
 Lift: feminin, gnc, monosexu, phobic, prefix, testicl, underdevelop
 Score: gender, sex, tran, femal, woman, terf, lesbian
- Topic 41 Top Words:
 Highest Prob: site, becom, run, move, mind, enjoy, ruqqus
 FREX: site, ruqqus, chan, voat, migrat, server, app
 Lift: backer, bitchut, catch-, dent, discordhttpsdiscordggnday, donald', humanitarian
 Score: site, ruqqus, move, becom, join, run, chan
- Topic 42 Top Words:

- Highest Prob: big, decid, continu, quit, compani, corpor, busi
 FREX: wtf, tech, big, quit, behind, chungus, silicon
 Lift: baker, glorious, blackshirt, bust, chungus, chyna, eco
 Score: big, compani, decid, quit, continu, corpor, busi
- Topic 43 Top Words:
 Highest Prob: say, racist, call, okay, exact, world, fine
 FREX: doubl, subtl, indian, fine, racist, fwr, say
 Lift: "asian, "rich, azn, chapotard, gambit, rindianpeoplefacebook, sub
 Score: racist, say, okay, asian, exact, fine, call
- Topic 44 Top Words:
 Highest Prob: violenc, rchapotraphous, call, deserv, chapotraphous, user, celebr
 FREX: chapotraphous, uniron, celebr, rchapotraphous, violenc, hat, deserv
 Lift: boys<URL>, charl, <URL>
 Score: rchapotraphous, violenc, chapotraphous, amidst, congressmen, defranco, kidsthes
- Topic 45 Top Words:
 Highest Prob: state, general, bit, number, half, unit, hitler
 FREX: intellig, draw, hitler, hail, hammer, bit, general
 Lift: iranian, magnitud, plate, prosper, protein, quantum, CNCNCN
 Score: state, bit, number, unit, half, hitler, general
- Topic 46 Top Words:
 Highest Prob: peopl, white, black, racism, race, person, discrimin
 FREX: racism, redefin, white, identitarian, supremaci, peopl, race
 Lift: -hate, 'white, 'whiteness', "institut, avarag, caucasus, cherokeeirishgerman
 Score: white, peopl, black, racism, race, discrimin, supremacist
- Topic 47 Top Words:
 Highest Prob: everi, day, start, yet, old, singl, week
 FREX: everi, slipperi, old, comedi, yet, week, singl
 Lift: bailli, comedi, oceania, "liber, and, assail, carreer
 Score: everi, day, yet, old, singl, start, week
- Topic 48 Top Words:
 Highest Prob: need, read, next, write, situat, transpar, book
 FREX: congrat, kill, laden, transpar, praxi, comprehens, read
 Lift: amber, beleiv, bottl, congrat, kobe, praxi, rspez
 Score: need, read, next, write, transpar, situat, kill
- Topic 49 Top Words:
 Highest Prob: tri, someone, reason, better, issu, either, less
 FREX: tri, reason, better, explain, hard, either, instead
 Lift: "whites", rjustblack, rjustbewhit, doubli, "feminist", blast, melodramat
 Score: tri, someone, better, reason, explain, instead, less
- Topic 50 Top Words:
 Highest Prob: make, chines, put, sens, espec, propaganda, truth
 FREX: rchina, cring, chines, hmm, make, sens, appreci
 Lift: dilat, non-us, cring, egyptian, flew, hmm, platinum
 Score: make, chines, put, sens, propaganda, western, rchina
- Topic 51 Top Words:
 Highest Prob: hope, republican, fuck, peopl, like, make, die
 FREX: patriot, tree, gop, hope, republican, metro, quiet
 Lift: asswip, flyover, <URL>, <URL>, <URL>, <URL>, <URL>
 Score: republican, hope, fuck, tree, agnost, already-occur, arsenic
- Topic 52 Top Words:
 Highest Prob: take, away, cours, step, notic, properti, wouldn't
 FREX: "m, advic, sharehold, step, unjust, notic, rdankmem
 Lift: "m, consolid, cyber, elections", embargo, evict, farci
 Score: take, away, cours, properti, step, notic, wouldn't
- Topic 53 Top Words:
 Highest Prob: get, anyth, spez, joke, littl, downvot, imagin
 FREX: spez, downvot, pathet, nice, surpris, neckbeard, <URL>
 Lift: erot, non-leftist, umanan, "coron, de-upvot, ember
 Score: get, spez, anyth, joke, downvot, upvot, imagin
- Topic 54 Top Words:
 Highest Prob: time, mani, long, first, page, sort, saw
 FREX: loop, hatespeech, long, time, theyv, mani, multipl
 Lift: biscuit, ccp's, conspiracist, eta, <URL>, internet", login
 Score: time, mani, long, first, page, saw, front
- Topic 55 Top Words:
 Highest Prob: just, like, dont, look, someth, know, seem
 FREX: like, just, seem, look, dont, sound, someth

- Lift: voice”, sext, limp, <URL>-<URL>, obama’, sheesh, sound
Score: like, just, dont, look, seem, someth, sound
- Topic 56 Top Words:
Highest Prob: thing, mayb, help, around, stuff, rather, amount
FREQ: mayb, welcom, crazi, help, forget, thing, blm
Lift: amigo, rjohnbrown, welcom, crazi, anti-imperialist, forget, mlk
Score: thing, mayb, help, stuff, around, welcom, blm
- Topic 57 Top Words:
Highest Prob: feel, let, problem, kind, harass, line, target
FREQ: problem, suppos, hit, kind, sit, line, shitti
Lift: <URL>, “liberals”, bleep-bloop
Score: feel, problem, let, harass, hurt, kind, target
- Topic 58 Top Words:
Highest Prob: end, news, age, normal, begin, remain, hundr
FREQ: purg, wrongthink, blow, nazbol, age, kek, cent
Lift: “supremacy”, ame, asphyxi, batman, black-lives-matt, boogi, deposit
Score: end, news, age, begin, purg, normal, wrongthink
- Topic 59 Top Words:
Highest Prob: caus, fair, turn, twitter, stay, defend, hand
FREQ: nah, fair, pander, stay, fee, twitter, caus
Lift: alright, adulthood, anti-fasc, covet, demonet, dragon, fahrenheit
Score: caus, twitter, fair, stay, turn, defend, nah
- Topic 60 Top Words:
Highest Prob: last, check, sourc, attempt, wonder, privileg, bot
FREQ: usernam, itll, cum, check, sourc, contact, last
Lift: femboy, sooooo, ‘privelidge’, “get, beep, clubhous, cum
Score: check, last, sourc, bot, privileg, wonder, usernam
- Topic 61 Top Words:
Highest Prob: idea, platform, censorship, social, internet, media, control
FREQ: censorship, internet, discours, liabl, forum, idea, media
Lift: electron, fcc, scarier, watchpeopledi, weakl, yishan, “cause”
Score: platform, censorship, media, idea, social, internet, forum
- Topic 62 Top Words:
Highest Prob: way, everyon, without, equal, view, case, job
FREQ: way, everyon, equal, hold, goe, abl, without
Lift: bandaaid, insul, whiteblack, brexit, naiveti, neo-marxist, poof
Score: way, everyon, equal, without, view, job, abl
- Topic 63 Top Words:
Highest Prob: point, opinion, differ, agre, disagre, other, whole
FREQ: opinion, agre, disagre, point, silenc, whole, happi
Lift: “silenc, bum, terfs”, verbatim, pregaru, opinion, wallet
Score: opinion, agre, point, differ, disagre, silenc, whole
- Topic 64 Top Words:
Highest Prob: thought, elect, valu, capit, insult, forc, capitalist
FREQ: insult, wage, capit, capitalist, dissent, enem, profit
Lift: “slaveowners”, bike, counteract, dau, entrepreneur, festiv, hurdl
Score: thought, capit, elect, capitalist, insult, valu, worker
- Topic 65 Top Words:
Highest Prob: liter, lol, hes, presid, fail, trigger, lib
FREQ: lib, loser, forev, rpoliticalcompassmem, salti, hog, rot
Lift: aaand, anti-right, antirac, armband, berniebro, dork, drinker
Score: lol, liter, lib, hes, bitch, trigger, presid
- Topic 66 Top Words:
Highest Prob: care, wouldnt, bigot, friend, anyway, board, game
FREQ: care, friend, humor, board, cheer, token, bigot
Lift: mmmm, tasti, token, humor, joel, pineappl, prn
Score: care, bigot, friend, board, game, wouldnt, deal
- Topic 67 Top Words:
Highest Prob: didnt, fact, enough, american, wasnt, anti, follow
FREQ: didnt, anti, rconsumeproduct, wasnt, consumer, enough, gave
Lift: rconsumeproduct, anti, anti-comsumer, anti-sex, anticonsumer, didnt, <URL>
Score: didnt, fact, american, enough, wasnt, anti, recent
- Topic 68 Top Words:
Highest Prob: one, anoth, entir, name, list, two, top
FREQ: fella, rfragileblackredditor, rsmuggi, top, forgot, sir, one
Lift: coercblackmailguiltrip, exept, freakout, <URL>, rclericalfasc, rsoyboy, tamer
Score: one, list, name, top, anoth, two, heard

Topic 69 Top Words:

Highest Prob: hate, use, word, consid, direct, accept, defin
FREQ: word, english, hate, direct, use, consid, defin
Lift: mandarin, rcc, “huger”, banharass, biblic, male-h, raskpinkpil
Score: hate, use, word, defin, consid, english, languag

Topic 70 Top Words:

Highest Prob: exist, probabl, type, nobodi, total, insan, sometim
FREQ: yep, antifa, smart, probabl, insan, nobodi, fake
Lift: <URL> , rblackpow, sankara, smart, trans-support, weirdo, yep
Score: probabl, exist, nobodi, type, total, insan, antifa

Topic 71 Top Words:

Highest Prob: also, well, said, guess, claim, true, might
FREQ: guess, well, said, rid, idiot, true, complet
Lift: flaiano, foil, monk, cheek, guess, <URL> , rid
Score: said, well, guess, true, also, might, complet

Topic 72 Top Words:

Highest Prob: meme, correct, share, context, refer, civil, similar
FREQ: meme, whistl, boogaloo, share, boog, throw, context
Lift: anxious, atf, bird, electr, herp, pupper, stochast
Score: meme, correct, share, civil, war, context, refer

Topic 73 Top Words:

Highest Prob: face, theori, near, along, conspiraci, reach, sentenc
FREQ: reach, libertarian, ain't, cartoon, horsesho, inaccur, tactic
Lift: “look, ammo, beef, buncha, carlin, cartoon, cousin
Score: theori, near, along, libertarian, conspiraci, reach, face

Topic 74 Top Words:

Highest Prob: live, matter, slaveri, black, famili, action, middl
FREQ: slaveri, matter, live, centuri, irish, east, middl
Lift: “whiteness”, appalachia, bacteria, boston, boyz, den, eve
Score: live, matter, slaveri, black, middl, poverti, africa

Topic 75 Top Words:

Highest Prob: want, know, think, just, also, chang, much
FREQ: want, know, think, also, just, chang, much
Lift: want, know, think, also, chang, just, much
Score: want, know, think, just, also, chang, much