

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/171689/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Munger, Kevin and Phillips, Joseph 2022. Right-Wing YouTube: a supply and demand perspective. *International Journal of Press/Politics* 27 (1) , pp. 186-219. 10.1177/19401612220964767

Publishers page: <https://doi.org/10.1177/19401612220964767>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Right-Wing YouTube: A Supply and Demand Perspective

Kevin Munger

Joseph Phillips

September 18, 2024

Abstract

YouTube is the most used social network in the United States, and the only major platform that is more popular among right-leaning users. We propose the “Supply and Demand” framework for analyzing politics on YouTube, with an eye towards understanding dynamics among right-wing video producers and consumers. We discuss a number of novel technological affordances of YouTube as a platform and as a collection of videos, and how each might drive supply of or demand for extreme content. We then provide large-scale longitudinal descriptive information about the supply of and demand for conservative political content on YouTube. We demonstrate that viewership of far-right videos peaked in 2017.

Kevin Munger is assistant professor of Political Science and Social Data Analytics at the Department of Political Science, Pennsylvania State University. His research focuses on the impact of emerging communication technologies on political communication and social science methodology. Contact: Pond Laboratory, State College, PA, 16801, USA. kmm7999@psu.edu. (814-863-8346).

Joseph Phillips is a PhD student in Political Science at Pennsylvania State University. His research focuses on the development of partisan animosity and its impacts on trust in institutions.

Keywords: YouTube, Radicalization, Conservatism, Political Extremism

1 Introduction to YouTube Politics

YouTube represents a major democratization of political media in the medium that has consistently proven the most popular and most powerful: video. Human beings are designed to communicate audiovisually, and YouTube, more than virtually any major social networking site, uses audiovisual communication.

In journalistic practice and some political communication scholarship (Alvares and Dahlgren 2016; Costello et al. 2016; Forestal 2020), YouTube is specifically singled out as an important agent of radicalization into the far right. Though YouTube is not the only platform to have radicalizing potential (Mitts 2019; Richards 2019), YouTube combines Google’s expertise in content discovery (the recommendation algorithm) with the immersive and parasocial capacities of video. The fundamental openness underlying content discovery is a boon to the researcher, who can match extremist content to a variety of measures of engagement. These features are also indispensable for addressing ongoing methodological and ethical problems with understanding radicalization (Conway 2017).

YouTube’s algorithm is proprietary and thus represents something of a black box for researchers. We can never entirely be sure whether content affects viewership purely through viewer interest or whether it is mediated through algorithmic privileging. Nevertheless, the algorithm is just one affordance of YouTube, and regardless of the process, content with higher viewership has more potential for political influence.

The current paper aims to establish a framework that we hope that scholars of political communication will find productive. Although our focus in this paper is on how YouTube is used by right-wingers, we think that our interventions can be used to explain patterns of behavior on YouTube outside of this context. We identify certain parameters in society (eg the people with the taste for YouTube and the most time to consume media) and political media (eg the dominance of Fox News among conservatives) to trace how the technological affordances of YouTube interact with the right; analogous efforts to apply our framework to other sectors of online politics would succeed by beginning with analogous information and interacting it with our framework. Some of our framework applies to YouTube as an ecosystem and is more broadly applicable: the combination of algorithmic recommendation and the potential for profit should entail an increase in niche political broadcasters across the ideological spectrum.

Our paper has two main sections. First, we review and synthesize literatures from the study of political communication and social media. We argue against either treating

YouTube Politics as *sui generis* and attempting to develop a new literature from scratch or treating YouTube as simply one of the stable of social media platforms on which politics happens more or less interchangeably. Instead, we document key aspects of YouTube that are distinctive and which provide researchers with excellent purchase for asking important questions.

Inspired by Settle (2018)’s theory of Facebook interaction that insists on beginning with *why* and *how* people use the platform, our first Research Question is: What technological affordances make YouTube distinct from other social media platforms, and distinctly popular among the online right?

Our answers: YouTube is a media company; media on YouTube is videos; YouTube is powered by recommendations.

The confluence of these affordances make the costs of starting a channel and uploading videos low, content creation more efficient, and the process of matching audience tastes to content automated. It also makes forming communities around shared ideas and affinity for creators easier than on other websites. Although there is justifiable concern about “radicalization by algorithm,” we argue that the true threat posed by some right-wing content on YouTube is the capacity for creators to draw communities of committed viewers that mutually create and reinforce radical political canons, including some that promote hatred. There is a cap on how much news media a person can consume in a given day; YouTube has dramatically increased then number of distinct political communities which are able to hit that content cap.

Second, we undertake an exercise in quantitative description. The YouTube Right is large and extremely heterogeneous, and we thus take up Gerring (2012)’s call for research that consists of “mere description.” It is currently possible to invent and test some causal hypotheses involving YouTube, but in the absence of descriptive knowledge of *what it is*, it is impossible to know whether such a causal relationship is important or indeed of any significance whatsoever.

Hence, our second research question is: How have the supply of and demand for right-wing videos on YouTube changed over time?

- YouTube viewership of the extreme right has been in decline since mid-2017, well before YouTube changed its algorithm to demote far-right content in January 2019.(YouTube 2019)
- The bulk of the growth in terms of both video production and viewership over the past two years has come from the entry of mainstream conservatives into the

YouTube marketplace.

The rollout of cable television and the development of partisan cable news was the most politically important development in communication technology in the second half of the 20th century (Arceneaux and Johnson 2013; DellaVigna and Kaplan 2006; Martin and Yurukoglu 2017; Prior 2007). The primary reason is that there were *more channels* and thus people consumed *more partisan news* in the aggregate than the average local newspaper or radio market.

YouTube represents perhaps the strongest challenge to television. Like television, YouTube immerses viewers in a full audiovisual experience. However, it affords viewers far more choice over the content they consume, an unlimited and accessible backlog of political content accessible at any given time, and far more potential for audience participation. It also transcends national borders; the actors we study come from many countries in Europe and North America, and their politics are much more concerned with cultural attitudes than specific national policies. For these reasons, YouTube has the potential to change how the world engages with politics. The YouTube Right we describe here were among the first to fully embrace the platform, but if the supply of and demand for political media continues to shift online, YouTube has the potential to supplant television news as the primary source of political information for the majority of people.

2 Situating YouTube

We begin by discussing how YouTube’s political sphere can shed light on a number of substantive political communication questions, and how YouTube represents a useful methodological opportunity for scholars in this field. In so doing, we discuss previous work on YouTube and related topics outside of Political Science.

2.1 Background

YouTube has more users than any other social networking site in the US, according to Pew (Perrin and Anderson 2019). This may be something of a surprise, both that YouTube is more popular than Facebook and that it is even considered a social network. While some people use YouTube primarily to watch music videos or clips from other “traditionally” produced and broadcast video, the marketplace for original content on

YouTube is large, growing, young, and communal.¹ In a 2018 interview, Google CEO Eric Schmidt said that “today we have quite a powerful social network embedded inside of YouTube” (Cowen 2018).

The disproportionate (to its influence among the general population) amount of research using Twitter data has been well-noted, and is often ascribed to their open API from which researchers can scrape tweets (Tufekci 2014). YouTube, however, also has an open API,² which is in some ways even more generous than Twitter’s. Researchers can easily query search results from the first day that YouTube went live, and scrape the entirety of a given user’s history.³

However popular YouTube is, it has not yet captured much interest of Political Scientists. We believe that YouTube has been politically relevant for years, and we discuss previous research from other disciplines below.

A brief content analysis of the *American Political Science Review*, *American Journal of Political Science*, and *Journal of Politics* yields 8 articles, almost all of which mention YouTube in passing as part of a subset of social networking sites.⁴ These journals have published a total of fifteen articles that are primarily based on the quantitative analysis of Twitter data (five each), but have never published an article primarily based on the quantitative analysis of YouTube data.

The 2020 presidential election was the first major crossover between YouTube politics and traditional electoral politics in the US. Some the most successful members of YouTube Politics such as Steven Crowder are now household names. The insurgent candidacy of entrepreneur and political novice Andrew Yang was only possible because of central YouTube Political figures. Yang said that “what launched us was Sam Harris....Joe Rogan was the game changer...We raised tens of thousands of dollars a day for awhile there and a million bucks in a week.” (Weiss 2020).

Rogan—the former host of *Fear Factor* and currently one of the most popular celebrities in the United States—drew a huge amount of media attention in late January 2020 when he endorsed Senator Bernie Sanders’ candidacy. Rogan and Harris are both examples of what Lewis (2020) calls “micro-celebrities,” attacking mainstream news and attempting to institutional brands with their personal ones. Google Trends data suggests that Rogan’s endorsement attracted roughly the same amount of attention as *The New York Times*’ unprecedented dual endorsement of Senators Elizabeth Warren and Amy Klobuchar, both of which happened in the same week in January 2020 (see Appendix).

2.2 YouTube in Political Communication

Political attitudes and behavior come about through the interaction of information with predispositions. As history progresses, more and more of the information we encounter comes in mediated form. For most of human history, mediated information came from journalistic and political elites, and innovations in media constituted shifts from the written word to the audiovisual.

The advent of the World Wide Web has brought the masses into this cycle of innovation. First, political discussion networks, long the purview of one's neighborhood and extended family, now occur online with people throughout the world (Stromer-Galley and Wichowski 2011). Second, the gatekeeping process for being able to produce media has been radically reduced, and people increasingly get their news from user-generated content (Peters and Broersma 2013).

YouTube lies at the intersection of these developments. Communication research, largely qualitative, has long recognized YouTube as an important site of discourse (Antony and Thomas 2010; Van Zoonen, Vis, and Mihelj 2011), a site for counter-publics (Leung and Lee 2014), and of interplay/interchangeability between creator and audience (Bowyer, Kahne, and Middaugh 2017; Jerslev 2016; Lewis 2020; Murthy and Sharma 2019; Myrick and Oliver 2015; Wen, Chia, and Hao 2015; Xu et al. 2016). However, this research has stopped just short of systematically mapping out trends in the production and consumption of political content on YouTube, particularly among the far right.

Specifically, the observational study of YouTube presents an opening for understanding the consequences of information. The literature on media effects is sophisticated in identifying average treatment effects of exposure to messages, but has comparatively struggled in modeling media selection processes. Using surveys to model self-reports of selection into using YouTube are common (English, Sweetser, and Ancu 2011; Hanson et al. 2010; Ksiazek, Peer, and Lessard 2016; Vraga and Tully 2019), but cannot tell us much about the actual content people consume. Self-reports of more specific media use are fraught with social desirability bias and recall issues (Guess et al. 2019; Guess 2015). Controlled experimental environments used to model selection tend to lack external validity (Arceneaux and Johnson 2013). In a choice environment where the options for viewing political content are functionally limitless and ever-expanding, these methods are increasingly insufficient.

YouTube also represents the next step in a long line of attempts by both conser-

vatives and the far right to take advantage of emerging communications technologies. Some of the first nationally syndicated hosts of political talk radio were Pentacostal preacher Aimee McPherson, and the far-right anti-semitic Father Coughlin (Schultze 1988). Conservatives were largely able to take over political talk radio when it revived in the early 1990s (Hofstetter et al. 1999). When cable news took on an increasingly political bent, Fox News became conservative before CNN or MSNBC became more clearly liberal (Martin and Yurukoglu 2017). Now, as YouTube becomes an increasingly important site for right-wing content, it also represents a new epicenter for right-wing activity and influence.

There is one major departure from past innovations, and that is in how transnational the right-wing YouTube landscape is. This makes it possible to study YouTube as a sector of transnational communication, an area of long-term scholarly interest (Garrett et al. 2012). Though American creators feature prominently, as we discuss below, so do creators from countries throughout the Anglosphere.

2.3 YouTube Affordances

Researchers have several valuable tools at their disposal for analyzing both the content of YouTube. All YouTube videos are now automatically closed-captioned through Google-powered machine learning, though both the creator and the audience can provide closed captions to videos at will. These captions are imperfect, but can still be used productively as inputs to text analysis methods with the correct procedures (Proksch, Wratil, and Wäckerle 2019).

Further, methods for analyzing audiovisual data at scale to make inferences of interest to social scientists have recently become widely accessible (Dietrich, Enos, and Sen 2019). Unlike Facebook or Twitter, YouTube is primarily audiovisual, and the combination of these tools with this incredibly rich data source will jump-start a new and exciting area of study.

There are two forms of engagement with content that researchers can use on YouTube. None of these measures of engagement are unique to YouTube *per se*, but YouTube is uniquely useful in how much one can match these measures of engagement to content.

The first are likes/dislikes, which are by no means unique to YouTube. Facebook allows for a range of reactions to content, and Twitter allows one to like posts. Most people do not use these features on any website when engaging with content, so using them is a costly signal of preferences. However, a user's reactions to Twitter and

Facebook posts are often visible, if not to the public than to a specific group a user has selected into. This means there is a social dimension to reactions on Twitter and Facebook that is difficult to separate from private preferences. On YouTube, each user's likes and dislikes are, by default, private. This means that the like-to-dislike ratio is more clearly an aggregation of costly signals of private preferences than on other platforms.

The second form of engagement is commenting. This is not a unique feature of YouTube. Both Facebook and Twitter allow for commenting on content. Both the comments on a Facebook post and a YouTube video are deliberate interactions with that piece of content, and thus any chains of communication begin with the original piece of content that started a thread. On Twitter, researchers cannot make that determination. Each reply to a tweet is also a tweet, and chains of conversation can occur without users seeing that piece of content. Therefore, it is difficult on Twitter to assess, through commenting, how much this engagement is a result of the original content and which is not.

Comments also provide a useful indicator of community. When people comment on a piece of content, it is both to communicate with the creator of that content and to communicate with other viewers of that content. Within a video, a researcher can see how discussion networks form around content. Examining different videos from the same content creator or milieu of content creators over time enables observation of stability and change in these discussion networks.

2.4 YouTube Radicalization

Researchers can also exploit YouTube to understand radicalization processes. The rise of white nationalist and Alt-Right content among North American and European YouTube audiences has been the source of concern among journalists and scholars, and some argue that YouTube serves as a platform for radicalizing a generation of Internet natives toward the far right through its recommendation system. Indeed, one of the few articles in general interest Political Science journals referenced above to discuss YouTube argues this exact point (Forestal 2020). There is a growing body of journalistic evidence that suggests that this radicalization is in fact happening. Many of the worst terrorist mass shootings in the three years (Parkland, Florida; Christchurch, NZ; El Paso, Texas) have been committed by men with radical right-wing views who explicitly cite the role of the Internet in general and websites like YouTube in partic-

ular in motivating their attacks. However, the accumulation of journalistic evidence is fraught with a bias towards sensationalism (Boydston 2013), and even a large number of independently reported stories cannot establish statistical, quantitative trends. This is an area in which a theoretical perspective on media selection and interaction can help synthesize these accounts into a model of right-wing extremism on YouTube.

Communication scholars and political scientists have already explored this subject tangentially. Scholars have long recognized the Internet as an attractive space for people and organizations with extremist viewpoints to recruit, organize, and radicalize others (Alvares and Dahlgren 2016; Graham 2016; Mott 2019; Post 2015; Richards 2019; Whine 1999*a,b*), that people who spend a lot of time on the Internet can get exposed to extremist content quite easily (Costello et al. 2016; Hassan et al. 2018; Reeve 2019), and YouTube is no exception as a site of extremism, hate speech, and hostility (Costello et al. 2016; Matamoros-Fernández 2017; Murthy and Sharma 2019; Schmitt et al. 2018). However, beyond isolated case studies (Murthy and Sharma 2019), there is not much systematic evidence on engagement with the far-right on YouTube.

There are two important exceptions. The first, which brought the subject of YouTube radicalization to a wide academic audience, is research on the “Alternative Influence Network” (AIN) (Lewis and McCormick 2018). Qualitative Communication scholar Becca Lewis provided a detailed description of the existence and importance of this AIN, which we summarize here: there exist many alternative media clusters on YouTube that explicitly define themselves in opposition to mainstream structures of knowledge production, they are remarkably popular, and they tend to skew to the right.

The second, Ribeiro et al. (2020), finds compelling evidence of commenter overlap between videos uploaded various ideological communities, including the far-right. The paper demonstrates that many of the commenters on “Alt-Right” videos had previously commented on videos from the other camps. This is valuable descriptive information, and it enables the scholarly community to better theorize about causal relationships of interest. Rather than using this evidence as solid footing for further academic theorization and hypothesis testing, however, Ribeiro et al. (2020)’s conclusion says the following: “Our work resonates with the narrative that there is a radicalization pipeline...Indeed, we manage to measure traces of this phenomenon using commenting users.”

The status of the “radicalization pipeline” is indeed best characterized as a “narrative,” rather than a theory. And the motivation for this “narrative,” we argue, comes from journalistic coverage. In the next section, we outline a theory of right-wing politi-

cal media on YouTube that is instead developed from a synthesis of previous academic research in political communication; we then provide quantitative descriptive data that we hope will serve as a motivation for further research.

3 A Supply and Demand Theory of Right-Wing YouTube

What technological affordances make YouTube distinct from other social media platforms, and distinctly popular among the online right? We think a useful starting point for mapping out selection into right-wing YouTube media involves discussing both the factors that lead conservative and far-right content creators to populate a website like YouTube (supply) and users to select into this kind of content (demand). We are not the first to discuss the affordances YouTube provides (Murthy and Sharma 2019; Postigo 2016), but we are the first to link these affordances generally and systematically to the right-wing political ecosystem on YouTube. Though we do this with an eye towards radical right-wing content creators, we think this framework can be fruitfully applied to other political content creators, provided the appropriate modifications to the parameters we identify are made.

3.1 Supply

YouTube as a platform makes content creation easy and efficient for political content creators, fringe or otherwise. These “supply” variables can help explain why political content creators gravitated to YouTube as a social networking site in the first place.

The recommendation system is part of this picture. When watching a video, a viewer can browse a list of videos that are similar to the previous video or which comport with their viewing history. By *tagging* (providing specific keywords used by the search and recommendation algorithms) and *titling* videos (often “clickbait” titles that entice viewers to select that video once recommended by the algorithm), creators can increase the likelihood their videos are seen. This feature evens the playing field between alternative and mainstream creators, giving each the same capacity to “target” their videos to the recommendation system. Other affordances bear mention. One of these is *monetization*. YouTube provides a number of avenues for content creators to make money, in contrast to Facebook and Twitter, which are largely volunteer labor.

One method is through the YouTube partner program, which gives participating content creators a percentage of advertising revenues creators generate (Google n.d). In recent years, YouTube has increasingly demonetized political videos to minimize the risk advertisers get associated with political extremists (YouTube 2019), so revenue from this method has decreased for the extreme right wing.

However, alternative content creators have two other methods of raising revenues. One is through receiving “super-chats” on live-streams, donations from fans with optional messages attached that they have to read on stream. The second is through establishing a crowdfunding page on Patreon or an alternative website, giving perks to “patrons” in exchange for monthly donations. YouTube’s demonetization strategy encouraged the adoption of these two fundraising methods.

One of the structural challenges of online media is the weakness of the viewership-based advertising model. Hindman (2018) shows that the centralizing tendencies of the internet have led to an increasing concentration of ad revenue between the major platforms and the most successful media companies, squeezing out local news and many of the once-vaunted online media startups. The alternative revenue strategies of “pay-for-recognition” on super chats and monthly donations from Patreon are a potentially revolutionary solution to this problem, particularly among those with the most devoted viewerships. Unlike ads, they incentivize the creation of a devoted fanbase and transform the revenue process into two-way communication between creator and audience. Some creators are particularly successful. Before Jordan Peterson deleted his Patreon, he made upwards of \$33,000 a month. There is wide variation in how much creators make from these avenues, but the most successful can make a living with funding from their viewers.

A third and final major affordance of YouTube is that unlike Facebook and Twitter, which feature video but primarily use text as a communication tool, the primary medium for YouTube is video. The startup costs to creating YouTube videos are minimal. Though many creators invest in studios and expensive sound and video equipment, it’s also common for creators use of cameras and microphones built into their computers or smartphones. Creators can use free software to edit their videos, or if they stream live, make use of Google Hangouts, which is connected to the YouTube platform.

Videos are also incredibly efficient to create. It can take days or weeks to produce one hour’s worth of text content on Facebook or Twitter, but in some cases, creating one hour’s worth of video content takes *exactly one hour*. It requires large teams of cameramen, editors, makeup artists, writers and producers to create high-production-

quality traditional broadcast television, but in many cases, the total number of people required to create a political YouTube video is *one*. Creators certainly vary in the amount of preparation they do. Some, such as Steven Crowder or Ben Shapiro, have teams of editors and invest significant time into pre-recorded content. Others, such as Nick Fuentes, simply stream from the comfort of their homes. In terms of both increasing the amount of polished political videos and enabling the existence of the lone, fringe political vlogger, the cost of content creation is much lower on YouTube compared to traditional broadcast television.

YouTube and associated technologies are thus attractive for political commentators at many points on this professionalization spectrum, who can produce enough video content to establish themselves as a major source of media for a fanbase of any size, without needing to acquire power or legitimacy by working their way up a corporate media ladder. It also makes possible the “fan service” revenue stream from “super chats.” It is even more attractive for clusters of like-minded commentators like the ones we analyze below. Video monologues are harder to maintain and are often boring without significant post-production. Dialogues—often stylized as “debates”—borrow from the popular cable news “talking heads” format that is a very efficient strategy for producing hours of dramatic, engaging content. The fanbases of different YouTube creators can get involved in the debates (especially if they pay), serving the dual purposes of revenue generation and community building. The pervasive opposition to “political correctness” and lionization of “free speech” in the YouTube Right eliminates most considerations of propriety or moderation in these debates, and the actors involved seem to recognize the role that conflict plays in drawing an audience for these debates: a popular series of debates were declared “Internet bloodsports” (Daro and Silverman 2018), a term unlikely to appeal to centrist or progressive viewers.

Furthermore, video, relative to text, affords increased capacity for the content creator to communicate emotion (Houwer and Hermans 1994) and increases their propensity to generate an emotional response (Paivio 1990). This is because video takes advantage of both cognitive systems that separately process verbal and visual information, whereas text only provides verbal information. There is some evidence that conservatives respond more to emotional stimuli (Tritt et al. 2016) and conservative elites get more attention from anger- and fear-laden content than liberal elites (Brady et al. 2019), suggesting one pathway by which the video modality is likely to benefit right-wing content producers. Analogous selection effects imply that right-wing content creators who prefer to communicate emotionally are more likely to adopt video as a

medium.

The specifics of the YouTube interface amplify this tendency. On other social media platforms, the only branding on posts are the poster’s avatar and name, which show up on feeds filled with other posts with other avatars and names. Even videos posted to, say, Facebook tend to take up a small percentage of the screen. YouTube videos take up nearly the whole page, meaning creators can command more undivided attention. Furthermore, creators show their faces (or if not their faces, vivid avatars) and have identifiable voices, which more closely mimic a conversation. These features can help a fringe content creator create a recognizable brand.

Even compared to other major platforms that use video, such as TikTok, YouTube has useful affordances for fringe content creators. Unlike TikTok, creators can produce videos of unlimited length, which allows creators to discuss politics with as much (or as little) nuance as they like. Longer videos also give creators more time to cultivate parasocial relationships with audiences within a single video. This also means that TikTok provides fewer opportunities for showing advertisements and does not pay its creators directly. Most importantly, the user base of TikTok is very different, and people too young to vote are heavily over-represented. Still, media reports in early 2020 indicate that “TikTok Politics” is on the rise—one article quotes a user who says that TikTok is “cable news for young people” (Lorenz 2020)—and scholars should pay attention to this trend in the coming years.

YouTube has limits: the number of viewers on YouTube is finite, and so is those viewers’ time. With a large and ever-expanding pool of creators and content courting the same audience, creators have to compete with other channels and even their own past content to gain viewership (Hindman 2018). That said, creators confront this issue on every platform - YouTube is not distinct in this regard. Furthermore, with an expanding user base, the potential expand to new audiences offsets the issue of competing with larger pools of creators.

In short, the structure of YouTube encourages the growth of political ecosystems. Because of the *discoverability* of YouTube videos, the enhanced *monetization* opportunities from both YouTube itself and technologies that have developed in parallel, and the efficiency provided by *video* in creating many hours of content, YouTube has the capacity to support a huge number of distinct media personalities. Each of these trends is consistent with the growth of the Right on YouTube.

3.2 Demand

Regardless of the ease, efficiency and potency of the supply of alternative right-wing political content, a necessary condition for it to impact the world is that people decide to watch it. The far right can tag their videos so that they end up in recommendations and title them to attract clicks, but people will stop watching if they feel deceived or uninterested.

In response to what was then plausibly called the “hyperchoice” cable news context, Arceneaux and Johnson (2013) develop the *active audience theory*. They argue against a supply-centric model of the effect of cable television on politics, highlighting instead the fact that many people made an active choice in their viewing habits that resulted in dramatically lower news consumption (also demonstrated by Prior (2007)).

We believe it premature to discuss the “radicalizing” potential of far-right media without discussing all the ways in which such an audience could have already existed, albeit without access to media more consistent with their ideal points.

Many factors have been shown to lead people to become sympathetic to the far-right in the first place. Economic turmoil, particularly unemployment, has long been a pull-factor for far-right groups and politicians (Arzheimer 2009; Bustikova 2014; Rydgren 2007). Men are also far more drawn to the far-right than women are (Cohen et al. 2018; Costello and Hawdon 2018; Reeve 2019). There has been a decades-long decline in the manufacturing sector in the United States, which has left many in the white working class, especially young men, without full employment (McDowell 2011).

In concert with declining employment prospects, real-world social connections and access to community have also declined (Putnam 2000). Social isolation (Palermo 2013; Post 2015) as well as low personal and political efficacy (Costello et al. 2016; Craig and Wald 1985; Hassan et al. 2018; Kay and Eibach 2013) are both risk factors for extremism. Both job loss and loss of connections to others can lead to a sense of loss of personal significance (Webber et al. 2018) and uncertainty about who one is in relation to others (Hogg, Kruglanski, and van den Bos 2013). All of these make totalizing/exclusionary belief systems and the content creators who espouse them more attractive. The communities content creators often create can also serve as a way of fostering meaningful ties in the absence of supportive offline ties (Bowman-Grieve 2009; Wojcieszak 2010). It is thus difficult to differentiate the effect of external factors causally prior to selection into far-right YouTube content from the persuasive effect of the videos themselves.

Additionally, the delivery mechanisms for YouTube videos entail a *distinct* and *expanded* demand. Although this has not been demonstrated empirically, there is anecdotal evidence that “preference for video” varies widely within publics: there exists some portion of the public who might never consume written news but do consume video news. The first decade of the 21st century saw an explosion of written political content on the internet, expanding the knowledge gap between politically interested people who like to read and everyone else (Bennett and Iyengar 2008). YouTube politics could narrow this gap.

Many people spend hours a day in contexts in which watching videos, or even just listening to the audio from those videos, is simply *easier* than reading. It’s impossible to read while driving, but it’s possible to listen to a political commentator. The practice of white-collar workers performing their jobs while wearing headphones is increasingly accepted (Walker 2018). How much people consume right-wing content at the office remains unclear, though the privacy of headphones makes it possible. The number of working-age men who are out of the labor force is also at an all-time high (Abraham and Kearney 2018). As a result, they have a huge amount of time to consume media and play video games.⁵ In general, the collective number of hours a day in which at least some portions of the US population could be consuming YouTube videos has been increasing. According to Google’s internal YouTube data, as of January 2018, 60% of their overall viewership was on mobile devices, a strong sign that people consume the site untethered to computers. Still, there is much that researchers still don’t know about how people actually engage with YouTube content, and we encourage further qualitative research on this point.

Although causally interrelated, the confluence of these trends has created a cohort of people with a litany of grievances and a lot of free time that used to be spent on the job. Some of these people may be ideologically amenable to mainstream media, but feel alienated either to the mainstream’s framing of the issues at hand or to its overall political culture. Others may view the entire system as corrupt and irredeemable, preferring chaos to the status quo (Petersen, Osmundsen, and Arceneaux 2018). The fringe ideologies available on YouTube offer validation to this audience’s frustration and disaffection, bundled with a seemingly coherent worldview that explains everything about contemporary politics and an internet-based counter-cultural aesthetic that evolved from “trolling” culture (Nagle 2017; Phillips 2015).

The size of this cohort, all consuming large quantities of YouTube politics for similar reasons, enables the the creation of the community they lack, amplifying any straight-

forward media effects. The shared technosocial environment of this audience and the content creators enables multi-platform communication, and the formation of a complex alternative media ecosystem.

Indeed, the most likely users of YouTube fit the description of people who can be drawn to fringe content creators. According to Vraga and Tully (2019), young people and men are more likely to use the platform. Additionally, people with lower attachments to mainstream institutions tend to browse YouTube more. This includes political Independents, those with higher conflict acceptance, low efficacy, and those with a combination of strong political interest but lower news literacy.

Fans of individual content creators have dedicated subreddits and Discord servers, platforms for their fans to discuss the latest videos and give feedback to the creator. Akin to parallel fundraising services like Patreon, these parallel forums are part of the overall media package experienced by the audience of these fringe creators. These opt-in forums represent the realization of the media echo chambers that have proven rarer than expected on more mainstream social media (Guess et al. 2018). Here, fringe audiences discuss the news only with others like themselves—and “the news” is the extreme video content from the focal creator.

These YouTube communities are thus ripe for the creation of parasocial relationships, a facsimile of the traditional sociality this audience lacks. The capacity of broadcast television to promote parasocial relationships between an audience and a performer was proposed in an influential article by Horton and Richard Wohl (1956), in which they define the term as a “simulacrum of conversational give and take,” with the crucial distinction from a social relationship in the “lack of effective reciprocity.” This theory generated a thriving literature, largely within psychology, communication and entertainment studies (Hartmann and Goldhoorn 2011). Very recently, the application of parasocial relationships with YouTube creators has attracted the attention of scholars of computer-mediated communication (de Bérail, Guillon, and Bungener 2019; Ferchaud et al. 2018; Munnukka et al. 2019). This literature is ripe for extension to the realm of political communication and media effects, as suggested by Klimmt, Hartmann, and Schramm (2006).

Donald Horton contrasted parasocial relationships with those developed in what was then a niche form of media: “Audience-Participation Shows” (Horton and Strauss 1957). The structure of these shows, sixty years later, has been rendered commonplace by the affordances of YouTube discussed above. Streaming chats, especially with payment-based “super chats,” make the process of selecting audience members to be-

come active participants more fluid and accessible to all, eliding some (but never all) of the distance between performer and audience. We believe that an extension of this strand of theory to the context of YouTube politics would be invaluable. In particular, Horton and Strauss (1957)’s description of training the audience through repetitive audiovisual stimuli to perform various roles in the collectively constructed drama seems a remarkably prescient description of strategies used by today’s YouTube creators.

The expanded audience for media created by social and economic trends, the video modality that appeals to previously underserved audiences and simultaneously expands the contexts in which media can be consumed, and the capacity for parasociality and online community to replace lacking real-world sociality all serve to explain the size of the demand for right-wing political content on YouTube.

4 Quantitative Analysis

How have the supply of and demand for right-wing videos on YouTube changed over time?

Lewis (2018) describes an “Alternative Influence Network,” or the AIN, as a collective of *political influencers* who have made a name and in some cases a career for themselves by cultivating a community of viewers who tune in to their daily uploads or livestreams. The “Network” component comes from the way that these political influencers are frequent guests on each other’s videos, encouraging their followers to become more invested in both the ideas of the AIN and their interactions as personalities. These apparently authentic interactions, highlighting interpersonal “drama” between creators, both keep the attention of their audience and act as a subversive vector for their political agendas (Abidin 2016).

The scope of Lewis’ analysis was determined through qualitative snowball sampling, beginning with some of the most popular political figure on YouTube and extended through an examination of their frequent guests.⁶

The politics of the AIN vary considerably, and can be productively divided into two broad sections: the Right and the Rest. The latter category contains a number of extremely popular figures, many of whom came to YouTube prominence after other media careers. Their popularity on YouTube does not map well onto our theoretical framework so we exclude them from our quantitative analysis. This includes people like Joe Rogan, who was previously the host of *Fear Factor*, and who has been a friendly

host to presidential candidates including Bernie Sanders, Tulsi Gabbard, and Andrew Yang; and Dave Rubin, a former affiliate of the progressive Young Turks and current self-described “classical liberal” with an independent interview program.

Among the Right, we identify a handful of dimensions along which to categorize creators. Through an iterative process sampling several hours of content from each creator and noting consistent features of their videos and political stances, we derived three clusters from these channels. These clusters differ on explicit support for racism, anti-Semitism or white nationalism, as well as an emphasis on transgressing progressive norms. This allows us to produce three labeled clusters: Conservatives, the Alt-Lite, and the Alt-Right. We do not think that these clusters can be fruitfully mapped onto a single ideological dimension; the dimensionality of the space is too high. However, we can comfortably rank them according to “extremism” (magnitude of the distance from the median on all dimensions): Conservatives, Alt-Lite, Alt-Right.

The Conservative cluster defines itself in contrast to mainstream media in general and liberal media in particular. Creators in this cluster tend to advocate for the free market and against the introduction of a welfare state. This cluster tends to champion conservative stances on social issues, preferring stronger immigration enforcement, limiting abortion rights, and opposing same-sex marriage. Though it can be argued that conservative creators advocate against affirmative action and a welfare state for racial reasons, they eschew explicit racist rhetoric or support for racism, using ostensibly color-blind rhetoric. This cluster also strongly opposes anti-Semitism, with many in this cluster going out of their way to express strong support for the state of Israel. This cluster varies on how much it relishes transgressing progressive norms. Some (e.g. Steven Crowder) make ample use of performative humor to transgress against norms of political correctness seen as silly or unnecessarily restrictive. Others (e.g. Ben Shapiro) tend not to emphasize transgression.

The Alt-Right cluster is firmly committed to a far-right ideology. Issue emphases differ between members of this cluster, but members of this cluster advocate strongly for white nationalism, traditional gender roles, and strong restrictions if not an outright end to immigration. They depart from conservatives on standard economic and social issues on two fronts. First, similar to far-right parties in Europe, the alt-right are not categorically against the welfare state (Golder 2016). Rather, this cluster is specifically against welfare for people of color, for explicitly racist reasons. Second, though this cluster often champions a Judeo-Christian culture, several members of it (e.g. Jean-Francois Gariepy) are themselves atheists. This cluster widely endorses the

white genocide conspiracy theory, arguing that existing governmental policies serve to reduce white birth rates and increase non-white birth rates. This cluster is also highly anti-Semitic. Several in this cluster (e.g. Mike Enoch) do not support Trump for this reason, believing he has been compromised by an international Jewish conspiracy due to Trump's pro-Israel sentiment and closeness with his Jewish son-in-law, Jared Kushner.

The Alt-Lite cluster is on many dimensions sandwiched between the Conservative and Alt-Right clusters and is defined less by ideology and more by the norms it tends to transgress. Some members of this cluster (e.g. Paul Joseph Watson) tend to argue for traditionally conservative viewpoints. Others, including Stefan Molyneux and Lauren Southern, espouse more white nationalist messaging. More than either cluster, the Alt-Lite cluster enjoys transgressing what it sees as authoritarian boundaries set by the left-of-center on discourse. It makes frequent use of racist and otherwise offensive humor as a means to antagonize and upset (which they frequently refer to as "triggering") liberals and leftists. The Alt-Lite cluster differs from the Conservatives in that it uses somewhat more explicit racial rhetoric and may not prize traditionalism. It also differs from the Alt-Right in three respects. First, explicit anti-Semitism is rare among this cluster. Second, the Alt-Lite still retains robust support for President Trump. Third, no one self-identifies as "Alt-Lite."

Our categorization scheme was defined in reference to this group of YouTube creators, but the terms we use do of course occur in other sectors of contemporary political discourse. Hawley (2017)'s book on the Alt-Right traces their antecedents, constituency and goals, and distinguishes them from both Conservatives and the Alt-Lite. On the first point, Hawley shows how the Alt-Right came to prominence by criticizing established Conservatives, both on their ideology and their institutional malaise. Hawley sees the Alt-Right as more openly anti-Christian than the figures in our cluster, but his account fully concords with their disdain for "establishment" Conservatives. And his ideological and sociological account of the Alt-Lite is similar to ours: the Alt-Lite "views on immigration and race relations partially overlap with those on the Alt-Right but do not cross the line into open white nationalism" (p143-4). The distinction between Conservative and the Alt-Lite is less ideological; the former attempts to maintain mainstream legitimacy by drawing a sharp line between themselves and the racists and anti-Semites to their right, and the Alt-Lite's transgression makes this much more difficult. Main (2018)'s book similarly distinguishes the Alt-Lite and Alt-Right in that only the latter explicitly embrace anti-Semitism and race realism, while the former defends its viewpoints using civic nationalism.

The Conservative cluster has the strongest connections with legacy media. Several members of this cluster, including Ben Shapiro, Candace Owens, James O’Keefe of Project Veritas, Dennis Prager or PragerU, and Steven Crowder, are regular contributors to Fox News. Several members of this cluster also have experience in legacy media. Ben Shapiro was a Breitbart reporter for several years before departing and founding the Daily Wire. Steven Crowder was an employee of Fox News for several years. Larry Elder was a conservative talk radio host for two decades before beginning his YouTube channel. This gives the Conservative cluster a connection to mainstream (albeit conservative) institutions that their more radical counterparts do not. Indeed, in another media era, more of these figures may have been hosts on cable news or right-wing talk radio. Their further-right counterparts, which we detail below, experience only isolated attention from mainstream media, and rarely in the form of polite interviewing.

Despite widespread support for Trump among the Conservative and Alt-Lite segments of the AIN, much of the YouTube right is not American. Unlike terrestrial radio or television, whose signals often fail to transcend media market lines, let alone national borders, viewers can watch any YouTuber regardless of their origin as long as they are capable of understanding the video. YouTube has truly facilitated the ability for political discourse to take place transnationally (Garrett et al. 2012). Alt-Lite Stefan Molyneux, Faith Goldy, Lauren Southern, and Gavin McInnes, and the Alt-Right Jean-Francois Garipey and Andy Warski are all Canadian. Steven Crowder was born in America but has since emigrated to Canada. Alt-Lite figures Paul Joseph Watson and Milo Yiannopoulos, and the Alt-Right Millennial Woes live in the United Kingdom. Martin Sellner and Brittany Pettibone both live in Austria (though Pettibone is originally American). Alt-Righters “The Golden One” and Red Ice TV operate from Sweden. On one level, the widespread transnational cooperation seen among the far-right seems unlikely given the sphere’s highly nationalistic bent. On the other hand, white nationalists also consider white people in various countries a single nation (Wright 2009) and cooperate on this basis.

These distinctions in right-wing doctrine have largely been ignored by a mainstream discourse that (rightly) sees many of these views as abhorrent. Our goal in describing these beliefs and individuals is not to legitimize any of them. We believe that disaggregating the YouTube right into constituent subgroups is essential for understanding its complex process of growth and change over the years.

We recognize that our quantitative approach is purely descriptive and involves some level of subjectivity. Indeed, one may argue that the difference between the Alt-Right

Table 1: Descriptive Statistics for YouTube Right and MSM Accounts

	YouTube Right	MSM
Unique Channels	35	219
Channels w Videos	35	157
Unique Videos w Metadata	26,058	821,840
% Videos in “News and Politics”	47%	82%

and Alt-Lite in particular is fuzzy. However, in empirical analyses below, we find the same general trends apply to both of these groups. At the same time, these clusters correspond to real fault lines between conservatives and reactionaries in the broader political world, making them useful to analyze on this basis.

5 Quantitative Trends

5.1 Comparing the YouTube Right and MSM in Content Creation and Search Visibility

Before we turn to our supply and demand framework, we will describe key differences between the YouTube Right and mainstream media (MSM). The channels that comprise the YouTube Right are those described above. To take the usernames that these figures adopt and query the YouTube API requires finding each account’s unique “channel_id,” a lengthy alphanumeric code.

We identified 54 of these channel id’s through searching channel names matching to Lewis (2018)’s list, 46 of which had accessible videos on the YouTube API (Table 1 displays descriptive statistics). The other 8 channels either were suspended or their creators unilaterally deleted their channels and videos. We then restricted our analysis to the 35 channels we identified as part of the Right. These videos were queried by searching for each channel’s “playlist,” the record of the videos they’ve uploaded. With this list of each video’s “video_id,” the API can be queried to provide “video metadata” on each video, including: video publish date; video title; video category (YouTube encourages creators to give each video one of 32 categories); view count; comment count; like count; and dislike count. These figures are current as of May 2020.

To serve as a comparison group, we used a list of 219 channels associated with “mainstream” media accounts described in a working paper by Eady et al. (2019). Although it has not yet been published, the project aims to “define the population of

US national online news sources” on Youtube (per Eady). This group had four times as many channels and nearly 24 times as many total videos, reflecting the fact that the MSM video content consisted almost entirely of re-broadcasts of videos from news channels or other outlets. Another helpful reference point is the percentage of videos in each group that were labeled (by their creators) as belonging to the “News and Politics” category. 82% of the MSM videos fell in this category compared to just 47% for the Right. The latter group tended to also label their videos as “Entertainment,” “People and Blogs,” or “Education.”

Figure 1 plots the rate at which the two groups uploaded videos. Note that the y-axes are different, with the MSM putting out at least 20 times as many videos as the AIN at each month in the graph. The comparison is useful, however, because it highlights two discontinuities in the AIN trend that do not appear in the MSM trend: there are serious jumps in January 2013 and May 2016.

In addition to video metadata from the channels identified as belonging to these two groups, we performed a historical analysis of the “search” functionality of YouTube. The search bar is for many people the gateway to YouTube videos.

The YouTube API allows a researcher to specify a search query (a word or phrase, like a Google search) for a given date range (going back to 2006) and a number of other parameters. Possibly relevant options (left unspecified in our analysis) include searching by location, the language of the video, the topic (from YouTube’s pre-specified list of 32 topics), video duration (short, long, or medium).

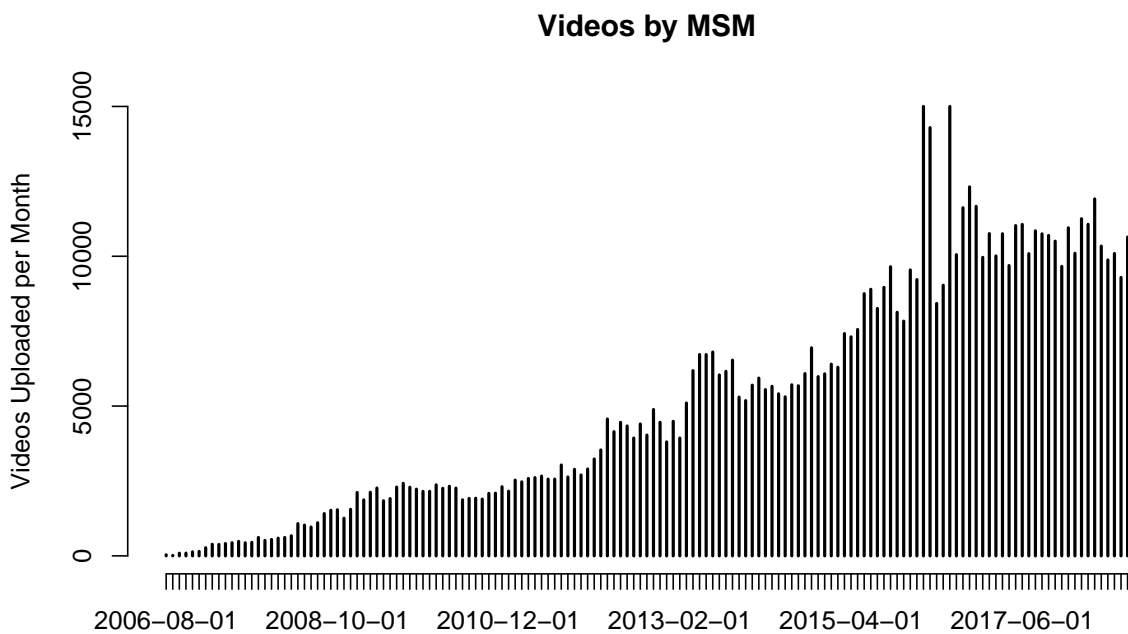
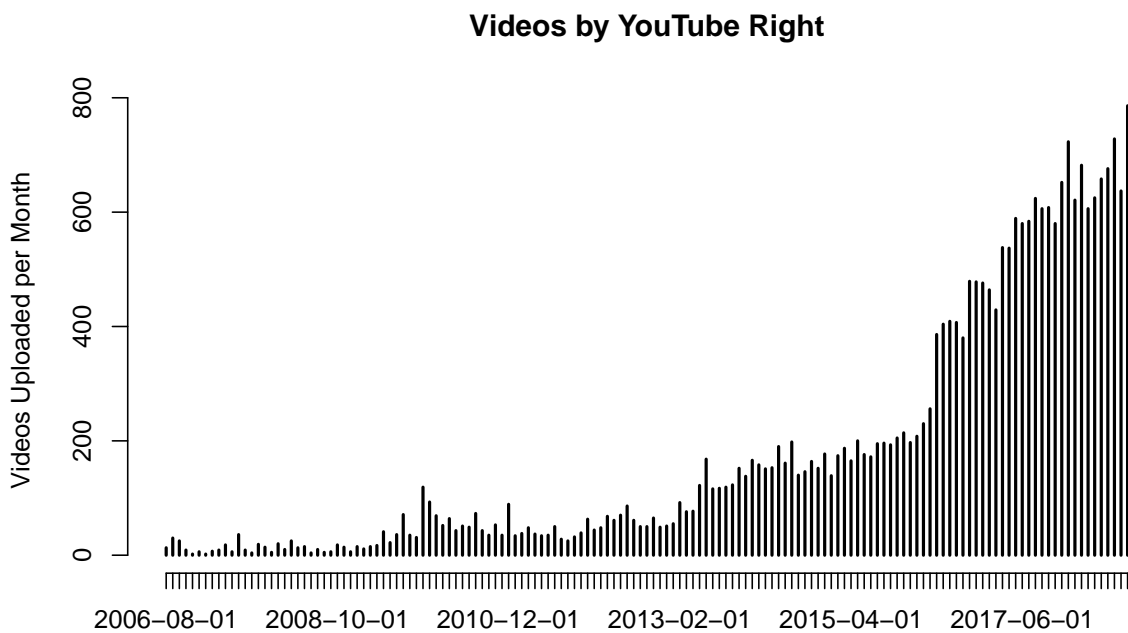
The parameter that we did specify was “order_by,” which is crucial for determining which videos end up in the “top 100” (the admittedly arbitrary standard we adopted for this exploratory analysis). Options include:

- `relevance` : Videos are sorted based on their relevance to the search query. This is the default value for this parameter.
- `viewCount` :Videos are sorted from highest to lowest number of views. For live broadcasts, videos are sorted by number of concurrent viewers while the broadcasts are ongoing.

The below results are based on the “viewCount” option; we opted to go for the most popular videos rather than rely on YouTube’s black box “relevance” criterion.

One important caveat is that these searches do not exactly mirror user experiences due to the use of personalized recommendations. However, through our queries, we can

Figure 1: Timeline of posted videos: YouTube Right and MSM



Note that the y-axes are different. The first jump in the YouTube Right trend is January 2013; the second jump is May 2016.

assess what the average user may see if they typed a given phrase into the YouTube search bar on a certain date. Unfortunately, the precise the mapping from the data provided from the YouTube API to this quantity is unknown. Regardless, we can at least use a difference-in-differences approach to see how the relative prominence of the MSM and AIN in popularity-based search results changed over time, holding this search parameter constant.

We queried the search function of the API separately for each month from January 2008 to October 2018, returning the top 100 results per month for two sets of search terms. The first, what we call mainstream topics, are generic terms: “economy,” “news,” and “politics.”

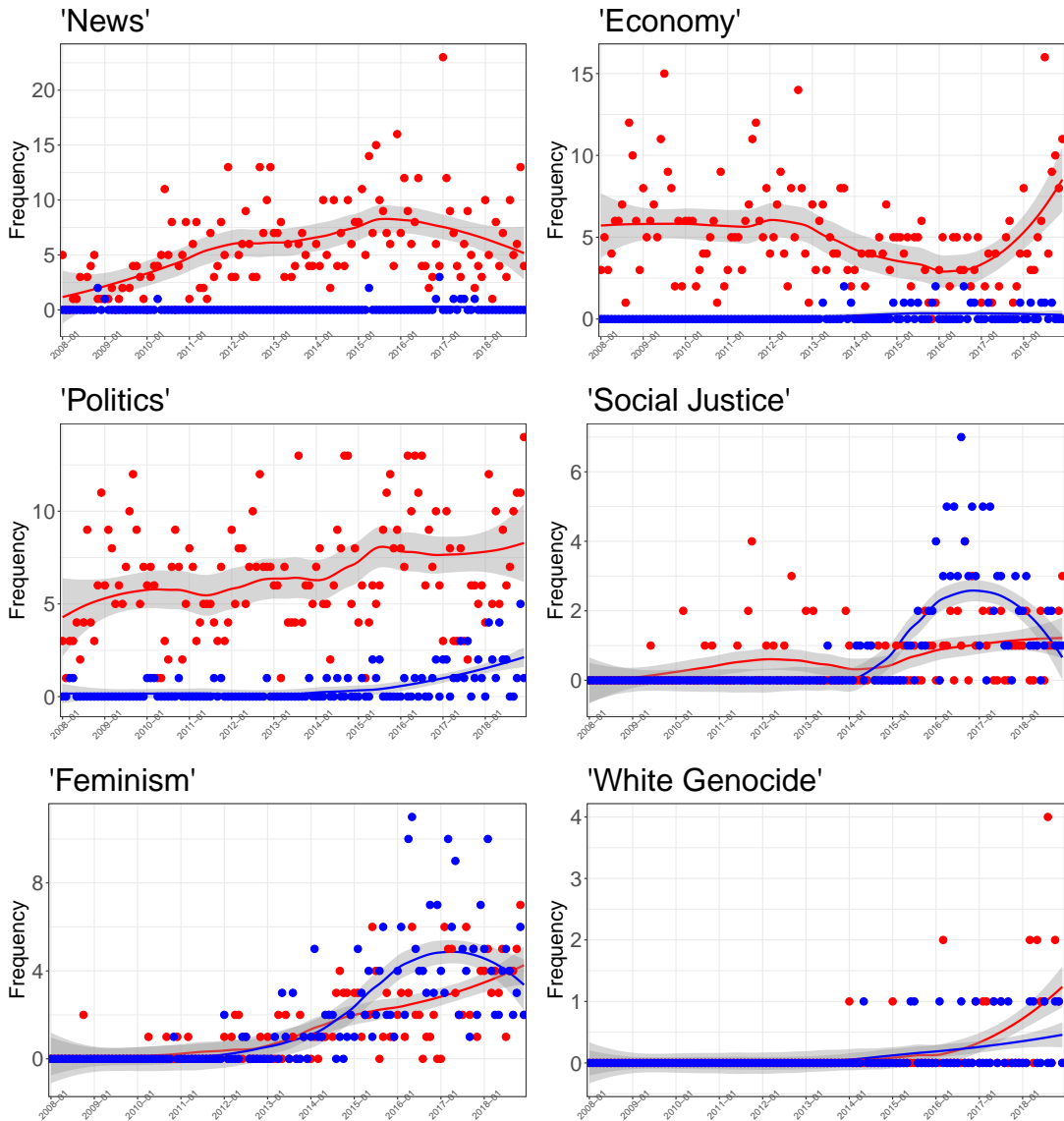
The second, what we call niche topics, are terms that have been specifically identified as areas of focus for the YouTube Right: “feminism,” “social justice,” and “white genocide.” These topics are not explicitly related to partisan issues or electoral politics, but they are relevant to broad cultural conversations that may be upstream of contentious issues like abortion and immigration.

With these monthly lists, we simply compared the channel_id’s of the videos provided by the API to those identified above as pertaining to either of the two groups.

Figure 2 displays the results returned by the search function. Each month, out of the top 100 videos returned from a given search term, Figure 2 plots the number of videos put out by a channel in either the MSM (in **red**) or the YouTube Right (in blue). The first three plots are the Major Topics, “economy,” “news,” and “politics.” We can see that the MSM has consistently made up 5-15% of the results for all three terms, and the YouTube Right has generally never cracked the top 100 for “economy” or “news.” For “politics,” however, they have made inroads since mid-2014. .

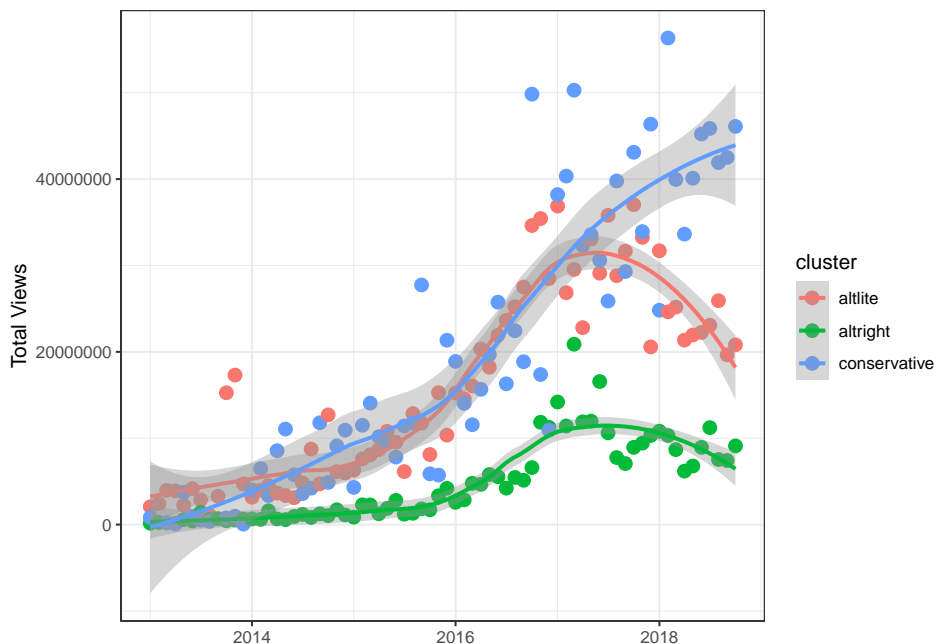
The next three plots paint a very different picture. The YouTube Right dominates these specific Topics, beginning mid-2013 (although the “white genocide” topic, by far the most intrinsically extreme, never returns more than a few matches from either group.) “Social justice,” a term that originated in progressive circles but is central to the far-right’s narrative of Western decline, jumps up for the YouTube Right at the beginning of 2016, which also sees a small bump for the MSM. The most mainstream term on this list, “feminism,” is even further dominated by the YouTube Right. At their peak, in 2016, they had 10 videos in the top 100, to the MSM’s 5. The latter panels do, however, indicate that the YouTube Right are past their prime, at least in terms of these search results. These results are not artifacts of the “Top 100” threshold and the dominating the low end of that ranking; Appendix B shows that the results

Figure 2: Results of Search: Major and **Specific** Terms



The first three plots show that the MSM (in red) has consistent and broad representation in search terms corresponding to Major Topics. The next three plots show that the YouTube Right (in blue) has dominated the terms corresponding to the topics they emphasize in their narrative.

Figure 3: Trends in Monthly Viewership Among the YouTube Right



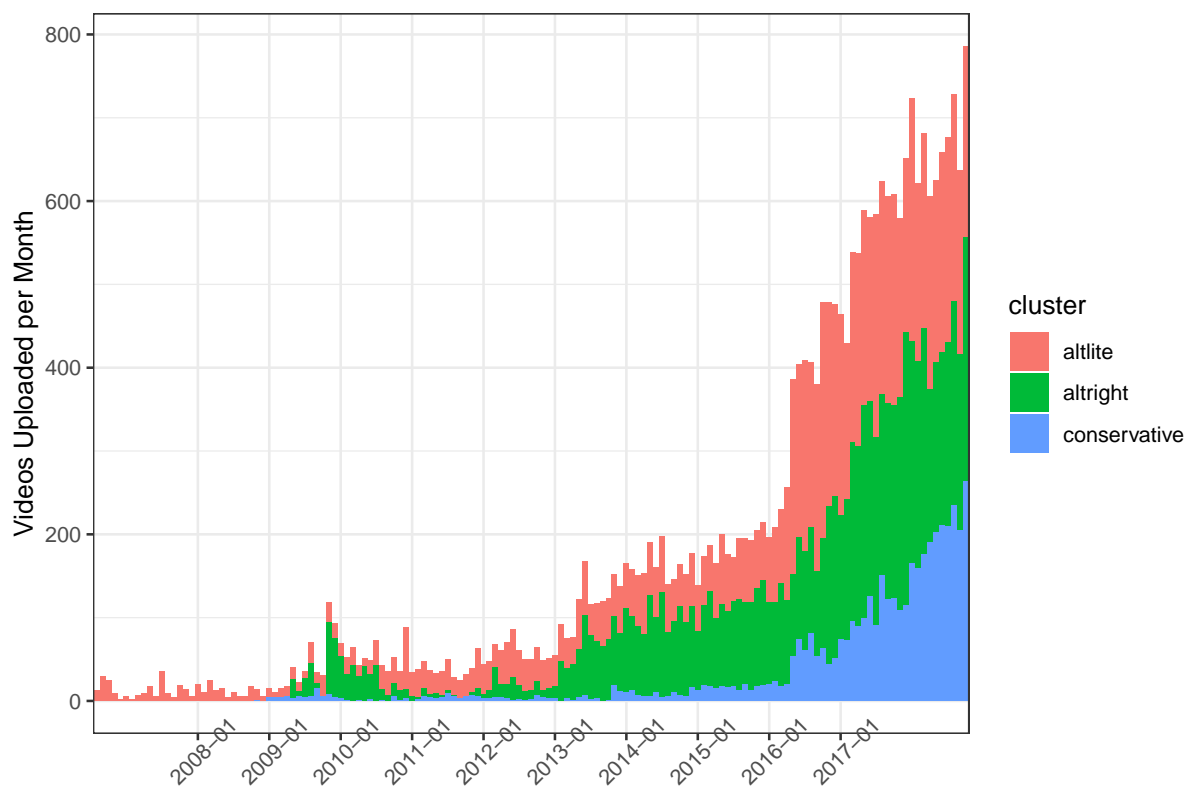
are broadly similar when restricted to the “Top 10” results.

5.2 Trends in YouTube Right Viewership by Ideology

In this section, we examine descriptive trends of YouTube video production and consumption over time. We begin with trends in monthly viewership between January 2013 and November 2018, as depicted in Figure 3. Between 2013 and 2016, all segments of the YouTube Right, including the Alt-Lite and Alt-Right, rose in viewership. However, since the middle of 2017, both of these ideological segments of the YouTube Right have seen a steep decline in viewership. By contrast, Conservative content creators—who have much more in common with mainstream discourse than other segments of the YouTube Right—have either continued to grow or plateaued in viewership.

View counts speak to trends in the *demand* for ideological content. To study *supply*, Figure 4 plots the number of videos uploaded by each ideological group, by month. Right around the time viewership of Conservative content started skyrocketing, Conservative content creation also rose dramatically. Conversely, despite the Alt-Lite and Alt-Right stepping up its content creation activity in 2017-2018, viewership of such con-

Figure 4: Timeline of posted videos: YouTube Right Breakdown



tent has been declining. Importantly, this does not appear to be the result of YouTube changing its algorithm, as they started efforts to algorithmically demote far-right content creators in January 2019 (YouTube 2019).

Our preferred explanation for these trends is as follows: Previous increases in viewership of Alt-Lite, and to a lesser extent, Alt-Right content reflected such content being the most ideologically adjacent to conservative users. This content did not align with most users' views, however, and increased competition from traditional Conservative and Liberal viewpoints enticed large portions of the this audience to abandon what was once the only game in town.

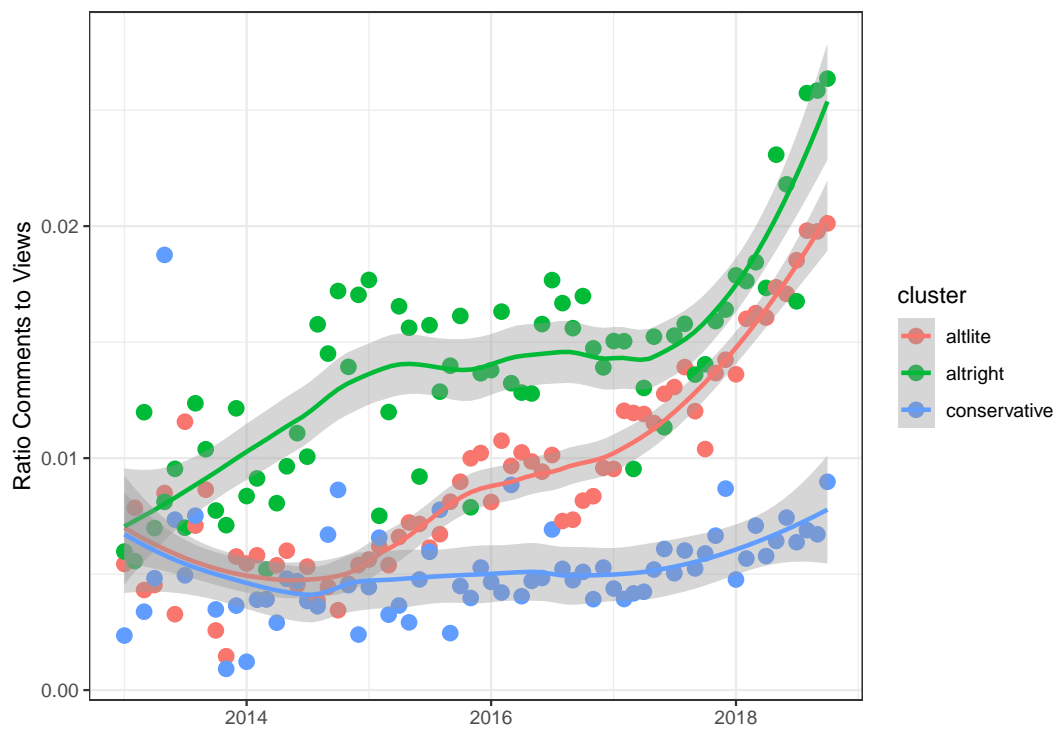
In other words—and reiterating that we are merely proposing a hypothesis that is consistent with these descriptive trends—the novel and disturbing fact of people consuming white nationalist video media was not caused by the supply of this media radicalizing an otherwise moderate audience, but merely reflects the novel ease of producing all forms of video media, the presence of audience demand for white nationalist media, and the decreased search costs due to the efficiency and accuracy of the political ecosystem in matching supply and demand.

Next, we consider *intense* engagement, by calculating the the comments-to-views ratio. (Similar analysis involving the likes-to-views ratio can be found in the Appendix; the results are broadly similar.) Models of YouTube politics that focus on the recommendation engine do not tend to focus on comment patterns, relying as they do on a passive audience.

We argue a robust comments section indicates higher communal activity on the part of the viewership. More comments relative to views mean a higher percentage of users wishing to interact with the creator or address other comments. Additionally, it can also mean a higher proportion of people are conversing with each other in the comments section. When a user comments, another user replies and they start discussing back and forth, each new message counts as a comment. These interactions, even if contentious, reinforce parasocial relationships between audience and creator and a sense of community between audience members.

As we see in Figure 5, despite stagnation and decline in viewership among Alt-Lite and Alt-Right channels, the content these channels produce feature popular comment sections, signalling that interaction between the viewers that remain is robust.⁷ Given the sociological trends that feed endorsement of far-right ideologies, Alt-Lite and Alt-Right channels are likely to have the most atomized, socially disaffected viewership out of any channel in the AIN. Those who remain watching Alt-Right content are likely

Figure 5: Intensity of Engagement: Ratio of Comments to Views



the ones who engage the most intensely - the ones who are invested into the online community.

5.3 Empirical Update: May 2020

The data presented above were current as of October 2018. Given an opportunity to revisit the analysis in May of 2020, we present an updated analysis of the main results presented above. These data unfortunately cannot supplant the earlier data because of an increase in missingness and the additional difficulty in differentiating *when* each of the views attributed to each video was recorded.

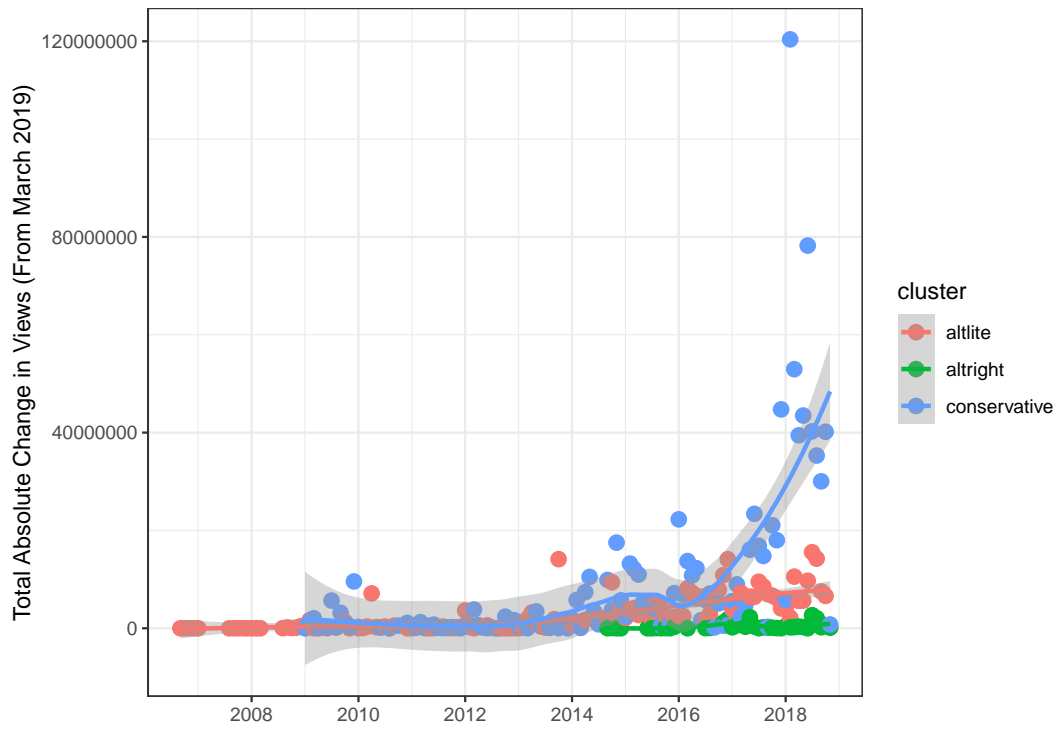
Overall, 95% of the videos from the original data collection remained on YouTube as of May 2020. However, the missingness was not evenly distributed across the three clusters: we have data from 90% of Alt-Right videos, 95% of Alt-Lite videos, and 99% of Conservative videos. Some of these missing videos were removed because the entire channel was banned (in the case of the Alt-Right Red Ice TV and James Allsup) or because the creators deleted some of their older videos (in the case of Mister Metokur, Andy Warski, and Caolan Robertson). The reasons for creators choosing to delete videos are idiosyncratic. Some may have deleted videos they saw as problematic under newer YouTube rules, while others (e.g. Andy Warski) have deleted videos based on a desire to “lay low” amidst internecine conflict.

Restricting our analysis to the videos that remain online, there are significant differences in the rate at which videos from this time period have continued to accumulate views. Figure 6 displays the increase in the total views per month by videos in each of the three clusters (top panel), and then displays these numbers added to the trends reported in Figure 3 (bottom panel). The back catalogue of the Conservative channels has received dramatically more attention over the intervening 16 months, so much so that the trends visible in Figure 3 are difficult to discern.

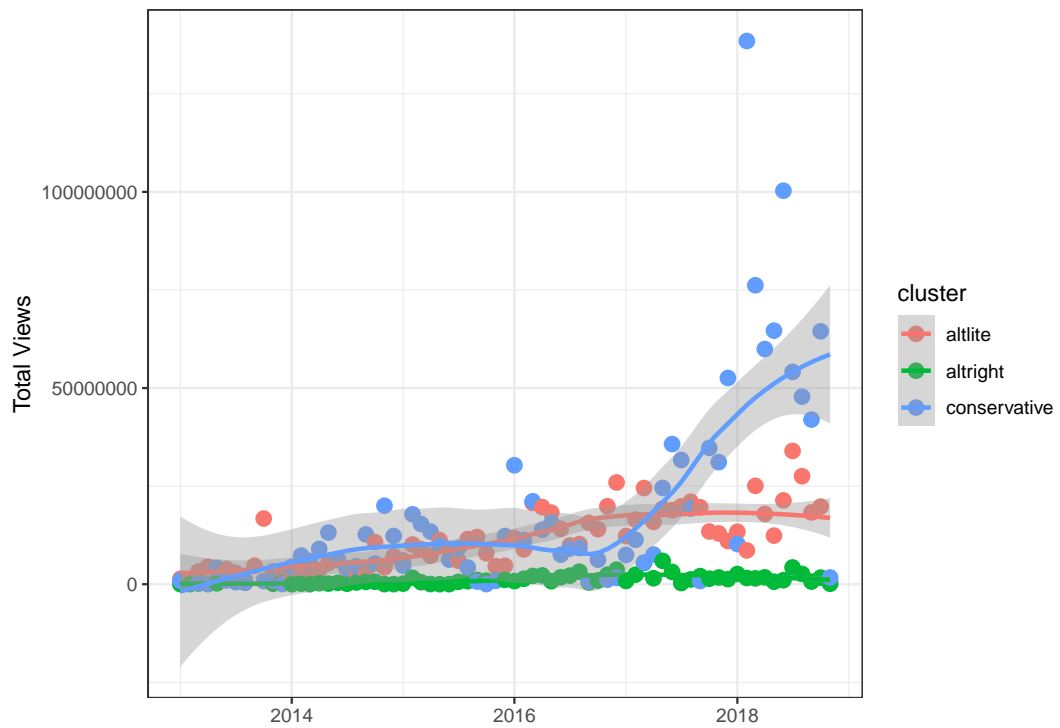
The channels who saw the largest increases in views were all Conservatives: Steven Crowder (1 billion), The Daily Wire (480 million), and PragerU (450 million). Two other channels, both Alt-Lite, saw gains of over 100 million views: Paul Joseph Watson (170 million) and Stefan Molyneux (150 million).

The motivation for watching older YouTube videos is somewhat different than keeping up to date on the latest videos. The “drama” and sense of community that is a key part of the strategy of independent creators has a short shelf-life. However, the comparatively higher production-value videos on a particular political issue are more likely to

Figure 6: Growth in Total Views Per Month, First Scrape to Second Scrape (May 2020)



Total Views Per Month (Replication of Figure 3), Second Scrape Only



attract an audience months or years after they are uploaded. These data are consistent with our argument that the Conservatives in our analysis differ from the more extreme clusters in both the issue-based content of their videos and their “business strategy,” the latter made possible by increased connection to “mainstream” media institutions and funding.

6 A Way Forward

In this paper, we argue for the need to study the YouTube Right systematically and advance a “supply-and-demand framework” to understand the proliferation of right-wing media on the platform. To date, journalistic and scholarly work has argued YouTube’s recommendation algorithm has led viewers to extremist content, radicalizing them to further-right views. We believe that this conclusion is premature, and we are certain that this is not the only important research question to be asked by Political Scientists about right-wing content on YouTube, or YouTube more broadly.

Instead, our theoretical work centers two other YouTube affordances that we argue are at least as important for understanding the rise of right-wing YouTube:

- **YouTube is a media company.** YouTube has been paying “creators” directly for years. Producers create videos to make money.
- **Media on YouTube is videos.** Videos are different from text or still images in a variety of ways that affects who consumes them, in what contexts they are consumed, and the effects of their consumption.
- **YouTube is powered by recommendations.** More than other social media platforms, YouTube’s recommendation algorithm allows for the discovery of content that was neither created nor shared by someone they explicitly chose to follow.

We also contribute some of the first longitudinal descriptive analyses of the production and consumption of right-wing content. Indeed, alternative voices on YouTube discuss topics mainstream media fails to touch, which may help them feature more prominently in search results and recommendations. However, since 2017, viewership of the furthest-right content has declined despite increases in the supply of such content. In its place has been the rise of more mainstream-adjacent Conservative creators.

We also find that the remaining Alt-Lite and Alt-Right audiences are more likely to be active in comments sections than those who frequent other channels, reflecting the community-building potential of these channels.

These descriptive trends still allow for a large role of the recommendation system, and it is still very possible that far-right content may radicalize some of its most avid viewership. In fact, it's possible that even before YouTube explicitly changed the algorithm to demote far-right content that changes in the recommendation system hurt viewership of far-right content in a way that other political content was not. However, the descriptive facts we present serve as a solid starting place for future research.

Some of that research should aim to formally evaluate claims about the power of the recommendation algorithm. The scope of analyses of YouTube politics must also be expanded; in particular, comparative analysis between the YouTube Right and the small but growing collective of left-wing YouTubers (self-identified as "BreadTube") can help illuminate the role of YouTube as a platform in oppositional ideological communities. Another empirical angle on YouTube is the way that it is inherently international; political video content has historically been country-specific, and the novel way that narratives and ideologies evolve when divorced from these specific contexts is not well understood.

We encourage scholars to pay attention to the various novel affordances of YouTube, either independently or as a bundle, other than the recommendation engine. A broader theoretical approach can enrich study of the causes and consequences of fringe media selection.

With that, we also encourage more reflexivity: we do not have the luxury of an objective vantage point from which to study alternative media, right-wing or otherwise. Political content creators are keenly aware of research about them and will attack analyses that conflict with their lived experiences. For example, A search for "Alternative Influence Network" on YouTube reveals 17 videos totaling almost 600,000 views. Four of these videos are highly critical accounts come from members of the AIN. These videos have a total of 435,000 views, each with high like-to-dislike ratios. The success of these communities may be due to their audience's disenchantment with mainstream knowledge production as much as it is with that audience's appreciation for the quality of their alternative analysis.

There is no easy solution when studying actors that can react with public hostility, but a necessary first step is to make more generalizable conclusions about the study of the YouTube Right. YouTube politics and alternative media are here to stay; no

algorithmic tweak will put the rest of the YouTube's powerful affordances back in the box.

References

- Abidin, Crystal. 2016. "Arent These just Young, Rich Women doing Vain Things Online?: Influencer Selfies as Subversive Frivolity." *Social Media+ Society* 2 (2): 2056305116641342.
- Abraham, Katharine G., and Melissa S. Kearney. 2018. "Decline in the US Employment-to-Population ratio: A Review of the Evidence." *National Bureau of Economic Research* .
- Alvares, Claudia, and Peter Dahlgren. 2016. "Populism, Extremism and Media: Mapping an Uncertain Terrain." *European Journal of Communication* 31 (1): 46–57.
- Antony, Mary Grace, and Ryan J. Thomas. 2010. "This is Citizen Journalism at its Finest: YouTube and the Public Sphere in the Oscar Grant Shooting Incident." *New Media & Society* 12 (8): 1280–1296.
- Arceneaux, Kevin, and Martin Johnson. 2013. *Changing Minds or Changing Channels?: Partisan News in an Age of Choice*. University of Chicago Press.
- Arzheimer, Kai. 2009. "Contextual Factors and the Extreme Right Vote in Western Europe, 1980–2002." *American Journal of Political Science* 53 (2): 259–275.
- Bennett, W Lance, and Shanto Iyengar. 2008. "A New Era of Minimal Effects? The Changing Foundations of Political Communication." *Journal of Communication* 58 (4): 707–731.
- Bowman-Grieve, Lorraine. 2009. "Exploring Stormfront: A Virtual Community of the Radical Right." *Studies in Conflict & Terrorism* 32 (11): 989–1007.
- Bowyer, Benjamin T., Joseph E. Kahne, and Ellen Middaugh. 2017. "Youth Comprehension of Political Messages in YouTube Videos." *New Media & Society* 19 (4): 522–541.
- Boydston, Amber E. 2013. *Making the News: Politics, the Media, and Agenda Setting*. University of Chicago Press.
- Brady, William J., Julian A. Wills, Dominic Burkart, John T. Jost, and Jay J Van Bavel. 2019. "An Ideological Asymmetry in the Diffusion of Moralized Content on Social

- Media Among Political Leaders.” *Journal of Experimental Psychology: General* 148 (10): 1802–1813.
- Bustikova, Lenka. 2014. “Revenge of the Radical Right.” *Comparative Political Studies* 47 (12): 1738–1765.
- Cohen, Shuki J., Thomas J. Holt, Steven M. Chermak, and Joshua D. Freilich. 2018. “Invisible Empire of Hate: Gender Differences in the Ku Klux Klan’s Online Justifications for Violence.” *Violence and Gender* 5 (4): 209–225.
- Conway, Maura. 2017. “Determining the Role of the Internet in Violent Extremism and Terrorism: Six Suggestions for Progressing Research.” *Studies in Conflict & Terrorism* 40 (1): 77–98.
- Costello, Matthew, and James Hawdon. 2018. “Who are the Online Extremists Among Us? Sociodemographic Characteristics, Social Networking, and Online Experiences of Those who Produce Online Hate Materials.” *Violence and Gender* 5 (1): 55–60.
- Costello, Matthew, James Hawdon, Thomas Ratliff, and Tyler Grantham. 2016. “Who Views Online Extremism? Individual Attributes Leading to Exposure.” *Computers in Human Behavior* 63: 311–320.
- Cowen, Tyler. 2018. “Eric Schmidt on the Life-Changing Magic of Systematizing, Scaling, and Saying Thanks.” *Medium*. <https://medium.com/conversations-with-tyler/eric-schmidt-tyler-cowen-google-ec33aa3e6dae> .
- Craig, Stephen C, and Kenneth D Wald. 1985. “Whose Ox to Gore? A Comment on the Relationship between Political Discontent and Political Violence.” *Western Political Quarterly* 38 (4): 652–662.
- Daro, Ishmael, and Craig Silverman. 2018. “How YouTube’s ‘Super Chat’ System Is Pushing Video Creators Toward More Extreme Content.” *Buzzfeed* .
- de Bérail, Pierre, Marlène Guillon, and Catherine Bungener. 2019. “The Relations between YouTube Addiction, Social Anxiety and Parasocial Relationships with YouTubers: A Moderated-Mediation Model Based on a Cognitive-Behavioral Framework.” *Computers in Human Behavior* 99 (1): 190–204.
- De Shalit, Avner. 2016. “The Ethics of Academic Boycott.” *The Journal of Politics* 78 (3): 642–652.

- DellaVigna, Stefano, and Ethan Kaplan. 2006. "The Fox News Effect: Media Bias and Voting." *National Bureau of Economic Research* .
- Dietrich, Bryce J, Ryan D Enos, and Maya Sen. 2019. "Emotional arousal predicts voting on the US supreme court." *Political Analysis* 27 (2): 237–243.
- Eady, Gregory, Richard Bonneau, Jonathan Nagler, and Joshua Tucker. 2019. "Partisan News on Social Media: Mapping the Ideology of News Media Content, Citizens, and Politicians." *Working Paper* .
- English, Kristin, Kaye D. Sweetser, and Monica Ancu. 2011. "YouTube-ification of Political Talk: An Examination of Persuasion Appeals in Viral Video." *American Behavioral Scientist* 55 (6): 733–748.
- Ferchaud, Arianne, Jenna Grzeslo, Stephanie Orme, and Jared LaGroue. 2018. "Parasocial Attributes and YouTube Personalities: Exploring Content Trends Across the Most Subscribed YouTube Channels." *Computers in Human Behavior* 80 (1): 88–96.
- Forestal, Jennifer. 2020. "Beyond Gatekeeping: Propaganda, Democracy, and the Organization of Digital Publics." *Journal of Politics* .
- Frye, Timothy, and Ekaterina Borisova. 2019. "Elections, protest, and trust in government: A natural experiment from Russia." *The Journal of Politics* 81 (3): 820–832.
- Garrett, R. Kelly, Bruce Bimber, Homero Gil De Zúñiga, Francois Heinderyckx, John Kelly, and Marc Smith. 2012. "New ICTs and the Study of Political Communication." *International Journal of Communication* 6 (1): n.p.
- Gerring, John. 2012. "Mere Description." *British Journal of Political Science* 42 (4): 721–746.
- Gibson, Rachel, and Marta Cantijoch. 2013. "Conceptualizing and measuring participation in the age of the internet: Is online political engagement really different to offline?" *The Journal of Politics* 75 (3): 701–716.
- Gohdes, Anita R. 2020. "Repression technology: Internet accessibility and state violence." *American Journal of Political Science* .
- Golder, Matt. 2016. "Far Right Parties in Europe." *Annual Review of Political Science* 19 (1): 477–497.

- Google. n.d. "How to earn money on YouTube." *Google* .
- Graham, Roderick. 2016. "Inter-Ideological Mingling: White Extremist Ideology Entering the Mainstream on Twitter." *Sociological Spectrum* 36 (1): 24–36.
- Guess, Andrew, Brendan Nyhan, Benjamin Lyons, and Jason Reifler. 2018. "Avoiding the Echo Chamber about Echo Chambers: Why Selective Exposure to Like-Minded Political News is Less Prevalent than you Think." *Knight Foundation White Paper* .
- Guess, Andrew, Kevin Munger, Jonathan Nagler, and Joshua Tucker. 2019. "How Accurate are Survey Responses on Social Media and Politics?" *Political Communication* 36 (2): 241–258.
- Guess, Andrew M. 2015. "Measure for Measure: An Experimental Test of Online Political Media Exposure." *Political Analysis* 23 (1): 59–75.
- Hanson, Gary, Paul Michael Haridakis, Audrey Wagstaff Cunningham, Rekha Sharma, and James D Ponder. 2010. "The 2008 Presidential Campaign: Political Cynicism in the Age of Facebook, MySpace, and YouTube." *Mass Communication and Society* 13 (5): 584–607.
- Hartmann, Tilo, and Charlotte Goldhoorn. 2011. "Horton and Wohl Revisited: Exploring Viewers' Experience of Parasocial Interaction." *Journal of Communication* 61 (6): 1104–1121.
- Hassan, Ghayda, Sébastien Brouillette-Alarie, Séraphin Alava, Divina Frau-Meigs, Lysiane Lavoie, Arber Fetiu, Wynnypaul Varela, Evgueni Borokhovski, Vivek Venkatesh, Cécile Rousseau, and Stijn Sieckelinck. 2018. "Exposure to Extremist Online Content could Lead to Violent Radicalization: A Systematic Review of Empirical Evidence." *International Journal of Developmental Science* 12 (1-2): 71–88.
- Hawley, George. 2017. *Making sense of the alt-right*. Columbia University Press.
- Hindman, Matthew. 2018. *The Internet Trap: How the Digital Economy Builds Monopolies and Undermines Democracy*. Princeton University Press.
- Hofstetter, C. Richard, David Barker, James T. Smith, Gina M. Zari, and Thomas A Ingrassia. 1999. "Information, Misinformation, and Political Talk Radio." *Political Research Quarterly* 52 (2): 353–369.

- Hogg, Michael A, Arie Kruglanski, and Kees van den Bos. 2013. "Uncertainty and the Roots of Extremism." *Journal of Social Issues* 69 (3): 407–418.
- Horton, Donald, and Anselm Strauss. 1957. "Interaction in Audience-Participation Shows." *American Journal of Sociology* 62 (6): 579–587.
- Horton, Donald, and R Richard Wohl. 1956. "Mass communication and para-social interaction: Observations on intimacy at a distance." *Psychiatry* 19 (3): 215–229.
- Houwer, Jan De, and Dirk Hermans. 1994. "Differences in the Affective Processing of Words and Pictures." *Cognition & Emotion* 8 (1): 1–20.
- Jerslev, Anne. 2016. "Media Times: In The Time of the Microcelebrity: Celebification and the YouTuber Zoella." *International Journal of Communication* 10 (1): n.p.
- Kay, Aaron C, and Richard P Eibach. 2013. "Compensatory Control and its Implications for Ideological Extremism." *Journal of Social Issues* 69 (3): 564–585.
- Kimbrough, Gray. 2019. "Xboxes and Ex-workers? Gaming and Labor Supply of Young Adults in the US." *Working Paper* .
- Klimmt, Christoph, Tilo Hartmann, and Holger Schramm. 2006. "Parasocial Interactions and Relationships." In *The Psychology of Entertainment*, ed. Jennings Bryant, and Peter Vorderer. Lawrence Erlbaum Associates Publishers pp. 291–313.
- Ksiazek, Thomas B., Limor Peer, and Kevin Lessard. 2016. "User Engagement with Online News: Conceptualizing Interactivity and Exploring the Relationship between Online News Videos and User Comments." *New Media & Society* 18 (3): 502–520.
- Leung, Dennis K.K., and Francis L.F. Lee. 2014. "Cultivating an Active Online Counterpublic: Examining Usage and Political Impact of Internet Alternative Media." *The International Journal of Press/Politics* 19 (3): 340–359.
- Lewis, Paul, and Erin McCormick. 2018. "How an ex-YouTube Insider Investigated its Secret Algorithm." *The Guardian* .
- Lewis, Rebecca. 2018. "Alternative Influence: Broadcasting the Reactionary Right on YouTube." *Data & Society* .

- Lewis, Rebecca. 2020. "This Is What the News Won't Show You: YouTube Creators and the Reactionary Politics of Micro-celebrity." *Television & New Media* 21 (2): 201–217.
- Little, Andrew T. 2016. "Communication technology and protest." *The Journal of Politics* 78 (1): 152–166.
- Lorenz, Taylor. 2020. "The Political Pundits of TikTok." *The New York Times*. .
URL: <https://www.nytimes.com/2020/02/27/style/tiktok-politics-bernie-trump.html>
- Main, Thomas J. 2018. *The rise of the alt-right*. Brookings Institution Press.
- Martin, Gregory J., and Ali Yurukoglu. 2017. "Bias in Cable News: Persuasion and Polarization." *American Economic Review* 107 (9): 2565–99.
- Massanari, Adrienne. 2017. "# Gamergate and The Fappening: How Reddits Algorithm, Governance, and Culture Support Toxic Technocultures." *New Media & Society* 19 (3): 329–346.
- Matamoros-Fernández, Ariadna. 2017. "Platformed Racism: The Mediation and Circulation of an Australian Race-Based Controversy on Twitter, Facebook and YouTube." *Information, Communication & Society* 20 (6): 930–946.
- McDowell, Linda. 2011. *Redundant Masculinities?: Employment Change and White Working Class Youth*. John Wiley & Sons.
- Mitts, Tamar. 2019. "From Isolation to Radicalization: anti-Muslim Hostility and Support for ISIS in the West." *American Political Science Review* 113 (1): 173–194.
- Montanaro, Laura. 2019. "Discursive Exit." *American Journal of Political Science* 63 (4): 875–887.
- Mott, Gareth. 2019. "A Storm on the Horizon? Twister and the Implications of the Blockchain and Peer-to-Peer Social Networks for Online Violent Extremism." *Studies in Conflict & Terrorism* 42 (1-2): 206–227.
- Munnukka, Juha, Devdeep Maity, Hanna Reinikainen, and Vilma Luoma-aho. 2019. "Thanks for Watching: The Effectiveness of YouTube Vlog Endorsements." *Computers in Human Behavior* 93 (1): 226–234.

- Murthy, Dhiraj, and Sanjay Sharma. 2019. "Visualizing YouTubes Comment Space: Online Hostility as a Networked Phenomena." *New Media & Society* 21 (1): 191–213.
- Myrick, Jessica Gall, and Mary Beth Oliver. 2015. "Laughing and Crying: Mixed Emotions, Compassion, and the Effectiveness of a YouTube PSA about Skin Cancer." *Health communication* 30 (8): 820–829.
- Nagle, Angela. 2017. *Kill all Normies: Online Culture Wars from 4chan and Tumblr to Trump and the Alt-Right*. John Hunt Publishing.
- Nielsen, Richard A. 2020. "Women's Authority in Patriarchal Social Movements: The Case of Female Salafi Preachers." *American Journal of Political Science* 64 (1): 52–66.
- Paivio, Allan. 1990. *Mental Representations: A Dual Coding Approach*. Oxford University Press.
- Palermo, Mark T. 2013. "Developmental Disorders and Political Extremism: a Case Study of Asperger Syndrome and the Neo-Nazi Subculture." *Journal of Forensic Psychology Practice* 13 (4): 341–354.
- Perrin, Andrew, and Monica Anderson. 2019. *Social Media Use in 2019*. Pew.
- Peters, Chris, and Marcel J. Broersma. 2013. *Rethinking Journalism: Trust and Participation in a Transformed News Landscape*. Routledge.
- Petersen, Michael Bang, Mathias Osmundsen, and Kevin Arceneaux. 2018. "A Need for Chaos and the Sharing of Hostile Political Rumors in Advanced Democracies." *Working Paper* .
- Phillips, Whitney. 2015. *This is Why we Can't Have Nice Things: Mapping the Relationship Between Online Trolling and Mainstream Culture*. MIT Press.
- Post, Jerrold M. 2015. "Terrorism and Right-Wing Extremism: the Changing Face of Terrorism and Political Violence in the 21st Century: the Virtual Community of Hatred." *International Journal of Group Psychotherapy* 65 (2): 242–271.
- Postigo, Hector. 2016. "The Socio-Technical Architecture of Digital Labor: Converting Play into YouTube Money." *New Media & Society* 18 (2): 332–349.

- Premack, Rachel. 2018. "Generation Zs Reveal Their 100 Favorite Brands." *Business Insider* .
- Prior, Markus. 2007. *Post-Broadcast Democracy: How Media Choice Increases Inequality in Political Involvement and Polarizes Elections*. Cambridge University Press.
- Proksch, Sven-Oliver, Christopher Wratil, and Jens Wäckerle. 2019. "Testing the Validity of Automatic Speech Recognition for Political Text Analysis." *Political Analysis* 27 (3): 339–359.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster.
- Reeve, Zoey. 2019. "Engaging with Online Extremist Material: Experimental Evidence." *Terrorism and Political Violence* .
- Ribeiro, Manoel H., Raphael Ottoni, Robert West, Virgílio A.F. Almeida, and Wagner Meira Jr. 2020. Auditing Radicalization Pathways on YouTube. In *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency*. pp. 131–141.
- Richards, Imogen. 2019. "A Philosophical and Historical Analysis of Generation Identity: Fascism, Online Media, and the European New Right." *Terrorism and Political Violence* pp. 1–20.
- Rydgren, Jens. 2007. "The Sociology of the Radical Right." *Annu. Rev. Sociol.* 33: 241–262.
- Schmitt, Josephine B., Diana Rieger, Olivia Rutkowski, and Julian Ernst. 2018. "Counter-Messages as Prevention or Promotion of Extremism?! The Potential Role of YouTube: Recommendation Algorithms." *Journal of Communication* 68 (4): 780–808.
- Schultze, Quentin J. 1988. "Evangelical radio and the rise of the electronic church, 1921–1948." *Journal of Broadcasting & Electronic Media* 32 (3): 289–306.
- Settle, Jaime. 2018. *Frenemies: How Social Media Polarizes America*. Cambridge University Press.

- Stromer-Galley, Jennifer, and Alexis Wichowski. 2011. "Political Discussion Online." In *The Handbook of Internet Studies*, ed. Mia Consalvo, and Charles Ess. Wiley pp. 168–187.
- Tritt, Shona M, Jordan B Peterson, Elizabeth Page-Gould, and Michael Inzlicht. 2016. "Ideological reactivity: Political conservatism and brain responsivity to emotional and neutral stimuli." *Emotion* 16 (8): 1172.
- Tufekci, Zeynep. 2014. Big Questions for Social Media Big Data: Representativeness, Validity and Other Methodological pPtfalls. In *Eighth International AAAI Conference on Weblogs and Social Media*.
- Van Zoonen, Liesbet, Farida Vis, and Sabina Mihelj. 2011. "YouTube Interactions Between Agonism, Antagonism and Dialogue: Video Responses to the anti-Islam Film Fitna." *New Media & Society* 13 (8): 1283–1300.
- Vraga, Emily K, and Melissa Tully. 2019. "News Literacy, Social Media behaviors, and Skepticism Toward Information on Social Media." *Information, Communication & Society* pp. 1–17.
- Walker, Rob. 2018. "When Headphones Get in the Way of Office Communication." *The New York Times* (April 2018). <https://www.nytimes.com/2018/04/27/business/when-headphones-get-in-the-way-of-office-communication.html> .
- Webber, David, Maxim Babush, Noa Schori-Eyal, Anna Vazeou-Nieuwenhuis, Malkanthi Hettiarachchi, Jocelyn J. Bélanger, Manuel Moyano, Humberto M. Trujillo, Rohan Gunaratna, Arie W. Kruglanski, and Michele J. Gelfand. 2018. "The Road to Extremism: Field and Experimental Evidence that Significance Loss-Induced Need for Closure Fosters Radicalization." *Journal of Personality and Social Psychology* 114 (2): 270–285.
- Weber, Christopher, and Matthew Thornton. 2012. "Courting Christians: How political candidates prime religious considerations in campaign ads." *The Journal of Politics* 74 (2): 400–413.
- Weiss, Bari. 2020. "Did I Just Get Yanged?" *The New York Times* .
URL: <https://www.nytimes.com/2020/01/30/opinion/sunday/andrew-yang-2020.html>

- Wen, Nainan, Stella C. Chia, and Xiaoming Hao. 2015. "What do Social Media say about Makeovers? A Content Analysis of Cosmetic Surgery Videos and Viewers Responses on YouTube." *Health Communication* 30 (9): 933–942.
- Whine, Michael. 1999a. "Cyberspace-A New Medium for Communication, Command, and Control by Extremists." *Studies in Conflict & Terrorism* 22 (3): 231–245.
- Whine, Michael. 1999b. "Islamist organizations on the Internet." *Terrorism and Political Violence* 11 (1): 123–132.
- Wojcieszak, Magdalena. 2010. "Dont Talk to Me: Effects of Ideologically Homogeneous Online Groups and Politically Dissimilar Offline Ties on Extremism." *New Media & Society* 12 (4): 637–655.
- Wright, Stuart A. 2009. "Strategic Framing of Racial-Nationalism in North America and Europe: An Analysis of a Burgeoning Transnational Network." *Terrorism and Political Violence* 21 (2): 189–210.
- Xu, Weiai Wayne, Ji Young Park, Ji Young Kim, and Han Woo Park. 2016. "Networked Cultural Diffusion and Creation on YouTube: An Analysis of YouTube Memes." *Journal of Broadcasting & Electronic Media* 60 (1): 104–122.
- Yin, Leon, and Megan Brown. 2018. "SMAPPNYU/youtube-data-api." *Zenodo* .
URL: <https://doi.org/10.5281/zenodo.1414418>
- YouTube. 2019. "Our ongoing work to tackle hate." *YouTube Official Blog*.
<https://youtube.googleblog.com/2019/06/our-ongoing-work-to-tackle-hate.html> .

Notes

¹A recent survey of members of Generation Z (who Pew defines as those born after 1997) by a branding agency found that respondents rated YouTube their number one favorite brand—just ahead of teen stalwarts Doritos, Oreos and Netflix. More academically prominent social networks fared much worse, with #23 Instagram, # 39 Facebook, and #87 Twitter (Premack 2018).

²In contrast to Facebook, which does not, and which has been restricting access to data collection that was once opt-in in the wake of the misuse of that data access

³The recently-deployed python package ‘youtube-data-api’ is optimized for academic use, lowering barriers to entry to using the API (Yin and Brown 2018).

⁴See De Shalit (2016); Frye and Borisova (2019); Gohdes (2020); Little (2016) and Montanaro (2019). There are only a few more substantial treatments. Gibson and Cantijoch (2013) examined YouTube use as a subset of news use, Weber and Thornton (2012) used a campaign advertisement originating from YouTube as an experimental treatment. Recently, Nielsen (2020) argued that far-right movements want women to have YouTube channels because they can act as more palatable representatives of extremism. Forestal (2020), in her theoretical treatment of social networking sites as deliberative spaces, makes the claim that until recently, YouTube served as an algorithmic haven for extremists.

⁵The impact of video gaming culture on far-right politics has been frequently noted. In particular, the “Gamergate” controversy—in which gaming enthusiasts aggressively harassed female gaming journalists (Massanari 2017)—may have permanently politicized this community, which certainly shares a number of demographic characteristics with the audience for the far right. Average weekly time spent playing video games nearly tripled from 2005 to 2015 among 21-30 year old men living with their parents but barely increased for men of the same age living on their own (Kimbrough 2019)

⁶The original publication does not highlight the specific scope conditions. We contacted Lewis, who clarified that “ The seed account was Dave Rubin’s, chose because a) he is considered so mainstream and b) as a talk show host, he collaborates with a wide range of accounts. It was bounded by a minimum of 4 connections.”

⁷One caveat to our data collection strategy is that individual channel owners are given broad capacity to moderate the comment sections of their videos. We cannot directly measure the propensity for moderation, so these numbers should be interpreted as downstream of whatever moderation is taking place.