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Targeting Greta Thunberg: A Case Study in Online Mis/Disinformation

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With Introduction by Eli Weiner

Introduction

Eli Weiner

The German Marshall Fund's Digital Innovation and Democracy Initiative worked with MediaCloud to examine misinformation and disinformation related to the climate-change activist Greta Thunberg, a young climate activist who was smeared by a number of conspiracy theories. We focused on a key period analyzing how narratives spread, whether one can discern strategic disinformation promotion, and how platform practices might address the promotion of conspiracy theories.

Focusing on the period after Thunberg began her weekly school strikes in the summer of 2018 and continuing through October 2019, just after the global climate strikes and her speech at the United Nations General Assembly, we identified five key narratives about her:

- **Mental ability.** Since Thunberg has publicly discussed that she has been diagnosed with Asperger's syndrome, a milder autism-spectrum disorder, her mental abilities and character traits have been questioned by some media sources and social-media users.
- **Antifa.** The publication on Twitter of a picture of Thunberg wearing an Antifascist All Stars t-shirt led to the conclusion that she supported the more violent antifa movement, which targets right-wing groups. Thunberg has since removed that picture and stated that she does not support fascism but also does not condone violence.
- **Soros.** George Soros has become a common target of attacks from conservative and alt-right corners of the internet. Associating Thunberg with him and his Open Society Foundations (OSF) has been used to discredit her and her discourse against climate change. Two elements seem to have driven this narrative: a manipulated picture in which Thunberg appears next to Soros, and the debunked rela-

tionship between Thunberg and the OSF-supported One Campaign.

- **Puppet.** A somewhat common thread of attacks on Thunberg claims she is being used by others (such as her parents, a Swedish foundation and other connected businesses, etc.) as a puppet, perhaps in a public-relations stunt for these interests.
- **Climate industrial complex.** In a somewhat more elaborate argument about obscure interests behind her, Thunberg is linked to a wider network of corporate interests from the energy and non-profit sectors, often called the "climate industrial complex." This is a low-volume narrative.

These narratives discredit Thunberg through personal attacks (questioning her mental abilities), her alleged associations (with antifa and Soros), and allegations that she is manufactured or a hoax (through narratives that describe her as a PR stunt, puppet, and part of a "climate industrial complex"). Studying how these five narratives evolved and spread on the open web (news and blogs), on Facebook, on Twitter, and on Reddit produces the following key findings.

Mis/disinformation narratives cut across countries and platforms

The narratives examined moved internationally and leapt across popular social media platforms. For example, the Soros and puppet narratives originated in Sweden and then spread to Germany and Australia, while the antifa narrative began on a German-language account. The "climate industrial complex" narrative started from a Canadian account and spread to the United States and beyond.

Four of the five narratives originated on Twitter before migrating elsewhere, while the fifth (regarding Thunberg's mental capacity) emerged on Reddit before being circulated on the open-web and amplified

by Michael Knowles of the Daily Wire. In September 2019, related Reddit submissions and comments spiked immediately prior to a surge in posts on Twitter and Facebook for both the “mentally ill” and puppet narratives, suggesting such mis/disinformation cuts across differing social media platforms. Social media posts about the different narratives also frequently link to external websites or YouTube videos. The first 16 posts on Facebook spreading the “mentally ill” narrative all linked back to Canadian media personality Ezra Levant’s YouTube videos promoting the idea that Thunberg suffered from mental illness.

Different groups with seemingly different motivation spread mis/disinformation narratives in complementary ways

Different actors without any discernable ideological affinity were responsible for disseminating and amplifying mis/disinformation narratives about Thunberg. In many cases, these mapped on to preexisting political concerns. The antifa and Soros narratives were conspicuously linked to the far-right Alternative für Deutschland (AfD) party in Germany, with 42 percent of Facebook posts related to the antifa narrative referencing it. AfD-affiliated accounts were also responsible for some of the first Facebook posts to spread the Soros narrative. This conforms with the party’s documented history of attacking Thunberg within the climate change denialism movement. Illustrating the crosscutting nature of these narratives, accounts affiliated with the U.S.-based conspiracy-theory group QAnon were also responsible for sharing the Soros narrative.

A collection of QAnon, pro-Trump, and climate change denial groups shared the puppet narrative, while the “climate industrial complex” narrative was driven mainly by climate change denial groups. In particular, the Canadian-based Friends of Science Society helped amplify that narrative and was the first to tweet it out. The narrative was then furthered by PJ Media, a right-wing publication, and climate-change denial Facebook groups in an attempt to link Thunberg to a wider ecosystem of nonprofits, governments,

corporations, and financiers trying to profit from fears over climate change.

In every case, large right-wing media groups such as PJ Media, Gateway Pundit, and the Daily Wire served as vectors for the mis/disinformation narratives.

The mis/disinformation question the independence and motives of Thunberg

A classic objective of disinformation is to stimulate skepticism and stoke distrust of mainstream institutions and accepted orthodoxies. In Thunberg’s case, it is clear that she is perceived as a symbol and agent of larger social and institutional forces, such as environmentalism and international organizations. Undermining her credibility is a proxy attack on the credibility of these organizations and movements.

Additionally, associating Thunberg with “known evils” such as antifa or George Soros reflects a common tactic of disinformation campaigns, which tie their target to controversial or polarizing entities to fragment popular support and raise question about their motivations.

Misappropriated satire plays a role in spreading certain mis/disinformation narratives

Mis/disinformation narratives at times are fueled by images originally run on satire outlets but are then decontextualized and recirculated as factual images. For example, the most shared URL on Facebook related to the Soros narrative is an article on a French satire website, secretnews.fr. The article claims that not only is Thunberg the granddaughter of Soros, but that her parents are siblings. It includes the photoshopped image of Thunberg and Soros. According to the newspaper Le Monde, many readers believe that information posted by this recognized satirical website is real.

Mainstream debunking of mis/disinformation narratives led to their amplification

In some cases, reporting and factchecking of mis/disinformation narratives led to their amplification.

This occurred with the narrative around Thunberg's mental ability, in which the top URLs on Twitter that referred to it came from The Daily Beast and BuzzFeed, the latter of which reported on an incident in which Michael Knowles of the Daily Wire called Thunberg "mentally ill" in an interview segment with Fox News. The findings presented in this paper highlight how the spread and traction of mis/disinformation narratives across platforms are altered and amplified by mainstream news coverage.

The findings suggest that platforms cannot tackle the problem of conspiracy theory and disinformation one by one, country by country, since disinformation moves across platforms and countries. It also points to the confluence of interests and groups in spreading disinformation, and its ability to undermine the credibility of trusted influencers. The findings reveal a key role of satire out of context in spreading disinformation as well as the role of the mainstream media. All of these suggest the need for a more concerted effort by platforms, working with the media, to address the spread of disinformation.

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Introduction

Since beginning her school strikes in August 2018 in Stockholm, Swedish teenager Greta Thunberg has become the international poster child of climate-change activism. It is reported that 7.6 million individuals participated in last September's global climate strikes as Thunberg delivered a scathing speech to world leaders at the United Nations General Assembly, criticizing their inaction related to climate change. As she has increasingly become a media focal point and spokesperson for the global climate-change movement, disinformation narratives have appeared in news media and social media platforms, aiming either to discredit Thunberg or to link her activities to spurious interests. These narratives are part of a wider discourse that aims to question climate change, further skepticism over it, and validate alternative views on the subject.¹

As has been documented by climate-communication researchers, these conspiracy-oriented narratives have a significant impact on the ability of the international community to engage in meaningful debate and action around climate change.² While public opinion polls around the world show increasing understanding among the general public of the threat posed by global warming, climate skepticism continues to fuel the arguments made by political forces interested in stymying domestic and international efforts to limit carbon emissions. This link between the

prevalence and circulation of conspiracy theories and policy inaction extends beyond climate change. The tobacco industry also relied heavily on narratives delegitimizing scientific research on the effects of smoking cigarettes in order to push back on anti-smoking public-health efforts.³ Conspiracy theories around supposed "death panels" linked to healthcare reform in 2009 played a significant role in delaying and impeding congressional debate on healthcare legislation.⁴ Skepticism around global epidemics,⁵ vaccinations,⁶ and HIV treatments⁷ continue to influence public discourse around these issues and thwart the effectiveness of treatments and policy responses.

While conspiratorial rhetoric has always played a role in modern politics, the internet has enabled new formats and avenues for the circulation of mis/disinformation. Now more than ever, a conspiratorial narrative can take on a life of its own, as strategic domestic and foreign actors, conspiracy-minded bloggers, social-media influencers, unwitting information consumers, and trolls and botnets circulate, build upon, and amplify these narratives. These stories are also no longer confined to any particular geography or jurisdiction, with actors from across the globe

1 In this paper, all links to mis/disinformative instances have been removed so as not to repeat such content or promote these narratives via links and references.

2 Rachel M. Krause, Hongtao Yi, and Richard C. Feiock, "Applying policy termination theory to the abandonment of climate protection initiatives by US local governments," *Policy Studies Journal* 44:2, 2016.

3 Clark C. Abt, [The Anti-smoking Industry](#), Philip Morris internal report, September, 1983.

4 Joseph E. Uscinski and Joseph M. Parent, *American Conspiracy Theories*, Oxford University Press, 2014.

5 Pascal Wagner-Egger et al, "Lay perceptions of collectives at the outbreak of the H1N1 epidemic: heroes, villains and victim," *Public Understanding of Science* 20:4, 2011.

6 Sara Pluviano, Caroline Watt, and Sergio Della Sala, "Misinformation lingers in memory: failure of three pro-vaccination strategies," *PLoS One* 12:7, 2017.

7 Nicoli Nattrass, "Understanding the origins and prevalence of AIDS conspiracy beliefs in the United States and South Africa," *Sociology of health & illness* 35:1, 2013.

able to contribute to and influence local and global public debate on pressing political and policy issues. As described in an upcoming report by the Digital Innovation and Democracy Initiative at the German Marshall Fund,⁸ these disinformation campaigns are able to capitalize on algorithmic recommendations in search and social media, to target susceptible users and personalize narratives, and to utilize photo and video manipulation practices to create viral memes, shallowfakes, and deepfakes to further legitimize conspiracy theories.

There has been a great deal of research and investigative reporting looking into how misinformation (unintentional inaccurate content) and disinformation (intentionally false content) is produced, encouraged, and circulated online. This paper takes a wider and more holistic look into how and in what ways narratives around Greta Thunberg have been created, circulated, and amplified online on a variety of platforms. In doing so, it examines patterns in the flow of mis/disinformation and understand the differences between the way various narratives circulate online, the kinds of narratives perpetuated, the actors involved in this circulation, the platforms used throughout the narrative's life-cycle, and the techniques that legitimize and perpetuate conspiratorial claims.

The paper examines mis/disinformative narratives related to Thunberg in the period after she began her weekly climate school strikes in the summer of 2018 and continuing through October 2019, just after the global climate strikes and her speech at the United Nations General Assembly.⁹ It identifies five key narratives and tracks them across four different digital spaces: open web news, Facebook, Twitter, and Reddit. In doing so, it maps the spread of these narratives across time and the actors involved in this

spread during Thunberg's rise to global prominence. The five narratives, described in more detail below, investigate claims related to Thunberg's mental ability, connections to antifa, affiliation with George Soros, her role as a puppet of larger interests, and her role in a "climate industrial complex."

Key Findings

Tracking specific narratives in the digital-media environment is a challenging task due to the proliferation of platforms on which content appears and circulates, the multiplicity of sources and authors, the global nature of online communication, and the speed and fluidity of message diffusion. Using cross-platform methods of data collection and synthesis makes it possible to develop high-level insights into how mis/disinformative narratives flow across platforms. While future case studies will allow us to discern whether some patterns hold across different disinformation dynamics, it is possible propose here the following key lessons about the flow of disinformation from this case specifically.

The scope of mis/disinformative narratives around Greta Thunberg is not restricted to a specific language or country. Despite the focus on English-language and U.S.-based news sources, contributions from other countries and in languages other than English appeared in the dataset generated for this study. These contributions were more common for those narratives whose search terms were proper nouns used in different languages (such as 'antifa' or 'Soros'). Particularly prominent was social-media content in German associated with the far-right Alternative für Deutschland (AfD) party in Germany.

Associating a target with entities assumed to be "known evils"—organizations and individuals known to be polarizing and controversial—is a common technique to facilitate the spread of mis/disinformation. Narratives associate Thunberg in one way or the other with Islamic State, Nazis, antifa, and George Soros.

Narratives gain traction when they get picked up by more mainstream figures and sources. In

8 Karen Kornbluh and Ellen P. Goodman, with contributions by Eli Weiner, [Safeguarding Democracy Against Disinformation](#), German Marshall Fund of the United States, March 2020.

9 United Nations, "[Greta Thunberg tells world leaders 'you are failing us', as nations announce fresh climate action](#)," UN News, September 24, 2019.

this regard, the volume of content questioning Thunberg's mental ability (referred to here as the "mentally ill" narrative) and content suggesting she is being controlled by other ideological actors (the "puppet" narrative) seems to be in large part attributed to the fact that these were featured by Fox News contributors and the network itself.

A mix of irony and images seems to help fuel the spread of mis/disinformation. Some threads in these narratives appear to have started when manipulated images were used to make a humorous or satirical point. When the images are taken out of their original parodic context, they become evidence to substantiate mis/disinformation. For instance, the highly shared photoshopped image of Thunberg and George Soros (originally a photo of Thunberg and Al Gore) seems to have followed this process.

Narratives achieve different levels of traction across different platforms. Some narratives about Thunberg seem to find more fertile ground on some platforms than on others. For instance, while the attack

on her mental fitness is more prominent on the open web and Reddit, the Soros narrative is more circulated across Facebook and Twitter. It is not possible at this point to identify the specific causes of this phenomenon

Thunberg's rise to fame correlates with an increase in the volume of mis/disinformation posted across platforms. Once she gained global prominence between September and October 2019 (when she sailed to the United States, the global climate strikes took place, and she delivered her speech at the United Nations General Assembly) the volume of all identified narratives peaked in discussions across platforms. Additionally, narratives that had emerged prior to September 2019 and then gone quiet, such as the antifa narrative, resurfaced at that time. Though further work is needed to evaluate the intensity of each narrative in relation to news coverage of Thunberg, Figure 1 illustrates the evolution over time of content about her and about each of the narratives examined.

Figure 1. Media Cloud: Comparative Volume Over Time by Narrative

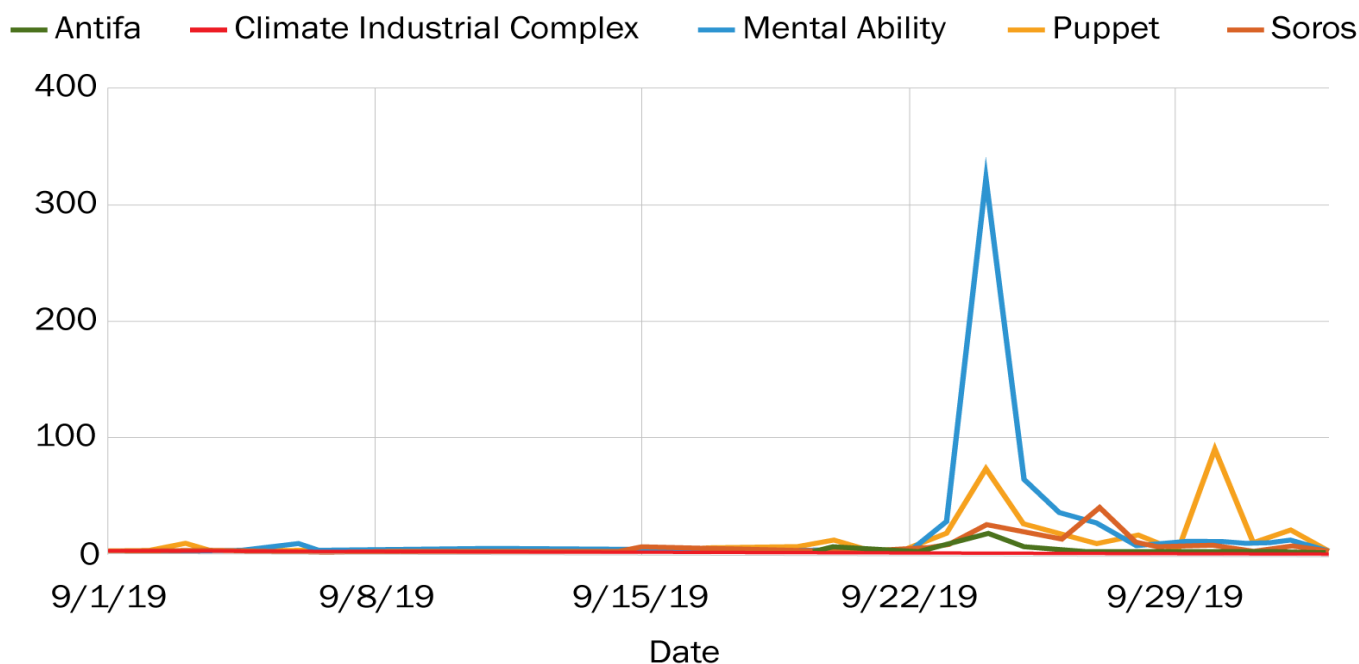


Table 1. Methods and Metrics*

Platform	Data Source	Data Description	Limitations	Key Metrics
News media	Media Cloud	News articles on the open web published by U.S.-based media	Media Cloud primarily collects stories via publicly available RSS feeds. If none are provided, its system can sometimes use other techniques to find stories (following links or sitemaps).	Story count Inlinks: the number of other stories that link back to the story in question Facebook shares: the number of times the story was shared on Facebook at the time Media Cloud ingested the story
Facebook	CrowdTangle	Posts to publicly viewable pages and groups*	No posts from individual user feeds unless they were cross-posted to a page or group	Post count Interactions: the total number of likes, shares, and reactions to the post
Twitter	Crimson Hexagon	Tweets from public accounts (77 percent of users per Pew)**	Posts available for viewing were sampled	Tweet count Potential impressions: the total number of the sender's followers plus the follower counts of all users who retweeted the post
Reddit	Pushshift	Submissions and comments	No material limitations for this project	Submission count: the number of posts starting new discussion threads Comment count: the number of posts responding to existing discussion threads

*Lauren Fraser, "What data is CrowdTangle tracking?" CrowdTangle, last accessed January 31, 2020.

** Pew Research Center, "A large majority of tweets come from a small minority of tweeters," April 23, 2019.

Table 2. Narratives about Greta Thunberg

Narrative	Description	Query Keywords
Mental Ability	Since Thunberg has publicly discussed that she has been diagnosed with Asperger's syndrome, a milder autism-spectrum disorder, her mental abilities and character traits have been questioned by some media sources and social-media users.	"mentally ill" OR "stupid" OR "aspy" OR "retarded" OR "is mental" OR "Asperger's kid" OR "alcohol syndrome"
Antifa	The publication on Twitter of a picture of Thunberg wearing an Antifascist All Stars t-shirt led to the conclusion that she supported the more violent antifa movement, which targets right-wing groups. Thunberg has since removed that picture and stated that she does not support fascism but also does not condone violence.	"antifa"
Soros	George Soros has become a common target of attacks from conservative and alt-right corners of the internet. Associating Thunberg with Soros and his Open Society Foundations (OSF) has been used to discredit her and her discourse against climate change. Two elements seem to have driven this narrative: a manipulated picture in which Thunberg appears next to Soros, and the debunked relationship between Thunberg and the OSF-supported One Campaign.	"soros" OR "osf"
Puppet	A somewhat common thread of attacks on Thunberg claims she is being used by others (her parents, a Swedish foundation and other connected businesses, etc.) as a puppet, perhaps in a public-relations stunt for these interests.	"prop" OR "puppet" OR "paid activist" OR "pr" OR "stunt"
Climate Industrial Complex	In a somewhat more elaborate argument about obscure interests behind her, Thunberg is linked to a wider network of corporate interests from the energy and non-profit sectors, often called the "climate industrial complex." This is a low-volume narrative.	"climate industrial complex"

Methodology

Each of the four digital spaces were studied with different tools. News coverage was accessed and analyzed using Media Cloud's database of U.S.-based media and its Topic Mapper analysis tool. Crowd-Tangle, a Facebook-owned content analysis tool that retrieves posts from publicly viewable pages and groups, was used to access Facebook data. Crimson Hexagon, a private social-media-analysis platform was used to access Twitter. Pushshift, an open-source platform that collects all Reddit posts and comments, was used obtain data from that source. See Table 1 for detail on each data source and key associated metrics.

The data was pulled for the timeframe of July 1, 2018 through October 3, 2019. The query term used to generate the overall dataset was simply "Greta Thunberg." For news media all content that matched her full name was pulled, but because it is likely that references to her might not include her last name on social platforms, "Greta" alone was also searched on Facebook, Twitter, and Reddit. To account for noise (that is, posts matching "Greta" that were unrelated to Thunberg), certain terms that surfaced unrelated content were

removed, including "gerwig," "van susteren," and "van fleet." This left a broad corpus of data of coverage and discussion on Greta Thunberg.

Having collected this corpus of data, the search was oriented toward mis/disinformation by using three U.S.-based fact-checking websites—Snopes, the International Fact Checking Network, and FactCheck.org. News stories that discussed Thunberg-related mis/disinformation, found using Media Cloud and manual searches, was also evaluated. Mis/disinformative narratives were then sought through manual searches on Twitter and CrowdTangle. All three parts of this process helped identify relevant keywords and themes. We then repeatedly tested the query terms to refine the search results. (Attempts to debunk and discuss these narratives also contribute to their overall volume. Given the volume of data examined in this study it has not been possible to distinguish between content that supports a narrative and content that counters it on a large scale. Qualitative review allows drawing some conclusions about the most shared and circulated content.)

This process led to the identification of narratives of varied scope and reach (ranging from personal

Table 3. Volume of Coverage of Greta Thunberg





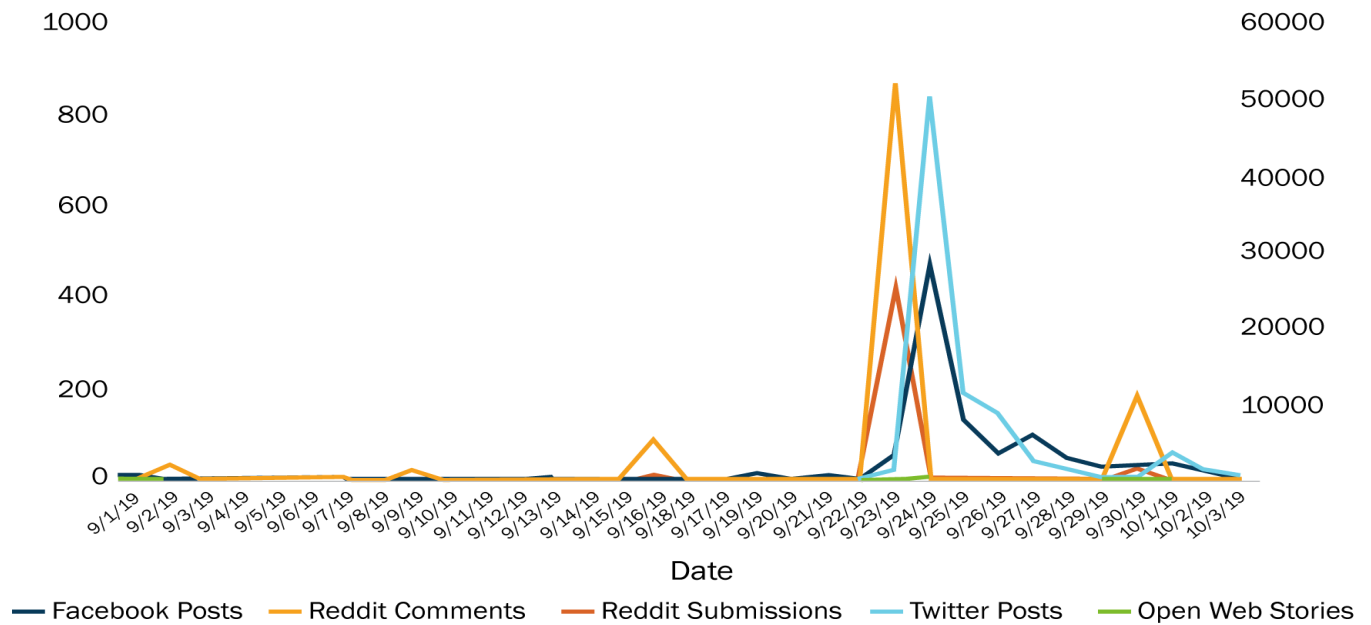
Narrative	Media			
				
Mental Ability	686 stories	1,146 posts	84,379 Tweets	545 submissions
Antifa	74 stories	1,346 posts	97,423 Tweets	115 submissions
Soros	179 stories	3,220 posts	146,158 Tweets	114 submissions
Puppet	586 stories	3,409 posts	69,908 Tweets	212 submissions
Climate Industrial Complex	9 stories	14 posts	435 Tweets	1 submission

Figure 2. Mental Ability Narrative

Twitter data is mapped on the right axis.

**Figure 3. Antifa Narrative**

Twitter data is mapped on the right axis.

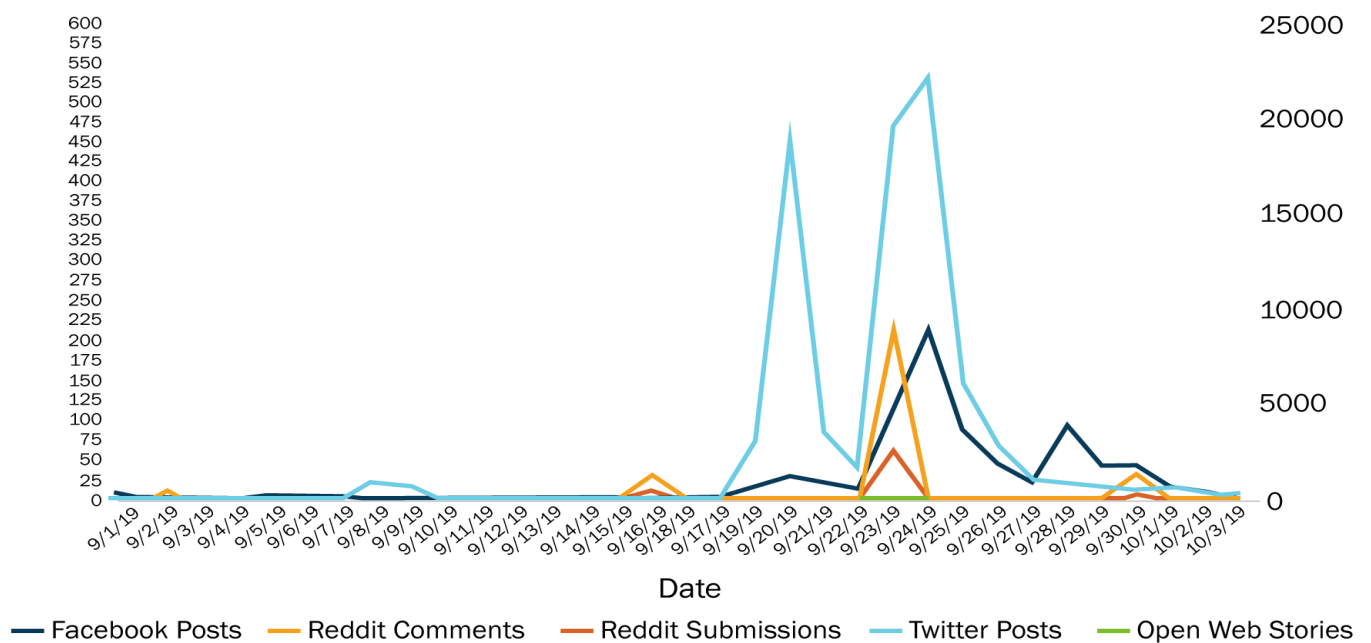
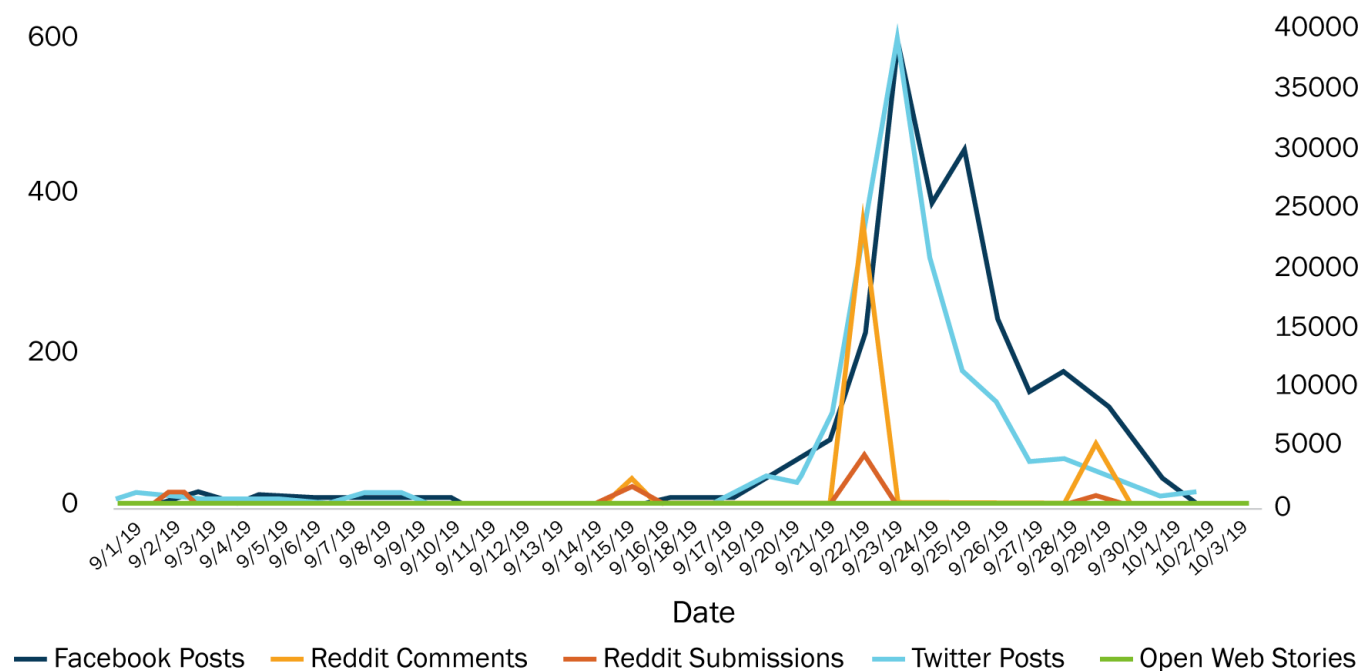


Figure 4. Soros-Related Narrative

Twitter data is mapped on the right axis.

**Figure 5. Puppet Narrative**

Twitter data is mapped on the right axis.

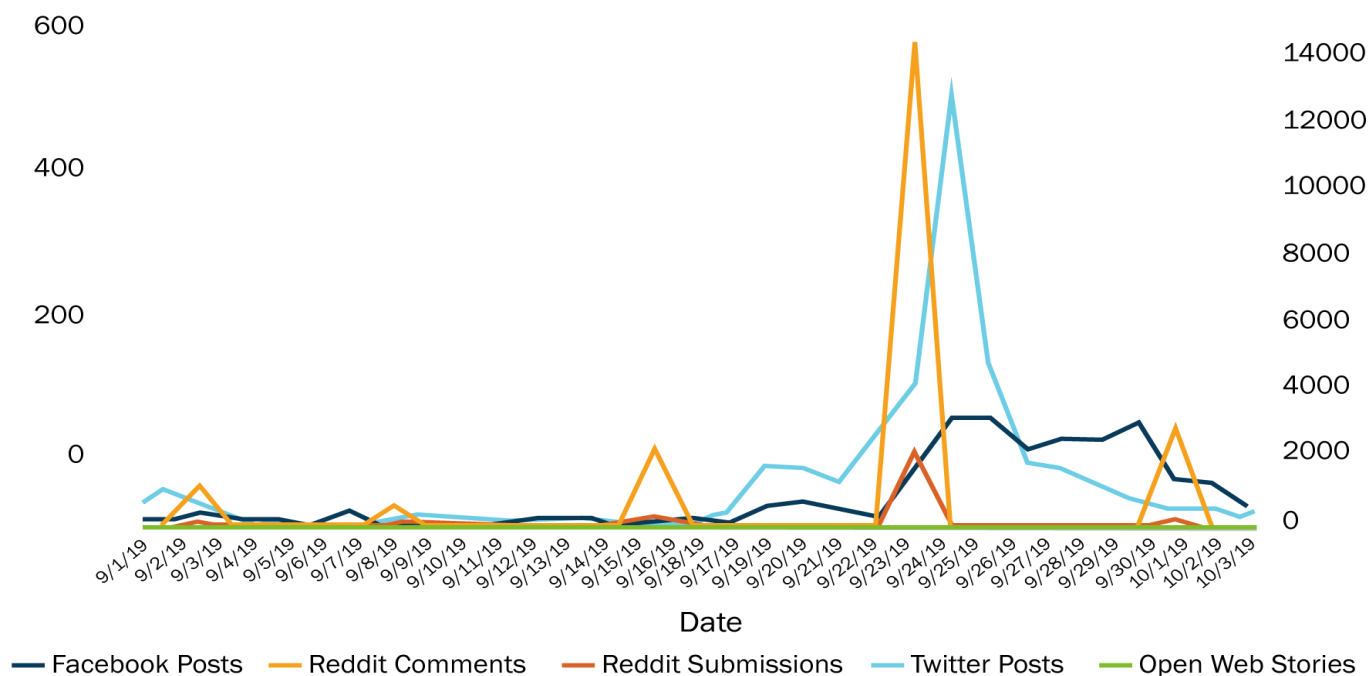
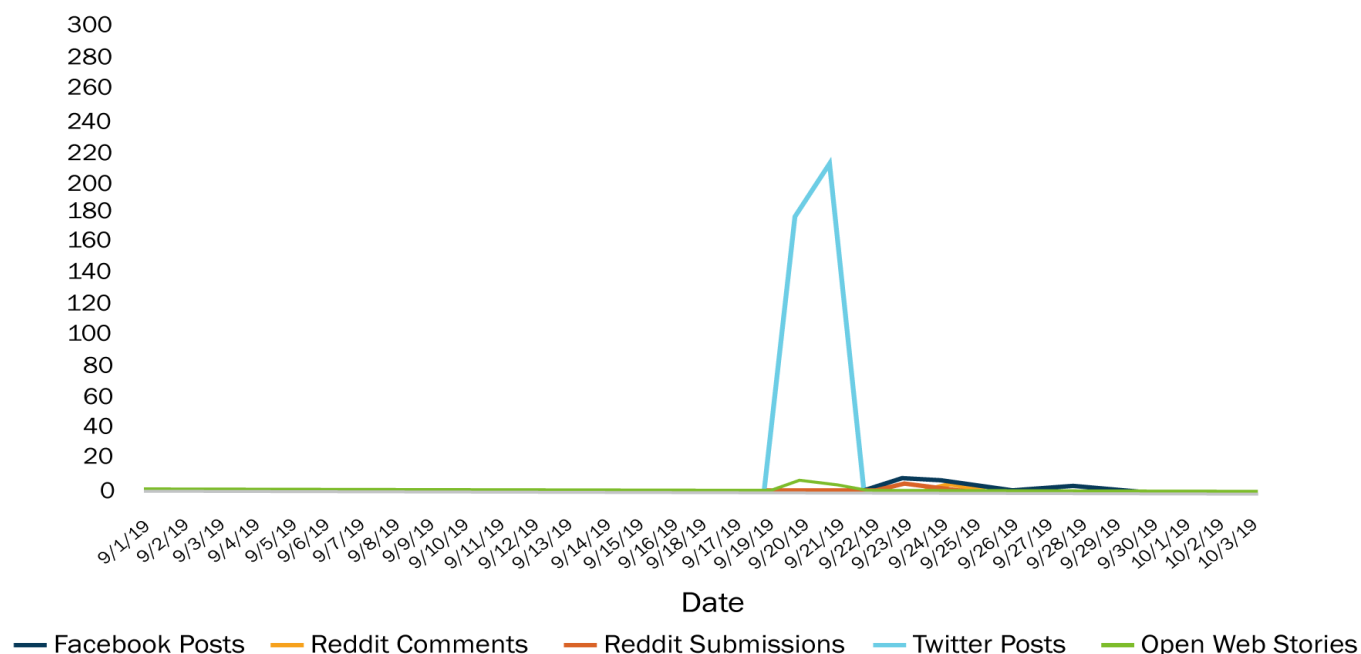


Figure 6. Climate Industrial Complex Narrative



attacks on Thunberg's appearance, mental ability, and actions as an activist to questions about her authenticity, and from attempts to associate her with "evil" people and organizations to arguments about her being an instrument of ulterior interests pursued by her parents, businesses, and various non-profits). Five of these narratives were selected for detailed study to provide an in-depth look at the different ways in which mis/disinformation appears and flows. (See Table 2.)

Disinformation Volume and Attention Over Time

The volume of a specific mis/disinformative narrative helps determine its relevance within the wider public discourse around a given topic. By identifying volume over time, it is possible to establish connections to other events that might trigger new narratives; this also helps identify diffusion patterns of specific narratives. Table 3 presents details about the volume of coverage of Greta Thunberg.

Certain narratives are mentioned more frequently than others, and certain ones are more prominent on some platforms than others. These changes in volume across platforms demonstrate the prominence of some narratives relative to others. For instance, prominence in open web discourse does not always correlate with coverage on social media; the antifa narrative matches 74 open web stories, whereas the mental ability narrative matches 686 open web stories even though both narratives are comparably mentioned on social platforms.

Cross-Platform Frequency Over Time by Narrative

It is possible to further understand the prominence of various narratives by examining their frequency over time across platforms. Figures 2-5 present narrative frequency during the studied period (September 1– October 3, 2019) and help highlight moments at which narrative discourse was most prominent and

the prevalence of narratives on any given platform. Across narratives, the scale of discourse on Facebook and Twitter is generally higher than that on the open web or Reddit. Depending on the narrative, different platforms peak at different points, suggesting that narratives travel from one platform to another, or that discourse on one platform can influence the discourse on another platform over time. These figures also show the moments at which mis/disinformation about Greta Thunberg was at a peak for any of the studied narratives and in each of the studied platforms.

Narrative Origins and Influencers

Beyond offering a quantification of the coverage of the different mis/disinformation narratives about Greta Thunberg and of their evolution over time across platforms, this paper takes a deeper look into them and provides a more nuanced analysis of their different dimensions and of the actors taking part in their diffusion.¹⁰

The “Mentally Ill” Narrative

Public awareness that Greta Thunberg has been diagnosed with Asperger’s syndrome seems to have spurred discussion discrediting her by questioning her mental ability. While discussions of her condition are often part of more neutral reporting on Thunberg, derogatory terms (which comprise the query for this narrative) have been used to refer to her online. This line of attack goes as far as trying to prove (often through the use of facial images) that she suffers from fetal alcohol syndrome. A significant portion of the discussion on this narrative is a result of a September 24, 2019 incident in which Michael Knowles of The Daily Wire—a prominent “instrumental media”¹¹ or biased site that takes on the appearance of a news site

without applying journalistic standards or attempting to report accurately—called Thunberg “mentally ill” in an interview segment on Fox News (an incident for which the channel later apologized).

Origins



The first instance found of this narrative was a comment on Reddit, posted on December 5, 2018, questioning the legality of someone pulling Thunberg out of school. This comment posted by user WholesomeAbuser (an account now “suspended”) also called Thunberg an “oddball,” bringing up the idea of fetal alcohol syndrome in relation to her and also criticizing her argumentative approach.

Coverage on the open web began afterwards, when a text full of insults was published by The Daily Stormer—a neo-Nazi website modeled after internet forums including 4chan and 8chan—on January 24, 2019. The first tweets were posted on February 8, 2019, when the handle @PartisanDE tweeted “#GretaThunberg, the (not quite) volunteer environmental activist? Pappa Svante is actor and screenwriter! #facts about a stupid little puppet #climatestrike...” At least seven accounts retweeted the tweet that day. Twitter has since suspended all seven and @PartisanDE. Therefore, it is impossible to view their profiles or ascertain further information about these accounts. (This tweet matched the “mental ability” and “puppet narratives,” but it is the first that matched the “mental ability” narrative.)

Discussion on Facebook was last to begin; the first discoverable post was from the page “The Rebel,” on May 9, 2019 and shared a video of Canadian media personality Ezra Levant covering “the climate cult’s embrace of mentally ill teenager Greta Thunberg.” Levant’s coverage seems to be an early driver of this narrative on Facebook. The first 16 posts all link back to Levant’s YouTube videos. A majority of the pages

10 In order to avoid amplifying access to mis/disinformation, we have removed many links from the remainder of this document. Please contact us for further details.

11 Karen Kornbluh and Ellen P. Goodman, with contributions by Eli Weiner, [Safeguarding Democracy Against Disinformation](#), German Marshall Fund of the United States, March 2020.

and groups that link back to Levant are pro-Trump or Canadian nationalist.

Influencers



The most influential stories of this narrative on the open web were coverage of the Fox News incident mentioned above, featuring Knowles's attack on Thunberg. On Twitter, the bulk of the tweets matching this narrative (approximately 60 percent) were reactions tweeted on the day of Knowles' Fox News segment. Reporting on this incident from The Daily Beast and BuzzFeed comprised the top URLs on Twitter.

However, on Facebook, Levant's video—"PROOF: Greta Thunberg is 'mentally ill,' being 'weaponized'"—received the second-greatest number of shares of related URLs in this narrative, following a Washington Post article about the Fox News segment in which Knowles called Thunberg "mentally ill."¹²

The Antifa Narrative

The bulk of conversation in this narrative began when Thunberg tweeted an image of herself wearing a t-shirt that read "Antifascist All-Star" on July 26, 2019. The t-shirt and image were associated with the release of a new song featuring Thunberg by United Kingdom-based band The 1975. She faced a backlash after posting the photo, which she then removed. In subsequent tweets clarifying the situation, Thunberg explained that she had learned the t-shirt could be linked by some to a potentially violent movement and, since she did not support any kind of violence, she was removing the image to avoid confusion.

Origins

				
First Tweet: December 16, 2018	First Submission: March 16, 2019	First Comment: March 30, 2019	First Post: July 27, 2019	First Story: July 31, 2019

Although the majority of content in this narrative was triggered by the tweet of Thunberg's t-shirt, discussion connecting her and antifa began on Twitter and Reddit before the t-shirt picture emerged. The first instance of this narrative was a tweet on December 16, 2018, when the handle [@holmenkollin](#), with the name "Berkeley Institute of Truth," tweeted in German connecting Greta and antifa. The account has 344 followers.

This was followed by Reddit posts in March 2019: the first submission to match this narrative was posted to the subreddit [r/DeFranco](#) (a subreddit for fans of the Philip DeFranco Show with over 70,000 members) on March 16, 2019 following the Christchurch shooting in New Zealand. The user who posted (Charkk) mentions Thunberg as an example of one of the many conspiracy theories circulating around news of the mass shooting. The first Reddit comment was in a German-language submission posted on March 30, 2019 in the [AfD](#) subreddit. Research by the Institute of Strategic Dialogue in partnership with Greenpeace's Unearthed claims that the far-right AfD has a strategy of attacking Thunberg as part of a climate-change denialism movement.¹³

Facebook posts matching this narrative almost exclusively originated in Germany until the summer of 2019, but detailed analysis of the German-language content associated with this narrative exceeds the scope of this project. The first U.S.-based discoverable instance of this narrative on Facebook is dated July 27, 2019, one day after Thunberg's tweet with the antifa t-shirt photo. The post was from the page "Invisible Oranges," linking to an article from [brooklynvegan.com](#) titled, "Trump threatening to declare Antifa a Terror Organization." The article included reporting on Thunberg's t-shirt and embedded her tweets. Similarly, the narrative did not appear on the open web until after Thunberg's tweet with the t-shirt photo, when RT France published the first open web mention of antifa and Thunberg on July 31, 2019. The story

12 Allyson Chiu, "A Fox News guest called Greta Thunberg 'mentally ill.' The network apologized for the 'disgraceful' comment," Washington Post, September 24, 2019.

13 Damian Kahya, "German far right targets Greta Thunberg in anti-climate push," Unearthed, May 14, 2019.

made false claims that the boat Thunberg used to cross the Atlantic was commercially sponsored.

Influencers

Fringe media sources and clearly mis/disinformative stories dominated top news stories for this narrative, including Voice of Europe, Big League Politics, and the Daily Wire. The Gateway Pundit, a right-wing website that often publishes hoaxes and conspiracy theories, was also influential, since the most shared URL in tweets from this narrative was its article, “What Liberal Media Did Not Tell You: Screaming Green Teen Greta Thunberg Linked to Antifa Terrorists - Recorded Song for Antifa-Supporting Org.” Although this article was shared 2,865 times, that only represents 3 percent of the tweets from this narrative.

It is also clear that AfD was highly influential. On Facebook, 42 percent of posts in this narrative referenced the party.

Overall, there was a diverse set of influencers driving this narrative on Twitter as opposed to a singular entity.

On social platforms, many posts showing adults purporting to be Thunberg’s parents wearing antifa t-shirts appeared shortly after her testimony to the U.S. Congress and speech at the United Nations General Assembly. It appears that one of the original posts in this vein was from a Belgium-based woman, Monique D’hooghe, who seems to have posted the image in an ironic sense (based on review of comments on the post and review of D’hooghe’s other Facebook and Twitter posts), only to have it picked up by and reposted by more conservative pages looking to spread the narrative of antifa affiliation. The ways in which this image has been manipulated are unclear. It was not possible to ascertain how D’hooghe obtained the image, as she has not shared further information about its source.

The Soros Narrative

George Soros is a frequent target of conspiracy theories, and a supposed connection between him and Thunberg was seen across all platforms examined. Overall, the bulk of this narrative is a presumed link

between them via the Soros-backed One Campaign, which “fights extreme poverty and disease,” according to The Associated Press. A specific facet of this narrative focuses on a claim that German climate activist Lisa Marie Neubauer, through her work with the One Campaign and her role as Thunberg’s “handler,” links Thunberg to Soros. However, Neubauer is not Thunberg’s handler.¹⁴ Additional purported links between Soros and Thunberg, unrelated to the One Campaign, also emerge in this narrative.

Origins

				
First Tweet: October 10, 2018	First Story: July 31, 2019	First Post: March 4, 2019	First Comment: March 5, 2019	First Submission: April 25, 2019

The first instance of this narrative was a tweet from a Swedish account, @lmself81Ted, with the name Ted Karlsson. On October 10, 2018, Karlsson replied to a Swedish account, @klimatbevakaren, which self-identified as sharing climate news, by asking in Swedish “Why not listen to our physicists or other researchers in the field? Therepublikan, Greta, Soros, etc., are they our new source of knowledge?” Though this tweet does not directly state that Thunberg is a Soros operative, it is the first time that the two were rhetorically linked on Twitter. Karlsson has less than 100 followers and, based on their Twitter profile, they are a self-described “liker” of conspiracy theories. It is unlikely that they were the primary source of this thread of disinformation on Twitter. The narrative then appeared in news on the open web on December 17, 2018 in comments on an article about climate-change activists and school strikes published on the website Free Republic.

Similar to the antifa narrative, this narrative appeared first on Facebook in German pages and groups, particularly in discourse from and about AfD. The first discoverable Facebook post of this narrative was from a German page called “AfD Freising Watch,” which states it observes AfD actions in the area of

14 Arijeta Lajka, “Climate activist Greta Thunberg does not have ‘handler,’” Associated Press, September 30, 2019.

Freising. On March 4, 2019, the page posted an analysis of another German post, attributed to the page “AfD Bayern,” that stated Soros is behind Thunberg. AfD Freising Watch points out anti-Semitic elements in the original post.

Reddit was the last platform to show the narrative. The first Reddit comment linking Soros and Thunberg was posted on March 5, 2019 and makes note of the general phenomenon of a Soros-Thunberg conspiracy theory. The comment reads: “Meanwhile my countries alt-right is smearing this Greta kid, trying to make it out to be a Soros funded conspiracy. Not some random people, actual politicians are spreading this crap, having a minor at the center of a multi-billion-dollar conspiracy. Some people stop at nothing I guess.” The first submission was posted to the pro-free speech subreddit r/POLITIC (39,000 members) on April 25, 2019 by user ChrisforLiberty. The submission claims, “George Soros is backing ‘climate activist’ Greta Thunberg” and links to an April 25, 2019 article (644 Facebook interactions based on CrowdTangle data) from the fringe right-wing media website The Liberty Beacon.

The first few mentions of this narrative on Reddit were about the existence of this narrative, though they did not necessarily perpetuate it. The first instance of a comment that perpetuated the narrative on Reddit was on April 25, 2019 and states in Swedish: “[Rebecca Weidmo] Uvell links on twitter about anti-Semitic conspiracy theories about Soros behind Greta. If that’s what you have, then you have nothing. The only tragic thing here is how desperate you are.” The thread on which the comment was made (which linked to an article questioning Thunberg’s legitimacy on the Swedish newspaper Aftonbladet’s website) has since been deleted, and the comment itself is no longer viewable.

Influencers

One of the top five news stories as measured by media inlinks comes from left-wing environmental activist Cory Morningstar’s website, which has been the most active in putting forth the “climate industrial complex”

narrative as well (see further below). The websites The Gateway Pundit and Natural News, which have a history of spreading mis/disinformation, also appear in top media sources as measured by media inlinks and Facebook shares respectively.

The most shared URL on Facebook was from secret-news.fr, a French parody news site. The article—“Greta Thunberg is the granddaughter of left-wing billionaire Georges Soros”—claims that not only is Thunberg Soros’s granddaughter, but that her parents are siblings since they are both his children. The article features an image that was originally a photo of Thunberg and Al Gore, with Soros’ head photoshopped over Gore’s. Although secretnews.fr is a parody website, Le Monde and other news organizations have reported that many readers may believe the information posted on the site to be true.¹⁵

The URL most linked to on Twitter was an article from The Gateway Pundit: “Surprise! The Official Escort for 16-Year-Old Global Warming ‘Expert’ Greta Thunberg Is a Leftist Hack Funded by George Soros Org.” The article also points to the debunked connection between Thunberg and her alleged “handler” Luisa Neubauer. The article was linked to over 18,000 times, nearly triple the amount of the second-most shared URL.

Additionally, users affiliated with the Q-Anon conspiracy¹⁶ were influential sharers of content relating to this narrative on Facebook and Twitter.

The Puppet Narrative

The “puppet” narrative questions Thunberg’s legitimacy as a climate activist or as an individual choosing to strike without outside influences forcing her to do so. Frames in this vein suggest that she is interchangeably a prop or puppet, a paid activist, or that her activism is a public-relations stunt. These frames

15 Le Monde, “La fausse histoire des « 9 000 bébés échangés par une infirmière » dans des maternités françaises,” June 12, 2017.

16 Will Sommer, “What Is QAnon? The Craziest Theory of the Trump Era, Explained,” The Daily Beast, July 6, 2018 (updated March 20, 2019).

informed the basis of the query used to identify posts related to this narrative.

Origins



The first discoverable instance of this narrative comes from Swedish Twitter: @RealLarsLarsson, tweeted on August 20, 2018 in Swedish that it “sounds like someone else is pulling the strings... maybe a mother... the kid is used as a pr stunt.” This tweet received 77 retweets. Similarly, two days later the first discoverable Facebook post appeared on the Swedish page “STOPPA MAKTMISBRUKET,” (Stop Power Abuse.) The post claims that Thunberg’s mother does the “PR work of the 15-year-old daughter.”

Mentions on the open web and Reddit did not occur until the end of the year. The first mention on the open web occurred on December 11, 2018, when Rebecca Weidmo Uvell, who runs a “public affairs consulting company” published a post on her website titled “The PR Spin Behind Greta Thunberg.” The first Reddit comment was posted to r/australia (379,000 members) on December 30, 2018 in response to a submission that linked to a political cartoon and said “children should stay at school and learn.” The comment itself says that Thunberg is the “spiritual ‘leader’” of the strikes and references stunts in the context of the strikes themselves, saying they are “a classic ‘think of the children’ stunt.” The first Reddit submission was posted on January 30, 2019 in the subreddit r/alt_fakten (74 members). The post linked to a January 29 article (1,123 Facebook interactions based on CrowdTangle data) on the website meedia.de. The article—“PR puppet or climate figurehead - is the Greta Thunberg story too good to be true?”—questions Thunberg’s story and background.

Influencers

One high-profile actor spreading this narrative is Steve Milloy, a Fox News contributor and a self-identified

“climate-science contrarian.” He adopted the phrase “Greta the Climate Puppet” to refer to Thunberg and used it in a number of tweets. Approximately 7 percent of tweets in this narrative contain that phrase, and the majority of these are retweets of Milloy’s tweets.

On Twitter, the most frequently cited post was from @BasedPoland, who identifies as a Polish nationalist, stating that they grew up in Sweden and that Thunberg’s mother did a PR campaign. @BasedPoland cited a tweet from the Twitter account @AmyMek, a prolific account that spreads right-wing, anti-Muslim ideology and that was investigated and profiled by the Huffington Post and found to be that of a real person, Amy Mekelburg.¹⁷

Open web sources peddling this narrative appeared to be disparate and with a low amount of inlinks and shares overall. The most shared URL on Facebook was a since-deleted YouTube video, “Top 10 Reasons Why Greta Thunberg is a Fraud.” The video was shared by Q-Anon, pro-Trump, and climate-denial groups worldwide.

The Climate Industrial Complex Narrative

Though the “climate industrial complex” narrative produced the fewest results, it is nevertheless interesting since, rather than resorting to ad hominem attacks or attempting to discredit by simple juxtaposition or association, it presents a complex discourse about the systems that purportedly underlie Thunberg’s public image.

Origins



The first instance of this narrative was a tweet from the account @FriendsOScience on March 4, 2019, sharing self-described “independent investigative journalist” Cory Morningstar’s piece, “The Manufac-

17 Luke O’Brien, “Trump’s Loudest Anti-Muslim Twitter Troll Is A Shady Vegan Married To An (Ousted) WWE Exec,” Huffington Post, May 31, 2018 (updated June 1, 2018).

turing of Greta Thunberg – for Consent: The Political Economy of the Non-Profit Industrial Complex,” hosted on wrongkindofgreen.org. @FriendsOScience is the handle for the group Friends of Science Society based in Calgary, Canada, which describes itself as a group of scientists who conclude that the sun is the main driver of climate change, not humans or carbon dioxide.

The first Facebook post and open web story appeared in April. The first discoverable Facebook post was on April 25, 2019 by the page [Climate Change is Natural](#), a page with nearly 30,000 likes that asserts that climate change is a natural process and not man-made. The initial post references the supposed link between Luisa Neubauer, the One Campaign, and Thunberg, and labels them as agents of the “climate industrial complex.” The first open web story was published on April 27, 2019 on the Friends of Science website. Titled “Greta, Inc.,” it argued that Thunberg was pushing forward “Sweden’s climate industrial complex.”

The first posts on Reddit matching this narrative appeared in September. The first submission, posted September 23, 2019 to the subreddit [r/climateskeptics](#) (over 27,000 members), links to a September 23 PJ Media article (4,993 Facebook interactions based on [CrowdTangle](#) data) titled “Climate-Industrial Complex: Financiers Aim to Cash in on Greta Thunberg.” This article goes on to mention Thunberg’s previous affiliation with Ingmar Rentzhog and his organization,¹⁸ using it as a way to link Thunberg to Al Gore. The article also claims Rentzhog was instrumental in Thunberg’s success as an activist, since he made Thunberg “a viral celebrity” by leveraging We Don’t Have Time’s prominence and the fame Thunberg’s mother had garnered as a singer.

¹⁸ Thunberg was previously a youth advisor for Rentzhog’s organization, We Don’t Have Time. After she learned that the organization was using her name without her knowledge, she ended the affiliation. Thunberg has debunked any current affiliation with Rentzhog or We Don’t Have Time [on her Facebook page](#).

Influencers

The bulk of influential open web stories related to this narrative are linked to the right-leaning media network PJ Media.¹⁹ However, it is worth noting that the reach of these stories has not been significant to date. PJ Media was also the most influential source on Facebook and on Twitter. On September 23, 2019, approximately 170 accounts shared the PJ Media piece referenced above, causing it to account for 46 percent of shared URLs in tweets related to this narrative.

Another influential source on Twitter, with approximately 200 accounts sharing the content, was a blog post from the website [medforth.blog](#), “Climate-Industrial Complex: Financiers Aim to Cash in on Greta Thunberg.” This URL accounted for 45 percent of the shared URLs in tweets on this narrative. The [medforth.blog](#) website has a subheader of “Antisemitism, Antizionism, Jihadism and the Reunited Germany,” and states it is run by Fred Alan Medforth, who appears to be a former computer scientist living in Germany.

Cory Morningstar was also influential as her piece generated some of the first shares on social platforms related to this narrative.

Disinformation Stories of Disingenuity

This paper casts a wide net across the online media ecosystem in order to capture as much data as possible about attacks against Greta Thunberg and attendant mis/disinformation in 2018-2019, making it possible to explore the arguments and strategies that can be used to discredit a public person. It shows the variety of ways in which critics have claimed Thunberg is not authentic, genuine, or sincere—because she is a hoax, as is climate change itself. In the same way that critics claim Thunberg is not really what she purports to be, they say the idea she represents is equally false.

While the focus of this analysis has been textual, and keywords have been used to identify and study the

¹⁹ Media Bias/Fact Check, “[PJ Media](#),” July 9, 2016 (updated January 19, 2019).

different instances of mis/disinformation about Thunberg, it is important to consider the role images play in this process. From the manipulated image of Thunberg and George Soros to the false identification of Thunberg as the companion of an Islamic State fighter, visual elements seem to have played a significant role in the diffusion of these narratives. The frequent YouTube and Instagram content identified via Media Cloud underscores the role of images in the realm of mis/disinformation

The multi-narrative approach used in this paper highlights how the spread and traction of mis/disinformative narratives is complicated across platforms and amplified by mainstream news coverage. As argued in the forthcoming report by the German Marshall Fund's Digital Innovation and Democracy Initiative on combatting disinformation, policymakers and social media platforms' whack-a-mole efforts to remove individual fake news stories and content promoted by foreign actors, fails to consider the contours and contextualities of disinformation. This study suggests that the problem is broader in scope, content is not neatly delineated between domestic and foreign actors, and disinformation moves across a variety of social media platforms as well as through private (and hard to track and research) communication platforms. Additionally, these kinds of conspiracy theory stories disproportionately target minorities and women, or in this case a young woman, increasing the risk and cost for these groups to participate in society.

This study captures a wide variety of actors—including individuals, groups, and large international organizations—that participate in the creation and circulation of mis/disinformation. More sophisticated research approaches and policy analysis is needed in order to better understand the contours and contextualities of disinformation. Mis/disinformation thrives in the complex interplay of these actors, and better understanding that interplay will require more case studies as the one presented in this paper.

The views expressed in GMF publications and commentary are the views of the author(s) alone.

About the Author(s)

This paper is the result of a cooperative research project between the German Marshall Fund's Digital Information and Democracy Initiative and Media Ecosystems Analysis Group (MEAG), the nonprofit arm of the Media Cloud project. Media Cloud is an endeavor of the Center for Civic Media at the Massachusetts Institute of Technology's Media Lab and the Berkman Klein Center for Internet & Society at Harvard University.

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