The Impact of Internet Technology on Astroturfing

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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The Impact of Internet Technology on Astroturfing

The definition of astroturfing is “synthetic grassroots organizing created for manipulative political purposes” (McNutt & Boland, 2007, pp. 167). Astroturfing is a widespread phenomenon on the internet. South Korea’s National Intelligence Service used hundreds of twitter accounts to manipulate the outcome of the 2012 presidential election (Keller et al., 2020, pp. 6-7). Online astroturfing has also been used to promote corporate interests. It was revealed in 2006 that Walmart funded the creation of two astroturfed pro-Walmart blogs (“PR Firm Admits It’s Behind Wal-Mart Blogs,” 2006).

Astroturfing is a phenomenon that predates the popularization of the internet. In 1994, in response to government proposals for regulation of indoor smoking, the R.J. Reynolds Tobacco Company created the Get Government Off Our Back (GGOOB) coalition. GGOOB organized astroturfing campaigns like the “Regulatory Revolt Month,” which drew genuine support from the public and press for the cause of deregulating tobacco (Apollonio & Bero, 2007, pp. 342-343).

Online astroturfing can be viewed as a continuation of the astroturfing phenomenon. However, unlike offline astroturfing, online astroturfing is capable of manufacturing content with less capital and labor. Writing a program to leave ten million reviews on a website is far cheaper than handwriting one thousand letters. Since the cost efficiency and tactics of online astroturfing campaigns differ from their offline counterparts, online astroturfing should be viewed as a distinct phenomenon with different capabilities and objectives.

This paper compared online astroturfing campaigns with their historical counterparts to uncover how the medium of the internet enables disinformation campaigns to pursue differing tactics and instrumental goals. The sociotechnical transitions framework and *The Disinformation Playbook* were used to analyze online astroturfing campaigns.

The sociotechnical transitions framework describes the conflict between incumbent regimes and coalitions of grassroots movements and countervailing industries over sociotechnical change. This paper used the sociotechnical transitions framework and the 2017 repeal of net neutrality to explore how online astroturfing campaigns fight for deregulation.

The Disinformation Playbook provides a framework to understand disinformation tactics. This paper used *The Disinformation Playbook* and tobacco industry disinformation campaigns to analyze how the medium of social media uniquely enables industry to construct convincing narratives.

Net Neutrality and Deregulation

Background: Net Neutrality and the Revolving Door

Net neutrality was a regulatory measure that barred internet service providers from prioritizing or de-prioritizing internet traffic to specific content (Finley, 2020). The broadband industry had a vested interest in repealing net neutrality – without net neutrality regulations, ISPs could monetize internet content by forcing content creators into negotiations over access to their services (Romano, 2018).

Net neutrality was repealed in 2017 by the FCC despite an “overwhelming bipartisan majority” of 83% of people being in support of net neutrality regulation (“Overwhelming Bipartisan Majority Opposes Repealing Net Neutrality,” 2017; Ortutay & Arbel, 2017). A popular piece of legislation was overturned despite clear public support.

The ultimate repeal of net neutrality is contradictory to the idea that US regulatory bodies are democratic institutions. This paper does not hold the belief that regulatory bodies are beholden to public interest. Instead, the arguments in this paper were made under the assumption that US regulatory bodies are thralls of private industry. The vassalization of

regulatory bodies like the FCC can be attributed to regulatory capture practices like the revolving door.

The FCC and the Revolving Door

Much public discourse around net neutrality surrounded the then chairman of the FCC – Ajit Pai. Google Trends shows that from 2017 to 2019, the second most popular related search topic to “Net Neutrality” was the FCC chairman himself (“Google Trends,” 2022). The media coverage of chairman Pai was decidedly negative. Wired magazine described Pai as the “Nemesis of Net Neutrality” (Rice, 2018). Vice published an article titled “Gigantic Asshole Ajit Pai Is Officially Gone” (Gault, 2021). Many of these news articles have accused Ajit Pai of being a broadband industry plant. These claims are merited. The former FCC chairman was employed by Verizon Communications in the early 2000s (“Revolving Door: Ajit Pai Employment Summary,” n.d.). More recently Pai has returned to private industry. He now works at a private-equity firm with investments in the telecommunications industry (Brodkin, 2021). There is a clear conflict of interest between Ajit Pai’s public and private sector allegiances.

However, the media narrative that frames Ajit Pai as the single corrupt demon that fell net neutrality overlooks greater systemic problems. Pai’s transitions between private and public sector employment and his questionable allegiance to the public good isn’t an anomaly. Public officials often have professional affiliations with the private lobbying industry (Blanes i Vidal, Draca, & Fons-Rosen, 2012, pp. 3731). These affiliations then affect their regulatory actions in office. This phenomenon is so pervasive a term has been coined to describe it – the “revolving door.”

The FCC has always been subjected to the influence of the revolving door. Many FCC commissioners are affiliated with private industry (“The Comcast-FCC Revolving Door,” 2014).

For example, the current president of the National Cable Television Association was a former FCC chairman (“Previous FCC Commissioners,” 2021; “Our Members,” n.d.).

The 2017 FCC Comments Scandal

In early 2021, the New York Attorney General Letitia James published a report detailing the broadband industry’s astroturfed efforts to manufacture consent for the overturn of net neutrality. Millions of comments were manufactured by companies funded by the broadband industry’s lobbying firm. These comments were filed to the FCC online. An uncovered email written by a broadband executive (and former FCC chairman) revealed that the purpose of the comments was to allow chairman Pai to “talk about the large number of comments supporting his position” (Bureau of Internet and Technology, 2021, pp. 11).

Sustainability Transitions: A political coalition perspective establishes a framework of sociotechnical transitions. It details how coalitions between grassroots movements and countervailing industries form and mobilize against incumbent regimes to push for sociotechnical change. Hess uses the sociotechnical transitions framework to examine the political conflict around the transition to sustainable energy policy in the United States (Hess, 2014, pp. 278-279). Since social media campaigns are a tool used not only by incumbent industries, but also by coalitions of grassroots and countervailing industry organizations, the framework provided by *Sustainability Transitions: A political coalition perspective* is helpful for analyzing the effect of online astroturfing on regulatory policy.

Coalitions of countervailing industries and grassroot movements also created social media campaigns to submit FCC comments. The Electronic Frontier Foundation (EFF), a non-profit, grassroots organization, developed a web application to simplify the process of submitting personalized comments to the FCC. A similar tool developed by the EFF during the

2014 net neutrality repeal discussions helped crowdsource over 1 million comments (Reitman, 2017).

Fight for the Future (FFTF) is a grassroots digital rights organization that has run many campaigns fighting for just technology policy. In 2014, the FFTF (alongside other activist groups) created the Internet Slowdown campaign, a one-day internet-wide protest for net neutrality ("Campaign Timeline," 2022).

Companies that host internet applications benefit from net neutrality, as they are not forced into negotiations with broadband companies over content delivery speed. These companies represent the countervailing industry. Netflix, Vimeo, and Kickstarter (among many other companies) participated in the Internet Slowdown social media campaign ("Battle For The Net," 2014; Netflix, 2014). The Internet Slowdown campaign featured web applications that connected website users to the offices of their senators through phone ("Battle For The Net," 2014). Besides campaign participation, FFTF has also received monetary support from the countervailing industry. Yelp, DuckDuckGo, and Reddit (among many other corporations) have donated thousands of dollars to the organization ("Supporters," n.d.).

The campaigns employed by the coalition were different from that of the incumbent broadband industry. The coalition's social media campaigns were designed to rally public support for the cause of net neutrality. In comparison, the online astroturfing campaign funded by the broadband industry was markedly less concerned with genuine public engagement. The broadband campaign used internet data and automation to circumvent the need for public mobilization. Fluent, a marketing company hired by the broadband industry, fraudulently used the identities of visitors to their websites to submit comments to the FCC. Another advertising company copied identities from online data breaches in their comment submissions to the FCC (Bureau of Internet and Technology, 2021, pp. 28-30).

Comparing the FCC Comments Campaign with GGOOB

Get Government Off Our Backs was an astroturfed movement created by RJ Reynolds to rouse public support against the threat of indoor smoking regulation. GGOOB organized the Regulatory Revolt Month in March of 1995 (Apollonio & Bero, 2007, pp. 343). The Regulatory Revolt Month featured protests across several different US states. These protests were massive in scale and drew support from the public, the press, and government officials. One rally in Montana had over 300 people in attendance. The Montana speaker of the house made an appearance at this protest and signed the GGOOB resolution (Hyde, 1995). GGOOB was a successful astroturfing campaign. The organization was able to pass a moratorium on new federal regulations through congress. The proposed OSHA regulation against indoor smoking was also withdrawn (Apollonio & Bero, 2007, pp. 342-343).

Unlike the RJ Reynold's offline GGOOB campaign, the FCC comments campaign's goal was not to mobilize the public against regulation. Rather, the broadband industry's objective was to deceive the public into believing the democratic justness of the FCC's repeal of net neutrality. This change in strategy was enabled by the cost efficient nature of data collection and automation on the internet.

The ultimate repeal of net neutrality demonstrates that public consent is not a strict instrumental goal for online astroturfing campaigns seeking deregulation. As discussed in the background section of this paper, US regulatory bodies are subject to regulatory capture. The FCC in particular has a history of revolving door appointments. Private interests are disproportionately represented in the FCC. However, the FCC is nominally a democratic institution. This is why the broadband industry campaigned to provide the FCC with the illusion of public support.

This is also why the coalition movements, effective as they were in mobilizing the public, failed to preserve net neutrality regulation. The countervailing industry did not have a significant lobbying output compared to the incumbent industry (Leathley, 2017).

Tobacco Disinformation Campaigns and the Medium of Social Media

The FCC comments campaign was a coordinated effort that targeted one specific website with the goal of repealing one specific piece of regulation. However, astroturfing campaigns are still conducted even in the absence of a well-defined regulatory battleground. These astroturfing campaigns often spread disinformation to muddy the water of public discourse.

The tobacco industry has used disinformation campaigns to obscure science inconvenient to the industry. In the 1900s, tobacco companies, despite growing awareness of the adverse impacts of smoking, continued to market their products as healthy. RJ Reynolds advertisements claimed their cigars to be the doctors' brand of choice (Gardner & Brandt, 2006). Cigarettes were also advertised as a weight loss supplement and a treatment for respiratory diseases like asthma ("Medicinal Cigarettes," n.d.).

Cigarette usage has plummeted since the 1900s. They have since been replaced by e-cigarettes, the youths' new nicotine delivery system of choice ("Results from the Annual National Youth Tobacco Survey," 2022). The industry has shifted its marketing efforts away from cigarettes and towards vapes. The tobacco industry is now running disinformation campaigns to obscure the adverse health effects of vaping, similar to their past efforts with cigarettes. However, the mediums of communication in the 21st century are drastically different compared to the 1900s. Marketing strategies have also developed accordingly. Print media is no longer the avenue of choice for the tobacco industry; social media is the new frontier. This section of the

paper compares modern e-cigarette astroturfing campaigns on social media with their historical tobacco counterparts.

The paper *The Disinformation Playbook* provides a framework that details several methods through which disinformation is spread by industry (Reed et Al., 2021). Although the paper is focused on the impacts of disinformation on policy creation, the framework can also be used to classify various strategies used by disinformation campaigns in general. In this section of the paper I used the disinformation playbook to compare e-cigarette online astroturfing campaigns and historical tobacco disinformation campaigns.

I quoted social media posts in this section of the paper. Posts made by individuals were provided without attribution to protect the identities of the authors.

Manufacturing Uncertainty

The Disinformation Playbook states that disinformation campaigns often attempt to manufacture uncertainty through attacks on the credibility of scientific authorities (Reed et Al., 2021). In practice, undermining credibility extends beyond scientists to any authority holding views opposing industry interests.

The e-cigarette industry uses an interesting underdog narrative to undermine the credibility of authority. E-cigarette companies often portray themselves as countervailing industries with interests diametrically opposed to that of big tobacco. For example, Juul (an e-cigarette manufacturer) advertised a marketing campaign as a “Mission to End Cigarettes” (“Join The Switch Network,” 2018). The campaign website presented e-cigars as a healthy alternative to tobacco.

This narrative is echoed on social media by pro-e-cigar accounts. In 2019 the Wall Street Journal tweeted an article on a house panel on pro-vaping social media bots (The Wall Street Journal, 2019). Underneath this tweet is the following reply:

> I'm as real as they come - my parents didn't raise no bot! We will keep fighting, we will not stop, this is only the beginning. #wevapewevote #bigtobacco #corruption #exposethetruth

An image of a woman holding a sign is attached to this reply. The sign reads, "The Only Thing That Vaping Kills Is Big Tobacco."

Another tweet by the World Health Organization links to a web page detailing the dangers of e-cigarettes (World Health Organization, 2020). The following was tweeted in response:

> Shameful public health message @WHO. It will boost cigarette sales and big tobacco stocks worldwide. If countries ban and restrict smokers' access to vastly safer products based on this blinkered advice, millions will continue to die.

The idea that the e-cigarette industry is a distinct entity fighting against the corruption of "Big Tobacco" is used to imply that authorities that oppose e-cigarettes have ulterior motives. This narrative conveniently omits the fact that many tobacco companies have e-cigarette products. Juul, for example, is owned in part by Altria, a tobacco company (Maloney, 2022).

Old tobacco disinformation campaigns also employed the tactic of manufacturing uncertainty. An advertisement published in 1954 titled *A Frank Statement to Cigarette Smokers* reassured smokers that there was no scientific consensus on the causal link between cigarette consumption and lung cancer. The advertisement was signed by the "Tobacco Industry Research Committee." Various tobacco companies were listed as sponsors of this committee,

including corporations like R.J. Reynolds and Philip Morris (Tobacco Industry Research Committee, 1954).

Underdog narratives were used by the tobacco industry as well. In another advertisement titled *Why we're Dropping The New York Times*, the American Tobacco Company accuses the NYT of being an "anticigarette crusader." The advertisement continues, "[The American Tobacco Company] is not going to knuckle under to the Times or anyone else who tries to force us to accept a theory which, in the opinion of men who should know, is half-baked" (The American Tobacco Company, 1969). The narrative of this ad presented the New York Times as an aggressor "forcing" The American Tobacco Company into submitting to a "half-baked" theory.

There is an important distinction to be made between the old cigarette and new e-cigarette disinformation campaigns. Old print media advertisements often did not obscure their ties to industry. The rise of social media and online astroturfing has allowed the tobacco industry to disguise e-cigarette disinformation behind third parties. This lends more power to the underdog narrative. *Why we're Dropping The New York Times* portrayed the tobacco industry as David against the Goliath of news institutions. However, tobacco companies are not powerless entities. It's hard to emotionally invest people in a spat between corporation and institution. With social media, the industry can now frame the narrative as a conflict between vulnerable individuals (smokers) and corporate interests ("big tobacco"). This is a compelling story that is more likely to win public support.

Fake Science and Buying Credibility

The next pair of relevant tactics are fake science and buying credibility. Industry-run disinformation campaigns often fund the creation of faulty studies and use the veneer of academic respectability to lend credibility to their claims.

The tobacco industry used these tactics to downplay the adverse health impacts of second hand smoke. A 1984 newspaper advertisement titled *Second Hand Smoke: The Myth and The Reality* states that “a scientific study by the Harvard School of Public Health … found that non-smokers might inhale anywhere from 1/1000th to 1/100th of one filler cigarette per hour” (R.J. Reynolds Tobacco Company, 1984). The “1/1000th to 1/100th” claim was also made in a congressional hearing for a house subcommittee on tobacco. However, the true origin of this statistic is not a study – the citation points to an editorial published in the New England Journal of Medicine (Effect of Smoking on Nonsmokers, 1978, pp. 166-171). This editorial was written by Harvard researcher Gary L. Huber (Huber, 1975), who has a history of downplaying the negative impacts of tobacco usage (Shane, 1997). Unsurprisingly, Philip Morris and R.J. Reynolds funded Gary’s research to the tune of 7.5 million USD (“Tobacco Lawyers Funded Scientist,” 1997). Through Gary’s research, the tobacco industry was able to leverage the academic prestige of Harvard to cast doubt on the harmful effects of secondhand smoke.

The e-cigarette industry still uses these tactics today. During the course of my research I came across several Twitter accounts with academic credentials spreading e-cigarette propaganda. I will be analyzing one such account. Chuck (pseudonym) has a public LinkedIn profile. He is the Chief Executive Officer at the International Network of Nicotine Consumer Organizations (INNCO) non-profit. Before his position at INNCO, Chuck was employed as a director at the Foundation for a Smoke-Free World (FSFW). INNCO is funded by the FSFW, a non-profit organization that gets its funding from Philip Morris International (Robertson et al., 2022, pp. 50-53).

Chuck is very active on Twitter. He is a single-issue tweeter, and the one subject he tweets about is e-cigarettes. Chuck has chosen to put “PhD” in his twitter name. He often posts studies about the therapeutic benefits of nicotine. Chuck also frequently talks to other users. He

gets into quarrels with medical professionals on the regular. Below is one of Chuck's tweets responding to an e-cigarette secondhand smoke PSA:

> 2nd hand smoke harms are only barely measurable in huge population surveys, and only relevant to never-smokers who LIVE with a smoker for DECADES. Smoke lingers in rooms for 40 minutes. 2nd hand vapor evaporates in 20 seconds, and is well-within OSHA safety limits. #QuitLying

Chuck is a good example of bought credibility and fake science. He presents himself as a non-profit medical professional, and exploits his credentials to spread industry disinformation. Chuck is part of a larger trend; INNCO's associates are disproportionately active on twitter. More than half of the twitter users promoting e-cigarette products were linked to INNCO and FSFW (Robertson et al., 2022, pp. 50-51).

Although the disinformation tactics used to promote vaping and cigarettes are similar, the change in medium provides the industry with greater influence and reach. Social media and online astroturfing allow the tobacco industry to present the public with personable scientific authorities that spread disinformation on the industry's behalf. The high user engagement (retweets, arguments, hashtags, replies, etc.) from these social media authorities greatly boosts their visibility on the platform, allowing their messaging to reach a wider audience.

Discussion

This paper compared two cases of online astroturfing with their historical counterparts. The first online astroturfing case study was the FCC net neutrality comments campaign run by the broadband industry. Compared to its historical counterpart, the broadband campaign's primary goal was not to garner public support for deregulation. Due to data and automation

technology made available by the internet, the broadband industry was able to focus its efforts on manufacturing the illusion of public consent.

The manufacturing of the illusion of public consent is not a strictly online phenomenon. In 2008, Comcast hired people to flood an FCC hearing that many anti-Comcast activists had expressed interest in attending (Kiel, 2008). This action was similar to the FCC comments campaign – the intention was not to sway public opinion but to give Comcast the illusion of public support. However, the offline manufacturing of public consent is not a scalable strategy. The broadband industry was able to submit millions of comments to the FCC's webpage in 2017. This same level of engagement is impossible to replicate in the physical world.

The second astroturfing case study was on the e-cigarette industry's social media advocacy work. E-cigarette campaigns were compared with old tobacco disinformation advertisements. The medium of social media lends itself better to astroturfing campaigns compared to print media. As a result, disinformation campaigns on social media tend to use astroturfed narratives. These astroturfed narratives have allowed e-cigarette campaigns to reframe their disinformation through a more populist and ostensibly anti-corporate lens.

It's worth noting that the tobacco industry has used populist rhetoric in offline astroturfing campaigns as well. In a 1994 letter, GGOOB advertised itself as being sponsored by the "Small Business Survival Committee" despite GGOOB's obscured ties to tobacco industry giants. The letter framed regulations as measures that big corporations support with the intention to "wipe out small business competitors" (Apollonio & Bero, 2007; Kerrigan, 1994, pp. 6).

However, the medium of social media is more personal than advertisements. Unlike print media, narratives online are told from the perspective of vulnerable individuals. This gives populist narratives on social media a more genuine and empathetic visage compared to their historical counterparts.

Unlike advertisements, social media is a medium that people willingly interact with as a part of their daily routine. As illustrated by e-cigarette twitter disinformation, online astroturfing campaigns are able to use the unassuming and personal nature of social media to effectively spread pro-industry pseudoscience and talking points. Authority figures working on behalf of the tobacco industry present themselves in an affable manner online and have a high level of direct engagement with ordinary people. This method of engagement has a far higher degree of visibility and receptability compared to its historical counterparts.

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