

Copyright

by

Sarah Ansley Colclough

2018

The Report committee for Sarah Ansley Colclough
Certifies that this is the approved version of the following report:

“Software Agents and Haunted Media:
The Twitter Bot as Political Actor”

APPROVED BY

SUPERVISING COMMITTEE:

Diane Davis, Supervisor

Patricia Roberts-Miller

**“Software Agents and Haunted Media:
The Twitter Bot as Political Actor”**

by

Sarah Ansley Colclough

Report

Presented to the Faculty of the Graduate School

of the University of Texas at Austin

in Partial Fulfillment

of the Requirements

For the Degree of

Master of Arts

The University of Texas at Austin

May 2018

**“Software Agents and Haunted Media:
The Twitter Bot as Political Actor”**

by

Sarah Ansley Colclough, MA

University of Texas at Austin, 2018

Supervisor: Diane Davis

This report examines the rhetorical construction of Twitter bots as nonhuman political agents in press coverage of the 2016 U.S. election. It takes the rhetorical framing of “the Twitter bot” as a case study to argue that Twitter bots are a contemporary example of what media historian Jeffrey Sconce calls “haunted media” -- a communication technology that has been culturally ascribed an “uncanny” “agency.” First, this report provides a comparative close reading of two pieces from *The Atlantic* and *The New York Times* as examples of mainstream press coverage of bots shortly before and after the 2016 U.S. presidential election. Second, drawing on Sconce’s analysis of nineteenth and twentieth century media ecologies, it argues that “the Twitter bot” has been rhetorically constructed as haunted media through discourses that are inseparable from larger political narratives. The third and final section speculates on possible theoretical frameworks to expand this project in further inquiries. This report aims to demonstrate that haunted media narratives predate and persist beyond a specific election cycle or medium, and to argue that the construction of “haunted media” occurs alongside constructed concepts of democracy in our technologically mediated society. In doing so, this report contributes to the field of rhetoric of digital technology by bringing it further into conversation with political rhetoric.

Table of Contents

Introduction:	1
Preface: Terms, Definitions, and Context	5
Case Study 1: “How Twitter Bots Are Shaping the Election”	11
Case Study 2: “Democracy, Disrupted”	17
Haunted Media: Definitions and Lens	25
Conclusion: Rethinking a Critical Culture	34
Works Cited:	37

Introduction:

In February 2016, Samuel Woolley, dana boyd, Meredith Broussard, and Made wrote an essay for Vice Media’s technology platform, *Motherboard*, pondering the ethical quandaries posed by the various software agents colloquially known as “bots.” In this essay, the authors wrote that the pre-existing social, ethical norms that govern human interaction cannot be easily applied to bot activity:

Ever since ELIZA, which is often considered the first chatbot, one distinguishing feature of bots is that they are *semi-autonomous*: they exhibit behavior that is partially a function of the intentions that a programmer builds into them and partially a function of algorithms and machine learning abilities that respond to a plenitude of inputs. Thinking about bots as semi-automated actors makes them a challenge in terms of design. It also makes them unusual in an ethical sense. Questions of deception and responsibility must be considered when discussing both the construction and functionality of bots.¹

These questions of deception, responsibility, and the ethics of bot interaction became politically charged in the months preceding and following the 2016 U.S. Presidential election. Numerous mainstream press outlets speculated the extent to which software agents--specifically, bots --“interfered” in the “natural” democratic process of the election. Mainstream press coverage has ranged from cautious yet balanced analyses, such as Douglas Guilbeault and Sam Woolley’s piece for *The Atlantic*, “How Twitter Bots Are Shaping the Election,” published a week before the election, to overtly technophobic essays such as Thomas Edsall’s *New York Times* article, “Democracy, Disrupted,” which blamed online culture for “contributing — perhaps irreversibly — to the decay of traditional moral and ethical constraints in American

¹dana boyd, Meredith Broussard, Made, Samuel Woolly,. “How to Think About Bots.” *Motherboard* by *VICE*, February 23, 2016. https://motherboard.vice.com/en_us/article/qkzpdm/how-to-think-about-bots

politics.”² Such thinkpieces, coupled with post-election book titles like *How He [Trump] Used Facebook to Win*, *Hacking the Electorate*, *Prototype Politics*, and *The Death of Digital Democracy*, signify a transpartisan anxiety around the potential effect of non-human political agents on electoral politics.

In the past few years, the fields of rhetoric, communications, and new media studies have produced considerable scholarship around the relationship between politics and Twitter,¹ in addition to academic online writing that responds to contemporary events more quickly than allowed by peer-reviewed publication.² Recent scholarly work specifically on Twitter include studies of identity play and intersectional political identity construction, hashtags as construction of public of “spaces” of mobilization,³ rhetoric of “flagging” online content,⁴ the affective labor of black women on Twitter,⁵ scholarship exploring feminist strategies of claiming “public space” on Twitter⁶ (as well as critiquing it),⁷ encounters of difference and exposure mediated on Twitter,

² Thomas B. Edsall, “Democracy, Interrupted,” *New York Times*, March 7, 2017.

³ See Simon Lindgren and Ragnar Lundström, “Pirate culture and hacktivist mobilization: The cultural and social protocols of #WikiLeaks on Twitter,” *New Media & Society* 13, no 6., (2011). Accessed Online: April 30, 2018 <http://journals.sagepub.com/doi/abs/10.1177/1461444811414833>

⁴ See Kate Crawford and Tarleton Gillespie, “What is a flag for? Social media reporting tools and the vocabulary of complaint,” *New Media & Society* 18 no 3., (2014). Accessed online: April 30, 2018. <http://journals.sagepub.com/doi/abs/10.1177/1461444814543163>

⁵ Raven S. Maragh, ““Our Struggles Are Unequal: Black Women’s Affective Labor Between Television and Twitter,” *Journal of Communication Inquiry* 40, no. 4 (2016): 351 - 369.

⁶ See Ryan Bowles-Eagle, “Loitering, Lingerin, Hashtagging: Women Reclaiming Public Space Via #BoardtheBus, #StopStreetHarassment, and the #EverydaySexism Project.” *Feminist Media Studies* 15, no. 2, (2015), pg 350-353 and Kirsti K. Cole, “It’s Like She’s Eager to be Verbally Abused”: Twitter, Trolls, and (En)Gendering Disciplinary Rhetoric,” *Feminist Media Studies* 15, no 2 (2015): 356-358.

⁷ Shenila Khoja-Moolji, “Becoming an “Intimate Publics”: Exploring the Affective Intensities of Hashtag Feminism,” *Feminist Media Studies* 15, no. 2 (2015): 347-350.

⁸ as well as comparative analyses of the different rhetorical strategies used by U.S. Senators on Twitter in across party affiliation.⁹ However, while my own research is indebted to this work, in this report, I do not seek to provide a rhetorical analysis of an individual social media platform. Nor do I attempt a quantitative study of bot activity. Although it is undeniable that bots and other software agents participated in online dialogue, it is impossible to trace direct causality between software activity and electoral results.

Instead, this report focuses on press coverage of the role of software agents in the political process. By “political,” I mean “political” in the sense of electoral politics as well “political” in a broader sense of social engagement that I keep strategically, loosely defined. If one undertook a rhetorical analysis of media coverage of bots, algorithms, hacking, and other so-called ‘glitches’ in ‘the political machine,’ what might such a close reading reveal about common assumptions regarding the relationship between democracy, technology, and the nonhuman?

To answer this question, this report takes the rhetorical framing of “the Twitter bot” as a case study to argue that Twitter bots are a contemporary example of what media historian Jeffrey Sconce calls “haunted media” -- a communication technology that has been culturally ascribed an “uncanny” “agency” by undermining perceived binaries between the living/dead, human/nonhuman, passive/active, or collective/individuated consciousness. By examining the discourses that construct haunted media in the context of political commentary, this essay

⁸ Barbara K. Kaye and Chang Sup Park. “Twitter and Encountering Diversity: The Moderating Role of Network Diversity and Age in the Relationship Between Twitter Use and Crosscutting Exposure.” *Social Media + Society*. 3, no 3 (2017). <http://journals.sagepub.com/doi/abs/10.1177/2056305117717247>

⁹ Annelisse Russell, “U.S. Senators on Twitter: Asymmetric Party Rhetoric in 140 Characters;” *American Politics Research*. Published: June 23, 2017. Accessed: March 3, 2018. <http://journals.sagepub.com.ezproxy.lib.utexas.edu/doi/10.1177/1532673X17715619>

attempts to uncover how the rhetoric that constructs haunted media is inseparable from larger political narratives. In doing so, it should contribute to the field of digital rhetoric by bringing a discussion of digital technology further into conversation with political rhetoric.

This essay has three parts. First, I provide close readings of two pieces from *The Atlantic* and *The New York Times* as examples of mainstream press coverage of nonhuman political actors shortly before and after the 2016 U.S. presidential election. The second section extends Sconce's analysis of nineteenth and twentieth century media ecologies to the twenty-first century to argue that "the Twitter bot" has been rhetorically constructed as haunted media. In doing so, I hope to demonstrate that haunted media narratives predate and persist beyond this specific election cycle or the medium of Twitter. Furthermore, these narratives do not operate independently of other concepts of "democracy" or "political" "participation" in our technologically mediated global and national social network. The third and final section speculates on possible theoretical frameworks and sites of analysis to expand this project for further inquiries.

Preface: Terms, Definitions, and Context

Before beginning the analysis, it is worth defining and distinguishing between the terms “software agent” and “bot.” It is also worth providing some context for the debates around the role of software agents and bots in political life.

The phrase “software agents” refers to semi-autonomous software functions that have been programmed by humans to perform automated tasks without direct human oversight. Examples of software agents include algorithmic “filter bubbles,” data-mining software, and bots. The term “bots” can be used to describe a variety of specific software agent programs, including automated social media profiles, spam-generators, and “chatterbots” that use natural language processing systems to simulate human conversation. In this report, I use Alison Parrish’s definition of “bot,” a fluid definition which “encompasses many different kinds of software agents, from conversation simulators like ELIZA, to programs that write stories about sports events without human intervention, to automatically created social media accounts that spam hashtags.”¹⁰

A “Twitter bot” is an automated user account on the social media website Twitter. Twitter bots are famously easy to program, as anyone with “preliminary coding knowledge”¹¹ can create a Twitter bot using the Twitter API with help from Google Apps if necessary. In 2013, automated internet content production software was estimated to produce up to at least 62%

¹⁰Alison Parrish, “Bots:A definition and some historical threads.” Points by *Data & Society*. Published February 24, 2016.

<https://points.datasociety.net/bots-a-definition-and-some-historical-threads-47738c8ab1ce>

¹¹ Douglas Guilbeault and Sam Woolley, “How Twitter Bots Are Shaping the 2016 Presidential Election,” *The Atlantic*, November 1, 2016.

percent of all web traffic.¹² By 2017, Twitter bots have been estimated to comprise at least 15% of Twitter accounts.¹³ Given the abundance of information produced and circulated by Twitter bots, their role in political life is worth closer examination in order to gain insight into the role of technology in the political culture of the late 2010s.

The political significance of Twitter bots is complicated. On the one hand, Twitter bots and other automated software have been strategically employed by grassroots activists. Automated accounts can be used to draw attention to news events that may be overlooked by mainstream media. Twitter bots have been used to spread information, archive anonymous Wikipedia edits made by IP addresses located in Congress, post updates from the Foreign Intelligence Surveillance Court docket uncovered by mainstream news, monitor Supreme Court decisions, fact-check media or government officials, impersonate humans, and even write poetry. “Lighter” examples of Twitter bot social justice projects include @she_not_he, a bot that corrects Twitter users who misgender Caitlyn Jenner, and @staywokebot, which tweets encouragement and inspirational tweets to anti-racist progressive activists who may find themselves exhausted.

Bots can also be used creatively to draw attention to the power relations that construct “the news” in public/private political spheres (digital or otherwise), or to deploy images of alternate political realities. For example, in Eugenia Siapera’s rhetorical analysis of the #Palestine tag on Twitter, Siapera describes the dialectical construction of a “subjective, positioned and

¹² Yuval Rosenberg, “62 percent of all web traffic comes from bots,” *The Week*. Published December 16, 2013. See also Igal Zeifman, “Bot traffic is up to 61.5% of all website traffic,” *Incapsula*. Published: December 9, 2013.

¹³ Mike Newberg, “Nearly 48 million Twitter accounts are not people.” *CSNBC*. Published: March 10, 2017.

emotionally charged #Palestine”¹⁴ through a community of users with similar ideological positions regarding Palestine. While U.S.-centric media studies usually regards ideological similarity as a negative phenomenon (or an “ideological bubble”), Siapera writes that the #Palestine users use the hashtag to mediate a version of “Palestine” away from “mainstream media that focus on ‘hard’ news to activist, positioned, experience-based and affective news and other content on Palestine.”¹⁵ In this way, the “redistribution of power over the representation of #Palestine” is enacted by decentralizing the dominant frame through using the hashtag to circulate information.¹⁶ In this way, Twitter accounts -- bot driven or otherwise -- can participate in community construction.

Twitter bot projects like those mentioned above are examples of what Rita Raley has called “tactical media” -- projects that are “forms of critical intervention, dissent, and resistance” that ‘signify’ “the intervention and disruption of dominant semiotic regime, the temporary creation of a situation in which signs, messages, and narratives are set into play and critical thinking becomes possible.”¹⁷ As tactical media strategies, bots are particularly promising for digital activists who support the decentralization of online information distribution. Proponents of decentralization argue that redistributing the modes of information production and circulation, when paired with increased transparency into the process of online content production, enables a

¹⁴ Eugenia Siapera, “Tweeting #Palestine: Twitter and the mediation of Palestine.” *International Journal of Cultural Studies* 17, no 6. (2013).
<http://journals.sagepub.com.ezproxy.lib.utexas.edu/doi/full/10.1177/1367877913503865>

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Rita Raley, *Tactical Media* (Minneapolis:University of Minnesota Press, 2009), 6.

more “inclusive” public dialogue that can “give historically excluded groups the opportunity to assert their voice.”¹⁸

However, there are notable limits to the political efficacy of Twitter as a medium and, therefore, to bots as a strategy. First of all, the ease of access to the means of bot production does not *necessarily* entail the power of seizing means of information distribution. As M.C. Elish writes in “On Paying Attention: How to Think of Bots as Social Actors:”

a bot can be made by anyone, theoretically. The means to produce a bot are available to anyone with a moderate amount of coding knowledge. This opens exciting possibilities about the democratization of action and speech on the Internet. And yet, in practice, we have seen that not all bots are created equal. Bots may not require institutional authorization, but they are subject to institutional power dynamics. And bots with big money or powerful governments behind them will have more resources with wider impact.¹⁹

Although bots can be used for independent journalism and activism, bots have also been developed by mainstream media organisations. This allows corporate media companies to reproduce information on the same speed and scope as the tactical media bots meant to resist their framework. Second, due to the inherently commercial nature of social media, algorithms structure the user’s content feed to maximize potential ad revenue. This limits the potential

Twitter users with which one might interact.⁴ Worst of all, as Sam Woolley and Tim Hwang write, “journalists have increasingly reported on cases of politicians using bots worldwide during contested elections and security crises to pad follower lists, spam and disable

¹⁸Marco Konopacki, “Democracy is in danger, only technology can save it.” Opendemocracy.net. Published March 30, 2017. Accessed July 20 2017. <https://www.opendemocracy.net/democraciaabierta/marco-konopacki/democracy-is-in-danger-only-technology-can-save-it>

¹⁹ M.C. Elish, “On Paying Attention: How to Think of Bots as Social Actors.” Points by Data & Society. Published: Feb 26, 2016. Accessed: August 2, 2017.

activists, and send out pro-government propaganda.”²⁰ Tag spamming has been used by authoritarian regimes in both Venezuela and Mexico, for example, to drown out unfavorable news coverage by spamming trending tags with empty Tweets. Tag spamming as a political strategy can be used to silence conversations between marginalized voices, making it more difficult for activists to use social media sites like Twitter as a site for political organizing.

Furthermore, regarding electoral politics, bots can be used to inflate perceived support of a political candidate. One notable example was the incident in which 4chan allegedly began using bots to influence online polls to efforts of “pro-Trump Reddit community r/The_Donald and 4chan message boards, which bombarded around 70 polls, including those launched by *Time*, *Fortune*, and CNBC.”²¹ Twitter bots can even be used to inflate perceived support of a candidate from particular demographics. For example, *The Atlantic* reported in May 2016 that an army of bots impersonating Latino supporters of Republican candidate Donald Trump²² manifested online following a dip in Trump’s popularity amongst Latino voters as a result of a number of anti-Latino, anti-immigrant statements. Bots impersonating minority voters can also be used to “troll.” For example, the neofascist site *The Daily Stormer* has called upon its readership to create Twitter accounts pretending to be African-American users in order to troll actual black Twitter users. Although bots can usually be identified as non-human by the rate at which they Tweet, as of summer 2017, Twitter has yet to develop a “flagging” system for accounts

²⁰ Tim Hwang and Sam Woolley, “Bring on the Bots,” Civic Hall (Civicist): Civic Tech News and Analysis. Published: May 1, 2015. <https://civichall.org/civicist/bring-on-the-bots/>

²¹ Andrew Coutts and Austin Powell, “4chan and Reddit Boarded Debate Poll to Declare Trump Winner. *The Daily Dot*. September 27, 2016. <https://www.dailydot.com/layer8/trump-clinton-debate-online-polls-4chan-the-donald/>

²² Samuel Woolley and Phil Howard, “Bots Unite to Automated the Presidential Election,” *WIRED*., May 15, 2016. <https://www.wired.com/2016/05/twitterbots-2/>

suspected of being bots similar to Wikipedia's "flagging" system for articles with insufficient citations.⁵ The most sophisticated bots, capable of faking entire "personalities" may, ironically, require the use of bot-identifying bots, such as BotOrNot.co, to be recognized as bots themselves.

This is the political and social context in which Douglas Guilbeault and Sam Woolley's *The Atlantic* article "How Twitter Bots Are Shaping the Election" (published November 1, 2016 -- a week before election day) and Thomas Edsall's *New York Times* piece "Democracy, Disrupted" (published March 2, 2017) were written. With this context in mind, I now turn to the two articles as case studies.

Case Study 1: “How Twitter Bots Are Shaping the Election”

The Atlantic article “How Twitter Bots Are Shaping the Election” was published November 1, 2016 -- a week before election day. Anneburg’s School of Communication’s Douglas Guilbeault and University of Washington’s Sam Woolley wrote that the 2016 U.S. presidential election attracted bot use in electoral politics on a scale previously unseen. Guilbeault and Woolley’s piece in *The Atlantic* reported that Oxford University’s Project on Computational Propaganda discovered “Twitter accounts that have extremely high levels of automation, meaning they tweeted over 200 times during the data collection period (Oct. 19-22) with a debate-related hashtag or candidate mention, accounted for nearly 25 percent of Twitter traffic surrounding the final debate.”²³ Oxford University’s research team also discovered that “more than a third of pro-Trump tweets and nearly a fifth of pro-Clinton tweets between the first and second debates came from automated accounts, which produced more than 1 million tweets in total;” corroborating other media reports²⁴ that “both candidates’ social media followings are highly automated.”

Guilbeault and Woolley consider this “automation” a problem because, they argue, follower inflation undermines the integrity of polls as means of gauging the popularity of candidates. The authors write:

In this year’s presidential election, the size, strategy, and potential effects of social automation are unprecedented—never have we seen such an all-out bot war. In the final debate,

²³ April Glaser, “On Twitter, Trump bots are out-tweeting Clinton bots 7 to 1.” *Recode*. November 1, 2016. <https://www.recode.net/2016/11/1/13488020/trump-bots-clinton-twitter-third-debate-twitterbots-election>

²⁴ Nick Bilton, “Trump’s Biggest Lie? The Size of His Twitter Following,” HIVE by *Vanity Fair*, August 4, 2016. <https://www.vanityfair.com/news/2016/08/trumps-biggest-lie-the-size-of-his-twitter-following>

Trump and Clinton readily condemned Russia for attempting to influence the election via cyber attacks, but neither candidate has mentioned the millions of bots that work to manipulate public opinion on their behalf. Our team has found bots in support of both Trump and Clinton that harness and augment echo chambers online. One pro-Trump bot, @amrightnow, has more than 33,000 followers and spams Twitter with anti-Clinton conspiracy theories. It generated 1,200 posts during the final debate. Its competitor, the recently spawned @loserDonldTrump, retweets all mentions of @realDonaldTrump that include the word loser—producing more than 2,000 tweets a day. These bots represent a tiny fraction of the millions of politicized software programs working to manipulate the democratic process behind the scenes.

I pause now to highlight four key points about this paragraph. First off, when the authors declare “never have we seen such an all-out bot war,” they do not specify the scope in which a bot “war” has “never” been seen, as bots are relatively new technology. Using technology for political propaganda is not new, as the authors -- to their credit -- are quick to point out. It is also worth pointing out that, technically, unlike hacking or colluding with a foreign power to exchange information, spamming a tag via Twitter bots is not illegal. Whether or not it *should* be illegal or regulated is another debate altogether. I am more interested in the way this article frames hacking and spam-creating Twitter bots side-by-side as a foreign invasion or interruption of American political processes -- though, granted, hacking was not as politically pressing a topic in fall 2016 would become in the following year.

Secondly, the phrase “the bot war” echoes other uses of “war rhetoric” in political, cultural issues (“war on drugs,” “war on poverty,” etc.). Yet the authors do not specify who or what “wars” against whom in this “bot war,” or even where bots figure in on the “information war” or “war on the truth.” Notably, the site designers at *The Atlantic* chose to emphasize the sentence “never have we seen such an all-out bot war” in a separate text bracket on the page, causing the sentence to seem slightly more sensationalist than Guilbeault and Woolley may have intended in their essay. The result is that the phrase “all-out bot war” implies a kind of “break” or “event” in

technology that should be examined more carefully. The use of war rhetoric to describe bots obscures specific details regarding how bots *in particular* operate within “a political machine.”

My third point regards the article’s description of the potential for bots. One of the authors -- Samuel Woolley -- co-authored a 2015 Civic Hall article with Tim Hwang in which they argued that while bots “may not be able to provide the deep analysis that a professional journalist would provide,” bots are able to generate awareness of issues where there previously was an information vacuum. To that end, well-deployed bots can help resolve an increasingly obvious challenge facing social media platforms: that the self-segregating nature of connections online tend to produce echo chambers that prevent people from receiving a diverse set of information.²⁵

Yet Woolley and Guilbeaut’s piece in *The Atlantic* takes a more foreboding understanding of “manipulation” of democracy by hijacking robots than the Civic Media piece from two years prior. Their primary concern is that bots contribute to social media homophily -- ideological self-isolation, or “social-media users’ tendency to engage with people like them” by isolating inside online “echo chambers.” Ultimately, the article concludes that media literacy education is the best way to resist such manipulation:

The propagandistic power of bots is strengthened when few people know they exist. Homophily is particularly strong when people believe they have strength in numbers, and bots give the illusion of such strength. The more people know about bots, the more likely it is that citizens will begin reporting and removing bots, as well as using bots to boost their own voices.²⁶

Their suggestion that “the more people know about bots, the more likely it is that citizens will begin reporting and removing bots” is not necessarily adequate. The article itself recognizes

²⁵ Hwang and Woolley, “Bring on the Bots.”

²⁶ Guilbeault and Woolley, “Shaping the Election.”

the difficulty in identifying or blocking an automated account. Furthermore, the authors note -- correctly, it seems -- that increased awareness of bots may inspire human participants to increase pressure for more government regulation of bot action, as “currently, there is almost no regulation on the use of bots in politics. The Federal Elections Commission has shown no evidence of even recognizing that bots exist.”²⁷ Woolley and Guilbeaut’s suggestion for media literacy focuses on mobilizing the public to demand government regulation of bots instead of, for example, mobilizing the people to create bots. This suggestion stands in contrast to cries from tactical media advocates identified by Raley, such as Critical Art Ensemble, who advocate for individuals seizing the modes of production. The suggested solution in *The Atlantic* article relies on the participation of the state; a suggestion that may prove problematic depending on how it was employed. At the same time, this allows activists without the technical skill to create bots to participate in political protest by pressuring their elected officials (or, perhaps, Twitter as a company although Guilbeault and Woolley are more concerned with state regulation. The implication is that abuse of Internet power for propaganda has legal consequences, as opposed to merely violating a website’s terms and conditions).

The fourth and final point regards the word choice of “citizen” in the final sentence of the aforementioned paragraph: “The more people know about bots, the more likely it is that citizens will begin reporting and removing bots, as well as using bots to boost their own voices.”

Presumably, the citizen who reports the bot is not necessarily the same as the one who

removes it. I can (and have) report(ed) harassment to Twitter, but another human being ultimately deletes the automated account. The use of the word “citizen” clarifies the “class” of

²⁷ Ibid.

human who can rightfully engage in political participation, in contrast to the bot who is rhetorically paralleled to an outsider.

It should be noted that the authors *do* attempt avoid to avert technophobia, noting the value of “the internet as a democratizing tool.” However, at one point, they describe the use of the internet as a democratizing tool in a way that slightly equivocates between “the Internet” and “bots.” The authors provide an example of the internet as a democratic tool by pointing to the immediate surge in Google terms “Trump” and “Iraq” during the final presidential debate within minutes after Democratic candidate Hillary Clinton asked audience members to google the terms. The authors also cite various aforementioned educational and fact-checking bot projects as positive examples of the internet. However, their positive example of fact-checking cites “The Internet” instead of bots, despite the fact that the essay is supposedly centered on *bot* activity rather than *internet* activity. This equivocation between “bots” and “The Internet” as various tactical media strategies shall be discussed in further detail in the following case study on Edsall’s *The New York Times* example. For now, I note Woolley and Guilbeault’s equivocation only to note a rhetorical slip that becomes far more pronounced in Edsall’s more technology-critical article.

In conclusion, Woolley and Guilbeault do not clearly define “democratic process” in their *Atlantic* piece, apparently keeping their working definition strategically open in their essay (as I do in this report). Nonetheless, by using rhetorics of war and citizenship in addition to centralize the role of the state in their solutions, the authors implicitly define “citizenship” in rites of participation. The “mechanic” is constructed as the outsider, despite the fact that bots are programmed by actual human beings. Their solution to the problem of “invasion” by nonhuman

political agents hinges on educating “the citizenship” -- in other words, educating the public about deception. Their analysis leaves open the possibility of the Internet and social media to participate in that conversation in positive ways. However, as we shall see in Edsall’s article, the “solution” of media literacy may be more complicated and politically ineffective than suggested by Woolley and Guilbeault. At this point, I turn to my second case study.

Case Study 2: “Democracy, Disrupted”

Several months after the 2016 U.S. Election, *The New York Times* published the opinion piece “Democracy, Disrupted” by Thomas Edsall, professor of journalism at Columbia University. In his opinion piece, Edsall writes that the internet and social media “have disrupted and destroyed institutional constraints on what can be said, when and where it can be said and who can say it” in ways which are “contributing — perhaps irreversibly — to the decay of traditional moral and ethical constraints in American politics.” He writes that

The influence of the internet is the latest manifestation of the weakening of the two major American political parties over the past century, with the Civil Service undermining patronage, the rise of mass media altering communication, campaign finance law empowering donors independent of the parties, and the ascendance of direct primaries gutting the power of party bosses to pick nominees.²⁸

In this quote, Edsall seems to define the “democratic processes” that are being interrupted by “the Internet” as the processes of established political institutions, such as political parties. I do not think Edsall would limit his definition of “democratic processes” to institutions, given the scope of his argument within this relatively brief article. However, this piece is certainly concerned with their failings. He attempts to keep his critique strictly nonpartisan by arguing that the weakening of both of “the two major political parties” and the inability of either party’s “bosses” to “pick nominees” as a threat to the democratic process.

In other words, Edsall argues that mere anarchy has been unleashed upon the American political system. He makes his argument predominately by quoting legal scholars, media theorists, and political thinkers from different professional backgrounds. It should be noted that

²⁸ Edsall “Democracy Disrupted.”

with the exception of one speaker identified by Edsall as an Obama and Sanders campaign employee, none of the speakers are identified within a specific political ideology. The Obama/Sanders backer is identified only in the context of providing background for this person's professional expertise involving presidential campaigns, not in the context of representing an ideological point of view. At one point, Edsall cites New York University law professor Samuel Issacharoff to mourn the loss of power of traditional political parties:

Neither party appeared to have a mechanism of internal correction. Neither could muster the wise elders to steer a more conventional course. Neither could use its congressional leadership to regain control of the party through its powers of governance. Neither could lay claim to financial resources that would compel a measure of candidate loyalty. Neither could even exert influence through party endorsements....The parties proved hollow vehicles that offered little organizational resistance to capture by outsiders. And what was captured appeared little more than a brand, certainly not the vibrant organizations that are heralded as the indispensable glue of democratic politics.²⁹

First off, there are notable similarities to the Woolley and Guilbeault article despite the differences in argument and style. The language of "takeovers," "capture," and "resistance to outsiders" echoes the "war rhetoric" of the previous article. However, whereas the phrase "all-out bot war" implied "bot against bot," the language of "resistance to capture by outsiders" clearly positions traditional parties as the "target." Issacharoff (and thus Edsall) also invoke language of the machine: "mechanism" and "vehicles." This line of rhetoric frames the political parties as machines "hacked" by outside forces when the party leaders underwent a loss of control.

On the subject of hacking, like Woolley and Guilbeault, Edsall cites the ongoing investigation into the Kremlin's meddling in the U.S. election as an example of a threat to

²⁹ Michael Issacharoff from then-forthcoming paper "Outsourcing Politics: The Hostile Takeovers of Our Hollowed Out Political Parties" qtd in Edsall "Democracy Disrupted."

American democracy enabled by the exploitation of a technological vulnerability. And, once again, the author does not clearly distinguish between legal and illegal forms of “meddling” with the democratic process. I find the lack of distinction between collusion with a foreign

power and spamming the internet with propaganda relevant not because I am interested in splitting legal hairs, but rather because I suggest that the lack of distinction in this rhetorical analysis stems largely from similarities in which the language of “attack” and “infiltration” are employed to describe both.

Secondly, it is notable that Democratic candidate Hillary Clinton is not mentioned by name at all. Donald Trump is referenced by name only briefly in the second paragraph. Edsall’s choice in barely mentioning Trump contrasts with most of the pre- and post- election news coverage, which carefully noted the different media strategies employed by different candidates and their supporters (as noted in the different articles that covered Oxford University Computational Propaganda study). This focus is also in line with Edsall’s focus on the erosion of American political parties *in general*. The implication is that Trump’s nomination and election injures Republican and Democratic parties alike. By focusing on “The Internet” instead of a particular candidate, Edsall’s description of social media and the Internet curiously abstracts agency from either party. In doing so, Edsall (perhaps unintentionally) removes blame from the strategies employed by supporters and by the Trump campaign -- though, granted, the evidence of collusion between the Trump campaign and the Kremlin had not been as clearly established by the publication of Edsall’s article as it came to be in later months.

A note must be made regarding the image that *The New York Times* chose for the article’s banner. The image that *The New York Times* chose for the article’s banner is one of an iPhone

screen with a photograph of a smirking Trump (from an unflattering angle). The phone is clutched by what appears to be a white woman's hand, with faceless bodies in patriotic paraphernalia out of focus in the background. Edsall himself probably did not select the picture. However, *The New York Times*'s selection of the image of Trump to head an article that barely uses his name emphasizes the election of this particular candidate as what "haunts" the discussion.

Finally, in this opinion piece, Edsall uses the words "social media" and "the Internet" almost interchangeably. This equivocation stands in contrast to the aforementioned *Atlantic* article, in which the authors note the fact-checking potential of Google as a potential curb to misinformation by humans or bots. Interestingly, Edsall does not *explicitly* mention bots. He describes "the Internet" or "social media" almost independently of any particular tactic. In doing so, he abstracts "the Internet" to the point of mystifying The Internet as a disembodied force. Edsall does not discuss the role of bots, but he describes the actions of human social media users in language that *sounds* like he is talking about bots. In one sense, Edsall is not exactly incorrect, given that bot activity is programmed by humans. In fact, by not mentioning bots, he underscores the human dimension to the political breakdown more clearly than Guilbeault and Woolley. Yet paradoxically, by the same token, his abstraction of The Internet not only mystifies the workings of digitally mediated human activity, it also reduces the agency of human voters by largely removing them from his analysis. In other words, the bot and the human are invisible within the "machine" of American democracy that has been hijacked by an outside force.

Finally, it should be clarified that while Edsall blames the internet for contributing to the collapse of democracy in our nation, he is not a technological determinist. He frames the

contribution of the internet within and amongst a variety of social forces. Edsall ends his essay by quoting a section of his email correspondence with King's College, London's Sam Greene, in which Greene cites a "deeper" reason for political "vulnerability:"

Our politics are vulnerable to nefarious influences — whether of the Kremlin variety or the Breitbart variety — not because our information landscape is open and fluid, but because voters' perceptions have become untethered from reality. For reasons that are both complex and debatable, very many voters have stopped seeing government as a tool for the production of the common good, and have instead turned to politicians (and others) who at least make them feel good. Thus, the news we consume has become as much about emotion and identity as about facts. That's where the vulnerability comes in, and its roots are in our politics — not in the internet.³⁰

This passage attempts to locate the "vulnerability" to perceptibility in a "politics" somehow separate from and preceding the "internet." Yet while Edsall, through quoting Greene, appears to argue that "root" of vulnerability may lie "in our politics," he rhetorically frames the internet as a vulnerable body open to viruses of multiple kinds. "The Internet" and "fake news" infiltrates and exploits that vulnerability. Therefore, while Edsall does not mention the bot in his article, or in the quote he provides from Greene, the rhetoric of "vulnerability" and "consumption" subtly invokes metaphors of illness and a virus that is more ideological than a literal computer virus.

At this point in my report, I turn to Greene's second noteworthy claim: that emotion and identity drive patterns of news consumption. If news consumption is libidinally motivated, as Greene suggests, than educating the voters on how to identify a "human" or "nonhuman" source of information may not work as a strategy to avoid homophily. Woolley and Guilbeault's suggested strategy of media literacy education may not be effective if news consumption is structured by citizen's desires and identity. In other words, the public may not care if a news

³⁰ Sam Greene qtd. in interview with Edsall.

source comes from a bot or a human -- or, rather, from a human producing “information” mediated with a bot. *Epistemic authority lies in identity construction of the consumer, and the ideological orientation of the information source is more important than whether or not the source is even human.*

A similar point has been identified by dana boyd in her online essay “Did Literacy Media Backfire?” In this essay, boyd writes that the American social culture that encourages skepticism towards authority has fused with individual innate political biases and collective distrust in media sources in such a way that encourages a “do-the-research-yourself” approach that does not adequately address issues of “trust” in epistemically viable sources. While boyd does not completely reject media literacy as a political project, she acknowledges what we call “media literacy” may not curb the “underlying problem” of “distrust” that stems from feelings of marginalization in the “news” or “legitimate knowledge” by various populations. In a time when public trust in mass media has sunk “to an all time low,”³¹ as one Gallup poll put it, boyd cautions that:

Addressing so-called fake news is going to require a lot more than labeling. It’s going to require a cultural change about how we make sense of information, whom we trust, and how we understand our own role in grappling with information. Quick and easy solutions may make the controversy go away, but they won’t address the underlying problems.³²

If the inquiry into knowledge production does not take into account national *affective* relations with *knowledge*, then simply educating the populace on the means of knowledge production may be an inadequate strategy. The implication for activist programmers is that bot

³¹ Art Swift, “Americans’ Trust in Mass Media Sinks to New Low.” *Gallup*, September 14, 2016.

³² dana boyd, ““Did Literacy Media Backfire?,” Points by *Data & Society*, January 5, 2017. <https://points.datasociety.net/did-media-literacy-backfire-7418c084d88d>.

projects that seek to illuminate and educate will be limited not only by the corporate and state control factors described above, but by an underlying cultural problem regarding affective relationship to news and authority. This underlying cultural problem may not be solved by the fact-checking and government *sousveillance* that bots, academics, and activists are programmed to perform.

This is the political context in which bots operate: a situation in which an underlying critical culture structures the reception and production of knowledge. boyd's concerns are in line with Greene (and Edsall) on the role of identity and emotion in consumption of information. However, boyd goes deeper than Greene's argument that consumer identity drives patterns of information consumption and epistemic authority by emphasizing the epistemic role in identity *production*. She also goes further than Greene by identifying how emotions other than satisfaction drive information consumption (such as isolation, distrust, guilt, etc.).

For this reason, I ultimately find boyd's analysis more satisfactory than Edsall's-through-Greene. boyd's reading of the political culture in which the internet facilitates the kind of collapse identified by Edsall goes into Americans' affective relationship with sites of knowledge production. However, whereas both Woolley and Guilbeault's account and Edsall's account situate the role of the internet within a recent history of technology and politics, boyd touches on a more recent history of American relationships with *knowledge* and technology. Although boyd does not have time to flesh out that relationship in her brief essay, I shall attempt to unpack this historical affective relationship with knowledge in the next section of this paper. In particular, I will attempt to show that media historian Jeffrey Sconce's writings on "haunted media" in the nineteenth and twentieth century extend to contemporary technologies in ways that

influence rhetorical framings like the ones seen in *The Atlantic* and *The New York Times* pieces I quote here.

Haunted Media: Definitions and Lens

Since at least the nineteenth century, a network of interrelated (sometimes paradoxical) metaphors and cultural narratives have ascribed specific communication technologies an “uncanny” “agency.” These communication technologies have traditionally been those that disrupt prevailing social perceptions of the binaries between the living/dead, human/nonhuman, passive/active, or collective/individuated consciousness. In *Haunted Media: Electronic Presence from Telegraphy to Television*, media historian Jeffrey Sconce begins his study of nineteenth and twentieth century technology with two key questions: 1) “under what social and historical circumstances did electronic media come to be seen as “living” and “alive?” and 2) “how have ideas of an animating sentience in electronic telecommunications changed across history and media?”³³

To explore these questions, Sconce reads various cultural media artifacts ranging from the fiction of Rudyard Kipling to the film *Poltergeist* into to trace specific instances in which a “sense of liveness” has attached itself to communication technologies. Sconce identifies three key repeating narratives: disembodiment, anthropomorphization, and “the electronic elsewhere.” These narratives include overlapping metaphors of “the body electric,” “transmission,” the paranormal, religion, addiction, or psychosis. Through these narratives, haunted media is constructed alongside and through a concept Sconce calls “electronic presence. “Electronic presence,” he writes, is a (collective and individual) “sense” of electricity as an “agent.” The individual/cultural sense of the “agency” of electronic presence is a “variable social construct”

³³ Jeffrey Sconce, *Haunted Media: Electronic Presence from Telegraphy to Television* (Durham: Duke University Press, 2000), 6.

whose “forms, potentials, and perceived dangers having changed significantly across media history.”³⁴ Notably, Sconce does not claim to be the first to “discover” this phenomenon, noting that “this animating, at times occult, sense of liveness” has been “variously described by critics as ‘presence,’ ‘simultaneity,’ ‘instantaneity,’ ‘immediacy,’ ‘now-ness,’ ‘present-ness,’ ‘intimacy,’ the ‘time of the now,’ or, as Mary Anne Doane has dubbed it, a ‘This-is-going-on’ rather than a ‘That-has-been.’”³⁵

For one example, take Sconce’s description of the telegraph as haunted media. By reading primary source documents from the nineteenth century, Sconce argues that the telegraph offered the nineteenth century “a way of conceptualizing communications and consciousness” that was not “grounded in the immediate space and time of those communicating.”³⁶ The telegraph user’s sensory perception of her own “body” and of space/time was altered by using the machine. “The simultaneity of this new medium [the telegraph],” writes Sconce, “allowed for temporal immediacy amid spatial isolation and brought psychological connection in spite of physical separation.”³⁷ In this disembodied/disembodying address, when the speaker was “given over” to an exchange located “temporally,” she experienced a sense of being given over to something outside herself in the exchange. Sconce reads contemporary accounts of the experience of the “exchange” between user and machine to note that “the central agent in these extraordinary exchanges was electricity.”³⁸ Because “speaking” or “writing” through/with these technologies

³⁴ Ibid 6.

³⁵ Ibid 6.

³⁶ Ibid 7.

³⁷ Ibid 7.

³⁸ Ibid 7.

“connected” a ‘writer’ to a disembodied addressee while disconnecting a writer from the “body,” the machine provided the *ability* to communicate but *disabled* both the individual and collective cultural “sense” of human agency. Or, rather, the writing-machine facilitated the *redistribution* of that “sense” of agency to an inanimate technology (in this case, the telegraph) that then took on a special cultural significance.

Another example Sconce offers of haunted media construction through wider social narratives can be found in his chapter on the wireless; more specifically, on the contamination fears regarding infiltration of the “body” by an invisible, undetectable “ether” coupled with immigration anxieties or fears of the rise of global fascism. In the early-mid 20th century, there was a prevalent concern that the American body -- be it the body politic or the “individual” (white, heterosexual family unit) -- was vulnerable to infiltration of by an invisible, undetectable, often “overwhelming” “ether.” Sconce’s analysis notes that the “press coverage of wireless” encouraged “somatic and even existential associations” of radio as a “coming ghost land.” He writes that “by focusing on the ‘uncanny’ behavior and ambiguous status of radio...this press coverage worked in “portraying the medium’s oceanic presences as an omnipresent and inescapable force that could bathe and even occupy the body.”³⁹

The simultaneous sense of the wireless as alienating and connecting individuals, bathing (“cleansing”) yet occupying the body, did not develop separately from other social forces. Regarding the perception of the wireless in the early twentieth century, Catherine Covert notes that even the growing popularity of the wireless was “tinged by an uneasy impression that radio was...ominous and somehow foreboding,” a “strange new sense...of being one with an atomized

³⁹ Sconce 67.

mass.”⁴⁰ The new “omnipresent” isolation experienced by listening to the radio cannot be understood independent of the industrialization, secularization, and sense of urban isolation that established the twentieth century. Fears of “ether invasion” occurred in a public discourse saturated with debate about maintaining the “social order” in an increasingly secularized nation faced with mass immigration to the United States at the turn of the century. As Sconce writes, because there was “no longer a consensus about America itself as a national community,” this anxiety around the alienating/displacing radio is connected with a political milieu and a sense of “lost agency” around simultaneous communication; a sense of technology “taking over.”⁴¹

In conclusion, these inherited narratives, cultural phobias, and fascinations continued to attach themselves to technologies in ways that did not operate independently from other social norms around citizenship, race, gender, or (I would add to Sconce’s account) sexuality. These haunted media “dislocated” the “site” of spatio/temporal communication from “mostly” spatial to “predominantly” temporal. In doing so, they challenged notions of the human “subject” which was (de)constructed within and alongside the agency of electronic presence.

With Sconce’s vocabulary in mind, I will now argue that this concept of “haunted media” still permeates political discourse around technology and American democracy in the twenty-first century. In particular, I will argue that the media coverage of the 2016 U.S. Presidential election constructed the Twitter bot as a non-human political agent and as a contemporary example of “haunted media.” Both technophobic and technophilic rhetoric of

⁴⁰ Catherine Covert, “We May Hear Too Much: American Sensibility and the Response to Radio, 1919-1924.” In *Mass Media Between the Wars: Perception of Cultural Tension, 1918-1941* edited by Catherine L. Covert and John D. Stevens (Syracuse: Syracuse University Press, 1984): 199.

⁴¹ Sconce 64.

software as non-human political agents intersect with wider narratives around agency, community, and citizenship.

Twitter Bots as Haunted Media:

The post-2016 sense that we inhabit a world at the mercy of algorithms may signify an ambivalent relationship between technology and democracy in the United States. But the relationship between technological development and conceptions of democracy pre-dates the “digital boom” of the early twenty first century. From the eighteenth century pamphlet to contemporary wiretaping, media networks have channeled, interrupted, and staged democratic participation, at the same time consolidating and rupturing our working conceptions of “democracy” through this participation. What has changed since the turn of the millennium is, to use Sconce’s terms, the conditions under which “animated sentience” has been allowed to some forms of technology -- such as partisan Twitter bots in Woolley and Guilbeault’s article -- and denied to others, as seen in the mystification of The Internet in Edsall’s.

The dislike of bots is not necessarily linked to explicitly political reasons. For example, in a 2013 *New York Times*, Ian Urbina article described "social bots" as “automated charlatans” that “insidiously” “indiscriminately churn out e-mail” scams and hold the power “to sway elections, to influence the stock market, to attack governments, even to flirt with people and one another.”⁴² The construction of the sentence “to sway elections, to influence the stock market, to attack governments, *even* to flirt with people and one another” instead of, perhaps, “to influence the stock market, to flirt with people and one another, and *even* to attack governments and sway elections” positions the flirting as the horrific “*even*,” the unimaginable limit. Despite the prevalence of the female robot in heterosexual love in the popular imagination, potentially being catfished by a bot is positioned as the ultimate technological horror for Urbina. Most women can

⁴² Ian Urbina, “I Flirt and Tweet. Follow Me at #Socialbot,” *New York Times*, August 10, 2013. Accessed: August 6, 2017.

certainly think of worse catfishing experiences, and for that matter, worse online confrontations with bots. Perhaps Urbina is more unnerved by a bot flirting than by a machine unsettling government structures, because while technology *has* always been used to attack governments and sway elections, this familiar disruption is being undertaken in a new, insidious way.

Take, for another example, an older article by Tom Simonite in *The MIT Technology Review*. The author rails against “fake accounts operated by low-paid humans or automated software” that are “used to inflate follower counts, to push spam or malware, and even to skew political discourse.”⁴³ I highlight this example for several reasons. Firstly, the author’s definition of “fake” is unclear given that by 2017, the phrase “fake accounts” usually refers to exclusively to accounts operated by software. Simonite appears to use “fake accounts” to refer also to accounts operated “directly” by human users behind an alias. Secondly, it is not clear why Simonite uses “low-paid” to modify “human” except insofar as he is implicitly making assumptions about what humans would perform labor indistinguishable from automated software. Best case scenario, the author is commenting on exploitation and/or threat to minimum wage jobs posed by robots. In the worse case scenario, there are classist and possibly sexist undertones in his equivocation between software and human in this context.

I cite these two examples not because they are particularly unusual amongst the many news articles, think pieces, or other media coverage of the bot, but precisely because they exemplify how common rhetoric of “the uncanniness” and the “eeriness” of bot technology is not separate from race, class, or gender. Another, more explicitly political example, can be found in the aforementioned *Botivist*, which was accused of “hijacking” or “interfering” with politics.

⁴³ Tom Simonite, “Fake Persuaders” *The MIT Technology Review*. March 23, 2015.

In December 2015, Signe Brewster reported in the MIT Technology Review that “45 percent of the contact efforts made by the bots were met with a reply. Direct requests for participation, which included questions such as “How do we fight corruption in our cities?” had the highest success rate, with a reply rate of 81 percent” while “tweets expressing solidarity with potential volunteers had the lowest reply rate at 21 percent,” which researchers interpreted as “potential volunteers” responding “negatively when the clearly nonhuman bots took on a more human tone.”⁴⁴ According to one of the researchers, “people actually started questioning whether bots should be involved in this kind of initiative and stopped participating” in response to the more “human” declarations of solidarity.

Another reason that the bot is regarded with suspicion is that our response to haunted media has a much older epistemic relationship to the machine: one in which anxiety is provoked by addressing or opening to an Other that we cannot know. As Michael Bernard Donals writes, extrahuman relations tend to “interrupt knowledge, exile its subjects, and call writers -- in Badiou’s terms to defy communication entirely...by making the unintelligible intelligible—twisting the impression created in the archive so that it becomes held fast by the name (as history, or as capital *W* “Writing”).”⁴⁵ To open to the automaton writer by engaging the human/nonhuman is to engage a unknown and possibly unknowable technological dimension to political discourse. The effect of such an opening is that “the subject refuses to read, ‘in complicity with a resistance to the lost object from which a text always cut loose . . . [and that]

⁴⁴ Signe Brewster, “How Twitter bots turn Tweeters Into Activists.” *The MIT Technology Review*, December 18, 2015.

⁴⁵ Michael Bernard-Donals, “Divine Cruelty and Rhetorical Violence.” *Philosophy and Rhetoric* 47, no. 4, (2014): 416.

continues to carry traumatic traces in often vague, undetectable ways' ([Badiou] 2002, 156).⁴⁶

Such traumatic traces arguably emerge in the impulse to “illuminate” and “familiarize” the uncanny in either advocacy for media literacy, a’la Guilbeault and Woolley, or in fearing a disembodied surrender, a’la Edsall.

In conclusion, what makes bots unusual is not a greater or lesser potential for political interference than any other technology. Thus thinking about bots as social actors warrants a rhetorical analysis that takes into account the “critical culture” in which bots, humans, and other information producers/consumers operate.

⁴⁶ Bernard-Donals 416.

Conclusion: Rethinking a Critical Culture

I began this essay by speculating as to the challenges and possibilities for rhetorical theory that are opened up by the invention to explore “rhetorical characteristics independent of human direction.”⁴⁷ In particular, I wished to perform a close reading of the rhetorical construction of Twitter bots as haunted media to demonstrate that thinking through the ethical relations of “deception and responsibility” involved in the “construction and functionality” of bots requires thinking through a new ethical “sense” of electronic agency. To this end, I took as my case study the rhetorical construction of “the Twitter bot” as haunted media in order to use haunted media as a lens to unpack the rhetorical construction of the bot as exemplified in two news articles. By extending Sconce’s analysis of nineteenth and twentieth century media ecologies to the twenty first century, I demonstrated that haunted media narratives predate and persist beyond a specific election cycle or technology. Furthermore, these narratives do not operate independently of other social relationships and epistemic categories in our technologically mediated, global and national social network.

I end now by tracing potential questions and concerns raised by this conclusion. There are numerous questions that may guide further rhetorical analysis of how software agents are framed as political agents. What effect does a sense of “lost” agency or *control* have on our concepts of “democracy?” How might the concept of haunted media reshape how critical theorists understand widespread conceptions of agency in the political system may have changed amongst technology users? How might other kinds of “haunted media” besides Twitter bots that “glitch”

⁴⁷ Douglas Eyman. *Digital Rhetoric: Theory, Method, Practice* (Ebook: University of Michigan Press, 2015). <http://www.digitalculture.org/books/digital-rhetoric/>

or “interrupt” the machine of democracy by “hacking” human interaction? In short, how might uncanny technologies impact the sense of community and citizenship in early twenty-first century American politics? However, I end with the suggestion that there is a broader ethical imperative to deconstruct the binaries between human and nonhuman that position “the bot” outside the realm of human activity in the first place.

In 2002, Jacques Derrida wrote of the relationship between democracy and technology that “everything that is affecting...the juridical concept of the state’s sovereignty today,” he wrote “has a relation -- an essential relation -- to the media and is at times conditioned by the telepowers and teleknowledges” involved in the circulation of information.⁴⁸ If Derrida is right that “we” have inherited technologically mediated concepts of “democracy” and “the state,” then our responsibility is to probe the practical deconstructions already underway in contemporary media ecologies. If rhetoric as a field is to explore the political dimensions of the possibilities of extrahuman rhetorical theory, then rhetoric must take up Derrida’s challenge to deconstruct the concepts “conditioned by telepowers and teleknowledges.” These concepts include not only the “state” and “nation,” but also the “human.”

In this report, I have attempted to argue that questions of the social and historical circumstances through which electronic media come to be seen as “living” and “alive” cannot be divorced from the *frames* by which certain human bodies are perceived as liveable, or deaths grievable, as Judith Butler puts it. To put this another way, distinctions between “human” and “nonhuman” activity cannot be divorced from wider relationships of power for oppressive or resistance regimes. The broader significance of a rhetorical analysis of the construction of

⁴⁸ Jacques Derrida and Bernard Stiegler, *Echographies of Television* (Cambridge: Polity Press 2002): 35

Twitter bots as haunted media, for rhetoricians, is that such an analysis opens up an analysis of the political dimensions of the rhetorical construction of “the human” and “the nonhuman.”

Works Cited:

Bernard-Donals, Michael. "Divine Cruelty and Rhetorical Violence." *Philosophy and Rhetoric* 47, no. 4, (2014): 400-418.

Bilton, Nick. "Trump's Biggest Lie? The Size of His Twitter Following." HIVE by *Vanity Fair*. Published: August 4, 2016.

<https://www.vanityfair.com/news/2016/08/trumps-biggest-lie-the-size-of-his-twitter-following>

Bowles-Eagle, Ryan. "Loitering, Lingerin, Hashtagging: Women Reclaiming Public Space Via #BoardtheBus, #StopStreetHarassment, and the #EverydaySexism Project." *Feminist Media Studies* 15, no. 2, (2015), pg 350-353.

boyd, dana. "'Did Literacy Media Backfire?'" Points by Data & Society. Published: January 5, 2017. Accessed: July 15, 2017.

<https://points.datasociety.net/did-media-literacy-backfire-7418c084d88d>.

boyd, dana, Meredith Broussard, Made, Samuel Woolly,. "How to Think About Bots."

Motherboard *VICE*. Published: February 23, 2016. Accessed: July 2017,

https://motherboard.vice.com/en_us/article/qkzpdm/how-to-think-about-bots

Brewster, Stiege. "How Twitter bots turn Tweeters Into Activists." *The MIT Technology Review*.: December 18, 2015.

Brustein, Joshua. "Trump's Twitter Bots Turned Out on Election Day." *Bloomsburg*. Published: November 17, 2016. Accessed: August 8, 2017.

Cole, Kirsti K. "It's Like She's Eager to be Verbally Abused": Twitter, Trolls, and (En)Gendering Disciplinary Rhetoric. *Feminist Media Studies* 15, no 2 (2015): 356-358.

Covert, Catherine. "We May Hear Too Much: American Sensibility and the Response to Radio, 1919-1924." In *Mass Media Between the Wars: Perception of Cultural Tension, 1918-1941* edited by Catherine L. Covert and John D. Stevens. Syracuse: Syracuse University Press, 1984: 199-219.

Derrida, Jacques, Stiegler, Bernard. *Echographies of Television*. Cambridge: Polity Press, 2002.

Edsall, Thomas B. "Democracy, Interrupted." *New York Times*. March 7, 2017.

Elish, M.C. "On Paying Attention: How to Think of Bots as Social Actors." *Data Society: Points*. February 26, 2016.

<https://points.datasociety.net/on-paying-attention-how-to-think-about-bots-as-social-actors-99e8dbdb0a0f>

Eyman, Douglas. *Digital Rhetoric: Theory, Method, Practice*. Ebook: University of Michigan Press, 2015. <http://www.digitalculture.org/books/digital-rhetoric/>

Glaser, April. "On Twitter, Trump bots are out-tweeting Clinton bots 7 to 1." *Recode*. Published: November 1, 2016. Accessed: August 8, 2017. <https://www.recode.net/2016/11/1/13488020/trump-bots-clinton-twitter-third-debate-twitterbots-election>

Guilbeault, Douglas and Sam Woolley. "How Twitter Bots Are Shaping the 2016 Presidential Election." *The Atlantic*. November 1, 2016. Accessed August 8, 2017. <https://www.theatlantic.com/technology/archive/2016/11/election-bots/506072/>

Kaye, Barbara K. and Park, Chang Sup. "Twitter and Encountering Diversity: The Moderating Role of Network Diversity and Age in the Relationship Between Twitter Use and Crosscutting Exposure." *Social Media + Society*. 3, no 3 (2017). Accessed Online: <http://journals.sagepub.com/doi/abs/10.1177/2056305117717247>

Konopacki, Marco. "Democracy is in danger, only technology can save it." *Opendemocracy.net*. Published March 30, 2017. Accessed July 20 2017. <https://www.opendemocracy.net/democraciaabierta/marco-konopacki/democracy-is-in-danger-only-technology-can-save-it>

Maragh, Raven S. "Our Struggles Are Unequal: Black Women's Affective Labor Between Television and Twitter," *Journal of Communication Inquiry* 40, no. 4 (2016): 351 - 369.

Parrish, Alison. "Bots: A definition and some historical threads." *Points by Data & Society*. Published February 24, 2016. <https://points.datasociety.net/bots-a-definition-and-some-historical-threads-47738c8ab1ce>

Raley, Rita. *Tactical Media*. University of Minnesota Press: Minneapolis, 2009.

Rosenberg, Yuval. "62 percent of all web traffic comes from bots." *The Week*. December 16, 2013.

Siapera, Eugenia. "Tweeting #Palestine: Twitter and the mediation of Palestine." *International Journal of Cultural Studies* 17, no 6. (2013). <http://journals.sagepub.com.ezproxy.lib.utexas.edu/doi/full/10.1177/1367877913503865>

Sconce, Jeffrey. *Haunted Media: Electronic Presence from Telegraphy to Television*. Durham: Duke University Press, 2000.

Simonite, Tom. "Fake Persuaders." *The MIT Technology Review*. March 23, 2015.

Swift, Art. "Americans' Trust in Mass Media Sinks to New Low." *Gallup*. September 14, 2016.

Urbina, Ian. ““I Flirt and Tweet. Follow Me at #Socialbot.” *New York Times*. August 10, 2013.

Zeifman, Igal. “Bot traffic is up to 61.5% of all website traffic.” *Incapsula*. Published: December 9, 2013.