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**Anti-Intellectual Political Rhetoric:
A Grounded Theory on Twitter Echo Chambers**

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Author's Declaration

I have written this Master's thesis independently. All viewpoints of other authors, literary sources and data from elsewhere used for writing this paper have been referenced.

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Anti-Intellectual Political Rhetoric:

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Stefan L. Meyer

Abstract

BACKGROUND: Separating the pursuit of knowledge and scientific endeavors from politics is impossible. Through the advancement of technology, especially social media, it has become easier for politicians to dismiss science and intellectuals through anti-intellectual rhetoric at an unprecedented rate. Critical thinking in analyzing policies is discouraged and dismissed in favor of uncritical common sense. **OBJECTIVE:** This thesis sets out to explore how political anti-intellectual rhetoric is spread by politicians in the US and UK through social media, specifically Twitter. **METHODOLOGY:** This study applies a Mixed Methods-Grounded Theory approach to develop an emergent theory on anti-intellectualism in political tweets grounded in data. The data analyzed was taken from ten members of parliament in the United Kingdom and 11 politicians in the United States. A total of approx. 50,000 tweets were included in the raw dataset. The data was analyzed and sorted using CAQDAS as well as manual coding methods. **FINDINGS:** Through empirical analysis of the data the study found that politicians who tweet anti-intellectual tweets will disengage from the Twitter conversation afterward. However, Twitter's method of displaying Twitter replies increases the probability of supporters seeing the message and multiplying it through an echo chamber. **JUSTIFICATION FOR THEORY:** The theory is grounded in the data presented in this thesis. Data was collected until further analysis resulted in theoretical saturation and failing to reject the emergent theory. **IMPLICATIONS:** As the politician has disengaged from the conversation, he or she can reject responsibility for the conversations that follow their tweet. In this manner a tweet that makes an uncritical claim can be morphed into a fully anti-science narrative through the echo chamber without the politician's further involvement.

Key words: anti-intellectualism, common sense, grounded theory, mixed methods, Twitter

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Introduction

It is the *métier* of academics and scientists to identify challenges in our natural and social environment and to discover and recommend viable solutions to these puzzles. This is, in my experience, how the learned see their role in society. Yet, most will likely admit that this does not reflect our everyday reality. Ideas that are strictly opposed to the scientific and academic consensus are politicized to varying degrees. The affected policies can have consequential long-term effects on inter-state affairs, international trade, and intercultural relations.

While there is no scientific data suggesting that genetically modified organisms (GMO) foods are unsafe to eat, and a significant majority of 88% of AAAS scientists agree on the safety of GMO crops, only 37% of the American public believe these foods to be safe (Pew Research Center 2015). Policies concerning GMO crops will have a monumental impact on the future of the world's food supply. This affects citizens in developing economies, who have no voice in policymaking, much more than those influencing policy in the rich economies. A similar observation can be made in regard to anthropomorphic climate change, which enjoys 97% consensus among climate scientists, yet is skeptically viewed by the publics of most countries.

During the cold war a culture of knowledge acquisition, democratic institutions, and open markets held a hegemonic position in Western discourse (Stivachtis 2015; Rigden and Stuewer 2012). This is not the case anymore. In the United States scientific findings and academic expert opinions are heavily politicized and the recently elected Republican president has even suggested that climate change is a hoax perpetrated by the Chinese government to damage the U.S. economy (Emery 2016). There have also been anti-scientific movements in the sphere of health and disease. These have ranged from conspiracy theories about adverse effects of vaccines (one of the greatest, life-saving achievements in human history), to denial of the linkage between HIV and AIDS, a position that may have cost 300,000 lives in South Africa (Dugger 2008). These are just three examples of an endless list of scientific advancements that are met with irrational opposition.

In my opinion, this should be of grave concern to any academic who dedicates her life to advancing the pool of human knowledge. It marks a shift from a culture that embraces intellectual quests to a culture of distrust in evidence-based knowledge. This cultural shift

will banish intellectuals to a virtual ivory tower ghetto while the dominant discourse will be based on visceral populism and contempt for people of the mind.

One might wonder to what extent this affects international affairs. It is not a topic often covered in curricula of academic International Relations programs, yet science, technology, and knowledge acquired through intellectual pursuits are playing an increasing role in international affairs. As mentioned before, science affects: the world food supply through GMO science and technology, the global climate and research into global warming and the effects of greenhouse emissions, the field of health, especially in the areas of HIV, vaccinations, SARS, and the avian flu virus; it is also a game-changer, meaning it can rapidly affect the way international affairs are conducted, the technologies we use from war to diplomacy change the way in which states conduct themselves on the international stage and can change the status of a state in international prestige and standing (Weiss, 2012; Weiss, 2015; Krige & Barth, 2006). These aspects have also changed the relationship between governments and private companies, many of whom have developed and produced these technologies. We can see this especially in the information technology sector, which has and continues to transform the way governments interact with each other and their citizens, but also how societies interact with each other (Weiss, 2015).

The importance of science to the policy-making process has led some constructivist IR scholars to suggest that “science must be developed authoritatively and then be delivered by responsible carriers to politicians” (Haas & Stevens, 2015), meaning that politics should not have influence on how science is conducted (Lidskog & Sundqvist, 2015; Haas & Stevens, 2015). Unsurprisingly, this does not reflect reality, which is why Science and Technology Studies (STS) scholars believe that science cannot be conducted independently from politics or that this position needs to at least be reevaluated (Lidskog & Sundqvist 2015; Fuller & Collier 2004). According to the National Research Council (1999), this is an issue that scientists in the science, technology, and health (STH) fields have brought up in congressional hearings in the United States in response to the Department of State redirecting personnel and resources from STH activities, elimination of the STH ‘cone’ from the cones in the framework for the promotion of foreign service personnel, the reduction of the scientific counselors in U.S. Embassies, and the delay in providing leadership to the Bureau for Oceans and International Environmental and Scientific Affairs. The problem of separating science and the intellectual from the political process creates a conflict of interest.

It has been demonstrated through content analysis of presidential rhetoric in the United States over the past century that presidential rhetoric has become increasingly more

anti-intellectual (Lim, 2008). This does not come as a surprise to me, as politicians in democracies depend on a common understanding with their voters. With the entire population as audience, it is in the interest of the politician to influence the national discourse in a way that benefits the politician and will get him re-elected. In this sense, the politician has an incentive to discredit intellectuals who conduct research which does not further the politician's interest, and an even greater incentive if that research is counterproductive to the politician's or political party's platform.

When I talk about anti-intellectualism in politics, I am not referring to unintelligent or uninformed politicians, but rather the rhetoric used by politicians to discredit science or intellectuals. or at least to marginalize them. Through the advancement of technology, the way politicians have been able to reach out to their voters has transformed to reach a larger audience more quickly, from having to speak to their constituents directly, to newspaper reporting on political speeches, to the immediacy of broadcast media (Eshbaugh-Soha 2016; Lim 2008), arriving now at the unfiltered and immediate link between politicians and the public through social networks such as Twitter. I see this issue tied to the current international rise of populism in politics (Inglehart & Norris 2016), which raises the question: how do politicians influence discourse to discredit or marginalize intellectuals and their pursuits? I believe that anti-intellectual discourse has fueled the populist fire and much of this can be traced back to political rhetoric.

The rise of social media, especially Twitter, has had an undeniable influence on elections and political discourse. The rising importance of social media and decline of traditional media has not just shifted the way we consume news, but has also had the effect of "increasing unsubstantiated, exaggerated, and even outright fake news stories" (Frantz 2017). It is no secret that politicians play use this tool to their advantage.

This thesis sets out to identify the way in which politicians in the United States and United Kingdom have employed rhetoric to further anti-intellectual discourse through a Multi Method-Grounded Theory (MM-GT) analysis of social media tweets by politicians. My thesis will start with a literature review on the concepts used in this study, specifically the definition of what intellectuals are for the purpose of this study, their relationship with International Relations, and the current state of anti-science movements. I will also give a short overview of philosophical concepts related to this study, and the epistemological defense of anti-intellectualism by some scholars. In chapter III on methodology, I will

explain what Grounded Theory¹ methodology is and how it differs from traditional research frameworks. I will also detail how I have chosen my sources and the data I will analyze. In chapter IV, I will give a detailed account of how I applied the Mixed Methods-Grounded Theory approach and the grounded theory that has emerged from the data. In the final chapter I will analyze the findings to my research topic and question, highlight the limits of this study, and offer recommendations for further study. I will end this thesis with my conclusions and final thoughts on the research I have conducted.

¹ I used capitalized Grounded Theory when talking about the methodology and lower case grounded theory when I am talking about a theory grounded in data.

CHAPTER I, LITERATURE REVIEW

Introduction

This chapter will review some of the literature concerned with anti-intellectualism and the concepts relating to anti-intellectualism in politics. I start out with the literature examining anti-intellectualism and analyzing it directly. As scientists and their research are part of the intellectual sphere, and much of science's funding relies on government and politicians, it is naturally affianced with intellectuals and the discourse on intellectuals and anti-intellectualism. Therefore, I will also present some of the literature on the anti-science movement and how it relates to politics. Finally, I will give an overview of the literature on low-quality rhetoric, which is the vehicle used by politicians to introduce anti-intellectualism into everyday discourse (Lim 2008).

Anti-Intellectualism

One of the most eminent scholars on anti-intellectualism, particularly in the United States, was Richard Hofstadter (1963). While his book *Anti-Intellectualism in American Life* was written more than half a century ago, it is still the most quoted work on Anti-Intellectualism according to a Google Scholar search (as of May 2018). Hofstadter defines anti-intellectualism as the “resentment and suspicion of the life of the mind and of those who are considered to represent it; and a disposition constantly to minimize the value of that life” (7). Hofstadter concedes that this is a very general formulation, but narrowing the definition would not add to its usefulness. Because the definition he gave is broad and inexact, he clarified what his definition does not include: “internal feuds or contentions of the American intellectual community” (7). While he found the struggles of self-critical scholars and the sometimes hateful comments toward the entire scholarly community to be interesting, they did not contribute to the perception of intellectuals in public life. In the book, he argues that anti-intellectualism is and always has been the fabric of American culture. He relates it back to the early settlers and anti-rationalism based on religion (absolutism vs. relativism), then

moves on to anti-elitism which is based on the assumption that claims by the elites² are self-serving and to preserve class privilege. The third category is unreflective instrumentalism, which holds that practical and material gain is the main objective of thought. Finally, he continues to talk about America's struggle with public education, which does not apply to my study. Unfortunately, he does not introduce international aspects of anti-intellectualism. This might be due to the book's being over 50 years out of print.

A more recent analysis of American anti-intellectualism is provided by Elvin Lim (2008). While Hofstadter laid out a picture of ever-present anti-intellectualism in America in a broad sense, Lim takes a narrower approach and examines the political discourse of U.S. presidents from George Washington (the first U.S. President) to George W. Bush (the 43rd U.S. President). *The Anti-Intellectual Presidency* highlights the importance rhetoric plays in the proliferation of anti-intellectualism in American politics. Lim claims that since the founding of the United States presidential rhetoric has "taken a nosedive" (IX). He argues that it is not the population who are anti-intellectual, but the presidents who engage in anti-intellectual rhetoric. He makes it clear that anti-intellect and unintelligence should not be confused. In fact, he maintains that an anti-intellectual president is indeed intelligent or "crafty enough to recognize the political utility of publicly rejecting the 'highfalutin' ruminations of the intellectual and affirm the soundness of 'common sense'" (3). This immediately brought to mind the current political atmosphere in Europe and the U.S. It reminded me of Michael Gove's 2016 statement during the Brexit campaign: "people in this country have had enough of experts" (Deacon 2016), or when Donald Trump Jr. was campaigning for his father and said "we didn't learn from MBAs, we learned from people with doctorates in common sense . . . My father knew that those were the guys and gals who would teach us the dignity of hard work at a young age" (Smith 2016). Lim makes the case that the quantity of presidential rhetoric has increased, this is something he attributes to presidents "going public"³. It is not the increased quantity in presidential rhetoric that is causing an increase in anti-intellectualism though, but the decreasing quality of rhetoric which he describes as:

Dumbing down, which I approximately understand to be some excessive degree of linguistic simplification, pejoratively supposes a "dumbness" or

² Canovan (1999) writes about how populist leaders take advantage of anti-elitist sentiments.

³ This is when the president addresses the population directly and seeks to rally public support for his policies. See Lim (2008) and Eshbaugh-Soha(2016) for further information on going public.

unintelligence presumed to be the state of the median auditor-citizen. By appropriating the term dumbing down, we implicitly endorse the idea that citizens are unintelligent and presidents are merely calibrating their messages as such. I reject the premise and therefore the conclusion of this idea. Citizens are not dumb, and they deserve more, not less, information from presidents so that they are equipped to make competent civic decisions. Though he will often be the first to make this charge, it is the anti-intellectualist who underestimates citizens and who assumes that citizens cannot digest anything more than platitudes and simplistic slogans. (xii)

Lim undertakes a systematic study of the quality of presidential rhetoric from 1789 to 2008. He starts out with content analysis of over 12,000 speeches by all presidents. He evaluates them all on the Flesch Kincaid Readability scale and finds that since the U.S.'s founding, the readability score of the State of the Union address has linearly declined from a college reading level to an 8th grade level. While he did not think it possible to keep the quality of the speech high while drastically simplifying the language, he used computer-assisted content analysis software (General Inquirer) to confirm that the quality of speeches has been reduced to platitudes and slogans. Furthermore, he conducts interviews with some 43 presidential speech writers to add some more qualitative data to his quantitative evidence. Lim's definition of anti-intellectualism is similar to that of Hofstadter in that he only considers anti-intellectualism in the political sense and does not engage with philosophical understanding of anti-intellectualism. My definition of anti-intellectualism for the purpose of this study is the same, yet I still think it is important to illustrate how intellectuals sometimes use the term and contrast it to this popular anti-intellectualism used in political rhetoric.

When we consider political rhetoric and public discourse, it raises the question of how the former is introduced into the latter. Until recently, politicians rarely had a direct line of communication with their populations. Much of the communication from politician to the public was--and still is--channeled through the mass media. I will go into further detail on this point later in the chapter in the section on low quality rhetoric. First, I want to address the issue of anti-science movements, which I find are closely related to anti-intellectualism, and in many cases are the basis for anti-intellectual rhetoric.

Anti-Science Movement

In an editorial in *Physics in Perspective*, Rigden and Stuewer (2012) argue that the anti-science movement in the United States comes from the top, i.e. it is directed by the

politicians in the House of Representatives and the senate. They point at the important achievements that were politically possible during the cold war, but can no longer find political support in U.S. politics. These achievements include the space program which put the first man on the moon; it ended when the space shuttle program was ended in 2012.

Further examples are high-energy physics programs like Fermilab, which included the Tevatron accelerator, which were defunded by Congress. Also, the Webb telescope, which replaced the Hubble space telescope, was proposed to be defunded in June 2011; however, Congress reversed its position in November and continued its funding at the expense of other NASA projects (Klotz, 2011). Rigden and Stuewer (2013) took a closer look at the politics and history of the anti-science movement in an article they wrote two years later. In this article they drew parallels between the United States today and Germany in the first part of the 20th century. With the ushering in of the Enlightenment era, Germany became, they claim, the “intellectual and cultural showcase for Western civilization” (127). However, they could not find an explanation for the “disease that infected German minds after the Great War” (128), even when taking into consideration the hyperinflation following the war. They put the blame on Hitler’s and Goebbels’ propaganda, causing German citizens to abandon rationality in favor of the Nazi agenda. The authors believe that there is evidence that the same is happening in America today, as is indicated by statistics of declining American hegemony in science literature. For example, they quote a statistic that shows that 61% of articles in “Physics Review” in 1983 were written by American physicists, and by 1993 this number had declined to only 29%. However, I do not find this to be proof of the absolute decline of American science, nor for an anti-science movement; it only demonstrates a relative decline, which might be due to other countries thriving and funding more research in physics. This is not bad in itself, as research conducted anywhere contributes to knowledge everywhere, provided that it is widely published. They then give some specific examples of what U.S. politicians have said or what their stance is, which clearly suggest an anti-science attitude:

Jon Huntsman, the former governor of Utah and US ambassador to China, has said that his own political party, the Republican Party, is becoming the anti-science party. Texas governor Rick Perry and presidential candidate Mitt Romney have given voice to irrational and anti-science statements. Republican Paul Broun from Georgia identifies where the “lies” contained in the theory of evolution and Big Bang theory came from: “straight from the pit of hell.” Broun isn’t alone: politicians routinely claim that climate change is a hoax, intelligent design should be taught in biology classrooms, vaccines cause autism, and Alzheimer’s could be cured

if government would just get out of the way. In the November 2012 issue of *Scientific American*, in an article with the title, “America’s Science Problem,” Shawn Lawrence Otto writes that each of the political parties “demands ideological conformity, even when contradicted by scientific evidence.” (128)

Rigden and Stuewer recognized that politicians do not change their positions without external influence. They believe this is due to the attitudes of the public toward science changing. They attribute this change of attitude to propaganda, which they define as the influence of radio, television, and social media. This is an interesting point as the media has a significant influence on public discourse (Herman & Chomsky, 2010). I will return to this point later in the chapter when I talk about low quality rhetoric and how it affects discourse on science.

While Rigden and Stuewer recognize that politicians do not change their positions without external forces, such as the public attitude toward science, Gerald Holton (1993) highlights this issue in his book *Science and Anti-Science*. He presents the image of a person’s functional worldview or *Weltbild* as a symptom of how one reconciles one’s understanding of, and conflicts between, science and authority. Holton points out parallels between the rise of Greek Enlightenment in the sixth century B.C.E., in which mythology was methodologically replaced with rational thinking, to the fifth century C.E. by which time popular belief had turned against the intellectual’s rationalism, and the current state of “metaphysical exhaustion”, to use Max Weber’s words (as quoted in Holton, 1993). While some may point to polls that show Americans believe in the potential of science as a force for good at higher rates than in other developed economies, he also points out that at the same time more than half of Americans do not believe in the theory of evolution, and half have problems finding the length of one side of a square when provided the length of another side. He attributed this to the notion that “in America today it is not science but religion which, as in the days of the seventeenth-century Pilgrims, is perhaps the strongest force in private and national life” (150). Yet, he maintained that Americans do not see a contradiction in these worldviews, even though the evidence-based science worldview is often incompatible with a faith-based worldview. In these instances the dominant worldview, which is mostly religious, is favored and other consciousnesses are ignored without recognizing the disagreements between the two.

Then again, the relationship between these different and conflicting consciousnesses should not be confused with an “incomplete or ignorant or damaged form of the ‘proper’ worldview that many believe should characterize our civilization at this time in history”

(152). Rather, the leading figures in the anti-science movement are presenting “an articulated and functional, and potentially powerful, countervision of the world, within which there exists an allegiance to a ‘science’ very different from conventional science” (152). This anti-scientific world view has a single purpose--to delegitimize traditional science, “a delegitimation which extends to science's ontological and epistemological claims, and above all to its classic, inherently expansionist ambition to define the meaning and direction of human progress” (152).

All through the history of modern societies we can observe sections of societies competing in three different areas: power, production, and belief (Holton, 1993). This is where the scientific worldview has shifted over time, and a part of the picture that is central to the role that anti-science movements play in political rhetoric. Holton describes the American regard of scientists and engineers to have shifted over the years. While this group, in harmony with American society, had been perceived as a “force against established authority, as challengers of all dogma and successors of the religious dissenters who founded” (156) in the United States up until World War II, they are now viewed as part of the authority establishment, due mainly to the increase of science influencing policy. This brings me to the point of scientists and intellectuals influencing politics and more importantly the reverse, politicians’ influence on science or the creation of knowledge through rhetoric.

Low Quality Rhetoric

The study of rhetoric in politics can be traced back to antiquity and Greek philosophy. Both Socrates and Plato, who described philosophy, sciences, medicine, and law as arts, did not consider rhetoric a form of art in the same way. They saw it more as a practical skill and a type of personality trait. While the arts served the purpose of finding the truth, rhetoric was merely a form of flattery and seduction of the mind, it often even conflicted with the truth (Plato; Lim 2008; Charteris-Black 2011). In Plato’s *Gorgias*, a Socratic dialogue, Socrates questions Gorgias, a self-proclaimed rhetorician, about the “art of rhetoric”. While Gorgias is convinced that rhetoric is an art, just like any other, Socrates is not easily persuaded by this notion. Socrates explains what the different arts teach and treat, such as medicine’s treatment of the ill, music’s composition of melodies, and then asks Gorgias with what rhetoric is concerned, to which Gorgias answers: discourse. He later then describes it as “the art of persuasion”. Gorgias then explains that his brother Herodicus, who was a physician, was not

able to convince his patient to take his medicine, but as a rhetorician, Gorgias was able to persuade the patient to take the medication. This persuasion was his art. In the following excerpt Plato highlights what he saw as problematic in the art of rhetoric:

SOCRATES: You were saying, in fact, that the rhetorician will have greater powers of persuasion than the physician even in a matter of health?

GORGIAS: Yes, with the multitude,—that is.

SOCRATES: You mean to say, with the ignorant; for with those who know he cannot be supposed to have greater powers of persuasion.

GORGIAS: Very true.

SOCRATES: But if he is to have more power of persuasion than the physician, he will have greater power than he who knows?

GORGIAS: Certainly.

SOCRATES: Although he is not a physician:—is he?

GORGIAS: No.

SOCRATES: And he who is not a physician must, obviously, be ignorant of what the physician knows.

GORGIAS: Clearly.

SOCRATES: Then, when the rhetorician is more persuasive than the physician, the ignorant is more persuasive with the ignorant than he who has knowledge?—is not that the inference?

GORGIAS: In the case supposed:—yes.

SOCRATES: And the same holds of the relation of rhetoric to all the other arts; the rhetorician need not know the truth about things; he has only to discover some way of persuading the ignorant that he has more knowledge than those who know?

GORGIAS: Yes, Socrates, and is not this a great comfort?—not to have learned the other arts, but the art of rhetoric only, and yet to be in no way inferior to the professors of them? (Plato)

This brings me back to Elvin Lim's (2008) point on the quality of rhetoric opposed to the quantity of rhetoric. In his analysis of presidential speeches, Lim classified those speeches which were written in the simplest language as low quality, which has been increasing in quantity over recent years. The further one goes back in time and analyses U.S. presidential speeches, the less the quantity becomes, but the higher the quality. While I concede that it is possible that simple speech can be of low quality, I believe the problem illuminated by Plato plays a larger role in the quality of rhetoric. That is to say that, low quality rhetoric is that rhetoric in which the ignorant persuades the ignorant. In the case that this persuasion is willfully of counterfactual nature or in opposition to what "he who knows" (Plato n.d.) trusts to be true, I would classify this as anti-intellectual rhetoric. For this reason, I do not believe that a simple computer-assisted qualitative content analysis is sufficient to recognize the quality or intent of political rhetoric. As Gorgias points out: rhetoric is concerned with discourse. For this reason one needs to understand the meaning and context in which the

rhetoric takes place. I will go into further detail on this in the methodology section of this thesis.

Leigh Shaffer (1977) offers a case in point for the rhetoric I want to highlight. His article analyzes the rhetoric used by Senator Proxmire's 1975 rhetorical attack on the social sciences. As the Chairman of the Subcommittee of the Senate Appropriations Committee that oversees the National Science Foundation, he publicly criticized those projects which he thought were a waste of taxpayer money. One case stood out because it struck a chord with the public and was quickly picked up by the media, a study Proxmire characterized as "the study of passionate love", when in fact it was a study to "test the theory of positive affect" (Shaffer 1977, 817). The purpose of the study was to examine "equity relationships involved in the interpersonal dealings of employers and employees, donors and recipients, aggressors and victims, engaged couples, husbands and wives, and parents and their children" (817). Yet, Proxmire characterized the study as pursuing "erotic curiosities" when he wrote "I think it is time the National Science Foundation put a stop to this Federal version of 'The Love Machine' and rearranged its research priorities to address our scientific, not our erotic curiosity" (Proxmire as quoted in Shaffer 1977). I believe this characterization demonstrates the ignorance of the purpose of social science in the minds of Proxmire and a large set of the population. Shaffer saw two recurring problems in this anti-intellectual rhetoric: "disagreement between intellectuals and the public over the value of knowledge" and "public misunderstanding of the nature of knowledge" (815). These problems, I believe, make it possible for low quality rhetoric to find an audience.

One important instrument of rhetoric, which I have mentioned in previous sections, is the media. To some extent politics, media, and advertising are tied so closely together that it is difficult to tell whose discourse we are in (Woods 2006). In societies which are considered to be democratic, the press is generally considered to be free and not under the influence of politicians or corporations (other than the company who owns the media outlet). This is evidenced by the higher ratings democratic countries usually receive in indices of press freedom (see Reporters Sans Frontieres 2018; and Freedom House 2017). Herman and Chomsky (2010) adduce arguments that even when the media are de jure free, they are actually restricted by "the powerful societal interests that control and finance them" (XI), on whose behalf they propagandize. They underscore the fact that most media companies in America are large transnational conglomerates, which are expanding with the increase of globalization. These companies are dependent on advertising revenues. But this does not always mean that they necessarily cater to what the viewer is most interested in, Herman and

Chomsky claim. First, the media companies have political interests, they need to appeal to politicians to receive favorable tax and other political benefits. Second, their advertisers are subject to the same pressures from politics, which is then reflected in the media content.

Herman and Chomsky show some media bias in the different types of reporting on issues in which the U.S. or her allies are aggressors and where the enemy are aggressors, and they find a higher prevalence of negative reporting in the latter (Herman & Chomsky 2010). While some of their conclusions and assertions seem borderline conspiratorial and the data possibly cherry picked, the claim that financing and politics play a role in the media does seem reasonable. In his study on presidential rhetoric Elvin Lim (2008) noted that there is a positive correlation with forms of media being introduced and presidents “going public”. This can be seen with direct addresses to the nation when the radio became a common household item, it increased with the introduction of the television, and I would say that with the introduction of social media the public exposure politicians now enjoy is larger than ever. As in the earlier example about Proxmire’s anti-science campaign, politicians can use the media to fuel anti-intellectual discourse. Once disinformation is put out there, it is difficult for the intellectual to follow this up and educate the public on the field of her expertise.

Conclusion

The extant literature reviewed describes how politicians can influence anti-intellectual sentiments in political discourse. Most of the literature which I was able to find through EBSCO Host and Google Scholar has primarily been concerned with anti-intellectualism in the United States. Even though Hofstadter (1963) asserts that anti-intellectualism is unique in American culture, my goal will be to analyze anti-intellectualism in a way that can be generalized to wider populations. Lim (2008) has provided an impressive study analyzing a lot of speeches through content analysis. The results are eye-opening, however, I find that his reliance on readability scores is too high and additional methods would strengthen his claims. His mentioning of low-quality rhetoric did lead me to investigate this area further, which provided me with valuable insight. The literature on the anti-science movement is also heavily focused on the sentiments toward science in the U.S. only and how politicians there influence it and take advantage of it. Plato’s illustration of rhetoric gives an insight to how someone who does not have expertise in a subject can still be more influential in everyday discourse about the subject than the expert. This is precisely what anti-intellectuals do.

CHAPTER II, PHILOSOPHICAL THOUGHT ON ANTI-INTELLECTUALISM

Introduction

As I define the intellectual, they are persons who work primarily with the mind, using critical thinking to advance the pool of human knowledge. How we arrive at knowledge and what types of knowledge there are has been an area of interest to philosophers since Plato in the third century B.C.E. In this chapter I will analyze some of the concepts used by philosophers to think about knowledge, how we acquire it, and what types there are. I will limit these to common sense and rationalism, which are relevant to anti-intellectual rhetoric in everyday discourse, as well as an overview of different philosophies intellectuals ascribe to, which are modernism and postmodernism. Lastly, I will discuss the differences between academic anti-intellectualism and public anti-intellectualism.

Common Sense and Rationality

Oftentimes politicians appeal to our common sense. Sometimes even to the point of discrediting the intellectual in favor of common sense (Lim 2008). This demands a definition and explanation of what common sense is. For this, the dictionary gives us a definition which should be quite familiar: “sound and prudent judgment based on a simple perception of the situation or facts” (Merriam-Webster 2017). However, in the section presenting synonyms and related words in contrast with “common sense” it goes into further detail:

sense, common sense, judgment, wisdom mean ability to reach intelligent conclusions. sense implies a reliable ability to judge and decide with soundness, prudence, and intelligence. (a choice showing good sense) common sense suggests an average degree of such ability without sophistication or special knowledge. (common sense tells me it's wrong) judgment implies sense tempered and refined by experience, training, and maturity. (they relied on her judgment for guidance) wisdom implies sense and judgment far above average. (a leader of rare wisdom) (Merriam-Webster 2017)

While sense, common sense, judgement, and wisdom are all considered synonyms for common sense, there is a clear difference: the degree of knowledge and sophistication

required is lowest for common sense. To be clear, my intention is not to understate the evolutionary role common sense plays in ensuring our survival. Common sense allows us to make quick decisions using what some might also call intuition. I have often heard people being criticized for lacking common sense, which suggests that common sense is considered a good thing to have. At the same time I have heard people plea to be rational. These terms often even seem to be used interchangeably. But the use of rationalism differs from common sense. Another look in the dictionary provides the definition of rational: “a : having reason or understanding b : relating to, based on, or agreeable to reason : reasonable - a rational explanation - rational behavior” (Merriam-Webster 2017). When we look up the definition for reason, of which one is “a sufficient ground of explanation or of logical defense; especially: something (such as a principle or law) that supports a conclusion or explains a fact” (Merriam-Webster 2017), we can clearly see the integral role sophistication and special knowledge play in applying reason and rationality. On the surface this may just seem a matter of degree, but I find that they can be directly opposed to each other in that they can produce diametrical opposite results⁴.

I want to present some clear examples of how the concepts of rationality and common sense have produced different beliefs. John Coates (1996) states that based on common sense, it was impossible to accept that the world was not flat. People believed that they would fall off a globe, but being able to stand on a flat surface was in accordance with common sense of the day. Early Greek philosophers had already advanced the idea of a spherical earth, and physicists regarded it as a known truth by the early middle ages. I suggest that their belief was not based on common sense, but on rationalism. This example illustrates two different components used in the application of common sense and rationalism: emotion in the former and evidence in the latter. An important distinction to make between common-sense and rationalism is that common-sense then is a type of knowledge, rationalism is a method to gain knowledge.

There is, of course, still a defense for common sense, it is impossible for us to know everything and prudent to follow the beliefs of common sense to enable us to function within society and understand the popular discourse of the society in which we live. Common sense gives meaning to the world we live in. There is no defense to preferring common sense to rationality though when a more informed opinion is available. This would be irrational,

⁴ For a closer analysis of the meaning of these different concepts Renee Elio (2002) has edited a very thorough book called *Common Sense, Reasoning, and Rationality*, which I can recommend for further detail.

which even in our commonsensical understanding is perceived to be inferior. The way rationality and common sense are affected by our social environment is a fundamental part in postmodern and critical theory and also some modern theories, such as Marxism. I will discuss this in the following section.

Modern vs. Postmodern

The question of rationality being the only way to arrive at truth raises the topic of postmodernism. The dominant way to arrive at the truth in modernity was ushered in through the enlightenment, when we shifted from looking for truth in the supernatural, religious beliefs, personal experiences, and intuition; to looking for empirical evidence and rationality (Rosenau 1992). There are intellectuals, in the sense of my earlier definition, who do not see the answer to truth in rationalism or traditional science, the ways of finding truth in modernity. Rather, they believe “all such systems of thought rest on assumptions no more or no less certain than those of witchcraft, astrology, or primitive cults” (Rosenau 1993). As the modern theories in science are the dominant ones, postmodernism can be seen as a revolutionary approach to studying the world. Especially in its purest form, it challenges every aspect of modern sciences, especially the social sciences and humanities. It does not accept that we can arrive at an infallible truth or that there is only one truth, it challenges the claims of the achievements of science and rejects policy recommendations (Rosenau 1992). They claim that the aim of modernity was to be a progressive force with hopes of liberating society from incompetence and irrational thought. Though they claim that it has not achieved its goal. Throughout the early 20th century, they declare that sciences and modes of thought have been used to create more destruction than positive effects on humanity. Postmodernists do not believe it is possible to arrive at absolute knowledge, and therefore they do not offer an alternative set of assumptions to modernism. Instead, they advocate for a return to pre-modern ways of thinking, valuing the intuition, traditions, and irrationalities which were commonplace in pre-modern times.

While modern thinking is still the dominant way of arriving at the truth in popular discourse, at least in the West, we can see some of these postmodern traits and beliefs taking hold of ordinary life. Rosenau claims that “In the fields of administration and public planning, suspicion of rational organization encourages a retreat from central planning, a withdrawal of confidence from specialists and experts” (Rosenau 1992). I interpret this

statement to refer to the practical field of public administration, and not the academic field, necessarily. The question arises: what is the source of this lack of confidence in specialists and experts among practitioners? In the social sciences this might be attributed to the fact that Postmodern scholars don't focus on "goals, choices, behavior, and personality" (Potter and Wetherell 1987) as much as on alternative discourses and the source of meaning. In Postmodern social research there is no testing, this is seen as a positivist approach which requires evidence, a concept which is not used and considered unnecessary by many postmodernist scholars. Rosenau believes this to be a reaction to "uncritical confidence in modern science and smugness about objective knowledge." (Krippner 1988, 131; Rosenau 1992). The appeal of it, she claims, is that it is open-ended and lacks specific definition. While I can see how these attributes may be appealing to some, it seems very similar to the concept of common sense, mixed with an intuitive method of filling-in the knowledge gaps. Positivist scholars constantly try to improve their methods and critique each other without abandoning empiricism and evidence. This can be seen through the fragmenting of some disciplines, such as economics, which can be split into traditional economics, which holds that actors are rational; and behavioral economics, which believes that in many cases, humans do not act rationally. Both fields are still considered useful, valid, and constantly advancing, adjusting and improving accuracy (at least to their proponents).

This is something proponents of Postmodernism may fail to recognize, the commonalities between modern critical social theory and postmodern social theory. Steven Best (1994) in *Foucault, Postmodernism, and Social Theory* describes how Foucault became one of the most prominent postmodern scholars and what influenced him to question modern ways of acquiring knowledge. 'Permanent critique of our historical era' (Foucault 1984, p. 42, quoted by Best 1994) that 'problematizes' modern forms of knowledge, rationality, social institutions, and subjectivity that seem given and natural but in fact are contingent constructs of power and domination" (Best 1994). The concept of power is a prevalent theme in the contemporary study of common sense, and the shaping of discourse, and shared knowledge. Foucault used the terminology of sociology, yet did not consider himself a sociologist. Many scholars would consider him to have been a sociologist employing postmodern methods in his theorizing (Rosenau 1991; Best 1994).

Kenneth Houston (2018) argues that the charge against post-modernism are unfair and that the dichotomy between scientific thought and postmodernist thought is oversimplifying a complex relationship. He questions if scientific thinking has always improved our society. While science may lead to the most accurate results in the natural sciences, as he concedes, it

is not clear if it does so in the study of societies. He points out that there is an overemphasis on STEM subjects in education today, yet a STEM education does not “guarantee the immunization of the mind against extreme violence” (Houston 2018. Par. 8). Many things that used to be common sense have been proven wrong science, but modern scientists claim that science cannot be questioned. Houston challenges this idea.

Academic Anti-Intellectualism and Public Anti-Intellectualism

The concept of anti-intellectualism is used in everyday discourse, in the media, and by academics. However, it is necessary to differentiate between the way the term is used and what meaning is ascribed to it. In academic discourse anti-intellectualism is treated differently from one area of interest to another. This is also true in popular discourse. Therefore it is important to define the different ways that this term might be conceptualized.

John Dewey (1910) in his essay *Some Implications of Anti-Intellectualism* wrote that the meaning of intellectualism has changed over time. He stated that “in its traditional sense, the word is used to denote the antithesis to the sensational theory of knowledge” (477), while in the modern usage it is contrasted with voluntarism. Pragmatism, which he considers to be anti-intellectual, has two forms. In its first form, anti-intellectualism supports the non-rational factors in our knowledge, while at the same time it holds that things are what they are known to be.

The second form of anti-intellectualism shares the polemic of rationalism, but it holds that to ascribe meaning and making things intelligible can only be achieved through concepts. This second type, which he links to instrumental pragmatism and the Chicago School, from whose standpoint the vice of intellectualism is “not in making logical relations and functions in and for knowledge, but in a false abstraction of knowledge (and the logical) from its working context” (479). In *Knowing and the Known* Dewey and Bentley (1948) relate common sense to science and scientific knowledge. The authors defend common sense as part of a constructed world and oppose scholars who claim that common sense is the antithesis to science. They proclaim that science is only possible through common sense.

It is through common sense that we see reality and create perceived experiences and senses, such as colors, sounds, and contacts, which are also used in science. They see a danger is separating the intellectual from any other profession, as they see it, both rely on each other. An intellectual or a scientist is not necessarily someone who only works with the

mind, but someone who uses tools, such as measuring instruments, beakers, and microscopes. These tools are used in the same way a mason uses bricks and mortar in their daily job. These tools need to be created by practitioners. In this way everyone is involved in the pursuit of intellectualism. At the same time they believe it is important to recognize the work of scientists as work by a highly trained person who is specialized in their field. Their work is not separate from that of the human concern (Dewey & Bentley 1948). I believe Dewey and Bentley want to illuminate the way practice, common sense, and science are all interrelated and interdependent, yet separate.

In academic circles the term anti-intellectualism is often used as a pejorative to marginalize competing paradigms, or those perceived to be competing with the researcher's own theories. Positivist scholars use the term to discredit what they call Postmodernism, which as I have shown in the previous section, does not have clearly defined boundaries. I do not know of any academics labeling themselves as postmodern or their methods as postmodern. Brezow (2017), who I believe is fundamentally ignorant on what Postmodernism is, sees Postmodernism and anti-intellectualism as being two terms for the same phenomenon. Considering that the term postmodernism is used in many ways, it is tautological to claim that these terms can be conflated if one defines postmodernism as anti-intellectual.

On the other hand, there are some scholars who are often labeled as postmodern or ascribed to the critical theory school of thought who treat modern forms of social inquiry as anti-intellectual or invalid. Often these traditional, modern theories are dismissed as supporting established power structures. Scholars who support this view can be found working in feminist theory, or anti-Western intellectual traditions among others.

The majority of scholars believe that each intellectual claim should be able to support itself through evidence. While conducting research to support political positions, or discredit research based on perceptions of the researchers who conducted the studies does happen, it usually does not find wide ranging support in the academic community if the arguments are not based in reason or sound logic.

Public anti-intellectualism, on the other hand, is what Hofstadter (1963) describes in his book. He describes three different types of anti-intellectualism, but all of them have a common trait: the mistrust and marginalization of intellectuals. The reasons a person will lack trust in intellectuals vary, they may stem from an incompatibility with their religion, to a feeling that intellectuals belong to an elite class who only have their own interest at heart.

Another example of public anti-intellectualism can be found in popular geopolitics, as well as identity creation, racist, sexist, and other discriminatory discourse. Capdevila and Callaghan (2007) provide an insightful analysis of discourse around asylum and immigration in the U.K. Through the analysis of a speech given by Michael Howard, the Conservative Party leader and opposition leader at the time, given in 2005, demonstrates rhetorical tools used to create discourse promoting racism disguised in a narrative of Britishness, fairness and justice, and securing borders. While the study is far too detailed to fully present all the findings of their study and excerpts of the speech, I want to highlight some examples that will illuminate the way this rhetoric can influence uncritical thinking and unconsciously change our knowledge of Others (i.e. common sense). Howard starts his speech by talking about a Britain that upholds the rules and “takes control of its borders”. He further claims “Today, our immigration system is out of control. I know it, you know it: everyone knows it,” (Howard, quoted in Capdevila & Callaghan 2007). Later in the speech, after more on the importance of securing borders, he says “Some people say that’s racist. It’s not. It’s common sense.” which is also the title of Capdevila & Callaghan’s paper. He then goes on to mention that Britain is a hospitable country and that he himself is a child of immigrants.

The authors discuss the way in which this changes discourse and affects the audience of the speech. By talking about “controlling our borders” Howard evokes an image of a state at war. A state that needs to take control of its borders is one that is under siege. By claiming Britain just needs to enforce its rules, he portrays opponents of his policies as not caring for the rule of law. In claiming that Britain is a hospitable country and that he is himself a child of immigrants he disguises the discriminatory effect of his party’s policies and gives his narrative legitimacy. When he claims that “I know it, you know it: everyone knows it”, the message is that there is only one sensible approach to the problem of asylum, and it is that of his party, as every rational man should understand. Painting all these pictures in the mind of the listener will affect the way that group knowledge, which is common sense, on immigrants is formed. After influencing the voters’ common sense he makes an appeal to common sense, when he says “Some people say that’s racist. It’s not. It’s common sense.” This can make the listener believe that if they do not support the picture of common sense that Howard has painted, then they do not possess common sense (Capdevila & Callaghan 2007). None of these arguments are based on critically analyzing facts and pertinent data to policy making is not given in the speech. This is a clear example of public anti-intellectualism.

I find that what separates academic anti-intellectualism from popular anti-intellectualism is the separation of common sense from scientific and academic inquiry.

When the findings of intellectuals are not trusted, they cannot become common sense. In this way common sense becomes outdated and more irrelevant as time passes, yet at the same time reliance and appeal to common sense increase.

Conclusion

The concepts relating to how humans acquire knowledge is paramount to studying anti-intellectualism. This chapter deconstructs the concepts of common sense and rationalism, which are sometimes used interchangeably in everyday use. How common sense and rationalism are used are very different in reality though. Common sense is a type of knowledge that societies share collectively and can access instantly without the need for much critical thinking. Rationalism on the other hand is a way to arrive at knowledge through critical thought, logic, and analysis. In this way rationalism can change our common sense.

Intellectuals since the enlightenment have relied on rationalism to explain our physical and social environment, especially those associated with the modern philosophy of epistemology. Postmodern scholars on the other hand believe that there is too much emphasis on rationalism and claim that “anything goes”. However, the term postmodernism in social science is often used as a derogatory term by modernist intellectuals to discredit scholars who apply different methods which do not fall into the scope of modernism. This means that there are no clear bounds to postmodernism and that postmodernists are not necessarily anti-rational or anti-positivist. However, members of each school might consider the other as anti-intellectual. This is not the norm though.

All intellectuals share the value of critical thought and analysis. This is what differentiates academic anti-intellectualism from public anti-intellectualism. Between academics the term is used to dismiss or marginalize research or philosophies which reject rationalism in favor for other methods of arriving at knowledge. In public anti-intellectualism knowledge is taken for granted and rationalism, critical thinking, and analysis are dismissed and replaced by common sense and intuition.

CHAPTER III, RESEARCH DESIGN AND METHODOLOGY

Introduction

Using text as data or extracting data from text has become almost fashionable in social research today. This is no surprise considering how much less labor-intensive it has become in the age of the internet and big data tools. Not only is it easier than ever to access data and texts through the internet but also to use tools to help analyze the text. Additionally, it should be noted that these texts are also readily and easily available to the public, manipulated by the public, and created by the public. This means that online texts, especially social media with sizeable followership, has the potential to influence discourse widely (i.e. globally) and quickly. Furthermore, it allows researchers to access the discourse from a specific time period in which the text was created. Textual analysis is used in disciplines from anthropology, to business, marketing, political science, and sociology. But approaches vary largely based on the goals of the study, the field of research, the background of the researcher, and the nature and source of the text.

As I will be working with social media posts by politicians posted to Twitter, I have combined mixed methods in with a Grounded Theory (GT) approach to match the needs of this study, which I will discuss in detail in this chapter. GT has a very different approach from traditional methodologies in that it does not start out with a hypothesis or extant literature. It also has a very unique jargon (e.g. indicators, concepts, memos, constant comparison), in which familiar words might not mean the same thing as in other methodologies. Therefore it is important to understand and frame the research and analysis in these terms.

David Silverman (2006) presents the criteria for the evaluation of research, which was adapted from the British Sociological Association as follows:

1. Are the methods of research appropriate to the nature of the question being asked?
2. Is the connection to an existing body of knowledge or theory clear?
3. Are there clear accounts of the criteria used for the selection of cases for study, and of the data collection and analysis?
4. Does the sensitivity of the methods match the needs of the research question?
5. Was the data collection and record-keeping systematic?

6. Is reference made to accepted procedures for analysis?
 7. How systematic is the analysis?
 8. Is there adequate discussion of how themes, concepts and categories are derived from the data?
 9. Is there adequate discussion of the evidence for and against the researcher's arguments?
 10. Is there a clear distinction made between the data and its interpretation?
- (Silverman 2006, 276)

In this chapter I will present my research design and demonstrate how these criteria are applied in my research.

Grounded Theory

The Grounded Theory methodology was developed by the sociologists Glaser and Strauss (1967) in the early 1960's and then published as a book *The Discovery of Grounded Theory*, in which they lay out the framework for this methodology. Glaser and Strauss ended up further developing the methodology separately, in different ways. Other scholars have also published their own interpretations of how to conduct Grounded Theory research. I will be following mostly the original method, which is still the one promoted by Glaser and often called classic Grounded Theory (Silverman 2009). I will also include some elements of Charmaz's more contemporary interpretation often referred to as constructivist Grounded Theory (Silverman 2009).

Grounded Theory methodology is a wide ranging package of tools to create new grounded theories, which can be adapted to the researcher's needs. Grounded theories differ from grand theories in that they are derived from data. This means that they are not generated from a hypothesis and then tested, but rather that they emerge from examining the data (Glaser & Strauss 1967; Charmaz 2006, Bryant & Charmaz 2007). There are some core elements (methods) of GT which are always present in all the different branches of the methodology. Understanding these elements will clarify how I have come to my conclusions at the end of my research. The core methods of GT are constant comparison, simultaneous data collection, simultaneous analysis, theoretical sampling, memo writing, and theoretical saturation (Guetterman et al 2017; Glaser & Strauss 1967; Silverman 2009, Charmaz 2006).

All of these methods are connected to each other and it would be difficult to eliminate any one of them from a study. The method of constant comparison is the most significant part of GT. This means that data is always compared, new indicators with old ones, new concepts with old concepts (Covan 2007). In the early stages of the research, the researcher looks at the data without any preconceived notions and with an open mind, and looks for differences and similarities in the data. From the data the researcher then starts coding based on categories that jump out at her (Kelle 2007). As the research goes on she will gain momentum, she might find more categories to code, or find that some do not apply to the research topic after all, or that they do not explain anything. Some categories might be narrowed down by closely examining the data though, and then become more precise concepts, and eventually emergent grounded theories (Glaser & Strauss 1976; Guetterman et al 2017).

Simultaneous data collection is part of this process. While the researcher is coding the data, she may discover a category or indicator that requires her to gather further data, this data can be added to the study and coded. These methods allow the researcher to keep pursuing the relevant data as she informs the emerging analysis (Charmaz 2006). It is important to note that this should not be mistaken for trying to make square data fit into a round hypothesis. As the research does not start with a hypothesis, everything is derived from the data and again abandoned before the project is complete, if it cannot be substantiated.

This is where theoretical saturation comes into play. During the process of constantly and simultaneously analyzing, coding, comparing the concepts and codes, and emerging theories derived from the data, there will be a point when nothing new can be found and the researcher just comes across the same findings over and over again. This is when theoretical saturation has taken place and data gathering can be stopped (Glaser & Strauss 1967; Glaser 2007; Silverman 2009).

Originally, GT was developed to give qualitative methods more legitimacy (Silverman 2009), as Strauss was a qualitative researcher and Glaser had a quantitative background. However in their book they say that “everything is data” and that GT can be used with qualitative and quantitative methods of data gathering (Glaser & Strauss 1967). Glaser continues to promote this variant of GT to this day; Strauss later published his own books though, in which he argued that GT should only be used with qualitative methods. The former methodology is now referred to as classic Grounded Theory, while the latter is often called Straussian Grounded Theory (Guetterman et al 2017).

One important aspect to GT, which was recommended in the first book, is that the researcher should enter the project with an open mind, without reviewing the literature before starting. This should prevent the cross-contamination of data (Glaser & Strauss 1967). This is something I find problematic and did not follow. Firstly, accomplished researchers will mostly be quite familiar with their fields and the literature from their fields that it is unlikely that they can enter this research without any background knowledge. Secondly, in cases like mine, I reviewed the literature already while narrowing down my research topics, this was before I started thinking about a fitting methodology. Lastly, if the categories or indicator, memos, concepts, and theories should come from the data, then cross contamination should not happen as preconceived codes and concepts will either not be found in the data, or they will be found even quicker because of the background knowledge.

Charmaz (2006) described the research process in the following steps, which are all constantly and simultaneously followed and not conducted in sequence: “rich data” is gathered. Data gathering methods, should be seen as tools, and there are a variety of ways to gather data. The data should be rich and be placed within its social and situational context; coding in GT falls into two categories line-by-line to conceptualize ideas, and focused coding, which is used to sort and separate large amounts of data; memo writing is the process of writing longer notes when codes start to crystalize meanings in the data; theoretical sampling, saturation, and sorting are strategies that take place once data has started to be coded and analyzed. These are all part of the process to find more indicator in data to fit into categories or emerging theories until they become saturated, meaning no new data can be found.

It is a method that allows the researcher to understand things that is otherwise invisible (Star 2007). Data can be found anywhere in life. I noticed this as I was becoming more involved with my study. Any time I used social media, I was looking for indicators. I kept notes on my mobile phone when I was not at home so I could investigate ideas that I came up with while out. Had I not restricted myself to Twitter posts, I likely would have noticed data in other places as well. Star (2007) calls this “living Grounded Theory”. Using data from real everyday life produces theories that make sense. The reader “will have an immediate recognition that this theory, derived from a given social situation, is about real people or objects to which they can relate” (Stern 2007).

This is a basic description of the Grounded theory approach and the terms and jargon used in this methodology. Guetterman et al provide useful summary of the stages of the

Grounded Theory methodology and the applicable vocabulary that goes with it. Table 1 gives an overview of the core terminology of Grounded Theory methodology.

Table 1: Grounded Theory Terminology (source: Guetterman et al 2017)

Grounded theory	An umbrella term denoting a family of interrelated approaches aimed at developing an inductively derived theory, explanation, or conceptual framework grounded in the data.
Constant comparison	A time-tested analytical strategy adapted by grounded theorists that serves as a foundational pillar of the method in which emerging data are continually compared to each other at increasingly more abstract levels to further develop categories, concepts, and theory.
Category	A type or grouping of similar or closely related codes or concepts generated through inductive data analysis. Categorizing is the process of organizing or abstracting these codes into an analytic concept or pattern.
Coding (open, initial, theoretical, axial, selective, and focused)	The data analysis process of assigning labels and organizing data at successively higher analytical levels in Grounded Theory. Grounded theorists advocate different forms of coding from the initial or open coding stages to increasingly theoretical, selective, or focused techniques used to develop the emerging theory.
Memoing	A well-established research strategy in the social sciences adopted by grounded theorists to refer to the researcher's ongoing process of reflection throughout the study to help guide the emerging analysis
Theoretical sampling	An often ignored but foundational form of purposeful sampling used in Grounded Theory referring to the ongoing selection or revisiting of participants, sites, and events directly aimed at the analytical development of theoretical categories and concepts.
Theoretical saturation	Signals the end of data gathering in grounded theory analysis when no new properties are emerging that contribute to the further elaboration of theoretical constructs.
Theory	Adapted by grounded theorists to represent a substantive or formal explanation or model of the central phenomenon being studied that emerges from data analysis throughout the research process.

Mixed Methods

Unlike a multi-method approach, in which either qualitative or quantitative methods are used, a mixed-method approach integrates different methods that are quantitative and qualitative. Based on my literature review I am familiar with methods which are more quantitative than qualitative, as well as some qualitative ones. Since these have all informed the initial codes I want to look for in the data, I have decided to use a mixed method

approach. One of the reasons is that the data pool that I have is very large, quantitative methods will let me find more of them quickly, which I can then compare or narrow down using qualitative methods. Glaser & Strauss (1967) stated that “in many instances, both forms of data are necessary--not quantitative to test qualitative, but both used as supplements . . . and, most important for us, as different forms of data on the same subject, which, when compared, will each generate theory” (Glaser & Strauss 1967, 18). In a report comparing the way Mixed Methods and Grounded Theory are used together, Guetterman et al (2017) differentiate between convergent, explanatory, and exploratory types of mixed methods approaches. Convergent designs use qualitative and quantitative data independent from each other and converge them during interpretation. Explanatory designs start out with quantitative methods and then use a qualitative method for added results. Exploratory designs is the opposite to explanatory, meaning that qualitative methods are first conducted, and followed up with quantitative. This is often done to test the quantitative data. In their study of Mixed Method-Grounded Theory they find that researchers chose one of these types. Keeping in mind the excerpt from Glaser & Strauss, only the convergent type should really be used in my opinion, when combined with GT.

Since I want to be able to constantly add, compare, and analyze data as it is the core of GT, I do not want to limit my methodological toolbox from the outset. However, as I already have a pool of data, and some general ideas and categories that I want to code for, I do have some methods that I want to use in the beginning to get me started in the constant comparative process. I have started my data gathering and methodological sorting of data and codes in the following way:

Data Collection: Posts to Twitter

Twitter is a social networking (or micro-blogging) service accessible through the web and smartphone applications. It was founded in 2006 and has since become one of the most visited websites on the internet. Its monthly active user base is estimated to be 319 million. It allows users to post messages up to 140 characters in length (until November 2017, when it was doubled to 280 characters).

The majority of these posts are made by private individuals and contain conversational text (37.6%) or pointless babble (40.1%) according to Pear Analytics (2009). It is also used for self-promotion by corporations and celebrities, including politicians during

their election campaigns and to promote policies they support and to criticize policies they oppose. Anyone can view and read tweets, as posts to Twitter are called, and registered users can follow other accounts to be notified of any new tweets made to that account. Donald Trump is known as the Twitter president, due in part to his controversial tweets, but also due to the attention the tweets have received. With over 50 million followers, he is one of the most followed politicians in the world, but his tweets are also discussed in traditional print and broadcast media. While most politicians do not have a Twitter account that receive the attention that Trump's tweets receive, most politicians do have a Twitter account. For the purpose of this study, I will be analyzing the tweets of ten American congress people, additionally I will include the tweets of the president Donald Trump, who is not in the United States Congress; I will also analyze the tweets by ten members of parliament in the United Kingdom (UK). I have selected the twitter accounts based on the number of followers. I have chosen those accounts with the greatest number of followers as their tweets should be the farthest reaching. The higher the exposure of the tweets, the more likely they should be able to influence discourse and also be bound by the rules and norms of discourse in their respective countries. My selection of the accounts was not based on the content of the tweets, as I did not want to bring in too many preconceived notions as suggested in GT (Silverman 2009; Glaser & Strauss 1967). This resulted in a pool of about 50,000 tweets. These will not all be analyzed closely, which is why I have decided to use Computer Assisted Qualitative Data Analysis Software (CAQDAS) to search for keywords which I am taking from my initial categories. CAQDAS tools that I will use will include: Key Words in Context (KWIC), automated collocation analysis, word frequencies, phrase frequencies, sentiment analysis, and keyword sorting. I have applied these methods in the following way:

Narrowing Down the Data

Analyses of texts can be conducted through different frameworks and methods. In the example of Elvin Lim (2008), which I discussed earlier, content analysis was used to determine the readability of speeches by American presidents. However, I believe this single approach lacks validity, or at least the demonstration of its validity. Another common method for text analysis is Critical Discourse Analysis (CDA). This is an interpretive method which might be categorized as poststructuralist or postmodernist. Some social scientists argue that positivist notions of reliability and validity don't take into account the constant changing

nature of the social world and that the interpretative methods used to study these changes make replication problematic (Marshall and Rossman 1989). While I do not disagree with the notion of the social world changing over time, the idea that replication of findings is problematic raises the issue of the explanatory potential of such research. While my social research may not be replicable in the same way that research in the natural sciences is, I am keeping my methods transparent and describing them in a way that can be replicated. Considering that the researcher should be intimately familiar with the studied discourse (Silverman 2001), and I am not all too familiar with political discourse in the UK, the CDA method would not fit this study. This is one of the factors in my choice for a mixed methods approach. Another factor is the amount of data or text available on Twitter and the selection of samples to analyze.

For a purely interpretative approach it would not make sense to select random tweets, read them closely, and interpret their meaning. Since I am looking at discourse and rhetoric specifically relating to anti-intellectualism, using CAQDAS allows me to analyze large amounts of text. Using software also allows me to narrow down a large text to smaller portions for close reading. Using a large corpus allows me to test how prevalent anti-intellectual speech is using quantitative measures such as word frequencies, and qualitative measures like readability and collocates. A close reading and interpretative approach can finally be used to validate the findings from the computer-assisted analysis.

As Twitter does not allow users to download all tweets of an account in a single file directly from their website, this usually has to be done through software developed for the purpose of “Twitter analysis”. To get a large text and stay within the limits that Twitter allows third-party software to download, I have chosen to download the most recent 2,500 tweets from ten American Congress people, ten members of parliament from the UK, in addition I have included the tweets from U.S. president Trump. I chose to download the tweets from the politicians with the highest number of followers. Three of these have not posted 2,500 tweets, in these cases I downloaded all tweets posted to the account. I ended up with a total of over 50,000 tweets or about 1,000,000 words. This is far too much text to conduct a close reading on, or even to code manually in a study of this scope. To get the most information out of the text, I have used the CAQDAS from Voyant Tools (www.voyant-tools.org) to automatically extract qualitative and quantitative data about all of the tweets based on the parameters I specify. I have also used Microsoft Excel’s Analysis ToolPak to sort tweets by keywords and quantitative measures, and perform statistical operations. I downloaded the tweets using the Twlets application, which I also used to perform the

sentiment analysis using the VADER (for Valence Aware Dictionary for sEntiment Reasoning) algorithm.

Computer Generated Data

The research was started by uploading the texts for each country's politicians to the Voyant Tools application. After filtering out stopwords and weblinks in the tweets, I looked at the most frequent words and phrases to see if any of them, on their own, might be associated with anti-intellectualism, common sense, or anti-elitism, three broad categories that I decided to start out with. In the 100 most frequent words for each corpus I did not find any words that, on their own, I would associate with anti-intellectualism.

Next, I performed a readability analysis for each politician on Online Tools (online-tools.org), measuring the mean characters per word, the mean syllables per word, as well as the readability scores based on the Flesch Kincaid Grade Level⁵ and the Gunner Fog Index. Before running the test I removed all retweets, which are tweets not originally posted by the account's owner. This way I could be sure that all the tweets were either written by the politician owning the account, or the team they have chosen to manage their account. While the Flesch Kincaid method was also used by Lim (2008) to analyze politicians' speeches, I will not be comparing my results with his results as the nature of the texts are very different in speeches and tweets on Twitter. However, I did compare the results between the politicians in this study, as this is part of the constant comparative method in GT. Since some researchers suggest that anti-intellectualism in political rhetoric is related to the simpleness and readability of the text (Lim 2009;) I will compare these results with my other findings to check for correlation or if other categories or concepts emerge.

Using the sentiment analysis results from Twlets, I calculated the mean score of positive, negative, and neutral tweets for each politician. This allows me to rank each politician on how positive or negative the emotions in their tweets are, combining the positive and negative scores gave me the overall level of emotion in tweets. As anti-intellectual rhetoric is based largely on emotion, this also allowed me to read the most emotional tweets from each politician and to rank them on emotion. This was based on the computer generated results from the sentiment analysis. To further measure how tweets affected the followers of

⁵ The Flesch Kincaid Reading Level is a readability index based on the average understanding of American students at the respective grade level, meaning years of formal education from approx. age six.

politicians, I also sorted the tweets by number of ‘likes’. I compared these results with those from the computer generated sentiment analysis. I assumed those tweets with the most ‘likes’ to have effected the highest levels of sentiment on the readers, and those with least likes to have little affective effect on the followers. This gave me two measures of sentiment. That which is reported by the audience, and that which the VADER algorithm determined to be an expression of emotion by the politician. I compared these results and described their differences and how they can validate each other and how they compare to the other data, or do they raise any other issues that need to be explored?

In the final step of computer-assisted analysis I created a dictionary of keywords which I associate with anti-intellectualism, common sense, and (anti-)elitism, my initial categories. This is likely the most subjective part of my analysis, as I chose the words myself based on my own understanding of the current political discourse in the respective countries. According to GT, this does not matter though as only information gathered from the data matters, so my searching for subjective keywords might bring up other concepts or data that I can later extract and compare. I used the Voyant Tools software to upload my dictionary and search for frequencies and collocates of these words. I also use Excel to search for the words and separate the tweets containing the keywords for interpretative analysis.

Lastly, I compared the most frequent findings from the computer-assisted analyses through a subjective and interpretative reading of those tweets. I give a description of my interpretation of the tweets and contrast them with the computer generated findings. In this way I attempt to validate the previous findings and methods through interpretative reading. As I describe in the next chapter, these steps initially followed in sequence, but then revisited and constantly updated as the analysis progressed.

Conclusion

This chapter has given a general overview of my conceptual framework, most importantly it explains the unique approach Grounded Theory methodology takes and the very peculiar use of jargon in the framework. This chapter did not give an exhaustive description of how GT was applied in this study because I believe it is easier to understand when it is put into practice. This is why the analytical chapter on the application of GT goes into further detail on the methodology.

An account of how the data for this study has been obtained from Twitter has also been given, as well as the mixed methods used to extract specific data from a larger data pool to narrow down the data for analysis. This included a combination of using CAQDAS (Twlets, Voyant Tools, and MS Excel) to narrow down the data and code for keywords, as well as manually coding data which had been sorted in Excel based on findings from CAQDAS methods.

CHAPTER IV, GROUNDED THEORY APPROACH APPLIED

Introduction

This chapter provides a detailed account of how the Grounded Theory approach was applied to the Twitter data pool. It starts out with a description of the early stages of analysis which is based on coding the data based on indicators that I believed would be relevant to anti-intellectualism in politician's tweets. These indicators were based mostly on hunches I had from reading social media posts in my personal time, as well as some ideas from the literature I had reviewed. In following the GT methodology, I tried to find all my concepts in the data and avoided validating previous theories or hypotheses.

The chapter also illustrates how I used the CAQDAS in practice to narrow down the data. Unlike in other methodologies, data is constantly gathered in GT, therefore this is not a preparatory phase in the study, but one conducted simultaneously and in conjunction with analysis. This allows for the adding and rejecting of indicators and concepts as the analysis progresses.

As the process of constant comparison, analysis, and data gathering progresses, an emergent grounded theory is formed. This theory is grounded in the data through the process of rejecting data points that do not confirm concepts as they emerge, and solidify concepts that emerge through data saturation.

Early Stages of Analysis

The first task in finding data was to find a way to download tweets, as I had already decided that my data will be coming from Twitter accounts. After some searching for services that allow the downloading of tweets and finding a large selection of options, I settled on Twlets. I also knew that I wanted to use software to assist in searching for keywords, sorting, and some automatic coding. This section will illustrate how I got my data, uploaded it, and started to analyze it. First with help of CAQDAS and then through manual methods.

Computer Assisted Qualitative Data Analysis Software

Twlets. After some searching on how to download large amounts of Twitter data, I decided to utilize the Twlets service. My choice was influenced by their price, which was cheaper than most of the other services I could find. Also, they offered to run the data through a sentiment analysis algorithm and include the scores for each tweet in the provided Excel file. Twlets uses the VADER algorithm for the sentiment analysis. This was specifically designed to do sentiment analysis on social media. Unlike other sentiment analysis, it is not only based on a lexicon search for keywords related to positive or negative sentiment, but also grammatical and syntactical conventions used to express sentimental intensity (Hutto & Gilbert 2014).

To download twitter data with Twlets, the Chrome browser extension needs to be installed from the Chrome App Store. Once the extension is installed, it needs to be connected to the researcher's Twitter account. Finally, money needs to be loaded onto the Twlets account at www.twlets.com to buy credits that allow for the downloading of data. By default the app will download the last 3,200 tweets from a selected account. Since credits (1 credit = 1 tweet) are sold in multiples of 25,000 and I wanted to download the tweets from 10 politicians for each country in the case study, I decided to download 2,500 tweets per politician. This can be changed in the settings of the Twlets extension. Once the settings are adjusted, each politician's tweets had to be downloaded by visiting the politician's Twitter page in the Chrome browser and activating the extension. This would then download the requested tweets.

I decided that I would download the 10 most followed politicians of each country as tweets with higher visibility are more likely to have a larger effect on discourse. The problem was finding out who had the most followers. After some searching on Google, I came across www.mpsontwitter.co.uk with a lot of data on UK MPs Twitter data, including a ranking by followers. Finding this for US politicians was much more difficult. Even though Twitter and the Sunlight foundation run a website www.tweetcongress.org, which included a listing of the 10 most followed congress people on Twitter, the data was obviously out of date and incorrect. Twitter also maintains lists of accounts, including one called "Members of Congress", with links to those accounts in the list. The Members of Congress list includes all 578 congress people who have a Twitter account. I visited each account and made note of the

follower count (if it seemed high) to finally determine who had the highest number of followers.

Once I had decided on the names, and visited the Twitter pages of the politicians I wanted to download, I ended up with 20 Excel files, which include all the tweets, as well as the results of the sentiment analysis, the number of likes for each tweet, and the number of retweets for each tweet. I ended up having credits left as some of the politicians hadn't yet posted 2,500 tweets. I used the remaining credits and also downloaded the tweets for US president Donald Trump.

Voyant Tools. Having all the tweets from each politician in an Excel file, I uploaded them to Voyant Tools. This online software package lets the researcher copy their corpus into a text box or upload it as files. To make constant comparison easier, I decided to upload two separate corpora for analysis, keeping the UK and U.S. separate.

The process is very straightforward: once one accesses www.voyant-tools.org the only option is to upload or paste a corpus to the website. Once the corpus is uploaded, the work area appears with five different tool windows, three on the top of the screen and two at the bottom. The default tools displayed are: a cirrus word cloud (visual display of word frequencies), The content of the corpus, comparative relative frequencies of words compared between the different files (each politician was a separate file), a summary window that gives an overview of all the data (number of words, most frequent words for corpus, most frequent words per file, vocabulary density, etc.), and a correlations window, which shows the correlation between two terms. Each of these windows can be replaced with one of Voyant Tools 19 different tools.

In addition, the data can be manipulated and the analysis adjusted. After uploading the files, the most frequent words were https, t.co, and RT (for retweet). These are not relevant to the analysis as they are just parts of how weblinks are displayed in Twitter. By clicking on the options button for any of the tools, I could edit the lexicon of stopwords. I added these to the list to get a better overview of the data. Furthermore, many of the tools can be viewed in several ways, the word frequencies are displayed in a word cloud by default, but can also be viewed in a table ranking the words row-by-row and showing the exact number of occurrences in the second column. By default everything is sorted or graphically displayed based on the most frequent terms in the corpus. Through simple clicking on a drop-down box one can also chose to focus on words most frequent in one file, or to input a manually

generated list of words and terms (see figure 1).

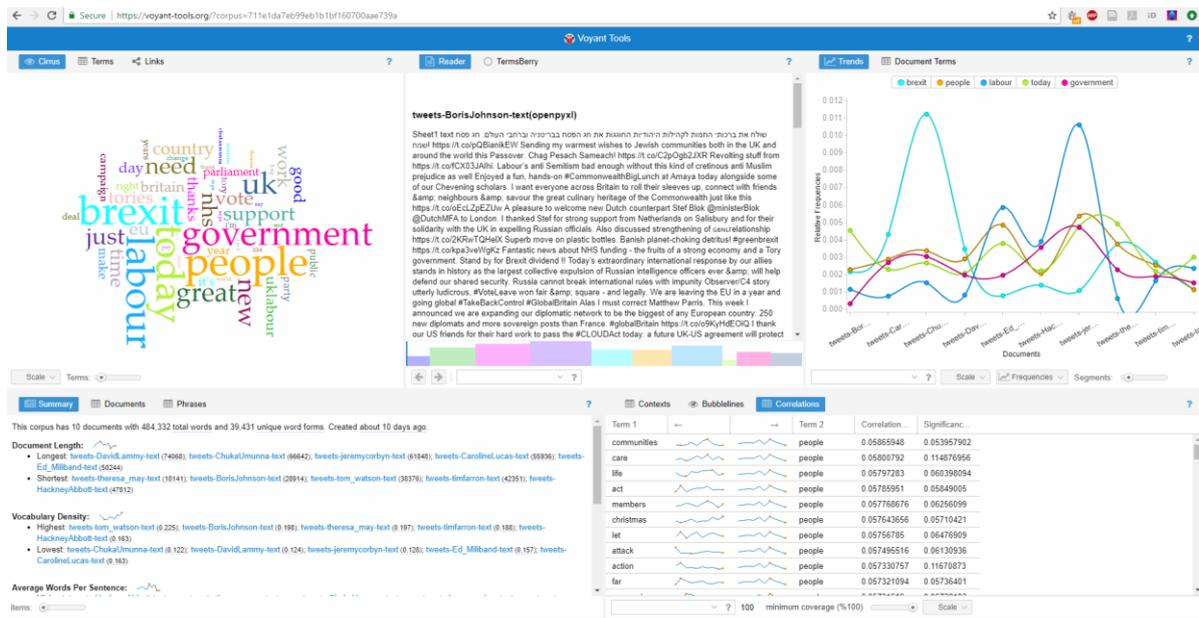


Figure 1: Default Voyant Tools Screen

Two very useful options or capabilities include the help function, which takes the user to an interactive tutorial for each tool and giving an overview of how to use them. The other one is a save function, which lets the researcher save the uploaded corpus and changes that have been made to the Voyant Tools server, that way it doesn't need to be re-uploaded every time one returns to analyze the corpus. The data remains on the server as long as it is accessed at least once in 30 days.

I looked through most of the tool's representation of the data to see if any of the data could be coded as anti-intellectual, common sense, or anti-elitism. I did not find anything in the results that neatly fit into these categories. Since I can compare the word frequencies by file and corpus, I decided to do a search for "common sense" and see how frequently it was used. Comparing the U.S. and the U.K. corpus, these were the results displayed in a graph (see figures 2 and 3).

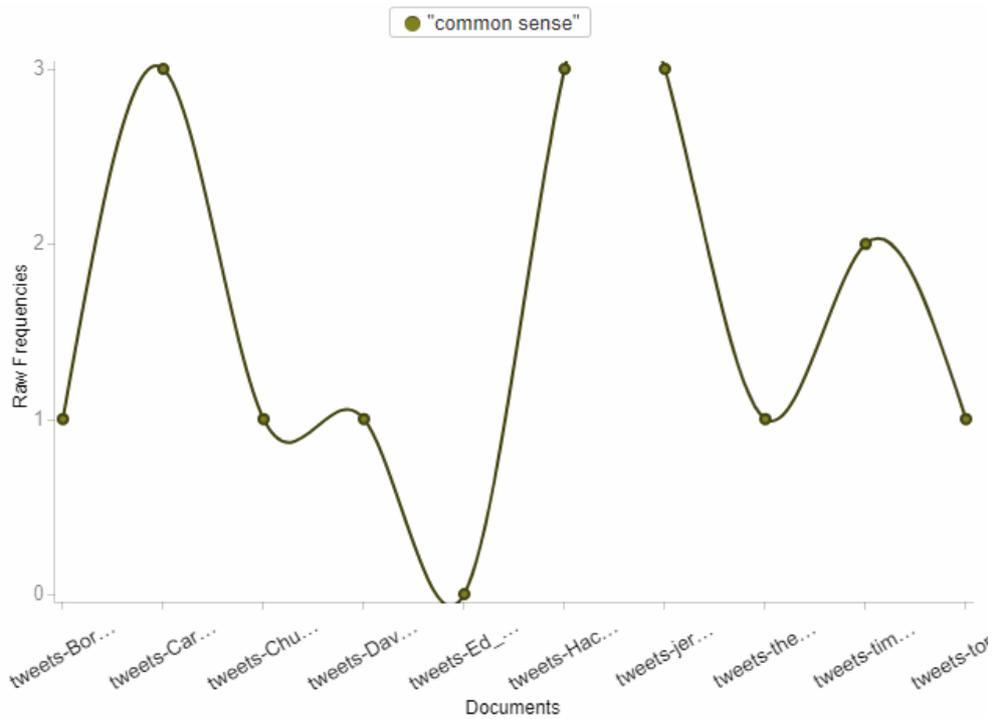


Figure 2: Frequencies of “common sense” in the U.K. corpus

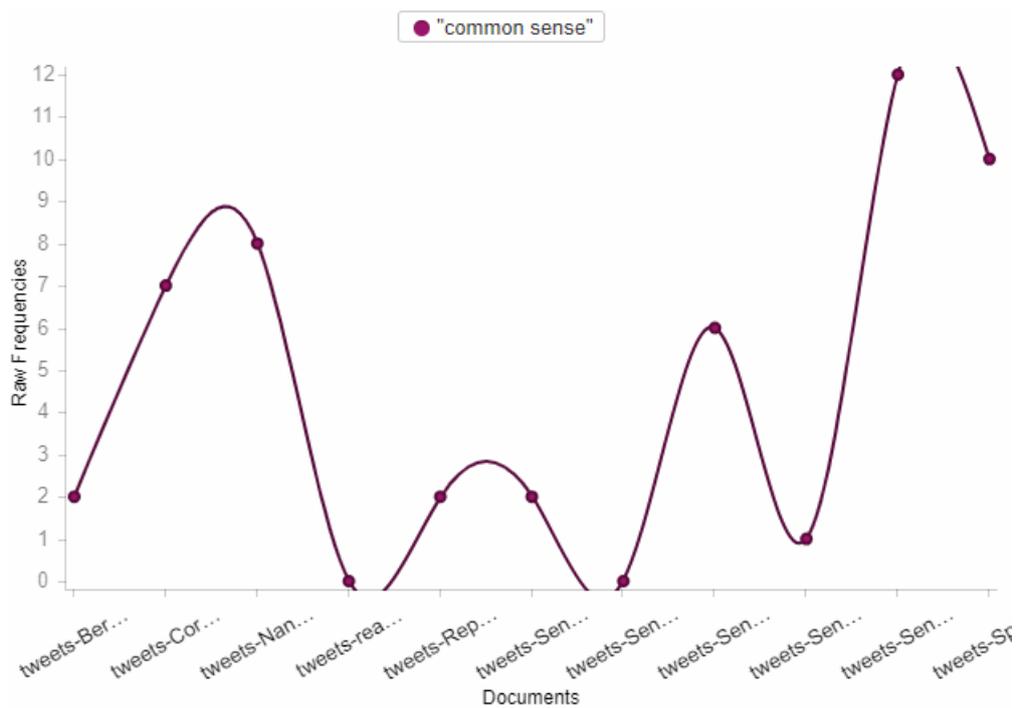


Figure 3: Frequencies of “common sense” in the U.S. corpus

While none of the British MPs used the term common sense more than three times, and only four of them used the term two or more times, American politicians used common

sense up to twelve times and five of them used it four or more times. Comparing the politicians within the countries, in the U.S. the term was used mostly by members of the Democratic Party, with Paul Ryan being the only Republican using the term more than once. In the U.K. there was not a significant difference between the parties. While two of the three MP's who used the term were Labour, the only MP to not use the term was also Labour. Everyone else used the term once or twice. These frequencies on their own do not point at anything meaningful, but reading them closely might provide ideas for further coding of indicators. Since Voyant Tools does not treat the text as individual tweets, but just one large corpus, I cannot sort for the terms to read the individual tweets closely. Sorting the tweets in Excel would allow reading and sorting for individual tweets.

Microsoft Excel. The Excel workbooks from Twlets contained all the tweets of each politician in individual cells, with one row per tweet. In addition the columns contained further information, such as the number of retweets, likes, and the scores from the sentiment analysis. I added an extra column called "common sense" to sort the tweets that contained the term. To find the tweets containing the term I used the Excel function:

```
=IF(ISERROR(FIND("common sense",B2))=TRUE,"",FIND("common sense",B2))
```

I applied this function from the first row of tweets (row 2) to the last row (row 2501). This function then returned a value to each row that contained the term and left the cell blank for each row that did not contain the term. By using the sort option in Excel it was possible to bring all the relevant tweets to the top of the document. I was also able to add additional words later during the constant comparison and coding process to my spreadsheets using the same function in the neighboring columns. Before getting into a closer reading of the sorted tweets, the data was narrowed more by applying additional sorting functions afforded by Excel.

As all the individual tweets had been scored for sentiment by Twlets, it was relatively easy to calculate the mean score for each politician. I used the AVERAGE function in the different sentiment columns to calculate the mean score for positive, negative, and neutral sentiment. I then created a bar graph to illustrate the relationship between the tweets and politicians. In deciding on how to sort this data, I decided that sorting it by least neutral to most neutral would allow me to see which politician uses the most emotional language in their tweets (total score - neutral score = total sentiment). Sorting for either negative or positive would ignore the contrasted sentiment in the sorting process. The results show that

Boris Johnson uses the most emotional language in the U.K. and Donald Trump the most emotional in the U.S. as calculated by the VADAER algorithm. Comparing this sorting with the positive and negative sentiment sorting (opposed to the sorting by neutral sentiment) returns an interesting result: Donald Trump has neither the highest score for positive sentiment, nor for lowest sentiment of the U.S. politicians, yet if one combines his scores, he has the highest score for total emotion (i.e. lowest neutral score). Johnson does have the highest positive sentiment score of the U.K. MPs, but his negative score was in the center, combined his positive and negative sentiment scores were still the highest score. In comparing the different parties, there did not appear to be a difference in either country, parties were represented throughout the spectrum. Comparing the US with UK tweets, the tweets from UK politicians were on average less emotional, as the lowest and highest neutral scores in the U.K. were both higher than the respective scores from US politicians (see figures 4 and 5).

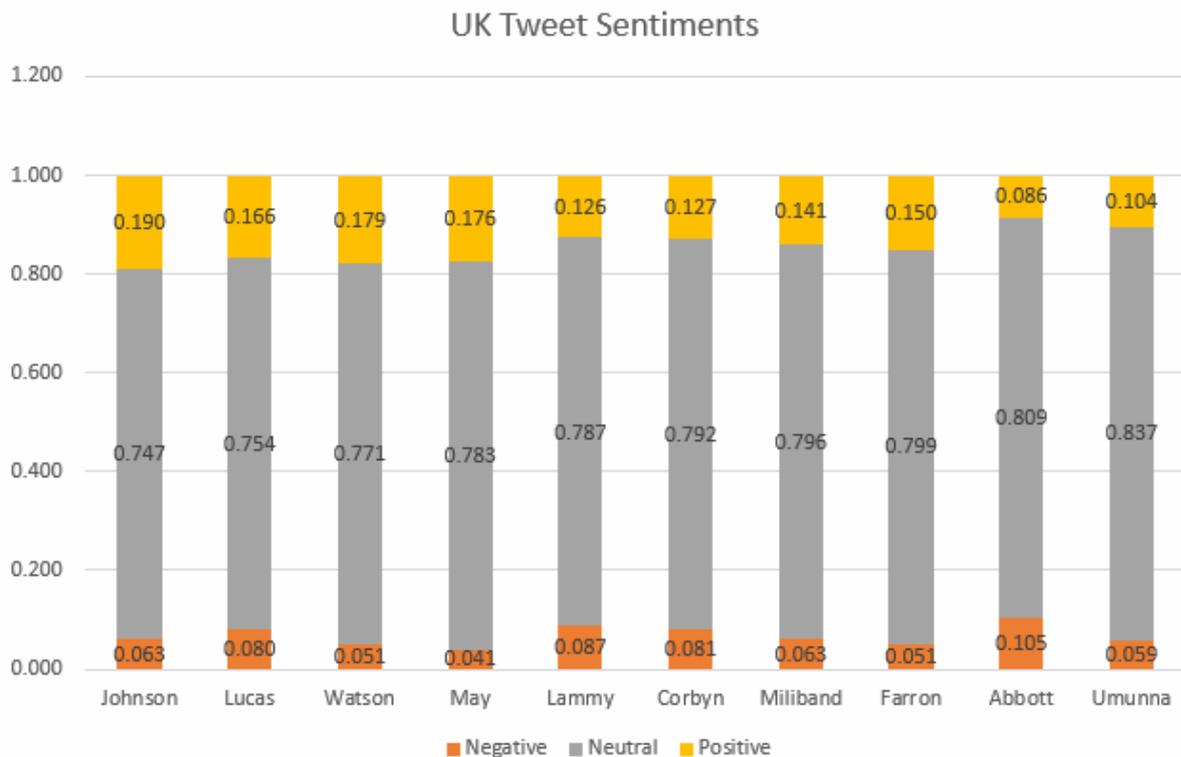


Figure 4: Sentiment analysis results of U.K. MPs' tweets

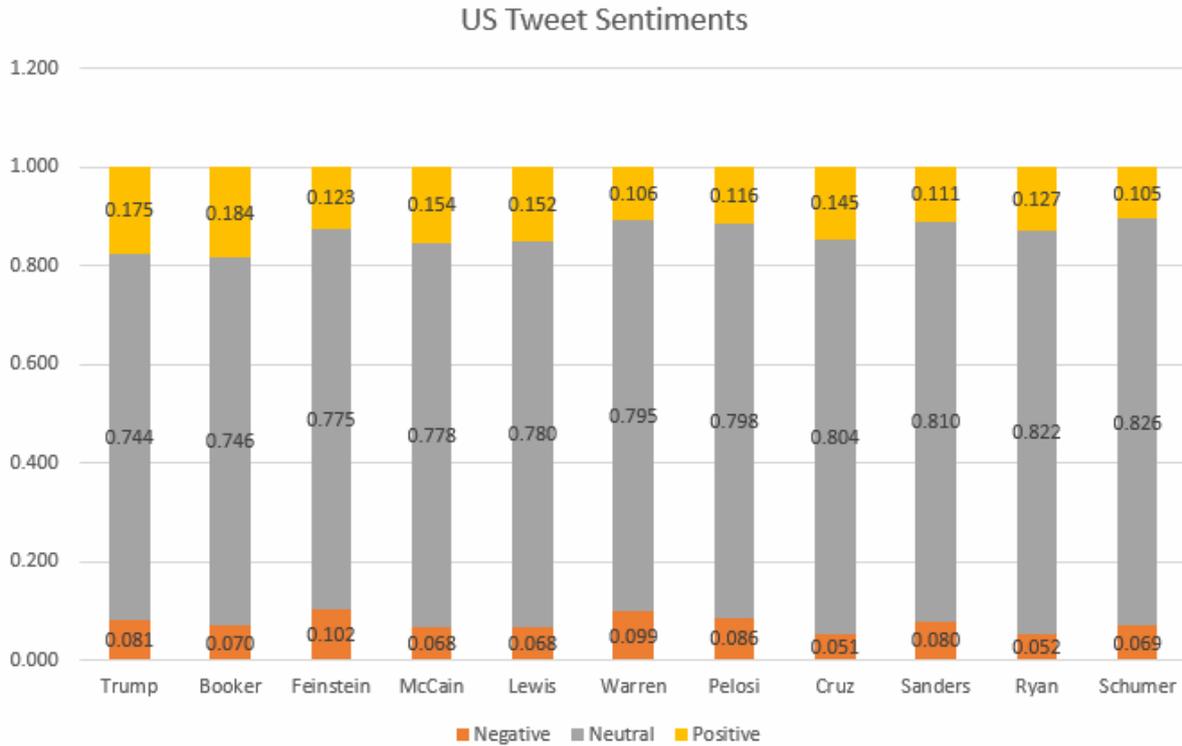


Figure 5: Sentiment analysis results of U.S. politicians' tweets

Not necessarily to compare or validate Lim's (2008) study, but also to see what indicators the data might provide, the tweets were sorted by readability of the tweets. I also used the Flesch Kincaid Grade reading level as Lim had done. Since this data was not in my Excel spreadsheets, I had to have the text scored by another service. Before it could be scored for readability, Excel was used to search and replace all weblinks in the text, as well as all retweets (since these were not written by the politicians). Then I exported the resulting text to www.online-utility.org for a readability scoring on each politician. It returned myriad results, as I was not sure what data I might still use down the road, I transferred the data on characters per word, syllables per word, Gunner Fog Index, and Flesch Kincaid Grade level readability to the spreadsheet. There was not a lot of variation on average characters or syllables per word; however, there was a stark contrast between Flesch Kincaid Grade level scores between the US tweets and the UK tweets (see table 2). This may just be due to the different use of the English language in each country.

Table 2: Results of readability analysis

U.S. Politician	F-K Grade Level	U.K. Politician	F-K Grade Level
Schumer	9.53	Abbott	14.32
Warren	8.87	Umunna	11.66
Sanders	8.28	Lammy	10.65
Pelosi	9.29	Corbyn	10.16
Feinstein	9.1	Miliband	7.61
Ryan	9.02	Farron	8.13
Cruz	11.48	Lucas	11.58
Lewis	7.6	May	11.1
McCain	16.16	Watson	7.28
Trump	7.46	Johnson	12.07
Booker	7.58		
Mean	9.49	Mean	10.45
Median	9.02	Median	10.87

On average the UK politicians scored about one grade level higher than the US politicians, with an average grade level score of 10.45 from the UK politicians and a score of 9.49 from US politicians. However, on the US side McCain was an outlier as he scored at a 16th grade level, which is significantly higher than any of the other US politicians and also higher than any of the UK politicians. This data does not say anything about anti-intellectualism on its own, but it will be interesting to compare it with other data later in the analysis process, as Lim (2008) suggested that low readability scores indicate dumbing down of language.

Manual Coding

Having multiple computer-assisted ways to sort and evaluate the data now, it was possible to start the process of manually coding the tweets. I narrowed down the tweets I would start reading closely by sorting them by level of sentiment and reading the first 30 closely. None of them, for any politician, jumped out as being anti-intellectual, most of them were not even rhetorical. They could be summarized as good wishes and condolences (for won elections, birthdays, awards received, and deceased relatives). Just by looking at the tweets that scored the highest in the sentiment analysis, I would not be able to guess who wrote them, if I did not know before. I then sorted by number of likes each tweet received. This returned a completely different set of tweets. Upon reading them, I noticed a common theme, they were almost all on partisan or divisive issues. Many of them included insults. While they may not have scored as high on the sentiment analysis, it was easy to tell that these tweets had a greater effect on the readers' emotions. Here are some examples of the use of insults or name calling to discredit others (indicators for insult and name-calling underlined):

The US is the biggest single investor in the UK - yet Khan & Corbyn seem determined to put this crucial relationship at risk. We will not allow US-UK relations to be endangered by some puffed up pompous popinjay in City Hall. (Johnson)

What an absolutely ludicrous, incompetent, absurd, make it up as you go along, couldn't run a piss up in a brewery bunch of jokers there are running the government at the most critical time in a generation for the country. (Miliband)

What a disgrace trump is. RT if you're proud of #OurNHS (Abbott in response to a tweet by Trump about the NHS losing money)

Congratulations to California's own @SenFeinstein on officially earning her own @realDonaldTrump nickname. Clearly doing something right! #FollowTheFacts (Pelosi in response to a Trump tweet referring to Feinstein as "Sneaky Dianne Feinstein")

I use Social Media not because I like to, but because it is the only way to fight a VERY dishonest and unfair "press," now often referred to as Fake News Media. Phony and non-existent "sources" are being used more often than ever. Many stories & reports a pure fiction! (Trump)

These are just some of the tweets which seek to discredit others through name calling or insulting in different ways that I want to illuminate. Johnson and Miliband use direct name calling, while they are not necessarily profane, I suspect that most people would find these derogating. Abbott calling Trump a disgrace is similar to the first two examples, except that disgrace is more of a descriptive noun which can be applied to other objects and situations, so it's not quite name calling. Pelosi's tweet is not one that uses name calling itself, but rather one that points out Donald Trump's usage of disparaging names. Trump's tweet about the media try to discredit the media by using descriptive verbs that are the direct opposite of how the media portrays itself and how many people think the media should operate. All of the examples I found were directed at other politicians from the same country (except for some from the U.K. directed at Trump), Trump was the exception tweeting insults mostly at the media and other politicians, but also at activists, NGOs, and foreign governments and their policies.

Categories

In reading through the most popular tweets I also noticed that some of them contained references to research (mostly about climate change) or other intellectual pursuits. I did not think that any of them were anti-intellectual, but decided to add the words science, climate change, study, and research to my list of keywords to sort by. This became part of a new category I called "science". I also created a category I called "othering", which I consider the insults and discrediting to be part of. There are many ways to other individuals, but also and especially groups of people, as is done in discrimination associated with immigrants and asylum seekers. I went back to the tweets to code for this category too. As I continued to read the tweets and code for my initial indicators, adding new ones, rejecting others, and comparing my findings with the data, I ended up with the following six categories: (1) Science and knowledge generation, (2) Guilting, (3) Derogatory, (4) Defensiveness, (5) Uncritical, (6) Facts and Truth.

These categories are based on close reading of tweets which were primarily based on one of these categories. The most liked and popular tweets of each politician all fell into one of these categories, it was also possible for tweets to fall into two categories. These are some examples of how tweets fell into categories:

Trump thinks climate change is a “hoax.” My supporters understand that we must move away from fossil fuels, not expand them. #RNCwithBernie (Sanders)

This tweet falls into the Derogatory category because it discredits Trump for denying climate change. It also falls into the Uncritical category because it assumes that his followers must accept his policy position on fossil fuels without providing any facts or alternative approaches to fighting climate change. Even though the study of climate change is scientific, I do not categorize this as Science and knowledge generation because it does not make reference to any scientific findings or advance the reader’s knowledge.

Thanks to all of the math & science teachers celebrating #PiDay! Nothing is better for building our future than investing in education. (Pelosi)

This tweet falls into the Science and knowledge generation category. Its only purpose is to promote science and furthering knowledge through education.

If I lose just six seats I will lose this election and Jeremy Corbyn will be sitting down to negotiate with Europe: <https://t.co/OwbfDseOJh> (May)

This tweet falls primarily into the guiltning category. May wants her supporters who do not plan to vote to feel guilty and at fault if her party does not win the election. It might also be classified as derogatory toward Corbyn because it is implied that he is not up to the job.

“The simple truth is this – if the Earth continues to warm, we will lose bears and entire polar ecosystems.” We can’t say we didn’t know ... <https://t.co/mjnWjJmA8V> (Lucas)

This tweet falls into three categories: Facts and truth because it states a truth that is supported by experts in the field. It is also uncritical in that it even uses the expression “simple truth”, when it was not simple to arrive at this truth. Third, it is also in the guiltning category because it guiltns the reader into doing something to slow down climate change.

In the East, it could be the COLDEST New Year’s Eve on record. Perhaps we could use a little bit of that good old Global Warming that our Country, but not other countries, was going to pay TRILLIONS OF DOLLARS to protect against. Bundle up! (Trump)

This tweet is primarily in the defensiveness category. Trump is often ridiculed for denying climate change. When the weather was colder than usual in the eastern U.S. he tweeted this to defend his position. It is also uncritical because his reasoning is based on a single personal experience but making a large claim about a scientific subject.

Having these six initial categories, I coded the most popular tweets according to the categories and made notes of indicators in those tweets. I added the keywords that I found recurring in some of the tweets to my Excel file to easily search and sort for them in each politician's tweet spreadsheet.

Analysis and Constant Comparison

Having read many of the tweets and assigning them to categories, I continued to compare the trends I saw in the categories and indicators and keeping notes on them. With new ideas and concepts now forming I wrote down some of the forming conceptual connections I made and writing memos about them. The categories which did not provide consistent data were dropped from the study. These are the memos and categories that I have kept and found to be grounded in the data:

Conceptual Memo 1

Derogatory + Defensiveness = Uncritical

I have found that politicians who write defensive tweets, which are often also derogatory do this in response to another derogatory event. This previous derogatory event can be a tweet from someone else, or something that has happened outside of social media. This becomes clear when the context of the tweets is analyzed. An example of this is Trump's regular tweets about fake news and attacks on the media. These are often in response to a derogatory article or broadcast about him, his administration, or his policies. In many of the cases his derogatory attack tweets can also be classified as defensive. Trump and other politicians are very quick to respond to disparaging comments about them. This might be because they are seeking to discredit the source of this information to save face. Sometimes the response to an attack against a politician is just a counter attack and name

calling, which I have seen mostly from Trump. Oftentimes politicians follow-up their defensive tweets with an uncritical tweet. Depending on the original attack on the politician, this uncritical tweet could be considered anti-intellectual rhetoric when it contains conclusions based on visceral opinion rather than critical analysis and thought. In cases where tweets are not followed up on twitter, they may possibly be followed up through other means which I am not including in this study.

Conceptual Memo 2

Uncritical + Derogatory = Defensiveness

When a politician makes an unscientific or uncritical claim, it may be responded to with a derogatory tweet. The derogatory tweets are mostly from political opponents in an opposition party, or even opponents in the politician's own party (mostly in the US). Sometimes the derogatory comments are also from media sources or other members of the social media network (Twitter in this case). The politician will feel the need to defend themselves from this derogatory comment and will respond with a defensive tweet. This starts a cycle bringing us back to Derogatory + Defensiveness = Uncritical. The defensive tweet might be followed up with another uncritical tweet. These uncritical tweets often include derogatory elements as well.

An example of this starts with an uncritical tweet from Trump:

Just out report: "United Kingdom crime rises 13% annually amid spread of Radical Islamic terror." Not good, we must keep America safe! (Trump)

This was tweeted on the same day that the BBC published an article about crime in the UK rising 13% over the past year. However, Trump also links this to terrorism, which is not part of the article or study and even places it within the quotation marks. This is a uncritical claim, which is partially incorrect or unproven. Several U.K. politicians responded to Trumps tweets in a similar way to Miliband:

Spreading lies about your own country: sad. Spreading lies about others: sadder. What an absolute moron. <https://t.co/0EACPcX9xR> (Miliband)

This is a derogatory tweet which implies that Trump spreads lies, it also uses name calling by labeling Trump an “absolute moron”. While Trump did not respond to this tweet directly, it did not take long for him to tweet toward the U.K. again:

.@Theresa_May, don't focus on me, focus on the destructive Radical Islamic Terrorism that is taking place within the United Kingdom. We are doing just fine!
(Trump)

This tweet came nearly a month later, so it is difficult to say if it can still be considered a reaction to the derogatory tweets toward him for his initial tweet, but the theme of criticising anti-terrorism measures is also present in this tweet.

While comparing the data I had extracted, I was was not able to come up with indicators that were consistent enough to verify the concepts in my initial memos. The raw data I had pulled from Twitter alone proved to not include enough information on the context surrounding many of the defensive or uncritical tweets. I kept on noticing defensive tweets or uncritical tweets and then a disengagement from the topic. Even though social media is claimed to enable a dialogue between constituents and politicians, the communication often seemed to be one-sided and there was little engagement between the politicians and other twitter users. I revised the categories in the memos to the following:

Derogatory = Defensive + Derogatory + Disengagement

Theoretical Saturation

While sifting through my codes for defensive and derogatory indicators, I followed up the context of the tweets through Google searches on what prompted the tweets. Many times they were in response to something the media reported which was derogatory, meaning a direct attack on something the politician said or did, sometimes it was just something challenging to a policy position or ideological position the politician holds. In any case, it was critical of something that the politician felt worth defending, which I coded as derogatory. For the process of finding the data outside of Twitter, I used the derogatory and defensive coded tweets which I had coded from the twitter data and worked backwards to find data in the context. Often times the politicians already provided links to the videos or

articles that they were defending against, which made it easy. Other times I searched for news of the days surrounding the tweets in question. In every instance that I followed the context of a derogatory and defensive tweet, the context pointed to a derogatory indicator which the defensive tweet was in response to. In every case the more personal the derogatory the initial indicator was, the more personal the derogatory defense was.

Explaining that defensive responses are always preceded by a derogatory indicator alone would seem like a tautological description in this concept. This is where the disengagement plays its role. It appears to show that politicians do not engage in anti-intellectual rhetoric on social media, since discussions are dropped by the politician, at least on Twitter. The discussion might continue outside of Twitter, where politicians cannot evade responses or questions about their remarks as easily. Further comparison of the data and coding responses by followers showed that just because the politicians disengaged from a tweet, does not mean that the tweet is not continuing to generate discussion on Twitter.

I color coded the first 150 tweets that received the most likes for each politician in my study on the spreadsheet. I then sorted the tweets that I had coded as defensive to the top of the spreadsheet. The number of tweets that were defensive and among the most liked tweets was in a significantly higher proportion to all the tweets in the pool included in this study. Sampling some of these tweets confirmed my suspicion that tweets that received many likes were also replied to often.

On average, the sampled tweets received 5.8% of the total number of likes in replies, so a tweet with 1,000 likes received on average 58 replies. This supports the often stated opinion that social media are ideological echo chambers. However, as I was searching for replies from politicians to their tweets to confirm that they had disengaged (which was done through the Twitter website, not the Excel spreadsheet), I also noticed something different about the replies on Twitter. Unlike replies on Facebook, which are all in one comment thread, replies on Twitter are treated as a separate tweet, each one creating its own thread. This amplifies the echo chamber effect. To illustrate what I mean I will show an example on one of Cory Booker's defensive tweets. His tweet was in response to a tweet by NRA TV, an account managed by the National Rifle Association (NRA) attacking Booker, among other democrats. However, Booker's tweet was not posted as a reply in Twitter, which means it could not be seen in the replies thread on the original NRA TV tweet. Booker did include a link to the original tweet so his followers can see the tweet and the video contained in it. The original tweet by NRA TV said:

“President Trump’s election, while crucial, can’t turn away the wave of these new European style socialists bearing down upon us...@KamalaHarris, @SenWarren, @BildeBlasio, @NYGovCuomo, @CoryBooker, @ChrisMurphyCT & @keithellison” -Wayne LaPierre #NRA #CPAC (NRA TV)

There was also a video attached to the tweet, which the quote comes from. Booker tweeted in response (see Figure 6).



Cory Booker
@CoryBooker

Follow

"If you have no critics you'll likely have no success."
Malcolm X

Sir, your personal attacks will fail.

Your millions of gun industry dollars blocking common sense gun safety will fail.

You're on the wrong side of history.

Change is coming.

Parkland is leading the way.

 **NRATV** @NRATV
"President Trump's election, while crucial, can't turn away the wave of these new European style socialists bearing down upon us...@KamalaHarris, @SenWarren, @BilldeBlasio, @NYGovCuomo, @CoryBooker, @ChrisMurphyCT & @keithellison" -Wayne...

5:15 PM - 22 Feb 2018

2,253 Retweets 10,552 Likes



508 2.3K 11K



Tweet your reply



Mar 6

Replying to @CoryBooker

Unfortunately, Obamaz has tainted Black po litocs for a long time. The socialist rhetoric is not attractive to any group today. Blacks are turning their backs on Dems bc they finally realize they are the enemy. Includes Black Dems.



Mar 3

Replying to @CoryBooker

You try so hard huh?

Figure 6: Tweet on Booker's Twitter Page

This is a defensive tweet that also includes an indicator appealing to common sense. Booker's tweet received 508 direct replies. The latest direct replies are shown at the top of the thread, I have included the latest two replies (at the time of writing) in the image. The two most recent replies to this tweet are both critical of Booker. However, there were many more positive replies, which is expected considering that most of his followers are likely supporters of his. An example of one of these positive reply tweets demonstrates how Twitter amplifies the echo chamber effect. Person 1 tweeted a supportive reply. The image (Figure 7) shows what followers of Person 1 see on their page. Twitter illustrates the thread and connection to Booker's tweet with a blue line and includes Booker's original tweet above Person 1's reply tweet, below that are all the direct replies to Person 1's tweet. Followers of Person 1 do not see any of the other direct replies to Booker's tweet, they only see the original tweet, the one left by Person 1, and all the direct replies to Person 1. The most recent reply to Person 1 was also supportive and made by Person 2. Followers of Person 2 only see Person 2's tweet and the thread linking it to Person 1's tweet, which is linked to Booker's original tweet (see Figure 8).

There is no reason to believe that Twitter treats any other reply differently, all replies are only shown in a thread with direct links to the original tweet. This differs from Facebook, where one must scroll through all comments to see the comment of a friend. I am not arguing that Facebook cannot or does not serve as an echo chamber, I have not looked at any data concerning Facebook, but I want to demonstrate the difference between Facebook and Twitter. On Facebook, friends of commenters are exposed to all of the comments to the original post that the friend commented on. On Twitter, they are only exposed to those tweets by their followers and the tweets which that person has replied to. For this reason I consider the category of twitter's echo chamber to be theoretically saturated. I will not find an instance where twitter replies are treated differently.

 **Cory Booker** @CoryBooker · Feb 22
"If you have no critics you'll likely have no success."
Malcolm X

Sir, your personal attacks will fail.

Your millions of gun industry dollars blocking common sense gun safety will fail.

You're on the wrong side of history.

Change is coming.

Parkland is leading the way.

 **NRATV** @NRATV
"President Trump's election, while crucial, can't turn away the wave of these new European style socialists bearing down upon us...@KamalaHarris, @SenWarren, @BilldeBlasio, @NYGovCuomo, @CoryBooker, ...

508 2.3K 11K

 **Person 1** [Follow](#)

Replying to @CoryBooker

Does he mean those Europeans that have affordable health care, little to no gun violence, better infrastructure, paid actual maternity leave, a general sense of looking out for each other, willingness to save our planet... What monsters ..@CoryBooker

6:10 PM - 22 Feb 2018

19 Likes 

4 19



 **Person 2** · Feb 22
@CoryBooker

I know, right? What he said "European Socialists" was so weird. It made me want to pour a glass of wine and buy a baguette. Then there was that term "legacy media".

1 3

Figure 7: Tweet reply on Person 1's Twitter page

Cory Booker @CoryBooker · Feb 22
"If you have no critics you'll likely have no success."
Malcolm X

Sir, your personal attacks will fail.

Your millions of gun industry dollars blocking common sense gun safety will fail.

You're on the wrong side of history.

Change is coming.

Parkland is leading the way.

NRATV @NRATV
"President Trump's election, while crucial, can't turn away the wave of these new European style socialists bearing down upon us...@KamalaHarris, @SenWarren, @BilldeBlasio, @NYGovCuomo, @CoryBooker,"

Person 1 Feb 22
Does he mean those Europeans that have affordable health care, little to no gun violence, better infrastructure, paid actual maternity leave, a general sense of looking out for each other, willingness to save our planet... What monsters ..@CoryBooker

Person 2 [Follow](#)
Replying to
I know, right? What he said "European Socialists" was so weird. It made me want to pour a glass of wine and buy a baguette. Then there was that term "legacy media".
7:29 PM - 22 Feb 2018
3 Likes

Figure 8: Tweet reply on Person 2's Twitter page

Emergent Grounded Theory

The emerging theory which crystallizes through the data I have analyzed can be stated as (Figure 9):



Figure 9: Emerging grounded theory

In all the cases I have coded for uncritical, derogatory, or defensive tweets by politicians of any party, from either country, were also coded as disengagement. All of the tweets coded in these categories were also liked or retweeted enough to generate at least one reply, in most cases they received many replies through, which led to an echo chamber of support for the politician. Hence, the emergent theory which is grounded in the data is that when a politician tweets a uncritical or derogatory or defensive tweet, and then disengages, which is always the case, this results in an echo chamber of support for the politician and the claims made in his or her tweet.

Conclusion

This chapter has demonstrated how I have used the Grounded Theory framework in conjunction with mixed methods to arrive at my grounded theory that uncritical, derogatory, or defensive tweets are followed by a disengagement with those tweets on Twitter. However, the disengagement by the politician then leads to an echo chamber in which the politician's followers fill in details and advance the narrative. In cases where the uncritical (always anti-intellectual), derogatory, or defensive tweets were anti-intellectual, the echo chamber balloons and multiplies the anti-intellectual message without any further interference from the politician.

This theory emerged from the data that was analyzed by starting out with indicators which were found repeatedly in the data and then grouped into categories. As the study continued new indicators were added and insignificant ones discarded. This led to the formation of new categories, and eventually memos, which are comparable to traditional hypotheses in other methodologies. As theoretical saturation was achieved, no further data was gathered and the emerging theory was grounded in the data.

CHAPTER V, DISCUSSION

Introduction

Having established an emergent grounded theory, it is important to point out the limitations in this theory and its associated study. While the findings of this study are relevant, they are not ground breaking and there are possibilities to improve and conduct further research in this area. This chapter will highlight the limitations and provide recommendations for further study.

Further, this chapter discusses the implications of the findings of the grounded theory. What this theory means for the promotion of anti-intellectual tweets by politicians gives the theory meaning and relevance. Therefore, I will discuss how the findings influence anti-intellectual tweets beyond the superficial level of the theory.

Limitations

This theory does have some limitations which I would like to point out in this section. As the data for this study was taken from only the politicians with the highest number of followers in their respective countries, it might not be accurate for politicians with fewer followers. While there is no reason to believe that they will not tweet uncritical, derogatory, or defensive tweets and then disengage from them, there may be no echo chamber resulting from these tweets if no one replies to the tweets. This would be likely with lesser known politicians who do not have many followers.

This theory can also not be reduced to anti-intellectualism on Twitter, except for the case of uncritical tweets. Uncritical tweets are by definition anti-intellectual because they discourage critical analysis of an issue. Defensive and derogatory tweets may not include anti-intellectual indicators, they may even include indicators that are supporting critical thinking or science, which will also be multiplied through the echo chamber.

These results are directly tied to data pulled from twitter and also illuminate how Twitter limits the replies followers see. It does not make any claims about other social networks and how anti-intellectual posts to those networks can be spread or multiplied. In the

case of Facebook, which I am familiar with, this theory does not apply due to the different way that comments are threaded in a Facebook discussion.

This study does not include deep interpretations of context that require in depth knowledge of local discourse, such as used critical discourse analysis and politico-linguistic methods. As I am comparing tweets from the United States and the United Kingdom, I am much less familiar with political discourse, political jargon, and background context to political discourse in the United Kingdom than in the United States.

Due to the technical restrictions of the Twitter application programming interface (API), the number of tweets that can be accessed per account are limited to 3,200. So it was not possible to include many more tweets or to search for a specific time frame for the tweets.

Time constraints limited the longitudinality of this study. A greater amount of time and financial resources would allow for the expansion of this study. I will provide some recommendations in the following section.

Areas for improvement and further study

Data for this study was mostly limited to Twitter and politicians' accounts. By expanding the pool of data accessed it may lead to more categories and emerging grounded theories. Further research could potentially also explore the implications of this grounded theory to other areas of interest. A Twitter echo chamber may also have implications for promoting certain ideologies, spreading falsehoods and lies, or to influence the sentiments toward groups of people, companies, organizations and individuals. With increasing interest in the study of post-truth social movements, the Grounded Theory approach could provide a fruitful methodology to apply these findings to this broader field in a larger study.

Implications

While this grounded theory can be applied to areas other than anti-intellectual discourse and rhetoric on Twitter, for the purposes of this study I want to highlight the applicability to anti-intellectualism.

Once one knows about the way Twitter displays replies to tweets, this can be manipulated to elicit positive replies from followers. It is likely that politicians do understand

how to use Twitter's reply scheme to their advantage. This can be seen in the example from Booker in the previous section. Instead of replying directly to the NRA TV tweet, he posted a new tweet with a link to the tweet he was responding to. He did not use the reply function in Twitter. This means that his response did not show up in the direct replies to the NRA TV post. Since NRA TV followers are likely to be critical of Booker, this could likely have been a strategic decision to avoid negative replies from NRA TV followers, as they do not see his tweet. This way only his followers and people who visit his Twitter page will see his tweet. These people are more likely to have similar policy opinions and word view. This will result in fewer derogatory replies to his tweet and comparatively more positive ones which can be echoed.

One of the categories that is part of this theory is disengagement. This may seem irrelevant at first glance, as all tweets can be echoed. However, this has important implications for anti-intellectual tweets. Even if they don't make very controversial claims, for example, only appealing to common sense, or asking a rhetorical question by putting out an empty signifier, to use a post-structuralist term, this can put an anti-intellectual image or association into the reader's mind. This anti-intellectual thought can then be amplified and repeated in the echo chamber. Since the politician has disengaged, he can claim no responsibility for where the discussion in the replies has led. For this reason it is prudent and strategic for the politician to disengage from comments that they do not want to have to defend. If a comment does raise a lot of attention and is brought up by the media, the politician can claim to be misunderstood.

Conclusion

The phenomenon of anti-intellectualism in political rhetoric is more complex than a scope of this study has been able to explore. The limitations pointed out in this chapter and the recommendations I have made represent a small image of how this study can be improved and expanded in a longitudinal study.

Further, I have illustrated how politicians can strategically use the way twitter displays reply threads to their advantage and spread anti-intellectual messages without claiming responsibility for the discussions that follow in the replies.

CONCLUSION

In this thesis, I have given an overview of the effect anti-intellectualism has on the everyday aspects of life. The increasing reliance on interconnected social networks, global and instant sources of media, and ease of mobility are contributing factors to an environment that allows anti-intellectualism to spread like a virus. Therefore it is in the interest of intellectuals and persons in positions of responsibility to prevent an anti-intellectual pandemic.

It is essential to know what the sources of this anti-intellectualism are, and what type of anti-intellectualism is a threat to human life and the planet we inhabit. I have provided the current state of literature and research on the subject, which is scarce, relative to the potential and real threats anti-intellectualism poses to the way we acquire knowledge and how we value knowledge. The word science comes from the Latin *scientia*, which means knowledge. Traditionally this science, in all its different types and disciplines, has been expanding our volume of knowledge in the form of testable explanations (Wilson 1999). As I have shown in this my section on anti-science movements, we are seeing a new type of scientist, one that I would call a pseudo-scientist. Pseudo-scientists use scientific terms or scientific sounding terms to promote their theories on social media, such as YouTube and Twitter. These theories, unlike scientific theories based on evidence, are based on personal experience and visceral anecdotes. These pseudo-scientists have millions of followers and fans who few them as authoritative figures. This can lead to the habit of critically examining statements and claims to be neglected in favor of intuitive acceptance of assertions which are viscerally loaded.

In an environment in which it is easy to believe anything that confirms one's worldview, it is all the easier for politicians to make claims and statements which are not grounded in any evidence or fact to further their political agenda. The ignoring of evidence by politicians, or even willfully misrepresenting the truth, has the added danger of disincentivising politicians to act in the interest of long-term sustainability in favor of personal short-term goals. Through low-quality rhetoric, which employs an appeal to common sense wrapped in a message evoking high levels of sentiment, politicians disregard the relevance of intellectual pursuits and the critical examination of claims. Social media makes it possible to broadcast these unfounded claims to the world in virtually no time.

To be clear, I have pointed out that there are differences in academic schools of thought which share some of the traits of anti-intellectualism. These are not anti-intellectual in the sense that they are uncritical of new information. It is rather the opposite that is the case, they are overly critical of theories that do not match their philosophy. These do mostly not relegate the source of knowledge to emotion and common sense, but rather the reverse: they use the concepts of common sense, feelings, and emotions to explain social phenomena. This differs from the anti-intellectualism I charge with the affliction of the state of knowledge generation and development of sound policy.

This thesis describes my journey in applying Mixed Methods-Grounded Theory methodology to find evidence in the data of social media, specifically Twitter, on how politicians apply anti-intellectual rhetoric through Twitter to further marginalize intellectual pursuits and to inflate the value of common sense and emotions beyond that of critical inquiry to meaningful social issues. The effects of which reach farther than the boundaries of their constituencies or states. My claims and theory are grounded in the evidence I have examined. I started out with a pool of over 50,000 tweets and used qualitative and quantitative representations of the data, using manual and computer-assisted methods to analyze and compare the data. My findings led me to the emerging theory that politicians will use uncritical, derogatory, or defensive tweets to disseminate anti-intellectual rhetoric. After publishing anti-intellectual tweets they will disengage from those posts on Twitter, which absolves them from responsibility of the online discussion that follows. Due to Twitter's method of displaying replies to tweets, critical replies are more likely to be filtered out through the way replies are displayed. This results in an echo chamber which does not encourage critical examination of the claims made, instead it allows the Twitter users commenting to advance the anti-intellectual message in the tweet by adding to the narrative. Even if the original anti-intellectual message was vague and on its own does not appear like much of a threat to evidence based claims, the ballooning effect of the echo chamber can super-charge the anti-intellectual components of the tweet and spread that message faster than anyone can react to defend facts and evidence.

My intention is not to disregard or dismiss emotions and common sense, which may be a factor in the surge of discontent with the intellectual. Rather, I am advocating taking emotions and common sense perceptions into consideration while putting one's own emotions temporarily aside to assess and critically evaluate the messages and information which we are presented and of which we take the validity for granted.

While awareness of the Twitter echo chamber alone will not solve the problem of anti-intellectual rhetoric entering our discourse, nor is it the only force driving the spread of visceral and anti-intellectual thought, it is vital not to underestimate multiplying effect this new media source has.

It is impossible to identify all these messages before they enter the echo chamber, much less to prevent them from entering it. I do hope that awareness of the issue will help identify some of these messages and encourage the reader to inject the conversation entering the echo chamber with a plea for reason and critical thought as it is broadcast to the world for eternity.

REFERENCES

- Berezow, A., n.d. Which Is Worse: Postmodernism Or Anti-Intellectualism?
- Best, S., 2015. Postmodernism and social inquiry. Routledge, London [England]; New York, New York.
- Bryant, A., Charmaz, K. (Eds.), 2011. The SAGE handbook of grounded theory, Paperback ed., reprinted. ed. Sage Publ, Los Angeles, Calif.
- Canovan, M., 1999. Trust the people! Populism and the two faces of democracy. *Political studies* 47, 2–16.
- Capdevila, R., Callaghan, J.E.M., 2008. ‘It’s not racist. It’s common sense’. A critical analysis of political discourse around asylum and immigration in the UK. *Journal of Community & Applied Social Psychology* 18, 1–16. <https://doi.org/10.1002/casp.904>
- Charmaz, K., 2006. Constructing grounded theory. Sage Publications, London ; Thousand Oaks, Calif.
- Charteris-Black, J., 2011. Politicians and Rhetoric. Palgrave Macmillan UK, London. <https://doi.org/10.1057/9780230319899>
- Coates, J., 1996. The claims of common sense: Moore, Wittgenstein, Keynes, and the social sciences. Cambridge University Press, New York.
- Covan, E., 2011. The Discovery of Grounded Theory in Practice, in: Bryant, A., Charmaz, K. (Eds.), The SAGE Handbook of Grounded Theory. Sage Publ, Los Angeles, Calif.
- Deacon, M., 2016. EU referendum: who needs experts when we’ve got Michael Gove? The Telegraph.
- Dewey, J., 1910. Some Implications of Anti-Intellectualism. *The Journal of Philosophy, Psychology and Scientific Methods* 7, 477. <https://doi.org/10.2307/2013388>
- Dewey, J., Bentley, A., 1948. KNOWING AND THE KNOWN.
- Dugger, C.W., 2008. Harvard Study Finds Heavy Costs for South Africa’s Misguided AIDS Policies. The New York Times.
- Elio, R., 2002. Issues in commonsense reasoning and rationality. *Common Sense, Reasoning and Rationality*, Oxford University Press, NY 3–36.
- Emery, D., 2017. Did Donald Trump Claim Global Warming Is a Hoax? [WWW Document]. Snopes.com. URL <https://www.snopes.com/fact-check/donald-trump-global-warming-hoax/> (accessed 5.12.17).
- Eshbaugh-Soha, M., 2016. Going Public and Presidential Leadership. Oxford Research Encyclopedia of Politics. <https://doi.org/10.1093/acrefore/9780190228637.013.57>
- Frantz, J., n.d. Study Shows How Social Media is Changing American Political Discourse | Penn GSE [WWW Document]. URL <https://www.gse.upenn.edu/news/press-releases/study-shows-how-social-media-changing-american-political-discourse> (accessed 5.13.18).
- Freedom House, 2017. Freedom of the Press 2017 | Freedom House [WWW Document]. URL <https://freedomhouse.org/report/freedom-press/freedom-press-2017> (accessed 5.18.18).
- Fuller, S., Collier, J.H., 2004. Philosophy, rhetoric, and the end of knowledge: a new beginning for science and technology studies, 2nd ed. ed. Lawrence Erlbaum Associates, Mahwah, N.J.
- Glaser, B.G., 2011. Doing Formal Theory, in: Bryant, A., Charmaz, K. (Eds.), The SAGE Handbook of Grounded Theory. Sage Publ, Los Angeles, Calif.
- Glaser, B.G., Strauss, A.L., 2006. The discovery of grounded theory: strategies for qualitative research, 4. paperback printing. ed. Aldine, New Brunswick.

- Guetterman, T.C., Babchuk, W.A., Howell Smith, M.C., Stevens, J., 2017. Contemporary Approaches to Mixed Methods–Grounded Theory Research: A Field-Based Analysis. *Journal of Mixed Methods Research* 155868981771087. <https://doi.org/10.1177/1558689817710877>
- Haas, P.M., Stevens, C., 2015. *Epistemic Communities, Constructivism, and International Environmental Politics*. Routledge.
- Herman, E.S., Chomsky, N., 2010. *Manufacturing consent: The political economy of the mass media*. Random House.
- Hofstadter, R., 1963. *Anti-Intellectualism in American Life*. Knopf, New York.
- Holton, G.J., 1993. *Science and anti-science*. Harvard University Press, Cambridge, Mass.
- Houston, K., 2018. The Necessity of Postmodernism in the Post-Truth Age [WWW Document]. *Areo*. URL <https://areomagazine.com/2018/04/15/the-necessity-of-postmodernism-in-the-post-truth-age/> (accessed 5.2.18).
- Hutto, C.J., Gilbert, E., 2014. VADER: A Parsimonious Rule-based Model for Sentiment Analysis of Social Media Text 10.
- Inglehart, R., Norris, P., 2016. *Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash* (SSRN Scholarly Paper No. ID 2818659). Social Science Research Network, Rochester, NY.
- Jorgensen, M., Phillips, L., 2002. *Discourse Analysis as Theory and Method*. SAGE, London.
- Kelle, U., 2011. The Development of Categories, in: Bryant, A., Charmaz, K. (Eds.), *The SAGE Handbook of Grounded Theory*. Sage Publ, Los Angeles, Calif.
- Klotz, I., 2011. NASA budget plan saves telescope, cuts space taxis. Reuters.
- Krige, J., Barth, K., 2006. Introduction:: Science, Technology, and International Affairs. *Osiris* 21, 1–21. <https://doi.org/10.1086/507133>
- Lidskog, R., Sundqvist, G., 2015. When Does Science Matter? International Relations Meets Science and Technology Studies. *Global Environmental Politics* 15, 1–20. https://doi.org/10.1162/GLEP_a_00269
- Lidskog, R., Sundqvist, G., 2011. *Governing the Air: The Dynamics of Science, Policy, and Citizen Interaction*. MIT Press.
- Lim, E.T., 2008. *The anti-intellectual presidency: the decline of presidential rhetoric from George Washington to George W. Bush*. Oxford University Press, Oxford : New York.
- Marshall, C., Rossman, G.B., 1989. *Designing Qualitative Research*. SAGE Publications.
- Merriam-Webster, n.d. Dictionary by Merriam-Webster: America’s most-trusted online dictionary [WWW Document]. URL <https://www.merriam-webster.com/> (accessed 3.20.17).
- National Research Council, 1999. *Pervasive Role of Science, Technology, and Health in Foreign Policy: Imperatives for the Department of State*. National Academies Press, Washington.
- Pear Analytics, 2009. *Twitter Study 2009*.
- Pew Research Center, S. 800, 2015. 88% of AAAS scientists say genetically modified foods are safe to eat; only 37% of the public agrees. Pew Research Center: Internet, Science & Tech.
- Plato, n.d. The Internet Classics Archive | Gorgias by Plato [WWW Document]. URL <http://classics.mit.edu/Plato/gorgias.html> (accessed 5.20.18).
- Potter, J., Witherell, M., 1987. *Discourse and Social Psychology: Beyond Attitudes and Behavior*. Newbury Park, CA, Sage
- Reporters sans Frontieres, n.d. 2018 World Press Freedom Index | Reporters Without Borders [WWW Document]. RSF. URL <https://rsf.org/en/ranking/2018> (accessed 5.18.18).
- Rigden, J., Stuewer, R., 2013. Enlightenment is Dimming in the United States. *Physics in Perspective* 15, 127–129. <https://doi.org/10.1007/s00016-013-0116-2>
- Rigden, J., Stuewer, R., 2012. Anti-science: It Comes From the Top. *Physics in Perspective* 14, 389–391. <https://doi.org/10.1007/s00016-012-0103-z>
- Rosenau, P.V., 1992. *Post-modernism and the social sciences: insights, inroads, and intrusions*. Princeton University Press, Princeton, N.J.

- Shaffer, L.S., 1977. The Golden Fleece: Anti-intellectualism and social science. *American Psychologist* 32, 814–823. <https://doi.org/10.1037/0003-066X.32.10.814>
- Silverman, D., 2014. *Interpreting qualitative data: David Silverman, Fifth edition.* ed. SAGE, London.
- Silverman, D., 2006. *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction.* SAGE.
- Smith, D., 2016. Donald Trump Jr's convention speech echoes Melania – both the good and bad. *The Guardian*.
- Star, S., 2011. Living Grounded Theory, in: Bryant, A., Charmaz, K. (Eds.), *The SAGE Handbook of Grounded Theory.* Sage Publ, Los Angeles, Calif.
- Stern, P., 2011. On Solid Ground: Essential Properties for Doing Grounded Theory, in: Bryant, A., Charmaz, K. (Eds.), *The SAGE Handbook of Grounded Theory.* Sage Publ, Los Angeles, Calif.
- Stivachtis, Y.A., 2015. Liberal democracy, market economy, and international conduct as standards of 'civilization' in contemporary international society: The case of Russia's entry into the 'community of civilized states.' *Journal of Eurasian Studies* 6, 130–142. <https://doi.org/10.1016/j.euras.2015.04.001>
- Weiss, C., 2015. How Do Science and Technology Affect International Affairs? *Minerva: A Review of Science, Learning and Policy* 53, 411–430.
- Weiss, C., 2012. On the Teaching of Science, Technology and International Affairs. *Minerva: A Review of Science, Learning and Policy* 50, 127–137.
- Woods, N., 2006. *Describing discourse: a practical guide to discourse analysis.* Hodder Arnold ; Distributed in the United States of America by Oxford University Press, London : New York, NY.