Authoritative Disinformation: the Benefits and Limits of Information, Media and Digital Literacies

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Outline

- My current research has been interested in authoritative disinformation: how disinformation is created, authorized and disseminated and how disinformation succeeds in light of or despite the content of the message
- In particular, the role of how cognitive authorities facilitate the success of disinformation campaigns (they also work in regular transfer of information)
- In the process I have incorporated studies from psychology, philosophy, communication studies, information studies, journalism, etc.
- I am interested roles of information literacy, digital literacy, and media literacy, not only their benefits or limits.
 - My conclusion is that that these literacies are beneficial for those who are open to learning.
 - They are not particularly useful for those in a propaganda feedback loop or who live in filter bubbles.
- I'll finish with a complex model of communication that tries to understand how disinformation campaigns work (and how literacies help awareness of the real contents of a media message)..

InfoWars

- World War III has started. As much as one would like to rail against the disinformation and conspiracy theories of Alex Jones, he is right about one thing: we are engaged in InfoWars, the title of his "news" program.
- The first major salvo of WW III was InfoWar I, the 2016 election of Trump.
- The war is not trivial. It is for the soul of America. And it is a World War. No matter what the country, it is a battle for science, reason, evidence, and fact (and humanism) to anchor political decision making, rather than bias, misinformation, hate, anger, and divisiveness.
- It is a war of disinformation, misinformation, lies, absent information, etc. against the evidence and truth, and for power and greed trolling simplistic solutions to complex problems.
- It is so extensive and amplified by the internet that we might have moved from the Age of Information to the Age of Disinformation, from the Age of the Enlightenment to an Age of the Anti-Enlightenment.

The Anti-Enlightenment

- One of the consequences of the age of information is that the growth and advent of the internet, particularly in the growth of communication and social media, has not only promoted the growth of information and potential knowledge, but also the growth of ignorance in its various forms and guises: misinformation, disinformation, fake news, and attacks on credible news sources.
- Access to the internet is now, more often than not, access to resources that reinforce biases, ignorance, prejudgments, and stupidity.
- Parallel to a right to information, we have created in practice a right to ignorance.
- Not only that: we, whether as individuals, groups or institutions like the government, have the legal right in the United States to disseminate ignorance and to block venues of facts and truth, and smugly claim to present lies and distortions as "alternative facts."
- We have entered an age of the Anti-Enlightenment, in which knowledge gained systematically and through careful observation of the environment is rejected and replaced by arrogant anti-science, anti-humanitarian propaganda whose misinformation or disinformation is transmitted through cable broadcasting and social media.
- We have entered an age where my biases, bolstered by partian colleagues and internet sources, trump your facts.

False Equivalences

- The notion of false equivalences asserts that for any issue, there are two equally valid opinions. While it is true that everyone is entitled an opinion, not all opinions are valid or have a foundation.
- But in the Age of Disinformation, this no longer holds. The sides in the war are not balanced, for the one side not only spreads disinformation but actively challenges, abuses, and attacks those who are committed to truth, evidence, facts, and logic.
- Climate change denial is a case in point. It suggests that those who believe in the vast scientific consensus have no valid grounds for their beliefs. In a supreme example of false equivalences, all opinions are equal, but the one opinion outweighs and trumps all others my biases, my opinions, my authorities are right everything else is deemed "fake news."
- Not all opinions are equally informed or justified. Some opinions are formed from false information, and such opinions do not have the same standing as ones that are well-formed: that is, ones based on rational arguments, evidence, and logic.
- False equivalences are exploited by false cognitive authorities

Cognitive Authorities

- A lot of disinformation is created, authorized, and transmitted by cognitive authorities, such as The New York Times, the Washington Post and Fox News
- Fox News is a false cognitive authority for it lacks journalistic integrity and has a falsification rate of over 59%, which means that its news is primarily disinformation, misinformation, lack of information, paltering or fake news.
 - O Politifact, for a time period that is not specified, estimates that of the statements "made on air by Fox, Fox News and Fox Business personalities and their pundit guests": 10% are true, 12% mostly true, 19% half-true, 21% mostly false, 29% false and 9% pants-on-fire false. (Fox's File, 2018). Thus a majority of statements, 59%, are less than half-true. It has gotten worse throughout Trump's time in office.
- Despite that, it is the major news source for most Republicans and conservatives.
- The point is that who said it is as important as what was said.

Cogntive Authority

Cognitive Authority defined:

- When one lacks experience, education or knowledge or one does not have the time or inclination to acquire such, it is a person, organization, media source, group or leader whose information one takes as second-hand knowledge based on that entity's credibility, trustworthiness and reliability.
- One can be mistaken about whether the authority is sound or not.

Patrick Wilson and Cognitive Authority



- Patrick Wilson wrote a work called *Second-hand knowledge an inquiry into cognitive authority* in 1983 which promoted a variety of notions.
- He argues that we can construct knowledge in one of two ways:
 - (1) We can construct first-hand knowledge based on our experience. Unfortunately, our experience is limited.
 - (2) We can construct knowledge from or through others, second-hand knowledge, something that we do not know for sure but take at the word of others
- Second-hand knowledge comes in various degrees some people know what they are talking about, and others (at the other end) can be self-inflated liars
- Cognitive authority is a phrase that Wilson coined to explain our understanding of others that recognize them as being proper authorities, which is often quite different than administrative authority, based on hierarchical structures. Your boss may be an authority on administrative matters, such as compensation, but that does not make him knowledgeable or an authority on e.g., the equity of compensation.

Cognitive Authorities

- Cognitive authority is related to credibility, competence, and trustworthiness.
- Cognitive authority exists on a continuum, exists in relation to a sphere of interest, and involves at least two people.
- Cognitive authorities can be friends, colleagues, peers, news media, Internet blogs, Twitter feeds, news channels, social media sites, etc.
- Examples of cognitive authorities are news sites representing different points of a political spectrum: e.g., Fox News or MSNBC.
- For news sites, the measure of their credibility or trustworthiness is related to consumer loyalty. This observation is true for both authentic and false cognitive authorities.
- News media can produce assertions as "true opinions," "false opinions," or "preferential opinions." They exist as opinions in the minds of the consumers until they are verified or not, or whether or when there are grounds for not needing to pursue their verification.



- We must distinguish between opinion and knowledge, between what we can know for sure (or to do the research or to get the education or to have the experience to have such knowledge) and opinions that may or may not be convertible into knowledge.
- Because we do not and cannot have knowledge about everything, we often rely on second-hand knowledge that we acquire from others to help us navigate through life, possibly originating in advice from parents about what sources to use to solve a problem.
- This second-hand knowledge is derived from cognitive authorities. This "knowledge" really exists as opinion in consumer's minds with varying degrees of certainty based on the degree to which they are trsutworthy, reliable, and credible.



- While contrary to conventional notions about opinion, I expand on the notion of opinion by arguing that opinions come in three general types: (1) true opinions; (2) opinions that are preferences, being neither true or false; and (3) false opinions.
- I argue for these distinctions because when one hears various kinds of information from, for example, one's preferred news sources, what is the cognitive status of this information?
- The kinds of information that one hears or reads do not exist as knowledge in most news consumers, save for those who have amassed a certain level of knowledge on a particular matter.
- There are exceptions as to when there are occasions where one feels warranted to accept second-hand knowledge without needing to establish its actual truth. When information is received from an information source, it is opinion or what can be called second-hand "knowledge." The question is whether it is knowledge or not. Or whether it could become knowledge.



- "True opinion" is opinion that could be turned into knowledge through experience, education or research, such as seeking evidence from reliable sources. If one did not know that the hypotenuse of a right triangle is the square root of the sum of its sides squared, one could take a course in geometry to learn it. If one believes that Pizzagate is a fake news story, one can do the research using reliable sources for confirming that assessment.
- If I think that Adele is a better singer than Lady Gaga, that may be true for one person and not another. Matters of taste, for which one can make arguments, are never true per se. They are matters of opinion that will vary among individuals or groups, even though one can advance arguments for why one would prefer one over the other.
- There are "false opinions," e.g., climate change denial, which cannot be converted into truth.

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- For example, at a July 2019 re-election rally, Trump made the following claims: that there was not an empty seat at this event or other Trump events; that Ilhan Omar praised al Qaeda and terrorism; that patients with preexisting conditions were protected more by Republicans than Democrats; that Hispanics have low employment because they want a strong border wall; that in the Ninth Congressional District, the liberal Dan McCready wants to take away Americans' guns, wants to raise taxes, and likes socialism and open borders (Dale & Subramaniam, 2019). These are false opinions, despite his supporters' embrace of or indifference to them (for example, many of Trump's supporters do not care if he utter lies), and yet they are touted as knowledge and often received or believed as knowledge.
- A somewhat confusing scenario needs to be sorted out: consumers receive information that pretends to be knowledge and that may be claimed to be knowledge by the consumer, based on their belief in a cognitive authority (such as a political leader, religious leader or news organization) and yet which is at best in the consumer's mind second-hand knowledge that may be in actuality opinion and even false opinion.



- In other words, one's second-hand knowledge may not be knowledge at all.
- The problem is that we need cognitive authorities. If we had to prove everything that we know, we would be paralyzed from making any progress in our lives.
- It seems probable that Trump's followers see Trump himself and Fox News and other ultra-right figures and associations as cognitive authorities.
- Similarly, liberals may embrace MSNBC and *The Washington Post* as their cognitive authorities. Are these cognitive authorities genuine?
- Do they have the properties and characteristics that we associate with real cognitive authorities? Or are they something that we might call pseudo-cognitive authorities or false cognitive authorities?



- Human beings may employ heuristics or mental shortcuts to deal with information. Unfortunately, "These mental shortcuts exacerbate the human inability to see the world as it really is" (Forgas & Baumeister, 2019, p. 9). The use of these mental shortcuts can be true of those who are either conservative or liberal or political actors of another stripe.
- Consumers of news media hear content from Fox News or MSNBC and may absorb the provided opinions as second-hand knowledge. This regular consumption may result in a heuristic, to trust this source, regardless of its actual basis in truth or evidence.
- The ultimate determination of whether a cognitive authority is genuine or false is not a measure of consumer loyalty, but whether their posted content *can* be ultimately authenticated and verified.

Accelerators or Enhancers

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There are enhancers or accelerators that make such news, particularly fake news, more plausible:

- Psychological factors, such as prejudice, resentment, greed, power, or other motivations, predispose those disinformed to embrace and perpetuate disinformation.
- Repeating information, true or not, increases its believability and this applies to newspaper headlines, statements, or speeches (Pennycook, Cannon & Rand, 2018). It also applies to cable news and their pundits, their consumers, their peer groups, party or viewpoint, associates or associations, and leaders (including religious leaders).
- There are bubble filters or propaganda feedback loops that reinforce biased content, particularly on the right (Morrison, 2018).
- The Dunning-Kruger effect suggests that people are uncritical about their own abilities and uncritical of their lack of critical thinking. To put it simply, people of poor intelligence lack the intelligence to recognize their impaired critical thinking ability (Dunning–Kruger effect, 2017).
- Once acquired, false information is hard to dispel.
- Agnotology is a specialized technique for spreading misinformation that makes information seekers more doubtful of views or information that they already hold (Agnotology, 2016).
- We will next look at the role of psychological factors, starting with self-deception.

Psychological Factors: Deception and Self-Deception

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- Self-deception may be a way in which we can embrace any of the forms of ignorance or false information.
- Self-deception is a way in which we can maintain our beliefs while ignoring or avoiding contravening evidence. Von Hippel and Robert Trivers describe five varieties of self-deception: (a) biased information search; (b) biased interpretation; (c) misremembering; (d) rationalization; and (e) convincing oneself that a lie is true.
- Self-deception is a socializing and socialized strategy. We convince ourselves of our false beliefs as we convince others, and vice versa. This reciprocity is social self-deception.
- There are two cases each of social self-deception each of which has two aspects, positive and negative: (a) situating (i) positive by seeking likeminded people and (ii) negative by avoiding people who disagree; and (b) persuasive (i) positive by trying to convince people to become likeminded or (ii) negative by withholding information that would deter a person from becoming like-minded.
- Collective self-deception elevates social self-deception into group behavior.



- Willful or deliberate ignorance: the conscious choice not to know.
 - There are varieties of willful ignorance, and they have both positive and negative dimensions.
 - Willful ignorance is different from self-deception because willful ignorance is always intentional, whereas self-deception is not: the willfully ignorant can recognize that they are willfully ignorant, whereas the self-deceived are typically not fully aware that they are self-deceived. Willful ignorance (being more conscious) is, therefore, more culpable than self-deception.
- Information avoidance is not the same as willful ignorance and may not be the same as self-deception.
 - Information avoidance as "any behavior intended to prevent or delay the acquisition of available but potentially unwanted information" (Sweeny et al., 2010, p. 341).
 - Reasons for information avoidance include: the information may demand a change in one's beliefs or an undesired action, or the information itself or the decision to learn information may cause unpleasant emotions or diminish pleasant emotions (p. 342).



There is a growing literature on the social psychology of gullibility, summarized by Forgas and Baumeister.

- Gullibility is "a failure of social intelligence in which a person is easily tricked or manipulated into an ill-advised course of action" (Forgas & Baumeister, 2019, p. 2).
- Gullibility can occur in one of two situations: "Either an individual's beliefs are manifestly inconsistent with facts and reality, or an individual's beliefs are at variance with social norms about reality" (p. 2).
- The psychological foundation of gullibility "appears to be the universal human capacity for trust to accept second-hand information we receive from others as a proxy for reality" (p. 5).



Forgas and Baumeister look at six psychological mechanisms of gullibility.

- The search for patterns and meaning: because human beings want to make sense of reality, they often find patterns and causation where there is none. (p. 8).
- Acceptance bias: "the near-universal tendency for human beings to accept rather than reject information" (p. 9).
- The power of heuristics: "Human beings are more prone to believe interesting, captivating stories and narratives that are salient and easy to imagine" (p. 9).
- Overbelief in the self: we are prone to "self-serving biases and distortions" (p. 10).
- Social mechanisms of gullibility: "all symbolic knowledge is socially constructed and shared. Comparing our views and ideas with the views and ideas of others is the way all symbolic reality is constructed" (p. 10).
- Epistemological failures to monitor and correct. Human beings fail to monitor and evaluate incoming information correctly in terms of their logical merits (p. 11).



Factors related to Trump supporters.

- Pettigrew (2017) outlines five factors that influence the uncritical acceptance of Trump by his supporters:
 - authoritarianism
 - social dominance orientation (SDO, i.e., they prefer to associate only with socially dominant groups)
 - prejudice
 - o low intergroup contact (i.e., a little familiarity with groups other than themselves)
 - o relative deprivation (i.e., feeling that others are much better off than they are)
- Trump supporters are less motivated by perceived economic anxiety than a loss of status
- There is a diversity of motivations among Trump supporters: resentment, greed, power, need to significance, prejudice, maintenance of white privilege, with different supporters prioritizing different values.



- Addiction to tribal identity politics. One former Fox News commentator, Tobin Smith, refers to the consumption of Fox News as addiction to "tribal identity porn," based on cultural and political resentment that "trigger feelings of hate, anger and outrage the addictive trifecta of tribal partisan pornography" (Smith, 2019, p. 459).
- Cognitive biases are mental shortcuts that help us resolve information problems. They are deviations from rationality in judgment. Wikipedia makes the comment: "Individuals create their own "subjective reality" from their perception of the input. An individual's construction of reality, not the objective input, may dictate their behavior in the world. Thus, cognitive biases may sometimes lead to perceptual distortion, inaccurate judgment, illogical interpretation, or what is broadly called irrationality."

 [https://en.wikipedia.org/wiki/Cognitive bias]. My only concern with such a comment implies that there is some clear notion of rationality. The notion of a universal rationality has been challenged by feminists and cultural differences.

Cognitive Bias Cheat Sheet

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There is a wonderful summary of cognitive biases in the cognitive bias cheat sheet by Buster Benson [https://medium.com/better-humans/cognitive-bias-cheat-sheet-55a472476b18]. He divides there into 4 types of problems that biases help us address:

- 1. Too much information (e.g., we notice things already primed in memory or repeated often)
- 2. Not enough meaning (e.g., we find stories and patterns even in sparse data)
- 3. Need to act fast (e.g., we favor options that appear simple or that have more complete information over more complex ambiguous options.)
- 4. What should we remember? (e.g., Information overload is a problem, so we filter aggressively, lack of meaning is confusing so we will in the gaps, we jump to conclusions, etc.)

Under each of these problems and subtypes, he names the variety of the cognitive bias involved.

The Role of Information, Media and Digital Literacies



- Information literacy is relevant for those seeking or verifying information. Information literacy is a "set of skills needed to find, retrieve, analyze, and use information" (Information literacy glossary, 2006).
- Media literacy is relevant for understanding the intent, content, context and their effect on the consumer of media, whether print or online or through different platforms. Media literacy is: "the ability to access, analyze, evaluate, create, and act using all forms of communication" (Media literacy defined, 2010).
- Digital literacy is relevant to the ethical use of the online environment, whether personally, professionally or globally. Digital literacy is "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills" (Heitin, 2016).
- These literacies are complementary but depending on one's perspective, one may take priority.
- All of these literacies can be beneficial if the potential audience is open to such instruction. None of them are likely to succeed for those who exist in a propaganda feedback loop or filter bubble.

Information Literacy



- determining the credibility of web sites and other online sources, such as using fact-checking sources;
- learning how to locate, evaluate, and use effectively the information sought for information needs, whether online, in libraries or in databases;
- learning the merits, defects, and effective use of search engines, deGooglization;
- promoting information literacy programs;
- learning about the structure of information sources to learn how to use them effectively;
- explaining the differences between knowledge, opinion, second handknowledge and the role of cognitive authorities;
- detecting logical fallacies;
- detecting violations of ethical principles
- In sum, critical thinking in information seeking behavior
- For details, see: http://personal.kent.edu/~tfroehli/froehlich.book.chapter.final.revision.pdf.

Media Literacy



- According to the National Association for Media Literacy Education, media literacy is the ability to access, analyze, evaluate, create, and act using all forms of communication. I would add the word 'interpret.'
- My simpler approach s the application of critical thinking skills to media messages: their intent, their motivation, their context, the real meaning of the message, the receptivity of the receiver, etc.
- Students must develop skills in deconstructing media messages through observation and interpretation of how such things as how color, proximity, font, imagery, and text contribute to reliable messaging, whether the message is information or disinformation. It asks such questions as: Who created this message? What is the intent of the message? What words, images, and structures are used in this message and why? How is this message supposed to engage our emotions?
- It is important to note that there are the emotional triggers that such messages that help the buy-in or rejection of the message.
- By observing and learning such skills, one can strive to perfect their own messaging, hopefully ones that promote the good, not ones that the Russian trolls and partisan hacks produce that instill division and dissent.
- Media literacy strives to promote civic responsibility

Digital Literacy

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An entry into Wikipedia defines digital literacy as referring:

- "an individual's ability to find, evaluate, and compose clear information through writing and other mediums on various digital platforms. Digital literacy is evaluated by an individual's grammar, composition, typing skills and ability to produce writings, images, audio and designs using technology. While digital literacy initially focused on digital skills and stand-alone computers, the advent of the Internet and use of social media, has caused some of its focus to shift to mobile devices. Similar to other expanding definitions of literacy that recognize cultural and historical ways of making meaning digital literacy does not replace traditional forms of literacy, instead building upon the skills that form the foundation of traditional forms of literacy."
- To which they add: "Digital literacy built on the expanding role of social science research in the field of literacy as well on concepts of visual literacy, computer literacy, and information literacy."
- https://en.wikipedia.org/wiki/Digital literacy
- "Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills." (Heitin, 2016).
- I find there are several problems with both of these characterization. First of all, media literacy is missing (though it is mentioned later).
- A word that I would add to "find, evaluate, and compose" is "interpret," for one of the important dimensions of media literacy is to interpret the intention of the message. Interpretation indicates that the evaluation of the intention is from a particular viewpoint, that it is not objective, though it strives to be.
- It is not clear where information literacy or media literacy end, and digital literacy begins. I find it useful to focus on digital ethics, issue that emerge in the distinctive online environment.

Digital Ethics



- "Personal digital ethics encompass how individual users honor one another's right to self-determination online. What makes these unique compared to the typical ethics guiding interpersonal conduct is that, given the nature of online infrastructure, communications is almost always mediated by some private interest or third-party" (Terrasi, 2019).
 - Social media hosting sites are ones in which users participate but which they do not control, though they can control what they contribute to it. If a friend sends one a photo of oneself, such photos should not be shared in social media without the consent of the friend.
 - o Terrasi contrasts personal digital ethics with corporate digital ethics, which "revolves around the practices of online platforms like social networks collecting sensitive information about users." (Terrasi, 2019). Google, Amazon, and other large online companies collect information about their users, and there is no clear expectation of what can and should be done with such information, including the right of users to control the data about themselves.
- The Zur Institute applies the notion of digital ethics to the realm of mental health professionals, defining it is "how to manage oneself ethically, professionally and in a clinically sound manner via online and digital mediums" (Zur Institute, n.d.).
 - The concern is whether it is ethical to use the internet or cell phones, for example, to learn about patients or clients, whether it is appropriate to friend them or how professionals should react to negative, even scurrilous, online reviews.
- Adam Henshall suggests that there are currently three hot issues in digital ethics.
- (1) Is computer code an instance of speech and regulation? Lawrence Lessing argues that computer code is a form of regulation, but not in a favorable sense. Rather than promoting more freedom, Lessing believes that "as this code changes, the character of cyberspace will change as well. Cyberspace will change from a place that protects anonymity, free speech, and individual control, to a place that makes anonymity harder, speech less free, and individual control the province of individual experts only" (Lessing, 2016).
- (2) A second issue is how much social and governmental control will be relegated to computer programs, whether we will move to a future where computers may be largely in control, given that the computations may be so complicated, their recommendations cannot be adequately assessed.
- Furthermore, (3) how do we combat digital monopolies, such as Google, Facebook, Amazon and Apple? (Henshall, 2018). This third concern echoes issues of corporate digital ethics, mentioned by Terrasi. While these large issues will have consequences which we must address, for this lesson, it is important to focus on what we can do immediately: personal digital ethics or professional digital ethics acting responsibly in the environment of digital media, not to mention to engage in and promote media literacy and information literacy.

The Limits of IMD Literacies

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IMD literacies work for those open to rationale discourse and training. But for true believers, those who live in an information filter bubble, or those in a closed propaganda loop, such techniques are not particularly useful.

In fact, I am trying to understand why such techniques do not work for partisan believers shackled to their positions and why disinformation campaigns succeed.

- a. Cults
- b. Addiction to tribal identity porn
- c. Filter bubbles or propaganda feedback loop
- d. Conspiracy theories
- e. Litigation
- f. The reinstitution of the fairness doctrine
- g. Socratic Techniques

On the next pages, you will see a communication model that tries to integrate different approaches and aspects for proper and improper information campaigns:

References



- This presentation is the result of the research of the author and does not reflect the views of the university or any governmental or Fullbright program.
- Except where explicitly given, all references to various authors in this presentation can be found in the reference list of two recent publications, most especially the second one:
- The role of pseudo-cognitive authorities and self-deception in the dissemination of fake news. *Open Information Science*, 3: 115-136, 2019. Available at: https://doi.org/10.1515/opis-2019-0009.
- Submitted book chapter, "10 Lessons for the Age of Disinformation," for Navigating Fake News, Alternative Facts and Misinformation in a Post-Truth World, edited by Professor Kamiz Dalkir, University of Montreal, to be published in Spring, 2020. Draft available at:

 http://personal.kent.edu/~tfroehli/froehlich.book.chapter.final.revision.pdf.
- Many of the slides are based on the second reference, which also elaborates the content of many slides to make them more accessible.