Ten Lessons for the Age of Disinformation

Thomas J. Froehlich, Ph.D.

Abstract

This chapter outlines the structure and content of a course devoted to developing strategies to cope with the massive assault of disinformation on American democracy. Ten Lessons for the Age of Disinformation will provide pedagogical techniques to teach high school, college students or adult learners how to cope with our current environment, which the author calls the "Age of Disinformation." It provides a multifaceted approach in which each facet reinforces the others. The ten lessons are (1) characteristics of the Age of Disinformation; (2) the varieties of false information; (3) knowledge, opinion, and second-hand knowledge; (4) deception and self-deception; (5) psychological factors; (6) cognitive authorities; (7) social media, intellectual freedom and libraries; (8) logical fallacies; (9) ethical principles; and (10) information, media and digital literacies and personal, political and professional commitments. Each lesson outlines the key ideas for each lesson and provides exercises that reinforce the key ideas of each lesson.

Target Audiences: high school and college students, community learning groups (e.g., library literacy programs), civics classes

Keywords: Disinformation, Deception, Self-deception, Second-hand Knowledge, Cognitive Authority, Information Avoidance, Information Literacy, Digital Ethics, Media Literacy, Information Ethics, Gullibility

It is essential to develop pedagogical techniques to teach students to preserve their understanding of truth in the Age of Disinformation. To be effective, teachers must take a multifaceted approach, each facet of which reinforces the other. A course or workbook to cope with the Age of Disinformation would involve ten different lessons: (1) characteristics of the Age of Disinformation; (2) the varieties of false information; (3) knowledge, opinion and second-hand knowledge; (4) deception and self-deception in disinformation; (5) psychological factors; (6) cognitive authorities; (7) social media, intellectual freedom and libraries; (8) logical fallacies; (9) ethical principles; and (10) information, media and digital literacies and personal, political and professional commitments. Exercises accompany each lesson.

Lesson 1: Characteristics of the Age of Disinformation.

- While disinformation has always been around, we are now engaged in global InfoWars, whereby true information is challenged by the varieties of ignorance and false information so that we have truly entered the Age of Disinformation.
- The Internet, self-publishing, and online trolls have dramatically increased the level, breadth, and speed of disinformation.
- The InfoWars between truthful information and disinformation are not balanced. To insist that the two sides have equivalent value falls prey to the notion of false equivalences. While there

may be two sides to every story, each side is not equally supported or grounded or deserves to be entertained.

• The side of disinformation insists on invalidating every opinion but its own.

As long as there have been human beings, there has been disinformation. The term itself is based upon a calque of a Russian word, Dezinformatsiya, which was supposedly invented by Joseph Stalin as a French-sounding word, after World War II, according to Ion Mihai Pacepa, a high-ranking official in Romania's secret police who defected in 1978 (Pacepa & Rychlak, 2013). It was derived from the name of a KGB (Russian Committee for State Security) black propaganda department, which disseminated a kind of propaganda that suggested that it was generated by those that it was supposed to discredit. The 1952 Great Soviet Encyclopedia called disinformation the "dissemination (in the press, on the radio, etc.) of false reports intended to mislead public opinion" (Taylor, 2019). It came into use in the 1960s and came into widespread use in the 1980s (Taylor, 2019). Its characterization has not changed much from the Soviet one, although it may have broadened its reach. Disinformation is false information with the intent to deceive, whether personally, socially, or politically. What has changed is its pervasiveness, speed, and the extent and variety of communication channels available to spread it. The Age of Disinformation has at least two dimensions: (1) the perpetuation of disinformation as a political strategy through all forms of media; and (2) the attack on reliable information, based on facts, reason, and evidence, intensified by the political structure which asserts if the current political establishment does not agree with it, it is, therefore "fake news." The disinformed are not merely disinformed; they often assert that only their "information" is true and contrary views must be rejected.

The Age of Disinformation is, to some degree, the Age of the Anti-Enlightenment. The Enlightenment advanced the notion that knowledge is gained systematically and through careful observation of the environment. It promoted ideals of individual liberty, constitutional government, separation of church and state, and religious tolerance. Now anti-science agendas, such as those that deny the value of vaccinations or the reality of climate change, and anti-humanitarian propaganda, such as the criminality of all immigrants, transmit disinformation through cable broadcasting and social media. Individual liberty produced such agendas so that one can say that the Enlightenment has not been an unmitigated good. For example, the notion of a universal reason that applies equally to all men, women and cultures and the radicalization of individual liberty are problematic. Sr. Joan Chittister, a Benedictine nun, describes the Enlightenment as increasingly favoring radical individualism and denigrating the common good (Landers, 2018). With the internet, radical theories have been embraced and amplified, seducing and aggregating vulnerable individuals as a force against the common good. However, it is a travesty to discard reason in favor of a pseudo-rationality or tribal beliefs. Evidence and facts matter.

A case in point: while many vaccine deniers are sincerely concerned about the welfare of their children about the supposed risks of vaccination, they fail to provide any scientific evidence for their views, except for a long-discredited and retracted article or colloquial evidence spread by those misinformed or disinformed about the scientific evidence. Sometimes such "evidence" is pushed by Russian trolls intent on sowing discord in American democracy. One of the concerns of anti-vaxxers is the inception of autism in their child as the result of vaccination, but symptoms of autism appear before any vaccinations occur (Vaccines Myths Debunked, 2019). What is new in the Age of Disinformation is that anyone who believes anything can find support for it, no matter how ignorant, wrong, or true, whether it is a

conspiracy theory, the flat-earth society, white supremacy, or aliens visiting earth. Google indifferently supplies both information and disinformation.

There is a war at hand, a war of information versus forms of false information. While Alex Jones peddles disinformation of the vilest sort, the title of his program, InfoWars, correctly indicates a global problem. The war of false information against real information is not only for the health of America's democracy but also is a threat to all democracies throughout the world. The author calls it a World War because it is quite global; throughout the world, the Internet is inflaming discord in many democracies, elevating autocrats, and fascists. The New York Times has reported that researchers at Oxford University discovered at least 70 countries that had disinformation campaigns (Alba &s Santariano, 2019). Its insult to freedom lies not only in what is spread on the Internet but also what it suppresses and challenges. In countries around the world, there is a battle to continue to anchor political decision making in science, reason, evidence, fact, democratic values, and humanism. The Age of Disinformation is one in which misinformation, lies, and obfuscation does war against the evidence and truth, and power and greed seek simplistic solutions to complex problems. While the war is predominately on the political front, it occurs in other areas. There was in 2019 an attempt to seek a referendum of Ohio House Bill 6, which passed by a slim margin and which according to its detractors, bailed out utility companies that were bankrupt, poorly ran and maintained nuclear power plants, and gutted the clean energy industry. The advertisements supporting retaining HB 6 alleged that the Chinese were coming to take Ohioans' jobs and take over Ohio's power grid, allegations that had no basis in reality. It touted the meme, "decline to sign," which was so effective the when the public was asked to sign a petition for the referendum, many who might be inclined to support the referendum would not even bother to find out what the petition was about (Bischoff, 2019).

The notion of false equivalences asserts that for any issue, there are two equally valid opinions. 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. 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. To insist that they are equivalent is a mistake in reasoning. We may note that the evidence for the opinions of the right or extreme right is often found lacking. Yochai Benkler, Robert Faris, and Hal Roberts in a book, *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics* (2018), argue that false stories are launched on a series of extreme Web sites, such as InfoWars, "none of which claim to follow the norms or processes of professional journalistic objectivity." (Benkler, Faris, & Roberts, 2018, p. 14). These stories unfortunately often find their way to such venues as Fox News that do not take the time to verify them.

Exercise suggestions will call on participants to consider the following questions:

(1) How do you describe your political viewpoint, if any? Conservative or liberal? If one of these, find information on one of your pet peeves on the side with which you do not agree and decide whether your pet peeve is justified or whether your understanding is limited. If you believe that

- you are apolitical or not engaged in politics, explore the soundness of any pet peeve you may have on any subject matter.
- (2) On what media do you rely? What bias does it represent? To what extent is the bias known?
- (3) How do you respond to the claim that you cannot remain neutral in the InfoWars? Doing nothing is the same as supporting the destruction of American constitutional democracy and, ultimately, the destruction of habitability on the planet.
- (4) Describe six characteristics of fake news or disinformation. Supply examples that exemplify one or more of those characteristics, explaining why.

Lesson 2: The varieties of false information.

Key ideas:

- (1) There are a variety of forms of false information and ignorance on the Internet, and we must distinguish among them: lies per se, ignorance per se, misinformation, paltering, disinformation, and missing information, with particular focus on two forms of information deceit, doxing and fake news.
- (2) The key characteristic of disinformation is the intent to deceive, whether in doxing, fake news, or other instances of disinformation.

There are a variety of forms of ignorance or false information available on various media, particularly on the Internet:

- Lies per se: While in earlier ages, we might expect lies to gain no traction (with some exceptions, e.g., Bill Clinton's "I did not have sex with that woman"), one of Trump's achievements is to make the lie a hallmark of his leadership style. Some of his supporters and supporting media may be convinced about or are indifferent to those lies because they believe that he represents some of their core grievances. According to those counting the number of lies he has uttered, it surpassed 10,000 in his first couple of years in office (Kessler, Rizzo, & Kelly, 2019).
- Ignorance per se: Lacking knowledge or awareness, being uninformed about a specific subject or fact. Unfortunately, Donald Trump provides another strong example: his lack of knowledge of the Constitution and how it forms the nature of our democracy, how government works, the separation of powers, or the role of the first amendment seems to elude his understanding. Unfortunately, there appear to be many areas of ignorance among the American populace: civics, American history, world affairs and leaders, and geography. While the research is a dated but still relevant, Andrew Romano in "How Ignorant are Americans?" explains areas of ignorance of Americans and why it is the case (Romano, 2011).
- Disinformation: Supplying misinformation or lies with the *deliberate aim to mislead*. The promoters of such untruths can include foreign governments, government agencies, corporations, or political parties, movements, or candidates. Fallis (2014) distinguishes lies from "true disinformation." When President Bill Clinton asserted that "he did not have sex with" Monica Lewinsky, he was arguably not lying, as they had not had sexual intercourse, but he was unquestionably misleading. True disinformation is related to paltering and doxing because accurate information is supplied, but it is not the complete story.

- Misinformation: Providing information that is incorrect or inaccurate. The difference between misinformation and disinformation is that the former does not have the intent to deceive. Misinformation may be just a mistake, such as getting the time of a movie wrong, or a false rumor, such as frequently appears on Facebook: It was claimed that an 11-year old girl was raped by a group of Muslim Refugees in Germany (Fisher & Taub, 2019, February 12). There was no basis for this rumor or, in an extension of that rumor, that the police were involved in a cover-up.
- Missing Information: Omitted information that makes it impossible to understand facts and make decisions. Its absence may be due to negligence, incompetence, or the desire to mislead; if it comes from a desire to mislead, it is disinformation. For example, after many mass shootings, the National Rifle Association and its supporters spread a meme stating that in Switzerland, one person in two has guns and it has the lowest crime rate in the world. They fail to mention that Switzerland has a mandatory military service for all able-bodied persons (e.g., men and women), that training in gun use is mandatory for all gun owners, and that it has a strong culture of gun responsibility and safety that is anchored in society and passed from generation to generation (Brueck, 2018).
- Paltering: An attempt to mislead by telling the truth, but not the whole truth. If your mother asks you whether you have finished your yard work and you reply that you were working on mowing the grass, this may be accurate, but if you were also supposed to weed the garden, you are paltering. Paltering is related to missing or omitted information, but it is a common ploy of politicians so that it deserves its own category. When Trump asserted that there had been zero admission of guilt in a 1973 federal lawsuit that charged his family's firm with housing discrimination, he was telling the literal truth, but he did so in order to falsely suggest that there was no legal recognition that Trump Corporation had committed housing discrimination, despite the fact that the conclusion of the suit included stipulations to desegregate Trump properties (McGregor, 2016).
- Doxing: searching for and publishing private or identifying information about an individual or group on the Internet, typically with malicious intent, such as shaming, extortion, coercion, or harassment. The publication is against their will, and often deliberately distorts the meaning of that private information. As a particular form of disinformation, doxing is related to "true disinformation" (Fallis, 2014). The term comes from a variation in the spelling of the abbreviation "docs" (for "documents") and according to Wikipedia, refers to "compiling and releasing a dossier of personal information on someone" (Doxing, 2019). For example, during the presidential election, Russian hackers targeted Democratic candidates and the Democratic National Committee headquarters by doxing those candidates and the Party. Hilary Clinton may have already had weaknesses as a candidate, but they were compounded by recurrent issues with her private email server and the statements by former FBI director James Comey. However, most Clinton supporters and the intelligence communities believed that the Russian assault of doxing and disinformation campaigns played a fundamental role in her electoral defeat.

Another example of doxing is a 2014 GamerGate controversy, in which a woman, Zoe Quinn, was harassed over a text-based game that she developed, called *Depression Quest*, based on her

experiences with depression. Other gamers thought that the game was a disincentive to the profession and decided to seek retaliation by posting her name, address, phone number, and other personal details, such as an ex-boyfriend's claims about her affairs with five other men. The last detail then developed into a conspiracy theory, maligning her reputation. It became such an extreme threat that she had to leave her home (Hathaway, 2014).

Fake news: another common form of disinformation, a type of "yellow journalism" (news stories with catchy headlines but with little or no factual basis) that consists of deliberate disinformation, hoaxes or fraudulent stories, spread in traditional media, cable news, or online social media. A national poll characterized the meaning of fake news for most Americans: "Just 25% say the term 'fake news' applies only to stories where the facts are wrong. Most Americans (65%), on the other hand, say that 'fake news' also applies to how news outlets make editorial decisions about what they choose to report" (National: 'fake news' threat to media; editorial decisions, outside actors at fault, 2018). This lesson takes the majority position. Fake news may differ from ordinary disinformation, in that its purveyors posit a narrative, such as a conspiracy theory or a meme, which Richard Dawkins originally defined in his book The Selfish Gene (1976) as "a unit of cultural transmission" (Chapter 11). A meme is a concept or behavior that spreads quickly from person to person that includes beliefs, fashions, stories, and phrases. Fake news is published with the intent to distort or "mislead in order to damage an agency, entity, or person, and/or gain financially or politically" (Fake news, 2019). A recent fake news story or meme claims that refugees in the United States get three times more money in federal government assistance than Social Security beneficiaries (Debunking false stories archives, 2019). Such claims are false.

This taxonomy of the varieties of false information may not be complete, but it covers most cases available in current media.

Exercise suggestions will call on participants to consider the following question:

(1) Of the eight varieties of false information given above, can you find different, specific examples of 6 of them? In each case, provide the example, provide its source (e.g., its URL), and why it illustrates the specific category well. Be aware that many examples may illustrate more than one category, in which case discuss how a particular instance manifests different forms of false information or ignorance.

Lesson 3: Knowledge, opinion, and second-hand knowledge.

- (1) 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.
- (2) 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.
- (3) 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 trust and believe their cognitive authorities. This knowledge as a source grows as

- the result of this second-hand knowledge is confirmed as trustworthy. It converts from pure opinion to some assurance about the opinion.
- (4) Persons, news institutions, or social media can act as cognitive authorities, whether genuine or false.
- (5) These authorities can be genuine or false, the paradox being that one can have high certainty about their cognitive authorities and yet it may be misplaced.
- (6) These opinions (to us as we hear or see them, though not to the cognitive authority) can be true, false, or a matter of taste: true, if one can do or does the research to verify it; false, if after research, it cannot be established as true; or a matter of taste, if based on one's tastes or preferences, being neither true or false.
- (7) Consumers of information sources may tend to assume that their opinions are knowledge when they are at best second-hand knowledge or at worst false opinion(s).

We need to consider the distinction between knowledge and opinion. While Plato and some of his commentators did not find his definition of knowledge to be entirely satisfactory, it is a good start. Plato characterized knowledge as "justified true belief" (*Theaetetus*, 201 c-d), i.e., one can supply a rationale for what one knows, based on reason and evidence or facts. Wikipedia offers a relatively straightforward approach: "Knowledge is a familiarity, awareness, or understanding of someone or something, such as facts, information, descriptions, or skills, which is acquired through experience or education by perceiving, discovering, or learning" (Knowledge, 2019). It is a cognitive state by which we understand something as the result of our experience, education, research, or cognitive processing. There is overwhelming knowledge in books, such as scientific knowledge, but this knowledge is latent to us until we each do the work of converting and processing the signs, symbols, and meaning of the texts and acquiring the appropriate experiences into knowledge. Knowledge has a quality of certitude, perhaps not immediately, but after a deliberative process.

While contrary to conventional notions about opinion, the author is expanding 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. The author argues 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 such information is simply received as confirmation bias and 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 (see below). "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. Thus the author wants to distinguish among opinions that

can be true, false, or a matter of taste: true, if one does or can do the research to verify it or has the experience or education; false, if after research, it cannot be established as true; or as a matter of preference; a matter of taste, if based on one's preferences. 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) and yet which is at best in the consumer's mind second-hand knowledge that may be in actuality opinion and even false opinion. Depending on the context, it could be true opinion as well, but it only becomes converted into knowledge based on education, experience or research. In settings like political rallies or cable news programs, the information provided is often a conflation of all three types. The point is that we have to sort out what cognitive states or claims someone contends to have versus what they actually are, despite the certainty with which they hold them.

Interestingly, Plato also proposed a category of "imagining," (*Republic*, 510a) a cognitive state inferior to the category of opinion (or in my extrapolation, false opinion). This cognitive state involves taking on a distorted perception of the sensible world. Conspiracy theorists often have such distorted perceptions: e.g., QAnon theorists assert such beliefs that John Fitzgerald Kennedy, Jr. is alive and well and working with Trump (Dickson, 2019). False opinions are false perceptions of the world (e.g., that Trump's rallies are always full or overcrowded) whereas false imaginings build on constructed frameworks that have no corollary in experience, e.g., that there are bodies of aliens that the government has secured from Roswell, NM and are hidden from the public. Such conspiracies theories, whether from the right or the left, are so pervasive and entertained, we might think of adding another category to the taxonomy of false information in lesson 2, "imagined realities," which are fanciful interpretations of real or fictional events, deemed to be true, just as the prisoners in Plato's *Republic*, who are chained from birth in a cave where they can only see images of objects parading before them, believe that their experience is the only reality (*Republic*, 514a–520a).

Patrick Wilson explored the construction of knowledge in *Second-Hand Knowledge: An Inquiry into Cognitive Authority* (1983). He argues that we can construct knowledge in one of two ways: (1) based on our experience; and (2) from or through others. Since our experience is limited, we must rely at times on second-hand knowledge, something that we do not know for sure but take at the word of others. These others may exist on a spectrum from very knowledgeable to outright liars. Cognitive authority is a phrase that Wilson coined to explain our understanding of others as being authorities. Cognitive authorities must have both credibility and trustworthiness. The second-hand knowledge that one gets from them really exists as opinion in consumer's minds with varying degrees of certainty based on the degree to which they trust and believe their cognitive authorities. This knowledge as a source grows as the result of this second-hand knowledge is confirmed as trustworthy. It converts from pure opinion to some assurance about the opinion. We will explore how cognitive authority occurs both for real news

and fake news, and how second-hand knowledge can be confused or embraced as first-hand knowledge or, more correctly, unwarranted or false opinion.

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? If so, how do we distinguish among these cognitive authorities? This issue will be explored further in Lesson 6.

Exercise suggestions will call on participants to consider the following questions:

- (1) In your experience, what do you count as genuine knowledge?
- (2) Can you think of any opinions that you have that could be turned into knowledge? How? For example, if you believe that Pizzagate is a fake news story, you can do the research using reliable sources to show this is a case of fake news. Consider some other fake news stories or memes,
- (3) Can you think of false opinions that you held and may remember? How did you go about determining that they were false and not a matter of opinion or preference?
- (4) Name some of your personal authorities. On which subjects do you trust each of them? How do you justify your trust in them? Were they always reliable?
- (5) Who or what are your cognitive authorities in media (e.g., newspapers, television or cable channel, or social media site)? Do they exhibit a bias? Do you think that you use them to bolster your view (as confirmation bias)?
- (6) Who or what are examples of false cognitive authorities? On what grounds can you assert that they are false?

Lesson 4: Deception and self-deception.

- (1) Self-deception may be a way in which we can embrace any of the forms of ignorance or false information.
- (2) 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.
- (3) 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.
- (4) There are two cases each of social self-deception each of which has two aspects, positive and negative: (a) situating (i) positive by seeking like-minded people and (ii) negative by avoiding people who disagree; and (b) persuasive (i) positive -- by trying to convince people to become like-minded or (ii) negative by withholding information that would deter a person from becoming like-minded.
- (5) Collective self-deception elevates social self-deception into group behavior.

The difference between disinformation and other forms of false information or ignorance is the intent to deceive. However, deception often involves self-deception. Sartre set self-deception, which he also called bad faith, as a key to understanding how people live inauthentically: holding or living a contradiction at one and the same time or believing what you do not believe, such as believing that your vote does not matter, while recognizing the slim margin by which Trump won the electoral college. In bad faith, people may deceive themselves into thinking that they do not have the freedom to make choices for fear of the potential consequences, i.e., that they would have to be responsible for themselves. We might file forms of "willful ignorance" under this category, knowing something but consciously or unconsciously ignoring it, e.g., choosing to believe that the Confederate flag or statues of Confederate leaders are not symbols of racism.

Self-deception is an important way in which we embrace false information, whether misinformation, disinformation, missing information, incomplete information, or even true information used in paltering, though it seems rampant in disinformation. There are two types: motivated and unmotivated. In motivated self-deception, we push a form of self-deception for conscious political, social, ethical or personal gain (e.g., proposing that all Muslims believe in Sharia Law and support jihad). Stephen Colbert's notion of "truthiness" is probably the best contemporary expression of motivated selfdeception. Wikipedia described it as a "belief or assertion that a particular statement is true based on the intuition or perceptions of some individual or individuals, without regard to evidence, logic, intellectual examination, or actual facts" (Truthiness, 2019). We practice truthiness when there is some belief we want to be true despite clear evidence to the contrary. Truthiness is common among Trump supporters who cannot find any fault in or ignore Trump's lies or behavior. But it can be found in liberals who want to believe that all corporations are corrupt and have no interest in consumers or consumer behavior, except as profit margins. Unmotivated self-deception involves succumbing to one's biases, motivated to the degree that it accords with one's a priori bias; in other words, we seek information that confirms our a priori beliefs, which is precisely known as confirmation bias. Many people are inclined to information avoidance as one technique of confirmation bias, that is, avoid any information or sources that contradict what one wants to believe, e.g., that Trump is a great leader or that MSNBC is a flawless critic of the Trump administration.

Von Hippel and Trivers (2011) describe five varieties of self-deception: They are (1) biased information search, (2) biased interpretation, (3) misremembering, (4) rationalization, and (5) convincing oneself that a lie is true. With respect to the first variety, the information seeker avoids information by limiting his/her exposure, holding onto a partial truth, rather than confronting the whole truth. When Trump supporters hear a negative report about Trump, such as that he paid money to women with whom he had affairs before the election, they restrict their listening to Fox News or to blogs, social media, or friends who support the same views.

Biased interpretation occurs when attitudes stay the same in the face of new, contradictory facts. Von Hippel and Trivers (2011) cite the case of two groups of people with strong, differing attitudes toward capital punishment. They were each presented with some evidence that suggested capital punishment was a deterrent of crime and with evidence that it was not. Both groups remained polarized in their opinion (p. 9). There are many such issues for Trump supporters and Trump critics: the success of the talks with North Korea about denuclearization; the renegotiated free trade agreement (USMCA – formerly NAFTA) with Mexico and Canada; the success of his tariffs on foreign-made products, such as

steel and aluminum; and the benefits of the new tax law. Each set of persons focus on the evidence that backs their original opinion.

The third self-deceptive strategy Von Hippel and Trivers (2011) describe is misremembering. This can happen when one gets new information that is inconsistent with one's preferences. (p. 9). An obvious example is all the Trump supporters who voted for and appreciated the presidency of Barack Obama. Under the tutelage of Trump, his supporters and media venues, they have become despisers of him and his programs, despite his legislation that was beneficial to them, e.g., Obamacare. They want healthcare but no longer Obamacare.

Rationalization occurs, according to Von Hippel and Trivers (2011), when one "avoid[s] telling oneself the whole truth by reconstructing or rationalizing the motives behind the original behavior to make it socially more acceptable" (p. 9). One can imagine a Trump supporter who asserts, referring to non-white Congresswomen, that "to go back to your country" is not a racist comment. One can also imagine a liberal spouting ideological purity when a candidate does not live up to their expected behavior in a green new deal.

Finally, convincing oneself that a lie is true. Perhaps the most famous example was when Trump, at a rally on July 24, 2018, proclaimed that "Just remember: what you're seeing and what you're reading is not what's happening" (Holmes, 2018). The irony is that this is precisely what Trump supporters should be thinking about the things Trump says. But it should not be that surprising that as the title and content of a psychological study assert, "Self-deceived individuals are better at deceiving others" (Lamba & Notyananda, 2014). Trump appears to be a good example of a self-deceived individual, as he claims to be the one person who can fix monumental national and international problems. Another good example is that of Rudy Giuliani, Trump's lawyer who asserted that "truth isn't truth" (Morin & Cohen, 2018) on the television program, "Meet the Press," when explaining why Trump should not have testified before special counsel Robert Mueller for fear of perjury if he were caught in a lie.

Self-deception is not only a learned behavior but a socialized and socializing one as well. Roy Dings (2017), in a paper on "Social strategies in self-deception," claims that self-deception can be "a process that is distributed across the social context of a self-deceiver." Other people may be the means to our self-deceptive ends. That is, we may mislead other people, withhold information or straightforwardly deceive them, and all of these actions may be part of our self-deceptive endeavors. Dings defines selfdeception in the following manner: as "(i) a process that originates in (ii) a motivation or intention ..., which leads to (iii) a self-deceived end state (which can be the formation of a novel belief or the maintenance of an existing belief or other attitude)" (p. 17). In social self-deception, other people are a means to the self-deceptive process. Other people include, Dings writes, "in a practical and broad sense, their behavior, which includes verbal statements, facial expressions, body language but also the lack of behavior" (Dings, 2017, p. 17). While self-deception does not require others to participate, it can be stronger when someone else enables it. Dings describes two cases, each of which have two aspects positive and negative: situating (a) positive – by seeking like-minded people (e.g., going to a partisan political party rally) and (b) negative – by avoiding non-like-minded people (e.g., as a liberal changing channels from Fox News); and persuasive (a) positive -- by trying to convince people to be like-minded (e.g., entering into political arguments that support one's political views) or (b) negative – such as by withholding information that would deter a person from becoming like-minded (e.g., describing Trump as an excellent steward of the economy even though many of the policies that drove growth largely

stemmed from his predecessor). The latter two seem to highlight common strategies of news organizations like Fox News: convincing Trump's supporters of the president's inflated success rate or not mentioning that white nationalists have been found guilty of racist crimes or failing to mention the evidence for Trump's impeachment. The easily accessible Internet and its many social media sites make such strategies easy to undertake: to find people who share the same disinformation, misinformation, conspiracy theories, etc., linking from one reinforcing site to another and avoiding sites that provide evidence that conflicts with one's a priori bias or political viewpoint.

Collective self-deception extends social self-deception into group behavior. Deweese-Boyd (2017) defines collective self-deception "as the holding of a false belief in the face of evidence to the contrary by a group of people as a result of shared desires, emotions, or intentions (depending upon the account of self-deception) favoring that belief" (Section 7.1). In this case, a group of individuals share levels of resentment about the status quo and share "the same belief for similar reasons and by similar means." One can imagine a group of Trump supporters who share a belief in the success of his presidency by watching the same media outlets (e.g., Fox News), which in turn are reinforced by their peers, evangelical leaders, and like-minded associates.

What distinguishes collective self-deception from solitary self-deception is its social context; namely, that it occurs within a group that shares both the attitudes bringing about the false belief and the false belief itself. Compared to solitary self-deception, self-deception in a collective or group is both easier to foster and more difficult to escape, being abetted by the self-deceptive efforts of others within the group that reinforce norms for the group (Deweese-Boyd, 2017). This is how Trump's supporters reinforce each other's collective beliefs.

Exercise suggestions will call on participants to consider the following questions:

- (1) Can you think of ways in which you may be deceiving yourself?
- (2) Can you think of ways you may be involved in behaviors or beliefs that can be described as social self-deception, either in your experience or on the web?
- (3) Have you ever been involved in behaviors or beliefs that can be described as collective self-deception, either in your experience or on the web?
- (4) Can it be argued that the white evangelical view that Trump was appointed by God in the manner of King Cyrus is a form of collective self-deception?

Lesson 5: Psychological factors.

There are psychological factors that predispose the uninformed, misinformed or disinformed to ignore information or to accept or perpetuate disinformation.

- (1) Willful or deliberate ignorance: the conscious choice not to know.
 - a. There are varieties of willful ignorance, and they have both positive and negative dimensions.
 - b. 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.

- (2) Information avoidance is not the same as willful ignorance and may not be the same as self-deception.
 - a. Information avoidance as "any behavior intended to prevent or delay the acquisition of available but potentially unwanted information" (Sweeny et al., 2010, p. 341).
 - b. 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).
- (3) There is a growing literature on the social psychology of gullibility, summarized by Forgas and Baumeister.
 - a. 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).
 - b. 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).
 - c. 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).
 - d. Forgas and Baumeister look at six psychological mechanisms of gullibility.
 - i. 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).
 - ii. Acceptance bias: "the near-universal tendency for human beings to accept rather than reject information" (p. 9).
 - iii. 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).
 - iv. Overbelief in the self: we are prone to "self-serving biases and distortions" (p. 10).
 - v. 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).
 - vi. Epistemological failures to monitor and correct. Human beings fail to monitor and evaluate incoming information correctly in terms of their logical merits (p. 11).
- (4) Factors related to Trump supporters.
 - a. Pettigrew (2017) outlines five factors that influence the uncritical acceptance of Trump by his supporters:
 - i. authoritarianism
 - ii. social dominance orientation (SDO, i.e., they prefer to associate only with socially dominant groups)
 - iii. prejudice
 - iv. low intergroup contact (i.e., a little familiarity with groups other than themselves)
 - v. relative deprivation (i.e., feeling that others are much better off than they are)

- b. Trump supporters are less motivated by perceived economic anxiety than a loss of status
- c. There is a diversity of motivations among Trump supporters: resentment, greed, power, need to significance, prejudice, with different supporters prioritizing different values.

Part of the problem of dealing with persons imbued with espousing or promoting fake news is that one tries to approach them rationally. Taking clues from the previous lesson, there are many psychological factors at play that enable the success of various forms of self-deception, where rational arguments do not work. The first factor is what is called willful ignorance, which is not a matter of accepting or promoting disinformation but ignoring information. Hertwig & Engle (2016) developed a taxonomy for deliberate ignorance: it is a device for, emotional regulation and regret avoidance, suspense and surprise maximization, performance enhancement, strategic behavior, impartiality and fairness, and cognitive sustainability and information management (pp. 361-364). While the authors do not answer the question about when this deliberate choice is right for the individual or society, it "is beneficial, rationally or ethically appropriate" (p. 365). Nevertheless, they are aware that there is a sinister side to it, "when it is used to evade responsibility, escape liability or defend anti-intellectualism" (p. 365). Gigerenzer & Garcia-Retamero (2017) agree that, contrary to the view that willful ignorance is irrational and counterintuitive, it has beneficial aspects in certain circumstances: when dealing with issues such as death and divorce as well as the pleasurable events (p. 195).

Kevin Lynch argues that 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. (Lynch, 2016, p. 521). Alicke (2017) agrees, arguing that willful ignorance tends to be more adaptive than self-deception, and is "a "cognitive strategy that people adopt to promote their emotional well-being," whereas "self-deception is less controllable and more likely to be detrimental" (n.p.). Self-deception is less manageable (given its unconscious nature) because there are few resources to have the self-deceived face the truth.

Information avoidance is not the same as willful ignorance and may not be the same as self-deception. Sweeny et al. (2010) define information avoidance as "any behavior intended to prevent or delay the acquisition of available but potentially unwanted information" (p. 341). They suggest that the 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). They note that these are not the only reasons for information avoidance. Golman, Hagmann, & Loewenstein (2017) take an approach that shares in some of the modes of self-deception. For the methods of information avoidance, they include physical avoidance, inattention, biased interpretation of information, forgetting and self-handicapping (choosing tasks that poorly match their capabilities) (pp. 99-104). The reasons they posit for the varieties of information avoidance share some of Hertwig & Engel's six motivations for deliberate ignorance (above): hedonically driven information avoidance (such as risk, loss and disappointment aversion, anxiety, regret aversion, optimism maintenance or dissonance avoidance); belief investments, such as intrapersonal strategic avoidance (e.g., resisting temptation, motivation maintenance, avoiding projection biases, or abdicating responsibility) or interpersonal strategic avoidance (pp. 104-120). Many

of these methods of information avoidance or the varieties of information avoidance can provide the strategies of the disinformed to remain disinformed.

There are growing studies in social psychology on the phenomenon of gullibility. Gullibility is defined by Forgas and Baumeister (2019) as "a failure of social intelligence in which a person is easily tricked or manipulated into an ill-advised course of action" (p. 2). It is related to credulity, the tendency to accept assertions that are not supported by evidence. According to them, 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). While the former would seem to challenge and deny those who believe in the flat earth or who believe that John Kennedy, Jr is alive and well and working with Trump (as QAnon theorists believe), the latter is harder to pin down. "We often use the term *gullible* to describe persons whose beliefs violate some consensual rather than scientific standard of how reality should be viewed" (p. 2). "As long as knowledge is incomplete and subject to future falsification, identifying gullibility is more a matter of consensual value judgment rather than a statement of inconvertible fact. Gullibility may thus often be a matter of perspective, residing in the eye of the beholder" (p. 3). Having said that, it seems clear, based on a consensual understanding, the balance of powers in the federal government is being undermined. What has aggravated matters is the rise of the internet. Before mass communication and self-publishing, there was

the privileged class of experts, truth-seekers, and truth-tellers who ... were institutionally established in our social systems and whose job was to discover and communicate the truth. They have now lost their privileged position and information monopoly. And now it seems that truth in public life is now also at risk (p. 5).

There is slippage in loyalty to national newspapers, which used to be arbiters of consensual truth, partly aggravated by claims by Trump that they publish fake news when their stories about him are critical.

Why are people gullible? According to Forgas and Baumeister,

One of the psychological foundations of gullibility, paradoxically, appears to be the universal human capacity for trust - to accept second-hand information we receive from others as a proxy for reality (Deutsch & Gerard, 1955). Indeed, our evolutionary history (Harari, 2014; Pinker, 2018; von Hippel, 2018) suggests that perhaps the most revolutionary cognitive development of our species occurred when we made the dramatic leap from being creatures who are bound by immediate reality to becoming creatures who can accept and act on consensual symbolic information or "memes" as if it was reality (Dawkins, 1976; Dennett, 2017). This ability to accept symbolic information from others and treat it as real is also one major foundation of all human cultural evolution (Harari, 2014). (p. 5).

The authors then look at the psychological mechanisms of gullibility. They present five: (1) Imagined causation or pattern recognition: because human beings want to make sense of reality, they often find patterns and causation where there is none. (p. 8). (2) Acceptance bias: "the near-universal tendency for human beings to accept rather than reject information" (p. 9). Information provided tends to be treated

as true, and time and effort must be made to render it false. The authors add: "The acceptance bias shows how gullibility occurs when people are distracted by other information, emotion, or time pressure." Given the din of hundreds of information channels and the emotionally charged political atmosphere, it is no surprise that people rally around a few sources. (3) Power of heuristics: "Human beings are more prone to believe interesting, captivating stories and narratives that are salient and easy to imagine (Kahneman & Tversky, 2000). When we are exposed to salient, frequent, and thus easily remembered information, due to a strange 'mental bug' in our information processing system, such information will also be seen as more true, reliable, and valid" (p.9). Coupled with the first two mechanisms, we can easily see the effect of Fox News or MSNBC or other news or social media channels. "Typically, what is familiar, readily available, salient, focal, representative and colorful captures our imagination and attention and is given far more credence than it deserves" (p. 9). (4) Overbelief in the self: related to the Dunning-Kruger effect (see Lesson on Cognitive Authorities), we are prone to "self-serving biases and distortions" (p. 10). People hold onto their beliefs considerably more than is warranted. (5) 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). Perhaps grounding Dings' assertions that in social self-deception, other people are a means to our self-deceptive processes, Forgas and Baumeister assert that "In an inherently ambiguous and uncertain environment, humans will spontaneously construct shared norms and standards that, however arbitrary, will impose a semblance of consensual order and predictability on their view of reality (Sherif, 1936)" (p. 10). Once these consensual norms are established, they are difficult to modify. When we think of the notion of consensual reality promoted by Fox News, all fostered by the previous psychological mechanisms, we can believe that their viewers' notion of reality will be difficult to change, mainly because it is reinforced by so many channels: friends, colleagues, political associates, church fellowship members, social media, etc.

What others think and do continues to have a powerful normative influence on human behavior, even if those norms are not internalized, and indeed, disbelieved (Asch, 1951). It turns out that the very process of openly discussing divergent views about reality can be a mechanism that promotes the acceptance of more extreme and biased views, as the voluminous research on group polarization phenomena shows.... (p. 11).

The final psychological mechanism that Forgas and Baumeister consider is (6) Epistemological failures to monitor and correct. Human beings fail to monitor and evaluate incoming information correctly in terms of its logical merits, based on what Forgas and Baumeister call "metacognitive myopia," a failure to think about our thinking. Unfortunately, this is not a natural way in which human beings think, despite all the textbooks on formal logic and scientific successes built upon it. The lessons on logical fallacies and ethical principles were included in Lessons 8 and 9 to help address this issue.

In addition to the research on gullibility, there is also a significant amount of psychological literature dedicated to trying to understand the factors that influence supporters of Trump. Thomas Pettigrew's (2017) paper, "Social Psychological Perspectives on Trump Supporters," shines a light on this group. Without dismissing the political factors that may be at work or claiming that this list is exhaustive, he identifies an array of factors reflecting five major social psychological phenomena that account for the bulk of Trump supporters' devotion: authoritarianism, social dominance orientation (SDO, i.e., they

prefer to associate only with socially dominant groups), prejudice, low intergroup contact (i.e., little familiarity with groups other than themselves), and relative deprivation (i.e., feeling that others are much better off than they are).

Pettigrew finds that many Trump supporters are attracted to authoritarian characters. Authoritarianism is characterized by such traits as "deference to authority, aggression toward outgroups [meaning any group with which the individual does not identify], a rigidly hierarchical view of the world, and resistance to new experience" (Pettigrew, 2017, p. 108). Authoritarians see the world as dangerous, and fear guides their response to it. While there is a debate among social psychologists about whether authoritarianism is a personality construct or a political ideology, Pettigrew argues that "there is no necessary conflict between these two perspectives" and that authoritarianism usually starts as a personality orientation, which then leads to an engagement with right-wing political ideology. From an authoritarian view, the motivation lies in fear, and the rhetoric of Trump provides fuel for the fire, which leads his supporters to consider him to be an authority of matters of American security, leading them to support him in his efforts to secure the borders against outgroups, including through family separation and a border wall between the United States and Mexico.

Pettigrew defines SDO is as "an individual's preference for the societal hierarchy of groups and domination over lower-status groups" (p. 108). People who want to maintain the current social hierarchy have an SDO. They believe members of other groups are inferior to members of their own. People with strong SDO are "typically dominant, driven, tough-minded, disagreeable, and relatively uncaring seekers of power" (p. 108). Trump's assertions that he alone can solve the nation's problems and that those who oppose him are "losers" are good examples. Losers now include all newspapers and media who are critical of him, while Fox News, Republicans, and conservatives are winners. Trump's supporters embrace of authoritarianism and SDO also make them more likely to accept outright lying by commission or omission or by paltering a part of the morally acceptable behavior of politicians, according to research published in the journal *Personality and Individual Differences*, by Jonas De Keersmaecker and Arne Roets of Ghent University in Belgium. This approach is generally more applicable to Republicans rather than to Democrats (De Keersmaecker & Roets, 2019).

Pettigrew's third factor points out that Trump supporters are anti-outgroup generally as well as anti-immigrant. In the 2016 election, Trump launched rhetorical attacks on immigrants, Mexicans, and Muslims. His actions in office have reinforced that stance: bans on entrants to the country from certain Muslim countries, harsh restrictions for asylum seekers, the separation of children from their parents at the border as a measure to discourage immigration, and claiming that some white nationalists are "very fine people." Support for Trump correlates highly with a standard scale of modern racism, which Trump has fully articulated in such remarks that Congresswomen Representatives Alexandria Ocasio-Cortez of New York, Ilhan Omar of Minnesota, Ayanna S. Pressley of Massachusetts and Rashida Tlaib of Michigan, should go back to where they came from, making references to their ethnic origins, and by having his supporters at his rallies chant: "send her back" (Davis, 2019).

Pettigrew (p. 108) also observes that there is growing evidence that Trump's white supporters have little contact with groups other than their own. They have less experience with minorities such as Muslims, Mexicans, or even Black Americans, than other Americans. Low intergroup contact makes it easier to dismiss members of other groups as foreign, un-American, or inferior. Ignorance of others allows one to

self-enforce negative stereotypes, as in Trump's references to immigrants as "animals" (Davis & Chokshi, 2018).

Pettigrew's fifth factor, relative deprivation, is particularly supportive of collective social self-deception. A myth arose after the 2016 election that Trump had won because he appealed to poor and unemployed people. However, Trump supporters were less likely than others to be unemployed, employed part-time, or looking for work. Moreover, those voters living in districts with more manufacturing were less inclined to vote for Trump. However, the original narrative rightly identified a sense of deprivation. It just failed to identify that this was a perception of deprivation, not its actuality. Trump supporters felt that other members of society were better off than they were and that their expectation of where they would be in life had been severely contracted.

In the *Proceedings of the National Academy of Sciences* of May 2018, Diane Mutz reports that Trump supporters are less motivated by perceived economic anxiety than loss of status. She says that their "changing preferences were related to changes in the [Republican] party's positions on issues related to American global dominance and the rise of a majority-minority America: issues that threaten white Americans' sense of dominant group status" (Mutz, 2018).

Trump supporters nurture resentment, perhaps less so for economic issues than for loss of status, which motivates their deception and self-deception. Hours of Fox News and social media sites denigrating "welfare queens," welfare programs, the more frequent appearance of minorities on media, and the media's and advertising's version of what an ordinary American home is supposed to be like are fanning the flames. Trump supporters feel impotent to regain their dominant position as white people, but feel they can gain potency through elevating their in-group by supporting someone who promises to defend the existing social hierarchy. They feel that they are victims of the forces of politics, corporations, education, and demographic shifts, and the president's focus on those themes makes them feel empowered. Trump's notion of self-empowerment ironically lies beside his claim that they have little power, but the irony appears to elude them.

Tobin Smith, a former Fox News Commentator, suggests that their programming fosters an addictive process based on resentment to:

- Understand the elderly white conservative viewer's pre-tribal mindset, which is
 a compilation of their resentments, indignations, cultural values, religious
 values, political values, racial perspectives, regional outlooks, and worldviews.
- Scare or outrage the crap out of viewers by boring down on a recently exposed tribal nerve like a psychic dentist with a drill, presenting a heresy or an innately scary image of non-white/ non-Christian foreigners, immigrants, or terrorists doing horrible things.
- Produce each seven-minute rigged outcome opinion-debate segment around the carefully selected partisan heresy such that the "fair and balanced" debate is massively rigged for the conservative pundits on the program to . . .
- Deliver the climactic and righteous rhetorical victory for the partisan right-wing viewer to trigger the jolt of dopamine and serotonin that the addict anticipated and knew was coming." (Smith, 2019, pp. 474-475)

In this lesson, we see that there are many psychological factors that affect or predispose whether someone accepts information or ignores or avoids it, how we are gullible with respect to it, and how we are susceptible to social and collective forms of enforcement or reinforcement with streams of information or avoidance of streams of information. We looked at some of the issues that drive the motivations of Trump supporters.

Exercise suggestions will call on participants to consider the following questions:

- (1) Can you remember the occasions in which you were gullible? Can you sort out which psychological mechanism(s) may have been involved: the search for patterns and meaning, acceptance bias, the power of heuristics, overbelief in the self, social mechanisms of gullibility, or epistemological failures to monitor and correct?
- (2) Can you find a few well-founded psychological studies that show how the misinformed or disinformed engage in one or more of the following behaviors to maintain their ignorance, disinformation, or self-deception?
 - a. Sustaining oneself in ignorance deliberately choosing not to know.
 - b. Preexisting attitudes and the continued influence of misinformation or disinformation, in a manner of confirmation bias.
 - c. Information avoidance.
 - d. Misperceptions: understanding false and unsupported beliefs about politics.
 - e. The role of cognitive ability on the impact of false information on social impressions.
 - f. Use of social media to increase racist behavior.
 - g. Self-deception as a function of social status.
 - h. In addition to the study above, psychological studies regarding Donald Trump's supporters (or any other cult or cultish leader).
 - i. Unfalsifiability (the practice by which people, when confronted with facts, reframe an argument in a way that makes it impossible to test to validate their viewpoint).
- (3) Discuss and evaluate the following article in terms of psychological concerns: Kolbert, Elizabeth (2017). "Why Facts Don't Change Our Minds," *The New Yorker*, February 27, 2017. https://www.newyorker.com/magazine/2017/02/27/why-facts-dont-change-our-minds

Lesson 6: Cognitive authorities.

- (1) Cognitive authority is related to credibility, competence, and trustworthiness.
- (2) Cognitive authority exists on a continuum, exists in relation to a sphere of interest, and involves at least two people.
- (3) Cognitive authorities can be friends, colleagues, peers, news media, Internet blogs, Twitter feeds, news channels, social media sites, etc.
- (4) Examples of cognitive authorities are news sites representing different points of a political spectrum: e.g., Fox News or MSNBC.
- (5) 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.
- (6) 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.

- (7) 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.
- (8) 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.
- (9) 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.
- (10)There are enhancers or accelerators that make such news, particularly fake news, more plausible:
 - (a) Psychological factors addressed in the last lesson, such as prejudice, resentment, greed, power, or other motivations, predispose those disinformed to embrace and perpetuate disinformation.
 - (b) 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).
 - (c) There are bubble filters or propaganda feedback loops that reinforce biased content, particularly on the right (Morrsion, 2018).
 - (d) 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).
 - (e) Once acquired, false information is hard to dispel.
 - (f) Agnotology is a specialized technique for spreading misinformation that makes information seekers more doubtful of views or information that they already hold (Agnotology, 2016).
- (11) Addiction to tribal identity politics

Wilson (1983) notes several properties of cognitive authority: (1) Cognitive authority is related to credibility. A person who has cognitive authority on a particular subject is regarded as a credible source for that topic. A friend who has installed many computer networks for friends and colleagues can be a cognitive authority on the subject of network installation. Wilson writes that credibility consists primarily of "competence and trustworthiness" (p.13). For example, I trust my competent friend to instruct me properly on how to install a network in my home. (2) Cognitive authority exists on a continuum. A person may know a lot or a little about a subject. For example, a person who has worked on network installation in a professional environment has more expertise than someone who had only done it for friends. Wilson notes that some cognitive authorities have so much knowledge that they become arbiters of settled opinion on a subject (p. 18). Newspapers such as *The New York Times* and *Washington Post* once played that role, perhaps less so today than in the past, given the growth of social media. Unfortunately, a steady campaign of false allegations about the reliability of their content has chipped away at many people's faith in these authorities. (3) Cognitive authority exists in relation to a sphere of interest. These spheres can be well-defined or ill-defined: an expert on the orchestral recordings of Beethoven has a different authority than a general expert in classical music. (4) Cognitive

authority involves at least two people. One can have cognitive authority without being a recognized expert. A person who has worked as a science journalist for a reputable publication has less cognitive authority than a doctor, who may have less cognitive authority than a medical researcher. A person may become a cognitive authority for a specific person or set of persons for a specific topic or set of topics. For example, we may have friends we ask for their book reviews because we share their taste and trust their judgment, but our friends are not professional book critics. (5) There are brands of expertise not related to knowledge, expertise that may not justify the qualification of cognitive authority.

Cognitive authorities can be friends, colleagues, peers, news media, Internet blogs, twitter feeds, news channels, social media sites such as Instagram, etc. For the purposes of developing this research to include such institutions as news media and news organizations, I have extended Wilson's original view.

In order to provide a focus for this issue, we will take two cable news channels, that of MSNBC and Fox News. Both are cognitive authorities for those that access them. The measure of one's commitment to them can be gauged in terms of loyalty. The results of the Pew Research study show the diversity of media in play, the variety among news consumers, and their differing levels of loyalty to diverse media. Older Americans are more attached to traditional media and television (Mitchell, Barthel, Shearer, & Gottfried, 2016). MSNBC and Fox News exhibit comparable levels of bias: on a scale of extreme left, left, left center, least biased, right center, right, extreme right, Media Bias/Fact Check rates MSNBC as "left" and Fox News as "right" (MSNBC, n.d.; Fox News, n.d.). The author has tried to use a case where there are legitimate comparisons and contrast. There are many cases that could be discussed, but the ones chosen seemed to be the most comparable and accessible for the purposes of this lesson.

With respect to news channels such as MSNBC, trustworthiness implies that reporting is based on evidence or facts. If there is a question, it can be traced back to sources of evidence or facts, as they are known at the time of reporting. Factual reporting means that the disclosure of truth may be progressive or even regressive. The first details of an event may be sketchy, if not incorrect, and what matters is that the reporting is consonant with the latest details of an event and that it is faithful to the evidence. MSNBC primarily relies on NBC reporters for their news, and while their factual rating is mixed, that is due to MSNBC's use of political pundits. Reliable cognitive authorities only change the facts they report if they actually change. When they discover errors in their reporting, they make corrections (MSNBC, n.d.). While experts are used, they appear to make appropriate assessments and judgments based on their experience and knowledge. However, many liberals may fall into self-deceptive and collective selfdeceptive practices, if they accept MSNBC assessments without independently verifying the basis of such assessments or their integration into their current state of understanding (beyond confirmation bias). Fox News, like MSNBC, claims to be trustworthy and have expertise. They tout a lineup of daily reporters and experts who claim to be reliable and credible. They have convinced their viewers that their position is accurate and reliable. Their only source for fact-checking tends to be limited when it is employed, the Wall Street Journal (Fox News, n.d.)

Their pro-Trump stories continuously report factually incorrect data. For example, Trump declared that the Mueller Report completely exonerated him, and all of Fox News and its pundits echoed that view. During the impeachment hearings, the evidence from Fiona Hill and Gordon Sondland of a factual bribery action demand from Ukraine by Trump was ignored and replaced by the President's distorted interpretation derived from a portion of Sondland's assertions, that he wanted nothing from Ukraine. However, this is not necessarily the viewpoint of all conservatives or conservative institutions. With

respect to Fox News, the Mueller Report explicitly stated that the special prosecutor could not and did not exonerate the president. When reporting that a "witch hunt" had tarnished Trump's otherwise unblemished reputation, Fox News and its pundits rarely reference the large number of indictments and guilty pleas of Trump associates that resulted from the Mueller investigation. While many Americans have little trust in Fox, there are selected audiences who trust it deeply. According to a Pew Research Center survey, "Fox News was the main source [of news] for 40% of Trump voters" during the 2016 election (Mitchell, Gottfried & Barthel, 2017). Another Pew survey summarizes, "When it comes to choosing a media source for political news, conservatives orient strongly around Fox News. Nearly half of consistent conservatives (47%) name it as their main source for government and political news" (Mitchell, Matsa, Gottfried & Kiley, 2014). This number appears to have increased since his election and residence in office.

A real cognitive authority would present stories that are consistent, cohesive, and coherent over time, with few inconsistencies or reversals. This description does not apply to Fox News (Zorn, 2018). Inconsistencies abound in the network's news reporting: the diverse, inconsistent views of the president are repeated on the news without acknowledging such changes, and the conservative vision of not so many years ago seems to have disappeared as Republican leaders and administrators demonstrate a lack of moral character, a failure to implement fiscal responsibility, and, contradicting the libertarian wing of the conservative movement, increasing government intrusion in the form of the carceral state, interference with women's reproductive rights, and immigration restriction. Instead of promoting second-hand "knowledge," Fox News often promotes second-hand opinion at best, opinion that could rarely, if ever, be converted into knowledge or fact. It generally promulgates a cognitive state that can produce neither opinion, right opinion, or knowledge, but where demonstrably "false knowledge" is presented as fact or relevant data is ignored. In the impeachment hearings of Trump, they reported none of the evidence provided by credible witnesses (e.g., Alexander Vindman, Fiona Hill), about Trump's quid pro quo with Ukraine and defended Trump's characterization of the proceedings as a Democratic hoax. When questioned about the beliefs uttered by Fox News, their viewers repeat their talking points but are generally unable to make a coherent justification of the talking points and resort to irrelevant remarks to cover their inability to defend them. This inability to defend Fox News's assertions seems to prove that what is presented by them is opinion, but it is claimed to be knowledge. Even more so, what is absorbed by the viewers is opinion, even false opinion, from which and about which there can be no justification, and often irrelevant retorts are provided: e.g., "All businessmen make deals," an assertion that ignores the wrongful nature of the deal where Trump was withholding Congress-approved national security funds from Ukraine to advance his personal interests rather than the national interests. The same could be said of MSNBC viewers if they are content to live at the surface of such second-hand "knowledge."

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 there are grounds for not needing to pursue their verification. As noted in the lesson on psychological factors, human beings often employ heuristics to deal with this kind of information. As Forgas and Baumeister note, "When we are exposed to salient, frequent, and thus easily remembered information," such as occurs on Fox News or the *New York Times*, this information will be regarded as "true, reliable and valid" (p. 9). Unfortunately, "These mental shortcuts exacerbate the human inability to see the world as it really is" (p. 9). The use of such shortcuts can be true of those who are either conservatives or liberals

or political actors of another stripe. These are reinforced by endorsement or repetition through social media, colleagues, peers, political and religious leaders, news pundits, etc.

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. Such consumption may amount to confirmation bias unless the consumer can verify the produced assertions in facts, evidence, or reason or have grounds for accepting second-hand knowledge without pursuing verification. In the latter case, consumers may be quite knowledgeable about the provided information and its sources and accept it as an information processing heuristic. Unfortunately, the same can be said of those who ingest false information from a company that claims cognitive authority. 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 or coalesces with the consumer's verifiable knowledge or expertise. We must strive to be vigilant and critical of our comfortable heuristics. The problem is that many disinformation consumers are unwilling to do the work of authentication and choose to acquiesce to their confirmation bias and to their self-deception and collective self-deception. The same can to said to a lesser degree of information consumers that have a long history with an information source that appears to be consistently reliable, accurate, trustworthy, and committed to acknowledging errors or repealing stories that lack any foundation. There are grounds for the acquiescence to information heuristics for credible cognitive authorities that do not exist for discreditable ones, though for the disinformed, they might appear to be the same.

What makes fake news consumers and disseminators work so well are what can be called accelerators or enhancers, many of which are traceable to the psychological mechanisms of gullibility mentioned in the last lesson. Many fake news consumers are preconditioned by the psychological factors enumerated in the lesson above, such motivations as prejudice, resentment, greed, power, etc. A study entitled "Prior exposure increases perceived accuracy of fake news" reported that repeating information, true or not, increases its believability, and this applies to newspaper headlines, statements, or speeches (Pennycook, Cannon & Rand, 2018). This research is reinforced by "echo chambers," defined by Törnberg (2018) as "online social media groups that reinforce perspectives and enable confirmation bias." See also social mechanisms of gullibility in the last lesson. There are "bubble filters" or propaganda feedback loops through self-selected information channels that reinforce biased content, particularly on the right (Morrsion, 2018).

There is also the Dunning-Kruger effect that suggests that people are uncritical about their own abilities and uncritical of their lack of critical thinking. That is, people of poor intelligence lack the intelligence to recognize it (Dunning–Kruger effect, 2017). This effect seemed to be further verified by a study by De Keersmaecker & Roets (2017) that indicated that the first impressions of fake news cannot be corrected by showing that the information was incorrect, especially in those with lower cognitive abilities, who tend not have the cognitive ability to be flexible in their attitudes. Even after learning that the original information was incorrect, it has a persevering negative influence on their social impressions. This approach is also supported by overbelief in the self, articulated in the previous lesson.

Once acquired, false information is hard to dispel. David Rapp's research on memory and learning reveals that our brains retain information without retaining its source, and therefore, we do not recall a key fact about its validity. He also finds that it is difficult to remember that the information we had

previously believed is false (Waters and Hargadon, 2017). This research is echoed in the psychological mechanism of epistemological failures to monitor and correct, seen in the previous lesson. There is a lingering effect that shows up, for example, in the Fox News' propagation of false conspiracy theories or in the publication of a medical report that incorrectly ties a list of problems, like autism, to children.

Finally, Robert N. Proctor coined a word for the study of culturally-induced ignorance or doubt, agnotology. He identified a specialized technique for spreading misinformation that makes information seekers more doubtful of views or information that they already hold (Agnotology, 2016). By way of example, Proctor described the tobacco industry's use of advertising to generate doubt that smoking causes cancer or other illnesses. Climate change deniers, proponents of fracking, pesticide manufacturers, and opponents of allegedly "fake news" use a similar approach. The echoing of Trump's attacks on the justice department, the FBI, the Democratic party, and other intelligence agencies on Fox News and alt-right social media play the same role.

All these factors seem to reflect Tobin Smith's understanding of Fox News programming as fostering an addictive process, mentioned in the lesson on Psychological Factors, based in addictive anger and resentment, that is played and replayed over and over again, and validated by a chosen-in-bad-faith, restrictive environment (i.e., their filter bubble) in which Fox News viewers live and dwell (i.e., peers, friends, political associates, religious affiliates, social media sources, etc., that reinforce their confirmation biases). He calls it an addiction to "tribal partisan pornography" (Smith, 2019, pp. 460-465). Undoubtedly, there is a form of addiction to left-wing news adherents; that, too, is based in anger and resentment but of a different sort. The source of their bias may be indignation and a concern for truth and respect for professionalism in the political sphere, not to mention that their views may be sourced in and likely verifiable in evidence and facts.

Exercise suggestions will call on participants to consider the following questions:

- (1) Who or what are some of your cognitive authorities? How do you evaluate their credibility, trustworthiness, and competence?
- (2) What are your favorite news sources? Are they biased? If biased, do they report facts and evidence impartially? Does its bias skew what is reported? Check the sources at the site Media Bias (https://mediabiasfactcheck.com/) for an indication of bias. How loyal are you to your sources that may be biased?
- (3) When you tune into your favorite news source, what kind of opinions does it assert ("true opinions," "false opinions," or "preferential opinions")? How do you sort them out? Can you convert what might be considered a true opinion into some form of knowledge? How? What do you do about false opinions or preferential opinions?
- (4) Can you name some occasions where news sources made assertions that you took as confirmation of something you already believe?
- (5) Discuss cases a genuine cognitive authority and a false cognitive authority, paralleling the comparison and contrast of MSNBC and Fox News. How do you make that evaluation? How does the false cognitive authority enhance "credibility" though one or more of the accelerators or enhancers? How have their promoted credibility through social self-deception or collective self-deception?
- (6) Can you find occurrences of collective self-deception? What cognitive authority or authorities facilitate that self-deception? What are the enhancers for such collective self-deception?

Consider the white evangelical view that Trump was appointed by God in the manner of King Cyrus or that the United States is a Christian nation whose governmental agencies should conform to Christian precepts or that the United States is a nation founded for and run by white people.

Lesson 7: Social media, intellectual freedom and libraries.

- (1) Social media are the hotbed of information and disinformation: it is in social media where much disinformation is found, exchanged, supported and spread, and where the InfoWars are inflamed.
- (2) Specific social media, such as Instagram and Facebook, cultivate, support, and perpetuate disinformation and conspiracy memes.
- (3) While one can explore such media to find the origins of certain memes or conspiracy theories, there is little regulation of their content, except for the possible intervention of their creators, but such interventions are rare, under the mandate of free speech or the first amendment.
- (4) There is a major concern for maintaining intellectual freedom (the freedom to hold, receive and disseminate ideas without restriction) or the freedom of expression, speech, and the press (the freedom to say or post ideas of whatever character).
 - a. A book entitled *The Freedom to Lie: A Debate About Democracy* (1989), a book of essays by John Swan and Noel Peattie, anticipates the issues of freedom of expression in social media.
 - b. It articulates the tension between what one might call a liberal position (John Swan) versus a conservative position (Noel Peattie) about whether such works as David McCalden's *The Holocaust Did Not Happen* should be included in a library's collection.
 - i. Swan's position is that a library is about free access, not truth, and therefore such works belong in the collection.
 - ii. Peattie says that among other factors (e.g., cost, balance, relevance to patron population), truth does and should matter in collection decisions, which in most cases would mitigate against including such works.
- (5) In a similar vein, Zuckerberg argues that freedom of expression must be maintained on Facebook, permitting politicians to lie about their opponents. This position of Facebook can be extrapolated to all social media.
 - a. This approach seems naïve in the onslaught of disinformation on the internet, awash with propaganda, and systems (e.g., cable news, religious and political leaders, government agencies, and pseudo-cognitive authorities) that reinforce that propaganda.
 - b. Is there a limit to free expression when that expression leads to harmful acts to demonized populations, the destruction of trust in political, governmental and media institutions, the loss of expertise, and the denigration of science and evidence?
- (6) There are particularly noxious forms of social media, the rabbit hole effect of YouTube, and the empowerment of hate groups by aggregating like-minded individuals around a particular forum, such as 8Chan.
- (7) A subsequent lesson on digital, media and information literacies will address ways to deal with some of these issues.

Social media, including Facebook, YouTube, WeChat, Instagram, Weibo, Twitter, Tumblr, Telegram, Reddit, Baidu Tieba, LinkedIn, LINE, Snapchat, and Pinterest, among many others, are a hotbed of information and disinformation. According to *Wikipedia*, social media sites share the following properties: they are interactive Internet-based applications; they live on user-generated content (e.g., posts, texts, videos, photos); they create profiles for the app or website that are maintained by its social media creators; and they facilitate the interactions of members or groups (Social Media, 2019).

A book about intellectual freedom in libraries, by Noel Peattie and John Swan (1989, 2012), The Freedom to Lie: A Debate about Democracy, anticipates the issues of disinformation on social media on the internet. In it, John Swan and Noel Peattie discuss whether books such as David McCalden's book, The Holocaust Did Not Happen, a Holocaust revisionist tract should be banned from the library. Swan takes the side of intellectual freedom. In his view, the point of libraries is to provide access to patrons, and there should be no constraints impeding that access. John Swan takes a cautious view. He looks variety of controversial things that could be in libraries: mathematical and logical truths; empirical truths (e.g., the earth is round); opinions, on which people may honestly differ (e.g., right or left politics, best restaurant); matters of taste (e.g., agree/disagree with current fashion trends); moral questions: is abortion or homosexuality right or wrong?; minority theories or opinions, not generally accepted by scholars in the field, but carrying no extra moral or political weight, no hidden agenda (e.g., Bacon wrote Shakespeare's plays); offensive language; bullshit; and outright lies, false statements knowingly made to mislead, frighten or hurt people: e.g., the holocaust did not happen, or black people are ineducable, etc. (Swan & Peattie, 1989, p. 33). It is the last category that he argues can be justified in not putting in the library collection. He argues that there are many considerations (e.g., budget, cost, relevance, access) that go into the decision of including or excluding a book or other resource in a library collection, and the fact that something is untrue is a major factor for considering exclusion from the collection. In other words, in specific contexts like non-fiction, truth does matter in library collections.

Correspondingly, there is the issue of freedom of expression on the internet, perhaps best exemplified by remarks by Mark Zuckerberg in a speech at Georgetown University where he argued that Facebook should be unfettered in intellectual freedom, including political advertisements of outright lies (e.g., pro-Trump reelection campaign advertisements that utter lies about his opponents). He takes the view that the marketplace will work it out – the lies will be discovered, eventually rejected or ignored. He bases his view, as do other free speech advocates, on the 1st Amendment, but Yochai Benkler, an author and the Professor of Entrepreneurial Legal Studies at Harvard Law School, argues that this is not a correct interpretation of the 1st Amendment. He argues that the 1st Amendment is only about government involvement in speech and does not apply to private speech or private parties, of which Twitter and Facebook are examples (Morrison, 2018). Despite or because of this observation, untruths are not sorting themselves out in the (dis)information marketplace. The disinformation that is asserted is rapidly spread across the internet, any corrections are ignored, and disinformation memes reinforce a priori biases. Fox News, for example, echoes Trump's and his supporters' talking points, which are often patently false. Correspondingly, in social media sites like 8chan white supremacists will defend their right to be racist and espouse hate rhetoric.

The logic of the view that the truth will win out is a belief in the trust in the individual, which John Swan sees the censors as not trusting or trying to control:

There are those who believe that they can devise noble universal principles of advocacy that exclude damned lies, or deny communication of ideas with pernicious regimes, and thereby concentrate their resources upon those worthier of free expression. The idea is tempting, not unlike the idea that you ought to be able to slip a warning label into a racist or sexist book according to some general principle of right thinking. But it is nothing more, I believe, than another manifestation of this distrust of the real act of independent decision-making (Swan & Peattie, 1989, p. 22).

The view that individuals are capable of sorting out the truth for themselves seems to be the rationale for the revocation of the fairness doctrine of the Federal Communications Commission (FCC) that was introduced in 1949 and which required broadcast license holders to present both sides of issues of public importance in a manner that was honest, equitable, and balanced. It was eliminated in 1987 on the basis that it "restricts the journalistic freedom of broadcasters ... [and] actually inhibits the presentation of controversial issues of public importance to the detriment of the public and the degradation of the editorial prerogative of broadcast journalists." (FCC Fairness Doctrine). In 1987 in an FCC Video, NBCUniversal made a claim, "Today we reaffirm our faith in the American people. Our faith in their ability to distinguish between fact and fiction without any help from government" (FCC Fairness Doctrine, footnote 18 of *Wikipedia* entry). Not long after the doctrine was eliminated, radio and television programs emerged that touted unorthodox political and religious opinions, such as the Rush Limbaugh Show.

Obviously, this is a noble ideal, but what does one do in the midst of an information system (i.e., the internet) awash with propaganda, and systems (e.g., cable news, religious and political leaders, government agencies and false cognitive authorities) that reinforce that propaganda? In the Age of Disinformation, this approach seems too simplistic. Is there a limit to free expression when that expression leads to harmful acts to demonized populations, the destruction of trust in political, governmental and media institutions, the loss of expertise, and the denigration of science and evidence? At the beginning of the impeachment inquiry of President Trump in October 2019, a American values survey by PRRI (Public Religion Research Institute) indicated that while 37% Republicans overall asserted that almost nothing could dissuade them from approving of Trump, over 50% of Republicans whose primary news source is Fox News approved of Trump. Those Republicans whose primary news source was other than Fox News had only a 30% approval rating of the President (Bump, 2019). Such data have led to descriptions of Fox News as "Trump TV" through which virtually all criticism of or about him is abandoned, conspiracy theories by him or about governmental agencies are indulged, factual evidence against him is ignored, and where they and their pundits become the source for him for "real news."

In addition to Fox News's propagation of fake news, social media are immensely important for the spread and speed of disinformation. Researchers have determined that false information spreads more quickly and broadly than genuine information and that those on the right are more susceptible to believe and more prone to disseminate false information than those on the left (Vosoughi, Roy & Aral, Sinan, 2018).

Falsehood diffused significantly farther, faster, deeper, and more broadly than the truth in all categories of information, and the effects were more pronounced for false political news than for false news about terrorism, natural disasters, science, urban legends, or financial information. We found that false news was more novel than true news, which suggests that people were more likely to share novel information (p. 1146).

Social media disinformation is spread by trolls, such as the Russians, and Trump and right-wing supporters on the one side, and liberals and progressives on the other side. There are also click-bait entrepreneurs whose allegiance is to making money and generally not to either side, though this allegiance leads them to be more likely to promote right-wing ideology because the conservatives are more easily seduced with news or clicks that support their confirmation bias. (Ingraham, 2019).

There is also the rabbit hole phenomenon on YouTube. When perusing YouTube videos for a particular content, such as a specific conspiracy theory, the algorithm that drives YouTube suggests more provocative videos to view, which in turn suggest more provocative videos to view, and so on (the rabbit hole) leading one researcher, Zeynep Tufekci, to declare YouTube to be "one of the most radicalizing instruments of the 21st century" (Tufekci, 2018). It is claimed that the success of the election of the ultra-right leader, Bolsonaro, in Brazil was primarily driven by YouTube videos (Fisher & Taub, 2019, August 11). All this is driven by the profit motive – the more clicks, the more profit for Google, the political consequences conveniently ignored.

Before the internet, people had a much more difficult time aggregating in groups to form hate speech collectives. Physical proximity tended to be a constraint. With the advent of the internet and social media groups, it is easier for persons with radical ideas to find like-minded individuals, creating a forum with a loud voice, that in turn can convince others to join their cause. It creates a crowd effect that there appears to be a large audience for a particular theory or belief. Postings at 8chan, a social media group that permits anonymous postings, apparently influenced the mass shooter of mostly Latino people at the El Paso Walmart. 8chan is described in Slate in the following way: "An anonymous, meme-filled internet backwater, 8chan has easily been a place for white supremacists to indoctrinate others – particularly white men – into bigoted ideologies" (Glaser, 2019). Social media like 8chan not only aggregate a forum, but self-deceptively entices its followers to believe that they have a loud voice and that their group numbers are more abundant than what they actually are, luring more members to the group.

Facebook is an illustration of the broader problem of regulating speech on the internet, particularly hate speech or conspiracy theories. The problem with conspiracy theorists is that any attempt to correct their theories by appealing to some form of contravening evidence is viewed itself as verification and extension of that conspiracy theory, another conspiracy theory to attack their conspiracy theory or a sign of more cover-ups. Is there a limit to free speech? The first amendment asserts that the "Congress shall make no law. . . abridging the freedom of speech, or of the press." But the apparent absoluteness of that prohibition had long been

subverted by the problematic statement by Justice Oliver Wendell Holmes in **Schenck v. United States** (1919):

the character of every act depends on the circumstances in which it is done. The most stringent protection of free speech would not protect a man from falsely shouting fire in a theater and causing panic. [The] question is every case is whether the words are used in such circumstances and are of such a nature as to create a clear and present danger that they will bring about substantive evils that Congress has a right to prevent (**Schenck v. United States**, 1919).

There does not seem to be much doubt that the man who creates panic in a theater should be chastised. Yet the hate speech and conspiracy theories on the internet have gotten to the point where physical harm, in fact, may result in: e.g., physical assaults on Jews, Muslims, members of the LGBTQ+ community, immigrants, etc. There is a concern for regulating such rhetoric beyond the issues of Facebook. The issue may not be panic in a crowded theatre, but support of false ideas and ideologies whereby previous institutional norms are challenged and trust in expertise are so challenged and attacked that the foundation of a liberal democracy has been catapulted into chaos, where sources or institutions are politicized and not trusted (e.g., the intelligence community, the Justice Department), thereby attacking the very essence of democracy and democratic institutions.

We are reminded of John Swan's comments:

The most effective advocacy of truth is insuring the widest possible access to all versions thereof.... ... debate, dialogue, and exploration are all essential to an understanding of truth, whatever its nature. It does mean that shutting off exposure to false information and pernicious ideas before they enter the stream of debate will in all likelihood not kill them nor protect the good ideas they seek to devour....

The basic flaw in the position of those who would defeat falsehood by denying it a place in our libraries and library programs is that it fails to take into account the simple but profound fact that the truth must be perceived by individuals, not dictated to them.... The worst falsehoods, the damnest lies, have their origins not in ideas but in pathologies, and suppressing symptoms does not cure the disease (Swan & Peattie, 1989, p. 17-18).

But how do we cope with collective self-deception, where the truth is a contrived second-hand or false opinion, paraded as knowledge? The willingness of individuals to seek the actual truth appears to be extensively diminished, given that *their* cognitive authorities have all the truth and that *only their* venues have access to the truth, and independent inquiry is fraught with seductive pitfalls designed to send one to hell, figuratively if not literally, based on one's religious persuasion (e.g., white evangelicals who believe that Trump was appointed by God). They put Socrates to death for questioning the orthodoxy. In these days, the orthodoxy is no longer 'right opinion,' but a contrived constructed reality, that one can call genuine fake news.

There are many techniques for the spread of disinformation in social media, such as bots, deep-fake videos, fake accounts that mimic the genuine interests of average individuals and hate groups whose enticements tend to promote not only speech but action. In Lesson 10 on media, digital and information literacies, we will review potential methods to deal with some of these issues.

Exercise suggestions will call on participants to consider the following questions:

- (1) Discuss the role of intellectual freedom in the Age of Disinformation, its benefits, and drawbacks. One cannot yell 'Fire!' in a crowded theatre when it is not true. Should there be any restrictions on social media or cable news channels? Mark Zuckerberg has indicated that Facebook will post political ads that are blatant lies, based on the First Amendment and freedom of expression. See Zuckerberg's defense of intellectual freedom at Romm, T. (2019, October 17). Zuckerberg: Standing for Voice and Free Expression. The Washington Post. Retrieved October 25, 2019, from https://www.washingtonpost.com/technology/2019/10/17/zuckerberg-standing-voice-freeexpression/. This web site contains the text of Zuckerberg's speech. The video is at https://www.youtube.com/watch?v=hcLSU17M3Lw (42 minutes). For one critique of his speech, see Vaidhyanathan, S. (2019, October 18). Mark Zuckerberg does not understand free speech in the 21st century. The Guardian. Retrieved October 25, 2019, from https://www.theguardian.com/commentisfree/2019/oct/18/mark-zuckerberg-free-speech-21stcentury. Find two other evaluations of Zuckerberg's speech (positive or negative) and base your essay on these materials and your own thoughts. When disinformation and misinformation become the core information of a democracy, is not that democracy destroyed from within?
- (2) Can you provide specific examples of social media in your experience and/or in web sites that exhibit extensive levels of disinformation, bias, deceit or conspiracy theories?
- (3) For manipulated videos, see "Seeing Isn't Believing, The Fact Checker's guide to manipulated video," The Washington Post (2109) at https://www.washingtonpost.com/graphics/2019/politics/fact-checker/manipulated-video-guide/?utm_term=.cd779e27a0d0&wpisrc=nl_most&wpmm=1. See also "The Future of Fake News" at http://futureoffakenews.com/. Can you find occurrences of manipulated video? How was it manipulated? How do you know?

Lesson 8: Logical fallacies.

- (1) Logical fallacies are instances of deceptive or specious reasoning that make weak arguments appear to be superficially attractive. They are sleights of hand that attempt to divert attention from the core issue to irrelevant considerations.
- (2) There are hundreds of logical fallacies that have been cataloged, but this lesson will focus on those that some politicians and disinformation specialists often employ, including argumentum ad hominem, the straw man fallacy, and the argument from pity.
- (3) One is only successful with this strategy of confronting logical fallacies if the proponents are willing to engage in rational discourse, although the fact that they are using them is likely to

indicate that this would not be the course. However, one can point out the nature of the fallacy to third-party observers.

(4) A given argument can entail more than one fallacy.

A fallacy has two general meanings: (1) a false or erroneous statement, something that is untrue, and (2) deceptive or specious reasoning. Logical fallacies fall into the latter category because they are attempts to weaken one's opponent's arguments by trying to deflect attention away from the content of the argument to irrelevant issues. Fallacious arguments can be quite persuasive, at least to the casual reader or listener. One can find dozens of examples of fallacious reasoning in newspapers, advertisements, and all through political rhetoric, whether of a liberal or a conservative stripe. Mastering the recognition of or understanding logical fallacies provides a rhetorical advantage in being able to deflect the intended effect of fallacies, to deceive and misdirect.

There are hundreds of logical fallacies, as given in such compendiums as Bo Bennett's *The Ultimate Collection of over Three Hundred Logical Fallacies* (2019) (https://www.logicallyfallacious.com/tools/lp/Bo/LogicalFallacies/205/What-is-a-Logical-Fallacy-Exactly). For illustrations, we will sketch a few cases of them, but others can be included in an elaborated lesson.

The *argumentum ad hominem*, an argument against the person. This fallacy occurs when one attacks the character of the person advancing the argument, rather than addressing or refuting the argument itself. It moves the discussion from issues to personalities or characteristics of one's opponent. Demolishing an argument by attacking the opponent's motives, background, or personal traits is an *ad hominem* attack. This is a fallacy because the only way to address an issue is with reasons or evidence with regard to claims of the person advancing the argument, not comments about their character. It is perhaps the most heavily used logical fallacy in Trump's arsenal of fallacies. Some of Trump's early advertisements attacked Hillary Clinton's health instead of her policies: "Hillary Clinton doesn't have the fortitude, strength or stamina to lead in our world. She failed as Secretary of State. Don't let her fail us again" (Beckwith, 2016). *The New York Times* has kept track of the victims of Trump's *ad hominem* tweets, which are mostly examples of name-calling, and it publishes these in an ongoing list (Lee & Quealy, 2019 - started in 2016, but current – as of May 2019, 598 persons).

The straw man fallacy. This fallacy occurs when one distorts the opponent's position and frames it into easily refutable terms. By criticizing this distortion, the fallacy maker claims victory over the opponent, whose original argument was quite different. Trump claimed that "Hillary Clinton wants to take your guns away, and she wants to abolish the Second Amendment!" While she advocated for gun control, she never has suggested that she wants to eliminate guns. The NRA produced an ad called "Don't Let Hillary Clinton Leave You Defenseless," which depicts a woman who is alone at night when her house is breached. She reaches for her gun, but Hillary and her Supreme Justices have taken gun rights away, so there is no gun. Because it takes too long for the police to arrive, the woman becomes a victim for the reason that she could not defend herself (Dumenco, 2016).

Appeal to Pity (ad misericordiam). Donald Trump has repeatedly claimed that no president in history has been treated worse than him, ever. For example, at the commencement ceremony for the U.S. Coast Guard Academy, he said: "No politician in history, and I say this with great surety, has been treated worse or more unfairly" (Nakamura, 2017). On one level, that may be true, but he seems to be unaware that it is the result of his actions, policies, appointments and administration.

A given case can illustrate more than one logical fallacy. Responding to Ilhan Omar's supposedly "anti-Semitic" tweet about Israel, Sarah Huckabee Sanders, one of the White House press secretaries under Trump, defended President Trump's assertion that the Democratic Party has become "anti-Israel" and "anti-Jewish":

The president has been an unwavering and committed ally to Israel and the Jewish people, and frankly the remarks that have been made by a number of Democrats and failed to be called out by Democratic leadership is frankly abhorrent, and it's sad, and it's something that should be called by name. (Moore, 2019)

This assertion could be seen as a Red Herring fallacy. It involves drawing attention to irrelevant points, changing the subject or dodging the issue. "Red Herring" is a hunting term that refers to dragging a herring on the hunting course to lead the hounds away from the pursuit of the prey. Sanders does not discuss the issue of the Democratic party being anti-Jewish; instead, she talks about how Trump supports the Jewish people. That fact may or may not be true, but it has nothing to do about the stance of the Democratic party.

Sanders's remarks also exemplify the Hasty Generalization (or Jumping to a Conclusion) fallacy. That is, it is drawn from inadequate evidence. Sanders indicates that remarks by some Democrats such as Ilhan Omar must mean that all Democrats are anti-Semitic.

Sanders's remarks can also be seen as instances of Begging the Question or Circular Reasoning. That is, something is assumed to be true that has yet to be established or demonstrated. In this case, she implies that because Democrats failed to challenge those statements, they must be anti-Semitic. Thus, she proves something not with evidence but with a lack thereof.

While Trump frequently engages in psychological projection, a psychological process in which persons defend themselves against their own unconscious qualities or impulses by denying their occurrence in themselves while projecting them onto others. For example, he portrays himself as a man of the people, while arguing that Hillary Clinton was the embodiment of special interests, when, in fact, it is more the case with him. He accuses others, such as the Clintons of running a criminal foundation, while denying it in his foundation (which the New York Attorney General had pressured to dissolve because of a "shocking pattern of illegality" (Goldmacher, 2018)). Any news with which he disagrees he deems as fake news, where his assertions are often examples of fake news. The Daily Kos characterizes his projection issues as a Projection Derangement Syndrome, which has the following characteristics:

- The behavior and traits of the subject are perceived as being in someone else.
- The behavior and traits exist in the subject to an extreme degree
- The other person accused of the behavior barely manifests these traits or behaviors, if at all.
- The subject has no awareness he has the behavior or traits he sees in others.
- This projection frequently causes great harm to self or others.
- This pattern of projection is pervasive and persistent (Dreyfus, 2019).

It seems that this process, typical to many politicians and their rhetoric, is not simply psychological but fallacious as well. Such projections can be seen either a form of *tu quoque*

argument or the kettle-calling-the-pot black argument (E.g., you are a fine one telling me not to cheat on my income tax, you do it all the time), though in this case, the politician seems unconscious of his own flaws; or a red herring argument in which one draws attention to irrelevant points, changes the subject or dodges the issue. Rather than confronting his own racist rhetoric, Trump accuses Democrats of being racists.

Exercise suggestions will call on participants to consider the following questions:

1. Using a guide such as Lily Lou's Spot the Flaw in a Politician's Argument With This Guide to Logical Fallacies (2017), https://lifehacker.com/spot-the-flaw-in-a-politicians-argument-with-this-guide-1796333209 or Bo Bennett's The Ultimate Collection of over Three Hundred Logical Fallacies
https://www.logicallyfallacious.com/tools/lp/Bo/LogicalFallacies/205/What-is-a-Logical-Fallacy-Exactly, can you find specific cases of logical fallacies in advertisements, in political speeches or on the Internet, and explain why each instance is a specific case of one or more logical fallacies?

Lesson 9: Ethical principles.

Key ideas:

- (1) There are commonly accepted ethical principles characteristic of Western culture, with versions often found in non-Western cultures.
- (2) Many political actions and policies advocated by the disinformation proponents or politicians or governmental agencies violate one or more ethical principles.
- (3) The general domain of "information ethics" addresses ethical concerns in the sources, creation, organization, dissemination, transmission, packaging, use, and evaluation of information
- (4) "Digital ethics" has emerged to address specific issues that arise within digital media.

In addition to logical fallacies that are rampant in the disinformation marketplace, many ethical principles are violated. While there is some disagreement about the priority and number of foundational ethical principles, we can assert, at least for Western culture, that there are five common ones: (1) Respect the moral autonomy of self and others (in other words, do unto others as others would do unto you, or in Confucian terms, do not impose on others what you yourself do not desire); (2) Seek justice or fairness; (3) Seek social harmony; (4) Act in such a way that the amount of harm is minimized or, better, that existing functional relationships are maintained or promoted; and (5) Be faithful to organizational, professional, or public trust. This list is not intended to the comprehensive, and the fact is that some of these values can conflict with each other. For example, seeking social harmony or the maximum amount of happiness for the greatest number of people is sometimes inconsistent with respect for individuals: universal vaccination may infringe on individual liberty, respecting the first principle, but infringe on principle (5) by causing medical problems for the unvaccinated and the population they encounter. Yet some situations violate all five principles, such as Trump's treatment of immigrants' seeking asylum at the southern border. Principle 1 states that we must respect the moral autonomy of each and every human being, a principle embodied in Kant's categorical imperative (Treat others as ends and never merely as means) and which is echoed in many religions' precepts (e.g., many foundational sacred texts explicitly mandate care for the poor, the sick, and the stranger). Treating asylum seekers as having no rights (e.g., violating Geneva Conventions),

separating children from their parents, and keeping children in dangerous and unsanitary conditions are profound violations of this principle. If we look at the second principle, seek justice or fairness, we also see violations: to ignore or delay due process of asylum claims is neither just or fair. Trump and his administration do claim that their policies will protect the social harmony of the United States (principle 3), arguing that many asylum seekers are rapists, crooks, and job displacers. However, these claims are false. The growth and happiness of the United States are, in fact, due to the inclusion and integration of immigrants, those who have come and those who continue to come. The policies also fail to minimize harm. Instead, the administration seems intent on a high level of cruelty, under that notion that it may deter immigration: e.g., separating children from parents (with no plan to reunite them), delaying legal procedures for asylum seekers, trying to prevent asylum seekers from stepping on US soil, keeping them in abysmal conditions, etc. These policies destroy functional relationships, such as those between parents and their children and other relatives (principle 4). (5) Finally, the president's policies violate the ethical principle of being faithful to organizational, professional or public trust. To uphold his role in the public trust, the President is to uphold the Constitution, enforce established procedures for asylum seekers, and seek the common good. He fails the public trust in these and other cases.

Information ethics is the general domain that addresses ethical concerns in the sources, creation, organization, dissemination, transmission, packaging, use, and evaluation of information. It is the latter (use and evaluation) that are highlighted in these lessons. However, the packaging is also of critical concern. For example, in website creation, there is what is called "dark patterns," explored by Harry Brignull (https://www.darkpatterns.org/) (Brignull & Darlo, n.d.), ways of creating a website that forces the user to take action that they would not normally do. For example, when a product-seeker goes to amazon.com, after perusing a particular product, the Amazon screen displays such information as" "the following products are bought together" (including the product at hand), leading the purchaser to think that the price for the 2 or 3 items mentioned was less than the items purchased separately, when in fact it is the same products with the combined price with no discounts. We might want to add another subcategory of disinformation that we could call "dis-sonance-information" or "muddling disinformation" because while it is disinformation intended to deceive, this kind is designed to confuse or mislead the consumer: e.g., in this case, to get a bargain where there is none. Amazon.com will often assert that there are only two items left in stock, suggesting an urgency to buy, when, in fact (if it were true), most items could be quickly reordered. Another example occurs downloading Adobe Reader to install on one's computer in order to read pdf files. In order to get this "free software," there is a checked box for including a download of Google Chrome as well (previously it was McAfee Anti-Virus software), which would have to be unchecked in order not to download it as well. Most users do not recognize this pre-choice or forced choice and unwittingly download it.

There is an extensive collection of concerns in information ethics that can be glimpsed at The International Center for Information Ethics (https://www.i-c-i-e.org/) and its journal, the *International Review of Information Ethics* (https://www.i-r-i-e.net/index.htm). It was created in 1999. At such sources, one can view the rapidly expanding field of information ethics and the domains that it extends to embrace.

There has also emerged a field of digital ethics, which Daniel Richards asserts, "encompasses how users and participants in online environments interact with each other and the technologies and platforms used to engage." He adds, "An important part of maintaining a solid digital ethos is critically reflecting on your choices of online self-representation and whether or not these choices reflect your goals as a

student and as a professional" (Richards, n.d.). Given a particular context, are one's choices of self-representation or for the representation of others ethical? The basic idea is that the ethical principles that we invoke in other environments should be invoked online and on digital media such as cell phones: e.g., do not spread rumors about others that you would not have done to yourself. However, Jonathan Terrasi points out that "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). As noted earlier about social media, they are hosting sites 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. 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. It is easy to extrapolate these views to all professions and personal online behavior, much in the same manner as the Pro-Truth pledge, but inclusive of the application of ethical norms in digital media, often mediated by third parties. Ethics has not changed, but the field of applications has galloped in the expanded communication technologies and their effect on the environment at large. 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.

Exercise suggestions will call on participants to consider the following questions:

(1) Can you find specific instances, actions, or policies of politicians or the government that violate one or more of the given ethical principles? Give details about the case, actions, or policies (with source documentation, such as URL) and explain precisely how specific ethical principles are violated.

- (2) Consider Eric Reiss's presentation on "the Ethics of Al" on YouTube dealing with ethical issues in website creation, particularly tricks in getting the user to do or buy things they do not typically want to do, (what are called "dark patterns"):
 https://www.youtube.com/watch?v=UAARKi8v0ps&fbclid=lwAR1Y9LQp9yKrMPQXJ7Gpbuv7NXtAR113ghr1zZpEebmSdkrmPKvLuapmt6o (28 minutes, but quite enlightening). Alternatively, check the web site, https://www.darkpatterns.org/, created by Harry Brignull, in particular, consider https://www.darkpatterns.org/types-of-dark-pattern. Discuss the "dark patterns" that you have encountered in your interactions with websites. Be specific in your response.
- (3) Check out the site for international information ethics at https://www.i-c-i-e.org/ and its journal, the *International Review of Information Ethics* (https://www.i-r-i-e.net/index.htm). Pick out a particular theme and discuss key ideas: e.g., the domains the field contains, the internet of things, etc.
- (4) If you were embracing digital ethics, what postings would be permissible on a social media site? What postings would be unethical? Be specific in your responses.

Lesson 10: Information, Media and Digital Literacies and Personal, Political and Professional Commitments

- (1) One can compare and contrast different literacies: information literacy, media literacy, and digital literacy
 - a. Media literacy is: "the ability to access, analyze, evaluate, create, and act using all forms of communication" (Media literacy defined, 2010).
 - b. Information literacy is a "set of skills needed to find, retrieve, analyze, and use information" (Information literacy glossary, 2006).
 - 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).
 - d. These literacies are complementary, but media literacy and digital literacy can be employed to enhance information literacy.
- (2) There are forms of information literacy using rational techniques for potentially open audiences
 - a. determining the credibility of web sites and other online sources;
 - b. learning how to locate, evaluate, and use effectively the information sought for information needs;
 - c. learning the merits, defects, and effective use of search engines;
 - d. promoting information literacy programs;
 - e. learning about the structure of information sources to learn how to use them effectively;
 - f. explaining the differences between knowledge, opinion, second hand-knowledge and the role of cognitive authorities;
 - g. detecting logical fallacies;
 - h. detecting violations of ethical principles.

- (3) There are dimensions of information literacy when addressing closed audiences, those who live in an information filter bubble, or those in a closed propaganda loop. These considerations are less about solutions and more about why some partisans are shackled to their positions.
 - 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
- (4) Personal, Professional, and Political Commitments
 - a. Pro-Truth Pledge
 - b. Promote the public good
 - c. Profession of ignorance

In the arena of coping with disinformation, two kinds of literacies have been suggested, media literacy and information literacy, usually based on one's perspective, that of journalism and mass communication or communication studies in the first case and that of library and information science in the second case. What are their relationship and their difference?

The National Association for Media Literacy Education defines media literacy as, "the ability to access, analyze, evaluate, create, and act using all forms of communication"; it "is the ability to encode and decode the symbols transmitted via media and the ability to synthesize, analyze and produce mediated messages" (Media literacy defined, 2010). Like information literacy, it is interdisciplinary, and it is concerned with a critical approach to the content of messages. Unlike information literacy, it looks at the specific framework and medium of the message. Given a particular message, a critical analysis would involve evaluating the purpose and point of view of the message, how it was constructed, whether it was trying to promote bias, propaganda, profit or some other agenda. Media literacy also aims to educate about how to create and develop messages. The Young African Leaders Initiative (YALI) characterizes media literacy with 5 core concepts: "(1) all media messages are constructed; (2) media messages are constructed using a creative language with its own rules; (3) different people experience the same media message differently; (4) media have embedded values and points of view; and (5) most media messages are organized to gain profit and/or power" (Media literacy: Five core concepts, n.d.). Media literacy can be seen as complementary to information literacy. To understand this claim, we must define information literacy.

The American Library Association (ALA) characterizes information literacy as the: "set of skills needed to find, retrieve, analyze, and use information," including "competencies in formulating research questions and in their [students'] ability to use information as well as an understanding of ethical and legal issues surrounding information" and skills "in critical thinking" (Information literacy glossary, 2006).

With information literacy training, information seekers would:

- 1. know when they have a need for information
- 2. identify information needed to address a given problem or issue
- 3. find needed information and evaluating the information
- 4. organize the information

5. use the information effectively to address the problem or issue at hand. (adapted from Presidential committee on information literacy: Final report, 2006)

The difference in information literacy and media literacy is the primary channel sought for information. A significant concern for information literacy is the use of formal information systems, such as libraries and other information supplying organizations, as a source for information. Media literacy looks at all channels through which information is communicated. Unfortunately, this distinction is not so clear because (1) information seeking is often not all that conscious (e.g., seeking content for confirmation bias); (2) information-seeking behavior is not restricted to formal information systems - in fact, the typical information seeker uses search engines first to satisfy their information needs: they are interested in "satisficing" their needs, in finding something that minimally fits their needs, not necessarily in finding the best content for their needs; (3) because of this default information-seeking posture, information literacy programs challenge information seekers to evaluate information from the web, whether from Google, social media or other information channels. When using non-formal information systems, the information seeker has to be trained to be wary of information content, and that is why media literacy is also useful. The context of the message in authorized information systems is pretty straightforward: to provide reliable sources of information (in general – libraries do not regularly stock or promote "outright lies" except as an example of, e.g., hate literature), whether knowledge, opinion or orthodoxy. On the web, one has to be critical of the content, context, intent, structure, channel, and reliability of the message. One can argue that media literacy is an extension of information literacy, given that we are looking at it in the context of information-seeking behavior. The American Library Association has decided to consider media literacy training in public library programs in addition to information literacy (Media literacy @ your library, 2017). At one point, they addressed the issue of a "digital literacy" that combines media and information 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). The upshot is that both information and media literacy are essential in information seeking on the internet, but for this lesson, I will conceive a broader notion of information literacy to include media and digital literacies.

It seems useful to divide information literacy, including media literacy and digital literacy, into two aspects: (1) aspects of information literacy that are useful for potentially open audiences, such as students at all level, adult learners, and persons trying to understand the disinformation landscape; and (2) aspects of information literacy that attempt to address issues for closed audiences, such as die-hard conservatives, right-wing or left-wing groups that live within their filter bubble or those who live in a propaganda feedback loop.

There are many forms of information literacy that can be used to address the first group. The first is determining the credibility of web sites, especially those espousing fake news, by analyzing their currency, the authorship (if available), the quality of their links and supporting resources such as bibliographic references, and by checking with experts or with fact-checking sites, such as PolitiFact (http://www.politifact.com/), FactCheck (https://www.snopes.com/fact-check/). These sites, too, can reflect bias (though not necessarily an invalidating bias, one that it ignores or distorts the interpretation of the facts or evidence): https://www.makeuseof.com/tag/true-5-factchecking-websites/ (Eillis, 2019). For a comprehensive approach to web site evaluation, see http://www.citationmachine.net/mla/cite-a-

<u>newspaper/search?utf8=%E2%9C%93&q=new+york+times&commit=Search+Newspapers</u> (Citation Machine, n.d.).

Another information literacy skill is to learn how to effectively locate, evaluate, and use information sought for information needs in formal information systems such as library catalogs or online databases. While menu-driven systems are useful in searching online databases, there are unknown hazards if one is trying to do a comprehensive or precise search. For example, if one is looking in the research database, ARTbibliographies Modern, for a list of publications, by Yves-Alain Bois from 1980 to the present, one would typically enter the author name as given or interpreted in the search query: e.g., Bois, Yves-Alain. However, it turns out that the database has six variations of the author's name: ("Bois, Yve Alain" OR "Bois, Yve-Alain" OR "Bois, Y -A" OR "Blois, Yve-Alain" OR "Bois, Y A" OR "Bois, Yves-Alain"). If one used only the name given to them (Bois, Yves-Alain), one would get a partial result because they would get results only for the one variation of author name that they used, not any from any of the other variations of author name. Many, if not all, users think that computers automatically map all variations of an author's name to a single entry, but it does not. A few systems which have what is called strong authority control, such as the Library of Congress, do link, for example, Jacqueline Kennedy Onassis (their preferred entry) with Jacqueline Bouvier Kennedy, Jackie Kennedy, Jackie Onassis, Jacqueline Bouvier, Jiagulin (Chinese variant) or Jackie, all of the forms of her name that an information seeker may use to find information by or about her. But these systems are few, and many information databases do not have this feature. This problem of a lack of authority control is not only true for ARTbibliographies Modern but many others. It is easy to fail to make a comprehensive search in databases such as these or miss a relevant entry because of not using the correct form of author name or not using all forms of the author name in the database. What magnifies this problem is that different database producers do different forms of indexing of author name and may have different entries for a particular author name so that when does multiple database searching (for which most libraries provide), especially database searching from different vendors, the results are severely flawed.

Furthermore, one can increase the precision of one's results from organized information collections, such as information databases, by learning about the indexing or subject terms used to construct the database. For controlled databases, the indexers try to be consistent in assigning subject term vocabulary to the intellectual content of articles in the database. If one uses the assigned term for a particular concept for a particular database, one can achieve a precise result, i.e., all articles that have been assigned a particular subject term will be clustered in the result. The result will be the consequence of an intellectual process undertaken by indexers and not a computer algorithm that does not understand the meaning of terms. Unfortunately, the assignment of subject terms varies among different databases and database producers, so that terms used in one database may not be used in another. Multidatabase searching using a single search term or phrase will produce flawed results, unless one takes the trouble to use the correct term, if it is available, for each of the databases being searched. There are many other issues to learn about databases and their construction that could enhance one's ability to search more effectively. However, it is important to note that if the information seeker just wants anything related to the search topic (i.e., anything about a particular concept or anything by a particular author), something that "satisfices" their information need (i.e., seek the minimum acceptable outcome or choose the first satisfactory option that one comes across), then rigor in using search systems, seeking what is called high precision (i.e., looking for many articles directly on target) or high recall (i.e., looking for many articles closely related to their information need) is not

required. Google satisfices many information needs, which is why it is so popular. The unfortunate side effect of searching ease is failing to learn and not wanting to learn about how to achieve depth or breadth in one's searches. There could be much better information to satisfy one's information need if the seeker understood how to do it. Unfortunately, many library search systems have been dumbed down to menu-driven systems, that not only hide the search issues but make it difficult to correct them.

Even with the ease of access to search engines, such engines are poorly used, and the nature of the results is poorly understood. The next important information literacy tool is learning the merits, defects, and effective use of search engines. The following are an outline of key points:

- (1) The choice of vocabulary in a search engine is important. A search on *kidney neoplasms* will generally produce qualitatively better results than *kidney cancer* because the former is the accepted medical terminology, used in scientific studies, and is likely to occur in research-based web sites or resources. Having said that, *kidney cancer* sites may be more accessible to the layperson. The point is that the choice of search terms can greatly affect the nature and quality of the results.
- (2) The use of search engine qualifiers will improve the quality of one's search, such as these Google techniques, Refine Web Searches

 (https://support.google.com/websearch/answer/2466433?hl=en&ref topic=3081620) or Advanced Search Techniques

 (https://support.google.com/websearch/answer/35890?hl=en&ref topic=3081620). One can restrict searches to specific domains (e.g., .gov), to specific time frames, to particular words or phrases, to alternative words or phrases, to language, to file type, to image type, or to image color, or to exclude any of these, to mention a few options).
- (3) All search engines exhibit bias. There are 200 factors that affect how Google ranks its search results (https://backlinko.com/google-ranking-factors), but most factors do so only slightly (https://optinmonster.com/seo-ranking-factors/). For example, new sites often rank low, the most popular sites (built on the notion of link popularity the more sites that link to a particular site are call link popular) are high on the output list. However, what is popular may not be the best. Sites that load slowly on mobile phones are ranked low but may have good information. Since 95% of searchers never go beyond the first page of search results, this is a serious problem because there may be more valuable resources below the splash page or pages (Santora, 2019).
- (4) Ideally, information seekers will learn how to learn by understanding how knowledge is organized and indexed and about pitfalls in failing to critically reflect on issues in information systems, such as library catalogs and information databases.

There are some other techniques for information literacy. Many libraries offer information literacy programs that provide hands-on training in the skills mentioned above. There are also many sites that offer guidance. The International Federation of Library Associations (IFLA) suggests the following criteria for spotting fake news:

- (1) consider the source investigate the site, its mission and contact information;
- (2) read beyond the given site or source, especially if the content is outrageous or intended to inflame;
- (3) check the author to see what credentials they have or whether they are real;
- (4) check the kind of supporting resources that are provided follow the links and where they lead one to, to assess the credibility of supporting resources;

- (5) check the date of the story old news may be old and not currently relevant (though many sites offer perennial insight);
- (6) determine whether the site is a spoof or satire, such as many stories that appear in The Onion (http://www.theonion.com/);
- (7) check your own biases no one is unbiased make sure that you do not prey on your own biases, liberal or conservative; and finally
- (8) ask the experts consult a librarian or subject expert or check a fact-checking site, like Politifact (http://www.politifact.com/). (How to spot fake news, n.d.).

Many libraries post information about the CRAAP test, a guide for evaluating sources found on the internet. CRAAP is an acronym for evaluating such properties as Currency, Relevance, Authority, Accuracy, and Purpose. An example can be found at https://guides.library.illinoisstate.edu/evaluating/craap.

There are also strategies offered in the lessons above: helping others understand the varieties of ignorance and false information on the web (lesson 2); the differences among knowledge, opinion, second hand-knowledge in media use (lesson 3) and the role of cognitive authorities in validating information or validating disinformation (lesson 6); the detection of logical fallacies (lesson 8) and the detection of violations of ethical principles (lesson 9).

The more difficult problem is trying to develop Information literacy options for addressing closed audiences, those who live in an information bubble or those in a closed propaganda loop. Information literacy here means not that we have a solution, but why a solution may not be forthcoming, i.e., understanding why the problem defies simple solutions. Several related phenomena may be involved.

One can start with cults. Janja Lalich, who has studied cults extensively, suggests that members of "totalistic" cults—those that consider their ideology the one true path—share four key characteristics. They

1) espouse an all-encompassing belief system; 2) exhibit excessive devotion to the leader; 3) avoid criticism of the group and its leader; and 4) feel disdain for non-members (Jacobs, 2018).

She believes that followers of Trump may belong to a cult. Steven Hassan authored a book, *The Cult of Trump* (2019), that obviously agrees (given the title of his book) that Trump is the leader of a cult because of "his air of absolute confidence, his grandiosity, - 'only I can fix this' – his practice of sowing fear and confusion, his demand for absolute loyalty, his tendency to lie and create alternative 'facts' and realities, his shunning and belittling critics and ex-believers" (Hassan, 2019, Introduction). He compares Trump to a line of cult leaders, such as Sun Myung Moon (of which the author was a former member), L. Ron Hubbard, David Koresh, Lyndon LaRouche, and Jim Jones. The only strategy that seems to work is being deprogrammed, physically removing the cult member from the cult context and challenging their belief system, until they see the unreality of their cult existence. This process was what happened to Hassan and had stimulated his interest in the psychological processes that bring cult leaders into total control. The problem with such methods, including legal constraints, is that the deprogramming must be continuously enforced, else going back to the cult environment will devolve into a relapse.

This seductive context is related to another aspect of cult devotion: filter bubbles or the propaganda feedback loops. In the current situation, many political partisans live in a filter bubble, where only select

sources enter the partisans' information stream, and others are ignored (as described in the lessons on deception and self-deception and cognitive authorities). According to Yochai Benkler, they live in a propaganda feedback loop, that not only controls the propaganda streams that are allowed attention but also where these streams reinforce one another (Morrison, 2018) (anticipated in the lessons of deception on self-deception and cognitive authorities). As we have seen, Fox News is an illustration. As we noted earlier, at the beginning of the impeachment inquiry of President Trump in October 2019, an American values survey by PRRI (Public Religion Research Institute) indicated that while 37% Republicans overall asserted that almost nothing could dissuade them from approving of Trump, over 50% of Republicans whose primary news source is Fox News approved of Trump. Those Republicans whose primary news source was other than Fox News had only a 30% approval rating of the President (Bump, 2019). According to Eric Wemple, the influence of Fox News cannot be underestimated:

There's simply no outlet that dominates any other part of the political spectrum in the way Fox News dominates the right. With that dominance, Fox News has done great damage. It's not as if Fox News's influence extends to only however many millions may be viewing in prime time. There's what experts call a "media ecosystem" out there, where people take nonsense uttered on Fox News, then share it on Twitter, on Facebook, with their neighbor. Nonsense has a high pass around rate (Wemple, 2019).

The Trump cult seems to be somewhat different from typical cults. Cults revolve around a singular leader, and the channels of communication are strictly controlled by him/her. In Trump's case, the communication channels are not strictly controlled by him, but by those who want to support his regime (e.g., Fox News, Sinclair Broadcasting) in a sort of set of self-regulating and promoting propaganda machines. Their support may not be only to their leader, but the power, money, and control that they obtain by promoting his leadership and government. 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).

Another troubling area of filter bubbles is social media sites that espouse various conspiracy theories. The problem is that when one attempts to offer evidence to counter a specific conspiracy theory, it is often met with a retort that the evidence provided is part of the conspiracy plot or higher conspiracy plot. All evidence is deemed by the conspiracy conceit as non-evidence or evidence of a more extensive conspiracy theory. People involved in such sites seem to be engaged in a version of Plato's imagining state of Cave dwellers mentioned in Lesson 3.

One solution to these problems is litigation, suing social media platforms for slander or infringements on privacy. However, Section 230 of the Communications Decency Act (CDA) of 1996, asserts that "No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider" (47 U.S.C. § 230). What this means is that Internet Service Providers (ISPs) and other third-party online intermediaries that host or republish content are safeguarded from many laws that might hold them otherwise legally liable. There are exceptions for criminal action and intellectual property. As the slanderous and hateful speech proliferates on the internet, there might be some consideration for curtailing such broad freedom of speech. The irony is that the CDA was created to promote "decency." But it seems to have created the

opposite in many instances, whereby Rebecca Tushnet refers to the online intermediaries, such as Facebook, as "power without responsibility" (Tushnet, 2008).

One possible solution to many of these problems is the reinstitution of a fairness doctrine. The original 1949 doctrine required broadcast license holders to present both sides of issues of public importance in a manner that was honest, equitable, and balanced. It could be argued that this regulation should apply to all news sources, whether radio, television, or cable news and social media platforms like Twitter, Facebook, and other social media sites. As in the original doctrine, it could be regulated by the Federal Communications Commission (FCC), but other Federal agencies could be involved, such as the Federal Trade Commission (FTC). One major problem would be that such regulations might apply to media in the United States (unless incoming data streams from other countries were somehow regulated as well), but not internationally. Given the international character of the internet, there would be countries with widely permissive policies, as there are now. Perhaps regulations by the EU or the UN might mitigate some of these circumstances. These fixes would be difficult to apply in that most platforms are not likely to be regulated in the same way. In the current political environment, such regulations are unlikely to be enacted, and self-regulation does not appear to work very well, given that competitors of a given social media site type could provide unfettered restraints.

While there are no clear techniques for assuring that one can easily remove adherents from a sphere of disinformation, we might suggest that Socratic techniques might be tried. In the Platonic/Socratic view of true education, there are two aspects: (1) Socrates as a stingray, electric eel or gadfly (to which he is referred in various Platonic writings), in which he shocks or benumbs his interlocutors into an awareness of their ignorance, that what they thought they knew with assurance they did not. The purpose of this shock is to clear away what one unidentified commentator referred to as "the conceit of false knowledge." (The author remembers the phrase and its insight but cannot find the original Plato commentator). Ignorance and false knowledge, as in false opinions, are conceits, i.e., believing what we are owners of the truth. And (2) Socrates as a midwife – using questions skillfully to have his interlocutors come to a self-realization of their true condition, hopefully with a willingness to be open to real learning (and no longer indulging in their confirmation biases). This second technique echoes John Swan's sentiments that "the simple but profound fact that the truth must be perceived by individuals, not dictated to them" (Swan & Peattie, 1989, p. 18). The paradox is that those who listen to false cognitive authorities seem to believe that truth can be dictated to them. However, this process does not always succeed as many are secure in their state of ignorance or unwillingness to change: e.g., when a liberal is confronted by an unpleasant fact or consequences of his/her position, he or she retorts with such remarks, as "I'm entitled to my own opinion!" rather than working through the difficulties in supporting his or her position. There is heat but no enlightenment with a battle of opinions, however illfounded or well-founded they are. It can only occur through a genuine dialogical process. We must admit that an interlocutor in a dialog may lack the wit to follow the logical conclusion of Socrates' questions or the questions of the leader in the dialogue. This inability is the case of Meno, the central character of Plato's Meno, who is left in a state of befuddlement when Socrates shows that his opinions about virtue, the topic of the dialog, lack any foundation (Meno, 71b-78e). The victim of false cognitive authorities, the Sophists, Meno was merely echoing the assertions of his teachers. He lacked the wit to supply a proper rationale for his definitions, no doubt because there were none. He is left with opinions, no doubt false opinions. At least he comes to know that he does not know, and the opinions that he parrots from his Sophist teachers do not hold water.

Appealing to Socratic techniques, if a Trump supporter tells you his vote for Trump "... was a wise decision ... for working-class Americans who are tired of their jobs being taken by illegals" (Lafond, 2018), one can ask what illegals is he talking about and what jobs? One can point out that while is true that there are 7.5 million undocumented immigrants in US jobs, most of these jobs are not ones that most US citizens would want (e.g., farm laborer or chicken plant processor), admitting that such jobs depress good wages for such jobs (which is hardly a fault of the laborer, but an unwillingness of companies to pay decent wages for such work) (Olsen, 2019). It is also true that student immigrants have earned high degrees and stayed and have been hired for high-paying jobs in various businesses and educational institutions. That opportunity is also available to many Americans if they are willing to do the work. If the Trump supporter is annoyed with such observations, he/she may follow with silence or with retorts to the effect that Trump has done other great things. Such an example illustrates the Socratic technique of benumbing. It also illustrates a case where the interlocutor is unwilling to change.

Rick Alan Ross of the Cult Education Institute suggests that if conversing with a Trump supporter, pick an emotionally charged issue, such as reproductive health rights, and explain that Trump supports defunding Planned Parenthood and holds outmoded opinions about women (Matthews, 2018). These observations might act as a benumbing moment, challenging the interlocuter into an awareness that her idol holds a position contrary to her beliefs. Ross suggests some other techniques. To sway a Trump supporter, one can start identifying persons that she respects, looking for people who have spoken in opposition to Trump. In this way, one can play the role of a midwife, by suggesting other high-profile figures or sources, that the interlocuter respects. Ross indicates that "the key to introducing more critical thinking is pointing out ambiguity and nuance, rather than challenging core beliefs directly" (Matthews, 2018).

Such reflections suggest possibilities for trying to open the close-mindedness of many political partisans. However, there are also personal, professional or political agendas to which one can commit. One can commit to the Pro-Truth Pledge (https://www.protruthpledge.org), personally, politically and professionally, too, unless we are acting in a profession such as librarianship, in which the librarians are charged "to provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval." (Library Bill of Rights). However there is a bit of a tension to that commitment, for the Library Bill of Rights also states: "Books and other library resources should be provided for the interest, information, and enlightenment of all people of the community the library serves," (Library Bill of Rights) because supporting untruths and websites full of disinformation generally are not regarded as places for enlightenment, except perhaps in a negative way—observing the nature of disinformation that purveyors want to flood the internet, much in the same way that a pro-white-supremacy book in a library collection would illustrate hate speech and varieties of misinformation or disinformation that support such a philosophy. If we take the Pro-Truth Pledge, we promise only to share verified truth as completely as possible, to honor truth (to acknowledge and defend it) and to encourage truth (to ask for lies to be retracted, to educate ourselves and others, and acknowledge genuine experts). It would help address and beat back the verbal pollution that exists in public sphere.

There is a final idea that we can learn from Socrates. If you recall many of Plato's dialogs, they start with Socrates' profession of ignorance. His interlocutor in a dialog, e.g., Meno in the *Meno*, brings up a topic to be discussed. Socrates' response is an enthusiastic willingness to learn because he professes that he has little or no knowledge of the topic at hand. His profession of ignorance has been referred to as

ironic, because in the end, his knowledge of the topic, as 'limited' as it is professed to be, turns out to be the most informed. This profession of ignorance is not false. It is a reminder of Socrates to himself to stay open to learning, to consciously recognize our biases and particular history, and to avoid pitfalls that may hinder our real learning or our real understanding of our interlocutors and what they have to offer. It is to recognize that we are a community of learners trying to work for a common, public good, a purpose that often gets lost in partisan bickering.

Exercise suggestions will call on participants to consider the following questions:

- (1) Can you locate two specific web sites and evaluate their credibility?
- (2) Taking a specific research question, can you locate, evaluate, and use information effectively from one specific library or library database and one internet source (e.g., Google Scholar)?
- (3) Can you create three searches on Google, where you use at least two of its advanced features for each search? See Google techniques, Refine Web Searches (https://support.google.com/websearch/answer/2466433?hl=en&ref topic=3081620) or Advanced Search Techniques (https://support.google.com/websearch/answer/35890?hl=en&ref topic=3081620). Can you explain the merits and defects of the results of your searches?
- (4) Can you find out about and take Pro-Truth Pledge (https://www.protruthpledge.org/)?
- (5) What techniques can you find other than those in the lesson whereby those involved in a political filter bubble or closed propaganda feedback loop can be effectively challenged in their assumptions (in the way of Socratic benumbing) or actually moved forward to begin to change their beliefs (in the way of Socratic midwifery).

The inclusion of a glossary would be helpful for quick access to key concepts.

Endnote:

In addition to the new material, this chapter is derived from three sources: Froehlich (2017); Froehlich (2019); and the course, *The Age of Disinformation*, which the author created and taught, Kent State University (Spring, 2018; Spring, 2019).

Bibliography

- Alba, D., & Satariano, A. (2019, September 26). At least 70 countries have had disinformation campaigns, study finds. *The New York Times*. Retrieved September 29, 2019, from https://www.nytimes.com/2019/09/26/technology/government-disinformation-cyber-troops.html.
- Alicke, M. (2017, September 10). Willful ignorance and self-deception. *Psychology Today*. Retrieved July 30, 2019, from https://www.psychologytoday.com/blog/why-we-blame/201709/willful-ignorance-and-self-deception.
- Beckwith, R. T. (October 11, 2016). Donald Trump's new ad attacks Hillary Clinton's health. *Time*. Retrieved March 4, 2019, from http://time.com/4526724/donald-trumps-new-ad-attacks-hillary-clintons-health/.
- Benkler, Y., Faris, R. & Roberts, H. (2018). *Network propaganda: manipulation, disinformation, and radicalization in American politics.* Oxford, UK: Oxford University Press.
- Bennett, B. (2019). The ultimate collection of over 300 logical fallacies. Retrieved June 30, 2019, from https://www.logicallyfallacious.com/tools/lp/Bo/LogicalFallacies/3/Book-Contents.
- Bischoff, L. A. (2019, October 21). With millions at stake, fight over Ohio energy bill takes ugly turn.

 Dayton Daily News. Retrieved October 28, 2019, from

 https://www.daytondailynews.com/news/local/with-millions-stake-fight-over-ohio-energy-bill-takes-ugly-turn/pybZYrQ9XW2uY6bgOMpgJI/.
- Brignull, H., & Darlo, A. (n.d.). *Dark patterns*. Retrieved December 5, 2019, from http://www.darkpatterns.org/.
- Brueck, H. (December 11, 2018). Switzerland has a stunningly high rate of gun ownership here's why it doesn't have mass shootings. *Business Insider*. Retrieved January 14, 2019, from https://www.businessinsider.com/switzerland-gun-laws-rates-of-gun-deaths-2018-2.
- Bump, P. (2019, October 21). The most loyal Trump allies are Republicans who watch Fox News. *The Washington Post.* Retrieved October 25, 2019, from https://www.washingtonpost.com/politics/2019/10/21/most-loyal-trump-allies-are-republicans-who-watch-fox-news/
- Communications Decency Act (CDA) of 1996. Section 230. (47 U.S.C. § 230). Retrieved August 10, 2019 from:

 https://uscode.house.gov/view.xhtml?req=(title:47%20section:230%20edition:prelim)%20OR%2

 O(granuleid:USC-prelim-title47-section230)&f=treesort&edition=prelim&num=0&jumpTo=true.
- Citation machine. (n.d.). Retrieved July 23, 2019, from http://www.citationmachine.net/apa/cite-a-website.
- Dale, D., & Subramaniam, T. (2019, July 18). Trump made 20 false claims at his North Carolina rally. *CNN Politics*. Retrieved July 21, 2019, from https://www.cnn.com/2019/07/18/politics/trump-false-claims-in-greenville-north-carolina-rally/index.html.

- Davis, J. H. & Chokshi, N. (2018, May 17). Trump defends 'animals' remark, saying it referred to MS-13 gang members. *New York Times*. Retrieved September 13, 2018, from https://www.nytimes.com/2018/05/17/us/trump-animals-ms-13-gangs.html.
- Davis, J. H. (2019, July 16). House condemns Trump's attack on four congresswomen as racist. *New York Times*. Retrieved July 21, 2019, from https://www.nytimes.com/2019/07/16/us/politics/trump-tweet-house-vote.html.
- Dawkins, R. (1976). The selfish gene. Oxford University Press.
- Debunking false stories archives. (2019, July 19). Retrieved July 21, 2019, from https://www.factcheck.org/fake-news/.
- De Keersmaecker, J., & Roets, A. (2017). 'Fake news': Incorrect, but hard to correct. The role of cognitive ability on the impact of false information on social impressions. *Intelligence*, *65*, 107 110.
- De Keersmaecker, J & Roets, A. (2019, June 1). Is there an ideological asymmetry in the moral approval of spreading misinformation by politicians?, *Personality and Individual Differences*, 143, 165-169.
- Deweese-Boyd, I. (2017). Self-deception. In E. N. Zalta (Ed.). *The Stanford encyclopedia of philosophy* (Fall 2017 ed.). Retrieved April 24, 2018, from https://plato.stanford.edu/entries/self-deception/.
- Dickson, E. J. (2019, July 3). QAnon followers think JFK Jr. is coming back on the 4th of July. *Rolling Stone*. Retrieved December 5, 2019, from https://www.rollingstone.com/culture/culture-features/qanon-jfk-jr-conspiracy-theory-854938/.
- Dings, R. (2017, December). Social strategies in self-deception. *New Ideas in Psychology*, (47), 16-23. Elsevier Science.
- Doxing. (2019). In: Wikipedia. Retrieved June 9, 2019, from https://en.wikipedia.org/wiki/Doxing.
- Dreyfus, S. (2019, March 12). Mad man Trump has PDS-Projection Derangement Syndrome. *The Daily Kos*. Retrieved from https://www.dailykos.com/stories/2019/3/12/1841456/-Mad-Man-Trump-has-PDS-Projection-Derangement-Syndrome.
- Dumenco, S. (2016, September 20). New NRA ad plays like a horror movie: 'Don't let Hillary Clinton leave you defenseless.' *AdAge*. Retrieved July 15, 2019, from https://adage.com/article/campaign-trail/nra-ad-hillary-clinton-leave-defenseless/305929.
- Ellis, M. (2019, September 30). The 8 best fact-checking sites for finding unbiased truth. *MUO*. Retrieved October 16, 2019, from https://www.makeuseof.com/tag/true-5-factchecking-websites.
- Fake news. (2019). In: *Wikipedia*. Retrieved March 24, 2019, from https://en.wikipedia.org/wiki/Fake news.
- Fallis, D. (2014). The varieties of disinformation. In: L. Floridi and P. Illari (eds.), *The Philosophy of Information Quality*. Synthese Library 358, DOI 10.1007/978-3- 319-07121-3_8. Switzerland: Springer International Publishing.

- FCC fairness doctrine. (2019). In: *Wikipedia*. Retrieved September 15, 2018, from https://en.wikipedia.org/wiki/FCC fairness doctrine.
- Fisher, M., & Taub, A. (2019, February 12). When facebook spread hate, one cop tried something unusual. *New York Times*. Retrieved October 22, 2019, from https://www.nytimes.com/2019/02/12/world/europe/facebook-germany-hate-speech.html.
- Fisher, M. & Taub, A. (2019, August 11). How YouTube radicalized Brazil, *New York Times*. Retrieved August 29, 2019, from https://www.nytimes.com/2019/08/11/world/americas/youtube-brazil.html.
- Forgas, J. P. & Baumeister, R. F. (2019). Homo credulous: On the social psychology of gullibility. In: Forgas, J.P. & Baumeister, R.F. (eds)., *The Social Psychology of Gullibility: Conspiracy Theories, Fake News and Irrational Beliefs*. Routledge. Retrieved from https://ebookcentral.proquest.com.
- Fox News. (n.d.). *Media Bias/Fact Check.* Retrieved April 14, 2019, from https://mediabiasfactcheck.com/fox-news/.
- Froehlich, T. J. (2017). A not-so-brief account of current information ethics: the ethics of ignorance, missing information, misinformation, disinformation and other forms of deception or incompetence. *BiD: textos universitaris de biblioteconomia i documentació*, núm. 39 (desembre). Retrieved March 4, 2019, from http://bid.ub.edu/en/39/froehlich.htm doi: http://dx.doi.org/10.1344/BiD2017.39.8.
- Froehlich, T. J. (2019). The role of pseudo-cognitive authorities and self-deception in the dissemination of fake news. *Open Information Science*, 3: 115–136. https://doi.org/10.1515/opis-2019-0009.
- Gigerenzer, G., & Garcia-Retamero, R. (2017). Cassandra's regret: The psychology of not wanting to know. *Psychological Review*, 124(2), 179-196.
- Glaser, A. (2019, August 4). 8chan is a normal part of mass shootings now. *Slate*. Retrieved September 1, 2019, from https://slate.com/technology/2019/08/el-paso-8chan-4chan-mass-shootings-manifesto.html.
- Goldmacher, S. (2018, December 18). Trump foundation will dissolve, accused of 'shocking pattern of illegality.' *New York Times*. Retrieved from https://www.nytimes.com/2018/12/18/nyregion/ny-ag-underwood-trump-foundation.html.
- Golman, R., Hagmann, D., & Loewenstein, G. (2017). Information avoidance. *Journal of Economic Literature*, *55*(1), 96-135.
- Hassan, S. (2019). The cult of Trump. New York: Free Press.
- Hathaway, J. (2014, October 10). What is gamergate, and why? An explainer for non-geeks. *Gawker*. Retrieved October 27, 2019, from https://gawker.com/what-is-gamergate-and-why-an-explainer-for-non-geeks-1642909080.

- Heitin, L. (2016, November 11). Digital literacy: an evolving definition. *Education Week*. Retrieved November 11, 2019) from https://www.edweek.org/ew/articles/2016/11/09/what-is-digital-literacy.html.
- Henshall, A. (2018, September 25). What is digital ethics?: 10 Key Issues Which Will Shape Our Future: *Process Street*. Retrieved November 20, 2019, from https://www.process.st/digital-ethics/.
- Hertwig, R., & Engle, C. (2016). Homo ignorans: Deliberately choosing not to know. *Perspectives on Psychological Science*, *11*(3), 359-372.
- Holmes, J. (2018, July 25). Trump's war on the truth has officially gone full Orwell, *Esquire*. Retrieved September 3, 2018, from https://www.esquire.com/news-politics/a22547037/donald-trump-orwellian-truth-reality-eyes-ears/.
- How to spot fake news. (n.d.). *International Federation of Library Associations (IFLA)*. Retrieved October 27, 2019, from https://www.ifla.org/publications/node/11174.
- Information Literacy Glossary. (2006, September 1). *American Library Association*. Retrieved November 22, 2019, from http://www.ala.org/acrl/issues/infolit/overview/glossary.
- Ingraham, C. (2019, April 29). Why conservatives might be more likely to fall for fake news. Retrieved October 26, 2019, from https://www.washingtonpost.com/news/wonk/wp/2016/12/07/why-conservatives-might-be-more-likely-to-fall-for-fake-news/.
- Jacobs, T. (2018, June 21). A cult expert finds familiar patterns of behavior in Trump's GOP. *Pacific Standard*. Retrieved April 13, 2019, from https://psmag.com/news/a-sociologist-explains-the-similarities-between-cults-and-trumps-gop.
- Jowett, G. S., & O'Donnell, V. (2015). What is propaganda, and how does it differ from persuasion? *Propaganda & persuasion*. Thousand Oaks, CA: SAGE Publications, Inc.
- Kessler, G., Rizzo, S., & Kelly, M. (2019, April 29). President Trump has made more than 10,000 false or misleading claims. *Washington Post*. Retrieved July 21, 2019, from https://www.washingtonpost.com/politics/2019/04/29/president-trump-has-made-more-than-false-or-misleading-claims/?utm_term=.61f1b93761d3.
- Knowledge. (2019). In: *Wikipedia*. Retrieved March 24, 2019, from https://en.wikipedia.org/wiki/Knowledge.
- Lafond, N. (2018, August 7). Ex-Trumpers confront supporters: lots of 'idiots' voted for trump, including me. *TPM*. Retrieved October 27, 2019, from https://talkingpointsmemo.com/livewire/ex-trumpers-confront-supporters-idiots-voted-trump-including-me.
- Lamba, S. & Notyananda, V. (2014, August). Self-deceived individuals are better at deceiving others. *Plos One*, vol 9, 8.
- Landers, J. (2018, July 31). Joan Chittister illustrates how mastering humility could save America. *The Chautauquan Daily*. Retrieved January 6, 2019, from http://chqdaily.com/2018/07/joan-chittister-illustrates-how-mastering-humility-could-save-america/.

- Lee, J. C., & Quealy, K. (2109, May 24). "The 598 people, places and things Donald Trump has insulted on twitter: a complete list." *The New York Times*. Retrieved July 22, 2019, from https://www.nytimes.com/interactive/2016/01/28/upshot/donald-trump-twitter-insults.html?r=0.
- Lessig, L. (2012, February 29). Code is law. *Harvard Magazine*. Retrieved November 20, 2019, from https://harvardmagazine.com/2000/01/code-is-law-html.
- Library Bill of Rights. American Library Association. Retrieved October 10, 2019, from http://www.ala.org/advocacy/intfreedom/librarybill.
- Lou, L. (2017, June 23). Spot the flaw in a politician's argument with this guide to logical fallacies, https://lifehacker.com/spot-the-flaw-in-a-politicians-argument-with-this-guide-1796333209.
- Lynch, K. (2016). Willful ignorance and self-deception. *Philosophical Studies*, vol 173, 505-523.
- Matthews, D. (2018, July 09). We asked a cult deprogramming expert how to talk your friends out of voting for Donald Trump. *Splinter*. Retrieved April 14, 2019, from https://splinternews.com/we-asked-a-cult-deprogramming-expert-how-to-talkyour-f-1793857315.
- McGregor, J. (2016, December 29). When telling the truth is actually dishonest. *Washington Post*. Retrieved April 11, 2019, from https://www.washingtonpost.com/news/on-leadership/wp/2016/12/29/when-telling-the-truth-is-actually-dishonest/?utm_term=.5b7a76aa69c1.
- Media literacy @ your library (2017, October 2). *American Library Association*. Retrieved November 22, 2019, from http://www.ala.org/tools/programming/media-literacy-your-library.
- Media literacy defined. (2010, April 6). *National Association for Media Literacy Education*. Retrieved November 22, 2019, from https://namle.net/publications/media-literacy-definitions/.
- Media literacy: five core concepts. (n.d.). *Young African Leaders Initiative*. Retrieved November 1, 2019, from https://yali.state.gov/media-literacy-five-core-concepts/.
- Mitchell, A., Barthel, M., Shearer, E., & Gottfried, J. (2016, July 7). News sources and audience loyalty. *Pew Research Center Journalism and Media*. Retrieved from https://www.journalism.org/2016/07/07/loyalty-and-source-attention/.
- Mitchell, A., Gottfried, J., & Barthel, M. (2017, January 18). Trump, Clinton voters divided in their main source for election news. *Pew Research Center Journalism and Media*. Retrieved April 14, 2019, from https://www.journalism.org/2017/01/18/trump-clinton-voters-divided-in-their-main-source-for-election-news/.
- Mitchell, A., Matsa, K. E., Gottfried, J., & Kiley, J. (2014, September 21). Political polarization & media habits. *Pew Research Center Journalism and Media*. Retrieved April 14, 2019, from https://www.journalism.org/2014/10/21/political-polarization-media-habits/.
- Moore, M. (2019, March 11). White House calls on Dems to condemn 'abhorrent' comments about Israel, *New York Post.* Retrieved June 30, 2019, from https://nypost.com/2019/03/11/white-house-calls-on-dems-to-condemn-abhorrent-comments-about-israel/.

- Morin, R. & Cohen, D. (2018, August 19). Giuliani: 'Truth isn't truth.' *Politico*. Retrieved September 4, 2018, from https://www.politico.com/story/2018/08/19/giuliani-truth-todd-trump-788161.
- Morrison, P. (2018, November 7). How the 'propaganda feedback loop' of right-wing media keeps more than a quarter of Americans siloed. *Los Angeles Times*. Retrieved October 26, 2019, from https://www.latimes.com/opinion/op-ed/la-ol-patt-morrison-yochai-benkler-20181107-htmlstory.html.
- MSNBC. (n.d.). *Media Bias/Fact Check*. Retrieved April 14, 2019, from https://mediabiasfactcheck.com/msnbc/.
- Mutz, D. C. (2018, May 8). Status threat, not economic hardship, explains the 2016 presidential vote, Proceedings of the National Academy of Sciences (PNAS). Retrieved June 30, 2019, from https://www.pnas.org/content/115/19/E4330.
- Nakamura, D. (2017, May 17). Trump claims 'no politician in history' has been 'treated worse or more unfairly,' *Washington Post*. Retrieved March 3, 2019, from <a href="https://www.washingtonpost.com/politics/2017/live-updates/trump-white-house/trump-comey-and-russia-how-key-washington-players-are-reacting/trump-says-no-president-hasbeen-treated-more-unfairly/?utm_term=.b36a3819ddf9.
- National: 'fake news' threat to media; editorial decisions, outside actors at fault. (2018, April 2).

 Monmouth University Poll. Retrieved April 14, 2019, from https://www.monmouth.edu/polling-institute/documents/monmouthpoll us 040218.pdf/.
- Olsen, H. (2019, August 16). Yes, undocumented immigrants take jobs from Americans. Here's the proof. Washington Post. Retrieved October 27, 2019, from https://www.washingtonpost.com/opinions/2019/08/16/yes-undocumented-immigrants-take-jobs-americans-heres-proof/.
- Pennycook, G., Cannon, T. D., & Rand, D. G. (2018). Prior exposure increases perceived accuracy of fake news. *Journal of Experimental Psychology: General, 147*(12), 1865-1880. doi: http://dx.doi.org.proxy.library.kent.edu/10.1037/xge0000465.
- Pacepa, I. M., & Rychlak, R. J. (2013). Disinformation: former spy chief reveals secret strategy for undermining freedom, attacking religion and promoting terrorism. S.I.: WND Books.
- Pettigrew, T. F. (2017). Social psychological perspectives on Trump supporters, *Journal of Social and Political Psychology* (5). Retrieved August 18, 2017, from https://jspp.psychopen.eu/index.php/jspp/article/view/750/html.
- Plato. *Meno.* In: Hamilton, E., & Cairns, H. (1989). *Plato: the collected dialogues*. Princeton, NJ: Princeton University Press.
- Plato. *Republic*. In: Hamilton, E., & Cairns, H. (1989). *Plato: the collected dialogues*. Princeton, NJ: Princeton University Press.
- Plato. *Theaetetus*. In: Hamilton, E., & Cairns, H. (1989). Plato: the collected dialogues. Princeton, NJ: Princeton University Press.

- Presidential committee on information literacy: Final report (2006, July 24). American Library Association. Retrieved November 11, 2019, from http://www.ala.org/acrl/publications/whitepapers/presidential.
- Richards, D. (n.d.). Digital ethics. *Writing commons*. Retrieved November 20, 2019, from https://writingcommons.org/digital-ethics.
- Romano, A. (2011, March 22). How ignorant are Americans? *Newsweek*. Retrieved October 28, 2019, from https://www.newsweek.com/how-ignorant-are-americans-66053
- Romm, T. (2019, October 17). Zuckerberg: Standing for voice and free expression. *The Washington Post*.

 Retrieved October 25, 2019, from

 https://www.washingtonpost.com/technology/2019/10/17/zuckerberg-standing-voice-free-expression/. This is the text of Zuckerberg's speech. The video can be found at https://www.youtube.com/watch?v=hcLSU17M3Lw.
- Santora, J. (2019, June 17). The 10 essential SEO ranking factors you need to rank #1 in 2019.

 Optinmonster. Retrieved July 10, 2019, from https://optinmonster.com/seo-ranking-factors/.
- **Schenck v. United States**, 249 U.S. 47 (1919).
- Smith, T. (2019). *Foxocracy: inside the network's playbook of tribal warfare*. New York, NY: Diversion Books.
- Social media. (2019). In: *Wikipedia*. Retrieved June 30, 2019, from https://en.wikipedia.org/wiki/Social_Media.
- Swan, J. & Peattie, N. (1989). *The freedom to lie: a debate about democracy*. Jefferson, NC: McFarland & Co., Inc. Publishers. Reissued in 2012.
- Sweeny, K., Melnyk, D., Miller, W., & Shepperd, J. A. (2010). Information avoidance: Who, what, when, and why. *Review of General Psychology*, 14(4), 340-353.
- Taylor, A. (2019, April 18). Before 'fake news,' there was Soviet 'disinformation.' *The Washington Post.*Retrieved October 22, 2019, from
 https://www.washingtonpost.com/news/worldviews/wp/2016/11/26/before-fake-news-there-was-soviet-disinformation/.
- Terrasi, J. (2019, April 10). Ethics are the latest analog phenomenon getting an online reboot. *Lifewire*. Retrieved November 21, 2019, from https://www.lifewire.com/what-are-digital-ethics-4587289.
- The Washington Post's guide to manipulated video. The Washington Post. (2019, June 25). Retrieved July 23, 2019, from https://www.washingtonpost.com/graphics/2019/politics/fact-checker/manipulated-video-guide/.
- Törnberg, P. (2018). Echo chambers and viral misinformation: Modeling fake news as complex contagion. *PLoS ONE*, 13(9), 1–21. https://doi.org/10.1371/journal.pone.0203958.
- Truthiness. (2019). In: *Wikipedia*. Retrieved March 24, 2019, from https://en.wikipedia.org/wiki/Truthiness.

- Tufekci, Z. (2018, March 10). YouTube, the great radicalizer, *New York Times*. Retrieved August 29, 2019, from https://www.nytimes.com/2018/03/10/opinion/sunday/youtube-politics-radical.html.
- Tushnet, R. (2008). Power without responsibility: intermediaries and the first amendment. *Georgetown Law: Faculty working papers*. Retrieved August 12, 2019, from https://scholarship.law.georgetown.edu/fwps papers/76/.
- Vaccine myths debunked. (2019, October 24). *Public Health*. Retrieved October 28, 2019, from https://www.publichealth.org/public-awareness/understanding-vaccines/vaccine-myths-debunked/.
- Vaidhyanathan, S. (2019, October 18). Mark Zuckerberg doesn't understand free speech in the 21st century. *The Guardian*. Retrieved October 25, 2019, from https://www.theguardian.com/commentisfree/2019/oct/18/mark-zuckerberg-free-speech-21st-century.
- Von Hippel, W., & Trivers, R. (2011). The evolution and psychology of self-deception. *Behavioral and Brain Sciences*, 34, 1-16. doi:10.1017/S0140525X10001354.
- Vosoughi, S., Roy, D., & Aral, S. (2018). "The spread of true and false news online," *Science*, 09 Mar 2018, 359 (6380), 1146-1151.
- Waters, A. & Hargadon, S. (2017, Spring). "Mind the misinformation," Northwestern Campus Life.

 Retrieved August 18, 2017, from

 http://www.northwestern.edu/magazine/spring2017/campuslife/mind-the-misinformation-david-rapp-explains-appeal-of-fake-news.html.
- Wemple, E. (2019, April 11). Yes, Fox News matters. A lot. *Washington Post*. Retrieved April 14, 2019, from https://www.washingtonpost.com/opinions/2019/04/11/yes-fox-news-matters-lot/?noredirect&utm_term=.8ad57d66b52f.
- Wilson, P. (1983). *Second-hand knowledge: an inquiry into cognitive authority,* Westport, CT: Greenwood Press.
- Zur Institute. (n.d.). What is digital ethics? Retrieved November 20, 2019, from https://www.zurinstitute.com/clinical-updates/digital-ethics-101/.

Definitions of Key Terms

Cognitive Authority: 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.

Deception: in the context of fake news, the process of hiding the real intent of provided information, which is to mislead or misinform, frequently about political issues or political leaders.

Digital Ethics – that branch of ethics that applies to digital media, for example, in online contexts, how users interact with each other, both in representing themselves and controlling data about themselves in the platforms and technologies that they use and in their respect for other users and in other users' right to self-determination and privacy. Professionally, it means to be circumspect in engaging with clients or patients online, both in seeking data about them or interacting with them. Apart from these local issues, there are also global issues, such as whether Americans, their government, or their representatives, will allow, for example, computer programs to act as speech or set norms, to frame governmental policy or to regulate behavior.

Disinformation: misinformation, lies or false information supplied with the deliberate intention to mislead or misinform, most often in a political context.

Gullibility: a tendency to be easily persuaded or duped into a problematic choice or course of action or to believe assertions unsupported by facts or evidence.

Information Avoidance: a psychological, social or political behavior to ignore or avoid information for the tacit purpose of self-deception, for good (e.g., in protecting a patient from the knowledge of a mortal illness) or ill (e.g., in refusing to listen to any news sources that contradict one's biases).

Information Ethics: that branch of ethics that addresses ethical concerns about the sources, creation, organization, dissemination, transmission, packaging, use, and evaluation of information.

Information Literacy: the set of skills and competencies of information seekers to critically 'find, retrieve, evaluate, and use information suitable to their information-seeking objectives.

Logical Fallacy: an instance of deceptive or specious reasoning that make weak arguments appear to be superficially attractive.

Media Literacy: the set of critical skills and competencies for media users or creators to be able to retrieve, analyze, evaluate, generate, and interpret all forms of messages. It involves understanding how messages are constructed, how they are variously experienced, how they have embedded points of view, and what the intentions of what their creators were, whether profit, power or some other purpose.

Second-hand Knowledge: information derived from one's cognitive authorities to help one's interaction with different domains in the world, whether assessments of the best books of the year or decisions about political issues. It is not really knowledge per se in the mind of the receivers, but opinions based on the credibility, trust or reliability of those authorities. Such information can be true or false or a preference based on the quality and nature of the "knowledge" that one receives from their cognitive authority.

Self-deception: a psychological or social process whereby we hide, ignore or avoid information that runs contrary to what we want to believe about ourselves, our relationships, our environment, particularly about our political environment, or the world.

Additional Readings

- Affelt, Amy. (2019). All that's not fit to print. Bingley, UK: Emerald Publishing Limited.
- Dice, M. (2017). The true story of fake news. United States: Resistance Manifesto.
- Fallis, Don (2009). "A conceptual analysis of disinformation," in *iConference Proceedings*. Available at http://hdl.handle.net/2142/15205.
- Ireton, C. & Posetti, J. (2018). Journalism, 'fake news' & disinformation: handbook for journalism education and training. Paris, France: United Nations Educational, Scientific and Cultural Organization (UNESCO). Available at https://en.unesco.org/sites/default/files/journalism-fake-news-disinformation-print-friendly-0.pdf.
- Jamieson, Kathleen Hall. (2018). Cyberwar. Oxford, UK: Oxford University Press.
- Levitin, Daniel. (2016). *Weaponized lies: how to think critically in the post-truth era.* New York, NY: Dutton.
- Nichols, Tom. (2018). *The death of expertise: the campaign against established knowledge and why it matters.* Oxford, UK: Oxford University Press.
- Postman, Neil. (1993). *Technopoly: the surrender of culture to technology.* New York, NY: Vintage Books.
- Rieh, Soo Young (2010). "Credibility and Cognitive Authority of Information" In: M. Bates & M. N. Maack (Eds.) *Encyclopedia of Library and Information Sciences*, 3rd Ed. (pp. 1337–1344), New York: Taylor and Francis Group, LLC. Available at http://hdl.handle.net/2027.42/106416.
- Zimdars, M. & McLeod, K., eds. (2019). *Fake news: understanding media and misinformation in the digital age.* Cambridge, MA: MIT Press.