

Purdue University Diplomacy Lab

Identifying Deceit in Social Media and News Sources

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DECEPTION DEFINED

The advent of the internet allowed for information to be shared on a mass scale. Its impact has even become more apparent with the growing use of social media as a legitimate source of news, global updates, and intelligence. Thus, it has become an avenue of warfare invisible to the naked eye. Despite being deeply rooted in the ideological tensions during the Cold War and arguably even prior, the issue of online deception was brought to the attention of the American public in the form of bots, trolls, and the like during the 2016 Presidential Election.

In today's day and age, it is apparent more than ever to recognize the signs and discern deception in the media as American adversaries continue to dilute and detach the world from truth to divide public opinion and conceal information. This section will differentiate between misinformation, disinformation, and mal-information, citing examples from recent history to the modern instances we encounter today. Finally, this section will discuss the broader, strategic impacts deception can engineer.

Under the umbrella term of "deception", lies three key terms: Misinformation, Disinformation, and Mal-information. Being the broadest of the three, misinformation is loosely defined as untrue, or semi-truthful content presented as fact, regardless of intent. Disinformation, unlike misinformation, is untrue, or semi-truthful content presented as fact, but deliberately, often covertly spread to influence an audience. Finally, mal-information provides truthful information, however, it is spread out of context to cause harm to an individual or group. For instance, a social media influencer may unknowingly spread misinformation by propagating inaccurate news to their followers based on hearsay. On the other hand, an account, puppeted by an adversarial intelligence agency

generates inaccurate information on a certain event to sway public opinion.

During the Cold War, the Soviet Union's premier intelligence agency, the KGB, formulated their disinformation campaign known to the West as "Active Measures". At the height of the AIDS epidemic in the 1980s, news sources began to propagate around the world claiming that AIDS was created by the United States government. It was so effective that a 2005 Oregon State University study found that "50% of blacks believe HIV/AIDS is artificial, 15% believe HIV/AIDS was made to commit genocide on African Americans." This of course led to the creation of a conspiracy theory still believed by many to this day. The KGB also published disinformation to persuade the American public that the CIA themselves planned and carried out the assassinations of President John F. Kennedy and Dr. Martin Luther King Jr, trying to exploit racial tensions in the US to pit one racial group against another. Thus when examining suspected content, it is important to be aware of the social and political tensions of the audience that could be easily exploited.

As a result of the COVID-19 Pandemic, there was the recent allegation that 5G cellular networks cause diseases like COVID-19 or even cancer, even though there is no scientific evidence supporting the claim. "The bogus claim's fundamental premise is that 5G radio waves are detrimental to the brain and cause health problems including autism and cancer. Experts, on the other hand, have disproved this fear, noting that 5G radio waves cannot damage DNA in our cells or even enter past the skin's protective layer. Because it presents inaccurate and out-of-context information as fact, this hypothesis is an example of disinformation."

During the 2016 Presidential Elections, thousands of accounts on social media were linked to the Russian government as

trolls or bots to which they spread, and propagate false information to distribute propaganda against Democratic nominee Hillary Clinton. To foment discord among Americans, Russian actors targeted certain geographic regions, swing states, and easily-exploitable online cohorts. Also exacerbated by advertising algorithms common in social media such as Facebook, Russia's meddling in the 2016 presidential election is one of the most pertinent modern examples of a disinformation campaign. Today, Russia continues to muddy the waters using deception to mask the ongoing events in the Russo-Ukrainian war.

In the People's Republic of China, one of the Communist Party's main objectives is to suppress ideas unpopular with the status quo and influence foreign countries' and individuals' stances on Taiwanese/Hong Kong's independence. Their foreign deceit campaigns are targeted at achieving these goals. During the Hong Kong protests against China's controversial Extradition Bill, government-sponsored media used Twitter to discredit protesters and increase support for police forces.

If successful, deception can destroy the public faith in the media and trust in the government, divide the public, and rewrite history. As people are drifting to political extremes and the middle ground disappears, we are more easily exploitable to foreign agents. The famous strategist Sun Tzu once said "All warfare is based on deception." A state needs to gain an advantage militarily, politically, and ideologically. Psychological operations (PSYOPS) and Military deception (MILDEC) are concepts in strategy as ancient as statecraft itself. As history often proves, an enemy that is divided physically or socially is easier to dominate, exploit, and control.

NEWS OUTLETS' ROLE IN DECEIT

Regarding news outlets, the major distinction to highlight is the difference between "state-run media" and "privately-owned media". A key factor in deciding if a source is reliable is if the news publication has independent editorial control over what its news agency reports on. A "state run media" company does not have editorial control of stories and can be prone to propagating deceit. State-run news agencies sites such as "Russia Today" (RT) would be an example of "state-run media" due to not having independent editorial control. An important point is that just because a media company is state-funded means it is controlled by its respective government, take for example the BBC which is funded by the British government but has independent control over its editorial guidelines and so, therefore, is less prone to pushing deceitful information.

An advantage of news media outlets over individual Twitter accounts is that they are generally more reliable. State-sponsored publications can look professional to the untrained eye; however, identifying who has editorial control inside a news agency is not always clear. In many case studies, state-run media is the main source of information inside a given country such as what we can see in North Korea. This creates obvious problems with affecting what people believe inside a given country due to deceitful information going unchecked.

DECISION MAKING: BIASES & RATIONALITY

Decision-making is a learned skill and can be improved with experience. Since common decision-making procedures are more often than not irrational and biased habits, we recognize that there is a certain amount of rationale associated with decision-making. Listed below are some

explanations that go into more detail about certain biases you may unknowingly have, as well as some criteria for rational decision-making. By learning and recognizing certain habits you may have, you will be able to make better unbiased and (more likely than not) correct decisions in identifying certain kinds of information.

Rational Decision-making

Rational decision-making is making decisions following reason or logic. There are four criteria by which we judge the wisdom of choices. The first criterion is the decision maker's assets. For example, as the decision-maker, one could first question what is their current psychological state and capacities, as well as social relationships and feelings in regards to what type of decision is being made. The next criterion is any possible consequences. A decision-maker should then ask themselves if there would be any consequences if they shared this and if it was false? What about if it was true? The third criterion is probability theory. After thinking about assets and possible consequences, a decision-maker should quickly think of probabilities. Usually, this involves quite a bit of math, which can be computed with the other aspects of this policy, but usually, in our minds, we can compute simple probabilities of how things can work out. Most of the time our gut instincts can be trusted, but one can always ask themselves after reading an article what the probability of it being true is. The last criterion is adapting a decision based on possible consequences and probabilities. So, after one would have thought about the first three criteria, one

can then execute a decision based on probabilities and possible consequences. Rational decision-making may seem like a long process, but we usually run through these things in our heads fairly quickly. As mentioned, decision-making is a learned skill and can be improved. Some common irrational decision-making procedures to be aware of are staying close to your habits, conformity, and cultural bias. By sticking close to irrational decision habits a decision-maker is most likely choosing what they have before, and we can always learn new things by branching out. Just because something feels/seems familiar does not always mean it is right.

Conformity is when one chooses what you think other people may choose. One may have overheard a co-worker or someone in a higher position than oneself speak on a topic, and then when they see an article they may be more apt to choose it and believe it. Lastly, cultural bias and religious preferences come into play when you make decisions regarding them. It is perfectly fine to share articles relating to them, but when a decision-maker is choosing them specifically because they have a bias towards them, it is more likely than not that the article could be biased and spread some sort of misinformation. By being aware of irrational decision habits and practicing the criterion for rational decision making, you are in the right direction in staying away from biased and irrational decisions when determining how to classify information.

Heuristics and Biases

Biases allow us to make inferences about underlying processes (heuristics). In our situation, we are making inferences from information and classifying it properly. By

recognizing that these are commonly unknown biases we have in decision making we are then better apt to make the more rational decisions by recognizing them and stopping them before it gets too far. Below we list two common heuristics in the judgment and decision-making world, define them, and list strategies for avoiding them.

The Anchoring Bias

Often our estimates of probabilities and consequences are vague and in any ambiguous situation, we have an ‘anchor’ that serves as a starting point. These anchors can be entirely arbitrary and can come from knowledge and experience, attitudes and preferences, other people, or from inferences based on certain proximity cues. In other words, it is similar to one of the things to look out for with irrational decisions. We do not want to stick too close to something if we don’t have much experience with it. If we do, it then becomes biased and has a higher chance of being misinformation, or just incorrect. Some examples of the anchoring bias include tipping at a restaurant. According to social custom, most Americans tip 15-20%, thus you are more likely to do that when you go out. An example applied to decision-making in categorizing information is website handles. If a website has a “.gov” or “.edu” on the end of it, we are more likely to trust it because it’s closer to our anchor of trusted websites. The Anchoring Bias can be both beneficial and detrimental, and we use it with almost every decision we make. However, it is important to recognize this so we can branch out and find different information or different sites to trust. If

you are unsure, just reference the rational decision section.

The Availability Heuristic

The probability of a decision is evaluated by the ease with which relevant instances come to mind. More frequent events are easier to recall and imagine than infrequent ones. This heuristic happens when we unknowingly probe our memory for what our brain believes is the most relevant information. This usually involves retention, but more often than not, certain information can be forgotten. Frequencies of distinctive characteristics among certain object classes tend to be overestimated, and that is usually what first manifests in the decision-making process. People's estimates of the frequencies involved in causes of death are correlated with what is reported on the news, and that is separate from actual occurrence frequency. For example, death due to plane crashes, tornados, shark attacks, and other vivid and much-reported causes are overestimated, while on the other hand, having a stroke, cancer, household accidents, and lead poisoning are quite underestimated.

A single instance is a poor basis for a generalization, but it still usually occurs, and often easily. This can be applied to decision-making in the workplace and identifying misinformation in a couple of ways. You may read an article that reminds you of a single instance you heard about from a friend or family member that just blew your mind. You are keener to believe an article because it was already so available in your mind. You must be able to separate this from your job in identifying certain types of information.

Just because you had heard of it before or it reminded you of something similar, does not mean it is true.

POLITICAL BIAS IN IDENTIFYING DECEIT

Two Case Studies: Portugal vs. the United States

Portugal:

Overall, belief in fake news is associated with the political ideology of the participants, classified within the scope of the left-right, political-ideological spectrum.

According to the 2021 study, titled “The Influence of Political Ideology on Fake News Belief: The Portuguese Case”, ideologically right-wing participants have a greater tendency to accept and identify fake news compared to individuals from the left of the political spectrum regardless of whether fake news favors the left or the right.

The fact that right-wing participants believe in pro-left fake news more than left-wing individuals contradicts confirmation bias and may suggest that the level of education and the age of individuals may interfere with the degree of acceptance of fake news. The results highlighted that the low level of education and the older age group had an impact on right-wing people in believing pro-left fake news. In addition, the belief in fake news, in general, also seems to be related to lower levels of education and older people, albeit with greater weight in right-wing people. However, the low-education factor does not appear to be stronger than the high-age factor. In general, left-wing participants are less likely to believe and disseminate fake news and real news than people on the political spectrum and the right.

United States:

On the other hand, the 2020 study titled “Understanding How Readers Determine the Legitimacy of Online News Articles in the Era of Fake News” suggests that those with left leanings perform better in comparison to their right-leaning counterparts in detecting true news articles.

On a whole, those on the left perform better than those on the right in determining the credibility of a news article. Right-leaning participants achieve higher accuracy (74% vs. 63%) in identifying fake articles that are more right-wing, while left-leaning participants have higher accuracy (81% vs. 75%) in identifying fake articles that are more left-wing. The accuracy of detecting true articles is surprisingly lower than the fake article detection across all the political leaning groups.

SOCIAL MEDIA’S ROLE IN DECEIT

Social media is incredibly central to the spread of deception. As interactions with posts, regardless of the veracity of the contents, drive revenue for social media platforms. Organizations like Facebook and Twitter have been slow to respond internally to curb the spread of false information. Posts containing misleading information have begun to be harder to identify from accurate posts, making countering deception much more complicated. With the COVID-19 pandemic and other scandals centralizing the possible consequences of spreading deceit online, social media platforms have begun to utilize policies and third-party fact-checkers to reduce liability relating to deception on their platforms.

Twitter, for example, labels posts containing misleading information. If the said post is considered to be “high-severity”, which is subjective to Twitter determination, the post may be deleted or

the posting account may be locked. Additionally, they have begun to partner with the Associated Press (AP) and Reuters for fact-checking of the platform's content. Most recently, Twitter has piloted a new feature that will allow users of the site to report tweets containing deception.

Within the Metaverse, which includes the platforms Facebook, WhatsApp, and Instagram, there is a similarly fine line being walked between generating revenue by having posts stay up, and curtailing the spread of misleading content. Facebook's policies state that posts containing false information will not be taken down, but will be shown lower on users' newsfeeds to reduce economic incentives for spreading and/or formulating deceit. The Metaverse platforms also utilize third-party fact-checkers. If these fact-checkers identify posts containing false information, Instagram will label these posts accordingly and will "reduce its distribution by removing it from Explore and hashtag pages, and reducing its visibility in Feed and Stories".