Psychological Underpinnings of Post-truth in Political Beliefs

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Although both the idea and the reality of so-called fake news or disinformation campaigns long precede the debate promoted by the 2016 electoral process in the United States, the frequency and intensity of the discussion around their prevalence and influence have increased significantly since President Trump took office. For example, the report on the investigation into foreign interference in the 2016 US election by Special Counsel Robert S. Mueller III explicitly cites the activities of specific Russian individuals, but the implicit indictment for manipulating the election was placed at the door of Facebook, Twitter, and other forms of social media that facilitated these campaigns.[1]

In an era when technological innovations support increasingly cheap and easy ways to produce media that look official, the ability to separate real from artificial has become increasingly difficult. The challenge for the public becomes much more complicated when leaders and others strive for conscious manipulation of public opinion, presenting false information or discounting true information as "fake." The relative success of these strategies depends on many factors, including the education and skepticism of recipients. But they are increasingly facilitated by search engine algorithms that optimize information to be presented in order of interest, as opposed to importance or authenticity. Such algorithms may appear to operate without intent but in fact directly reflect the intent of their creators, who typically desire the most views in order to maximize profits. And yet most people believe that what

a Google search returns, or what a Facebook feed presents, reflects a reasonably representative sample of "reality," when in fact that may be far from the truth.[2]

However, the public is not the only audience susceptible to such manipulation. Leaders can be influenced by false beliefs as well, falling prey to the universal human psychological biases that can affect all people. Lack of proper information, as well as the inability to distinguish real from false information, can exert a decisive influence on decision making in general, with especially dangerous implications for crises that occur under time pressure.

As much as the public discussion has focused on so-called fake news, the underlying political and social challenge involved in separating truth from fiction and in correcting misinformation results from natural psychological biases. The following discussion examines the psychological foundations that render individuals susceptible to a post-truth media environment and that allow this environment to emerge, escalate, and persist. After clarifying some definitional terms, the sources of susceptibility follow. A discussion of exacerbating factors precedes the conclusion.

Definitional Issues

"Post-truth" as a term was first used by Steve Tesich in *The Nation* to refer to earlier political scandals, including Watergate, the Iran-Contra affair, and the First Gulf War.[3] Ralph Keyes took up the term more explicitly in *The Post-Truth Era*.[4] Post-truth can be defined as "relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief."[5] Thus, post-truth is distinct from the concept of fake news, which involves the deliberate portrayal and spread of false information, whether through traditional broadcast or print media, or via the internet or other forms of social media such as Twitter. To qualify as fake,

the story has to be generated with the conscious intent to deceive or mislead the reader in order to achieve some financial or political goal.

As a term, "post-truth" originated long before the current administration, even before Donald Trump emerged as a presidential candidate, and it will likely endure long after he leaves office. Indeed, the reality of post-truth politics constitutes a much older practice, pre-dating even the advent of modern media. Political pamphlets from the seventeenth and eighteenth centuries were rife with emotional claims and triggers. The US government even established an institution designed to create just such a post-truth environment leading up to the First World War, in an effort to garner support for a fight that was opposed by the vast majority of Americans.[6] George Creel, who led the Committee for Public Information in this era, was a master at manipulating the public to support a war that most Americans originally opposed. Indeed, post-truth communication encompasses an enduring and endemic aspect of politics and, as such, deserves to be examined independently of the current administration. Given its increasing prevalence, the post-truth world will likely endure long after Trump leaves office.

But post-truth represents a much broader phenomenon than fake news, which only comprises one element of the larger reality. The foundation for post-truth is laid when people consider opinions to be as legitimate as objective facts or when people weigh emotional factors as heavily as statistical evidence. When such tendencies hold sway among even a significant minority of the public, they can exert a strong influence on public policy debates, as well as on behavioral outcomes such as voting.

"Post-truth" was the Oxford Dictionary 2016 International Word of the Year, which is given to the word that the editors believe most defines "the ethos, mood, or preoccupation of that particular year and to have lasting potential as a word of cultural significance." According to the *Oxford Dictionary*, there was a 2,000 percent increase in its usage over the course of one year, in 2016.[7] In Britain, it was most evident in the debate surrounding the Brexit vote, so clearly this phenomenon is

not restricted to American political discourse. Indeed, it has emerged as an international political pandemic. In the United States, it has become most closely related to the style of communication characterized by Trump. As David Frum wrote in 2016, Trump and his campaign were "qualitatively different than anything before seen from a major-party nominee."[8] Chris Cillizza argued, "There is no doubt that even in the quadrennial truth-stretching that happens in presidential campaigns, Trump has set records for fabrication."[9] Yet despite what elites were writing and warning, voters saw Trump as more honest than Clinton by an 8 point margin in the November 2, 2016, ABC-Post poll. This despite an analysis by PolitiFact that showed that 129 of 169 statements made by Trump that week were false, whereas 59 of Clinton's 212 statements were false.[10] In other words, what voters believed ran exactly opposite to the facts.

Note that post-truth is distinct from two other related concepts with which it is often conflated. Post-truth is not identical to the 2006 Merriam-Webster word of the year: truthiness. This word, introduced by Stephen Colbert on the opening night of his popular satirical show *The Colbert Report* on *Comedy Central* in 2005, refers to "believing something that feels true even if it isn't supported by facts," such as beliefs held by anti-vaccination campaigners.[11] This is part of post-truth— but post-truth encompasses a much broader phenomenon because it also includes beliefs that run contrary to facts. It includes the way individuals use feelings and beliefs to inform and advocate for policies completely divorced from those emotions and thoughts without any seeming awareness of the contradiction.

Post-truth is also distinct from the concept of fake news, which involves the deliberate portrayal and spread of false information, whether through traditional broadcast or print media or via the internet or other forms of social media such as Twitter. To qualify as fake, the story has to be generated with the conscious intent to deceive or mislead the reader in order to achieve some financial or political goal. In the wake of the 2016 election, there was much discussion of how the monetization strategies of social media encouraged some content

authors, including a notorious Macedonian village manufacturing anti-Clinton propaganda, to engage in false journalism because it generated revenue. In this case, the decision to target presidential candidate Hillary Clinton was driven by the greater returns that such a partisan focus generated.[12]

Note that fake news is distinct from the existence of a satirical news show such as the aforementioned *The Colbert Report* or any of its successors. Indeed, these shows are explicitly satirical and instead use real facts in ironic contexts to make political points. In these cases, the audience is supposed to be in on the joke and realize that the presentation is intentionally designed to evoke humor as well as awareness. Real "fake news," as opposed to satirical fake news shows, consists of stories that have no basis in fact but are presented as being objective or factually accurate. Accusations of news being fake, despite being real, constitute an essential part of the post-truth world. What distinguishes the processing of real as opposed to fake news lies in the depth of information processing involved. The more engaged the recipient is and the more that person treats incoming information with appropriate interrogation, as opposed to accepting it wholesale, the less likely he is to become trapped in post-truth reality.

Several features characterize this concept of post-truth. First, it relies heavily on appeals to emotion, such as fear and anger, which may be instigated in response to one incident but later brought to bear against another wholly unrelated incident, simply because both events are united by the identity of the opponent or the emotion of the perceiver. Much of the time, this hostility revolves around political ideology. For example, Democrats may characterize Republicans as racist and then easily transfer that anger onto other aspects of Republican ideology as well. But there are myriad divisions around which it is possible for individuals to coalesce outrage, including race, gender, religion, and sexual orientation, among many other possibilities.

Second, post-truth arguments separate fact from the specific details of a policy. So, feelings about one issue, such as abortion, are used to inform debates about other issues, such as tax policy, in ways that are

unrelated to any substantive connections between the topics. In other words, when material and ideological interests around values conflict, values tend to triumph. For example, if people who are adamantly opposed to abortion attach to the Republican Party for that reason, they may simply adhere to the Republican line on taxes, even if that position runs against their material interests. This is particularly likely when it comes to evaluating topics that are abstract, remote, pallid in nature, or difficult to understand.[13] Because partisans come to trust a party around an emotionally based issue they care about, it becomes easy to transfer that trust onto other issues where their actual interest may not, in fact, be accurately reflected or represented. Third, in a post-truth world, repetition reigns. Talking points, irrespective of any given question, come to serve as a substitute for more nuanced debate or discussion. Finally, in post-truth discussions, rebuttals to one's position are ignored or dismissed, thus refusing the benefits of repetition to the opposition. In addition, the opposition itself may serve only to enhance the commitment to the original idea, in a process known as belief polarization, as a result of biased assimilation of incoming information.[14] In all these ways, facts no longer weigh as heavily as the emotional triggers that politicians can elicit. Through these mechanisms, partisans can choose to believe the world is only as they see it, on both sides.

Alternative Sources of Belief

The susceptibility that people have to accepting feelings as facts does not constitute a new phenomenon, nor is it just restricted to news items or objective issues. But before mentioning some of the structural factors that tend to exacerbate underlying psychological dynamics, it is worth noting the foundational psychological and cognitive sources of belief, which are not simply restricted to scientific facts.[15] To be clear, the current discussion does not go into depth on the first two of these foundational sources of belief mentioned below—religion and precedent—because they are not primarily psychological phenomena,

although they still merit mention. The final foundational reason, stressing the importance of emotion in informing belief, offers the basis for the remainder of this examination.

For the majority of academics and other elites, scientific truth constitutes the gold standard upon which belief is supposed to be formulated. If beliefs do not derive from this source, the burden of proof lies with the person who disputes them to prove why another standard might be substituted. However, for many people in the world, and most non-elites in the United States, facts are not assumed to provide the default standard by which beliefs are established. For most people, other sources of belief are understood to hold equal legitimacy to scientific facts. First, and most common, religion and faith provide the guiding principles by which people live their lives. From this perspective, for many people, just because they cannot see and measure God does not mean that God does not exist. Indeed, faith in the absence of facts is taken as a demonstrable sign of piety and status in many religions. This means that believing things they cannot see or prove is not alien to many people and applying such habits to the political realm would not feel unusual.

Second, history matters. Our own legal system relies on precedent or custom in making decisions about guilt and responsibility, even when modern neuroscience may cast serious doubt on such issues as free will.[16] Finally, and most critically for our purposes, many people rely on their emotions as the most readily accessible, accurate, and immediate source of truth. This argument has a long and distinguished history in psychology, with William McDougall arguing against William James's more pragmatic approach that belief itself was a form of emotion.[17] Modern empirical demonstrations of this theoretical argument use those with affective disorders to demonstrate how emotions operate on decision making in general.[18] This works precisely because affect and emotion provide sources of information about one's present hedonic state, with implications for future feelings as well, which other forms of input do not offer.[19] Emotion regulation is a difficult, complex task which the vast majority of people have a hard time mastering.[20] As a

result, people seek ways to make themselves feel better, or at least less bad, and this can easily take precedence over attempting to keep sophisticated thoughts and cognitions grounded in empirics that may be hard to assess. This privileging of fast, easy, automatic emotional processing over complex intellectual assessment is exacerbated precisely because analysis of abstract knowledge requires so much additional effort.[21]

The natural, common tendency for most people is to rely on these other factors instead of, or in addition to, facts in order to negotiate their daily lives, especially in areas that really matter to them like religious faith and family. This means that most people are used to evaluating important experiences independent of objective scientific facts and methods. As a result, approaching news and political issues from a similar perspective would seem easy and normal. Indeed, it is most effortless for people to rely on basic and universal psychological biases which serve to reduce cognitive load. Everyone has to process way too much information every day, so easy, familiar, natural processes quickly become default strategies, regardless of whether the task is political in nature or not.[22] In an effort to negotiate the tasks we all need to accomplish every day, we rely on those intuitive psychological shortcuts which prove effective and efficient most of the time. But that means we may not notice the ways that these biases make us prone to systematic error or susceptible to systematic manipulation by others.

A few of these basic biases are worth noting. By now, many people are aware of the various well-documented judgmental approaches, including prospect theory.[23] But there are others that also produce systematic biases in information processing, although they may not have been as meticulously and rigorously documented. These include well-known phenomena such as biased assimilation, whereby people subject information to different levels of scrutiny based on whether or not they are predisposed to believe it. Material that is commensurate with pre-existing beliefs is simply accepted, whereas information which diverges from a person's prior beliefs is subjected to all kinds of interrogation, meaning that people are much more accepting of information they already agree with.[24] In addition, confirmation bias can also serve to

exacerbate these deficiencies in information processing by encouraging people to seek or interpret information in ways that are consistent with their beliefs and to ignore information which presents challenges, raises questions, or refutes those inferences.[25]

Why Are People Susceptible to Such Biases?

Contrary to popular scientific opinion, and bemoaned by many policy makers, people do not naturally gravitate toward scientific truth. In fact, on average, people try to avoid it. Humans show a proclivity to accept whatever information they are exposed to wholesale, in a surprisingly gullible manner. In short, the natural human default is to accept what others tell them as true. Moreover, if claims do not contain specific aspects, it makes it less likely that people will seek to test their accuracy, while specific claims induce skepticism, making them much more likely to generate close critique.[26] In general, individuals have to work very hard to resist believing lies. This means it takes a lot of extra effort for most people to resist, rather than believe, a lie. Believing simple lies is a lot easier than evaluating complex facts.[27]

Why would this be the case? The enormous energy required by basic brain processing explains most of it. In order to discern whether something is a lie, the brain must first treat it as true. Only once we assume something is true can we try to compare a statement against all other existing knowledge, information, and feelings to determine whether it is a lie.[28] This takes an enormous amount of extra time and energy that most people do not want to spend on every statement.

This also means that several strategies can easily defeat the brain's lie-detection system, primary among them the power of repetition, which generates a sense of illusory truth.[29] Repetition simply overwhelms our cognitive resources. Moreover, when information is retracted, it exerts the opposite of the intended effect.[30] Rather than making people realize the earlier information was false, retraction instead serves to simply reinforce the earlier information through repetition. This can produce the frequent blowback or sleeper effects,

whereby people remember the idea but not the source, and thus give more credibility to the idea than it deserves, serving to simply reinforce the previous falsehood through repetition.

In addition, basic information-processing strategies such as biased assimilation and belief perseverance mean that we integrate new information into our preexisting theories and models of the world.[31] We accept supporting information without question, subject information that reinforces our beliefs to much less rigorous scrutiny than evidence that seemingly refutes it, and treat neutral information as supportive. This means that everyone tends to cherry-pick data that support their views and denigrate their opponents' positions. This is where emotion inserts a decisive influence: outrage at the supposed misrepresentation of the other side exacerbates disagreement and misunderstanding. Memory effects can exaggerate these dynamics as well. We tend to remember things more easily contingent on mood, place, and state.[32]

So how do people decide whether something "feels" true? Norbert Schwarz and colleagues have put forward a powerful and persuasive model of the factors that influence such truth-validation decisions.[33] When people seek to judge the truth, they assess five basic factors: compatibility, coherence, credibility, consensus, and support. Compatibility assesses whether the information fits with what the person already knows and feels, and also whether it is consistent with his worldview. Compatibility thus illustrates one of the ways in which social identity can influence evaluations of the truth of a message by shaping whose evaluation counts and which messages matter. In this way, compatibility helps provide an explanation for how emotion serves as a source for evaluation of the truth—people are more likely to believe things that fit with their preexisting feelings and beliefs, in a process often referred to as biased assimilation.[34] Coherence refers to whether or not the story is internally coherent and plausible. Does it make sense? Simple stories have an inherent advantage on this dimension, because stories which are easy to process are interpreted as more coherent.[35] Credibility evaluates the source of information. Consensus asks whether other people share the view under consideration. If many people believe it, it

is assumed to be more likely to be true. This mechanism shows how social media can quickly enforce and magnify false information, particularly when individuals restrict themselves to echo-chamber enclaves. And support reflects whether the claim has much evidence in its favor, although which evidence is available or considered credible can be influenced by the other forces.

According to the Schwarz et al. model, people can evaluate information in one of two ways: they can rely on relevant facts and details, which takes a lot of effort, or they can rely on how easy, or "fluent," it is to process the information.[36] Note that these two models align with the System 1 versus System 2 information-processing model put forth by Daniel Kahneman in *Thinking, Fast and Slow*.[37] Because it requires so much less effort, people find it much easier to believe things that only require easy, or System 1, processing. For example, if a person were to evaluate the dimension of consensus from an analytic standpoint, she would have to figure out, and track, who believes what and why. This would require a great deal of effort, especially if such efforts had to be repeated for every piece of information she encountered. Or she could instead rely on an intuitive assessment of whether lots of other people believe it. Indeed, Leon Festinger pointed this out in his seminal work on social comparison in noting that people assume that if most people believe something, there must be some element of truth in it in a "where there is smoke, there must be fire" kind of way.[38] Politicians who often use terms such as "lots of people are saying this" or "everyone knows that" are implicitly relying on this natural psychological tendency for humans to accept consensually agreed-upon information more readily than more contentious information. One of the benefits of presenting claims of false equivalency, as often occurs in the climate change debate, for example, results from making people more skeptical of information that appears to have achieved less consensus than might be the case in reality.

Fluency, or ease of processing, can be influenced by many factors unrelated to objective facts. Repetition, for example, can make things more familiar and thus easier to process. In this way, President Trump's

constant repetition of claims of "no collusion" in reference to Russian interference in the 2016 elections not only serves to drive home this message but also distracts from other convincing evidence, such as that which would support obstruction of justice charges.[39] Repetition of visual presentation, including things as simple as font or emoji, can similarly serve to bypass systems that might otherwise demand more interrogation. In this way, highly fluent stories can thus circumvent even the need for repetition. But the flip side means that when things are not fluent, and thus harder to process, they will inspire greater scrutiny, explaining why complex arguments may instigate greater skepticism, or System 2 processing, than easy-to-process simplistic claims. Importantly, the Schwarz et al. model illustrates why attempts to correct misinformation often backfire.[40] Because of memory effects, the repetition of the false information will only strengthen its mental association, as the source of the information is quickly forgotten but the content remains active and reinforced. People remain quite sensitive to their feelings, while relatively ignorant or insensitive to their source, especially if it lies in subtle or background areas like color, rhyme, or smell.[41]

These are, of course, not the only factors that can influence an individual's evaluation of truth claims. The ones mentioned above fall under an area often referred to as unmotivated biases, proceeding from the assumption that if people knew they were doing them, they would see their errors and want to change. But more motivated factors can influence the assessment of truth and credibility as well. Cognitive dissonance has forcefully demonstrated that people often change their beliefs to align with behavior that may be shaped by entirely irrelevant forces, particularly under conditions of high perceived choice and low objective justification.[42] Indeed, other forms of motivated reasoning can encourage individuals to espouse beliefs for various reasons, including self-interest they may be unwilling to openly acknowledge.[43]

These psychological tendencies are not by any means restricted to the less educated. Rather, they represent universal aspects of human

information processing. We all share basic biases in information gathering and we all suffer from biased reasoning and biased recollection. These dynamics evolve for good reason; cooperation and social support constitute an essential advantage for humans and indeed are much more important than knowing the objective truth. And if we believe something, it is easier to convince others and enlarge our coalition, because confidence conveys authority and conviction.[44]

Exacerbating Factors

If these underlying psychological dynamics were not enough, a couple aspects of the modern political environment make individuals even more susceptible to treating opinion and feeling as fact in a post-truth world. First, there is an overall loss of trust in institutions, including the media.[45] The public also does not trust experts, at least partly because they so often contradict each other on all kinds of issues (such as nutrition), making people likely to dismiss all experts rather than try to sort through arguments on their own.[46] In addition, denigration of experts provides an easy way for coalitions to organize against opponents, just as increasing self-selection in media diets reduces the likelihood that people will encounter information with which they disagree. In striving for balance, the mainstream news media sometimes bestow false credibility on one side of a debate that actually lacks strong scientific support, such as with climate change. For observers confused by complex contradictory arguments or turned off by negativity, it is simply easier to retreat to tribal loyalties.[47] Indeed, recent polls show that conservatives with the highest education levels are the ones who are most likely to disbelieve the existence of climate change.[48] Source identification saying information is provided by "Exxon" or "the National Science Foundation" makes little difference in perceived credibility.[49]

In addition, there is no question that there have been massive changes this century in the way we obtain information. The rise of social media in particular means that, for good or bad, there are no

longer any central gatekeepers that vet the information that reaches the mass public. User-generated information, as well as the democratization of information facilitated by the emergence of the internet as a global commons, has supported the emergence of echo chambers. The vastness of the internet encourages selective sorting, meaning people use ideas, concepts, and keywords they are already aware of in order to seek out new information. This increases the prospects that they will only encounter positions they already agree with, in an online version of self-selecting into environments, groups, or relationships based on what makes people feel comfortable. But in an online world, this also makes it less likely that people will encounter new or discordant ideas or opinions. In addition to solidifying views, this also encourages people to have an unrealistic sense of how popular their opinions are, since they increasingly encounter only consonant ideas and opinions. When news is curated by friends and personalized, it immediately and directly increases interest and relevance and also attention.[50] It also increases a sense of false consensus, since fewer people are exposed to information they disagree with. Search algorithms clearly exacerbate this tendency as well, since they are built to show a viewer what they predict the viewer wants to see based on past viewing and searching behavior, drastically reducing the incidence of oppositional messages by design.[51] As the Cambridge Analytica scandal that recently indicted Facebook clearly illustrates, social media platforms allow strategies developed by professional advertising agencies to be applied to political campaigns through processes of micro-targeting, where partisans only have to preach to the converted.[52] This allows for the introduction of election manipulation on a massive, individualized scale that has never been possible before. This does not only relate to the Russian manipulation of the American election in 2016, it also allows all kinds of corporations and other groups seeking an electoral advantage to target large numbers of individuals with divisive messaging. This alone has served to further divide an already polarized public. These processes can become even more destructive as the targeting becomes more sophisticated and individualized.

Implications for Leaders

Although most of this discussion has focused on how the mass public may be susceptible to a post-truth environment, there is no reason to believe that leaders and other elites, who share the same fundamental psychological structures as other humans, would not fall prey to systematic tendencies on the part of others, particularly foreign leaders desiring to mislead. Clearly, leaders and other elites seek to manipulate the mass public by spreading false, misleading, and biased information, depending on followers to spread such misinformation campaigns on their own through the destructive facilitative platforms provided by social media. However, leaders themselves should be attentive to information that comes from other countries as well, since much of the most important information remains largely secret, making it more difficult to verify. Indeed, it may be impossible to secure independent corroboration for much of it. National leaders clearly do not have the time or training to properly vet or analyze information appearing on social media platforms from other countries—this falls within the purview of the intelligence community. And yet credible social media information may prove critically important not only in formulating long-term policies but also in responding to urgent short-term crises.

Of course, all information is filtered through preexisting beliefs, as noted in the literature on biased assimilation. This means that any given leader will prove more inclined to believe some information over other information if it more closely conforms to that leader's worldview. Work in so-called motivated biases shows the ways that wishful thinking can influence leaders' beliefs about the world in all kinds of ways.[53] Politicians tend to be more focused on broader political considerations, including public-opinion polls and fund-raising considerations, making them more likely to pay attention to information that serves, but may also harm, their longer-term electoral or reputational interests. Even when they might not believe something, if they know that such information will play well with their constituency, they may

pretend to believe it. Religion and monogamy provide great examples of this kind of faked authenticity. Not every leader is as religious or as faithful as he pretends, but he knows that such performance is expected by a constituency whose support he needs in order to get elected and stay in power. It is easier for a politician to pretend to be what he is not in order to gain the support of his followers than to live a life of truth that may get him kicked out of office. But, again, people's willingness to toss someone out of office may depend, in part, on the recursive ability of that leader to manipulate his followers into believing him over what they see themselves.

When foreign leaders present information to each other, the stakes may be even higher, particularly in a crisis situation. Leaders may be deliberately exposed to misinformation campaigns from foreign governments, or even domestic opponents, about, say, the existence of weapons of mass destruction, for years before any formal decision must be made or any overt crisis develops. In addition, it can prove exquisitely difficult to discern another leader's motives in offering information that may or may not be true, or concessions they may or may not have any intention of implementing. And, of course, the danger here can work in both directions, encompassing both System 1 and System 2 inference errors. For example, President George W. Bush launched a war against Iraqi leader Saddam Hussein on the ostensible basis of incorrect beliefs regarding the existence of weapons of mass destruction in Iraq. That war drew the United States into a destructive, costly, and ongoing conflict in the Middle East. Here again, the elusive nature of truth is thrown into bas-relief, since many believed that Bush launched the war for other purposes and was simply seeking a justification that would convince others of the importance of his cause.

The influence of the new global information environment on leader perception and behavior is at least twofold. First, and primarily, the facilitative and largely unregulated platforms provided by social media offer a rich foundation upon which to manipulate the public by spreading rumors, inciting outrage, and perpetuating misinformation. The

sheer volume of such efforts will make it increasingly difficult for people to separate truth from lies. Second, leaders themselves may prove susceptible to disinformation campaigns perpetuated by adversaries, either because they assimilate incoming information in light of pre-existing beliefs they may want to be true or because they themselves do not possess an adequate framework for evaluating the accuracy of information they encounter. While this may be the purpose of the intelligence community, it is likely easier for leaders to believe they can properly interpret information on social media since they are more likely to be familiar with it from their personal lives than it is for these leaders to assume they can properly interpret complex statistical data. And yet they may be wrong about this. Familiarity does not necessarily engender accuracy in perception. Either way, leaders may end up relying on inaccurate information in making decisions that have global consequences.

Conclusion

Humans possess universal psychological strategies that make it hard to detect lies for a reason. Storytelling is one of the most ancient forms of communication and entertainment. It allowed for the transfer of massive amounts of information across generations in preliterate cultures for millennia. Storytelling produces strong social bonds in a community and provides cohesive explanations and expectations. Storytelling provides shared knowledge and history and a sense of collective future within a community. That is why stories can become such powerful tools of deception. In a contest between propositional logic and narrative that is rich with emotion, there is no contest in power or persuasion.[54] Narrative wins every time. Emotion provides the foundation for myth, history, ritual, and social relationships. Narrative flow makes us receptive both emotionally and behaviorally to the information contained therein. This is why it constitutes such a powerful recruiting

tool for all sorts of extremism. Visceral emotional states induce intense attentional focus because the information in stories proved crucial for generations. If someone told a story about a person in a community who died as a result of eating a particular food or fighting with a specific neighbor, those people who paid attention to those stories and avoided that food and stayed away from those neighbors would have been much more likely to survive than those who did not.

Falsifiability may provide the cornerstone of the scientific method but believability constitutes the hallmark of a good narrative.[55] When a fact is plausible, scientists still need to test it—that is the purpose of hypothesis generation and testing. But when a story is plausible, the vast majority of people will believe it is true.[56] This process of believing stories potentiates cooperation among those who might not have anything else in common except their belief.[57] The benefits offered by such cooperation far exceed the costs associated with believing lies.[58]

Inoculating against such tendencies is exceedingly challenging. Retractions and corrections may work in the short run but fail over time as memory retains content and forgets the source, strengthening the false belief. Confronting falsehoods with facts only strengthens the lie by exposing more people to it and by making it more fluent and believable through repetition and familiarity. We can certainly increase suspicion through warning prior to exposure, but instilling widespread distrust can easily backfire in other ways. The most obvious solution involves implementing more stringent regulation of social media. This could happen in a variety of ways. For example, Congress could break up Facebook or require a different business model, such as a pay-for-use model. Or, more significantly, Facebook, Twitter, and other forms of social media could be released from indemnity against libel charges. However, another strategy likely to be effective lies in striving to make the truth as fluent, simple, and easy to understand as a lie. Couching the truth in compelling, simple, emotional stories about history or family or competition could do this. Describing the Russians as an opposing sports team whom no one would want to give a list of plays to, or talking about Facebook as a mean girl in middle school, might go

far in helping people understand the endemic, nefarious nature of the internal and external enemies we confront.

Notes

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