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The New State of the News: Confronting Misinformation
in the Digital Age

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The New State of the News: Confronting Misinformation in the Digital Age

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**“The New State of the News:
Confronting Misinformation in the Digital Age”**

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Glossary of Acronyms

AI	Artificial intelligence
AMLA	Alliance for Media Literate America
AP	Advanced Placement
CCSS	Common Core Standards Initiative
CML	Center for Media Literacy
CSCC	Center for Strategic Counterterrorism Communications
CSR	Corporate social responsibility
DETER Act	Defending Elections from Threats by Establishing Redlines Act
DOL	Lambrakis Press Organization
ESSA	Every Student Succeeds Act
EU	European Union
FCC	Federal Communications Commission
GEC	Global Engagement Center
Hybrid CoE	European Center of Excellence for Countering Hybrid Threats
KGB	Committee for State Security
IREX	International Research & Exchanges Board
ISIS/ISIL	Islamic State of Iraq and al-Sham (Syria)/the Levant
MASEN	Massachusetts state senate special election
MIP	Ministry of Information Policy
NAMLE	National Association for Media Literacy Education
NATO	North Atlantic Treaty Organization
NCLBA	No Child Left Behind Act
NDAA	National Defense Authorization Act
NGO	Non-governmental organization
NSA	National Security Agency
PNAS	Proceedings of the National Academy of Science
RIG	Russian Information Group
RSF	Reporters Without Borders
UCMC	Ukraine Crisis Media Center
UK	United Kingdom
UN	United Nations
US	United States
USSR	Union of Soviet Socialist Republic

Executive Summary

Hira Waqar

The circulation of misinformation is nothing new; it has been around for centuries in the form of information manipulation, rumor-spreading, and state-sponsored propaganda. So why now, in the digital age, have we just acknowledged and grown deeply concerned about something that society has always experienced? The answer might be in the question itself: As technology advances and becomes more easily accessible, individuals are able to access unlimited raw information as well as platforms where one can express oneself with the entire world as their audience. Concurrently, the same cognitive processes one uses during information evaluation in the non-digital sphere are also adapted to help individuals contemplate material found online. This phenomenon, broadcasted to a global audience and framed and processed with political and personal motivations, will inevitably produce misinformation. When an individual consumes misinformation, the impacts are not necessarily known in their day-to-day lives, but it can have serious social consequences at the macro level. To confront the spread of misinformation, this report explores its causes and devises solutions to remedy its consequences through three perspectives:

Individual and Collective Psychology

This section provides an in-depth analysis of how trust is established in the media, and conversely, how distrust encourages individuals to seek out alternative news sources. Furthermore, it explains how institutions play a significant role in legitimizing this trust. It outlines the process of appraisal that occurs when one analyzes materials found online, and considers how personal beliefs and biases interact with collective opinion and social influence. It also addresses how individuals engage with social media “echo chambers” that serve to ideologically polarize communities both online and off. This section then reflects on and analyzes the problematic and harmful reactions of the audiences that consume misinformation. Finally, the section discusses how media literacy programs can help address the concerns highlighted in earlier chapters.

Business and Technology

This section focuses on social media, as both a technology and an industry, and explains how artificial intelligence and machine learning algorithms on platforms such as Facebook, Twitter, YouTube, and Reddit make these networks the perfect incubators of digital misinformation. Yet this section also suggests how these technologies can be part of the solution. It explores the shifts in information power among traditional news outlets, social media corporations, and “Internet entrepreneurs,” and discusses how the revenue-centered approach built by advertising has exacerbated the spread of misinformation. Finally, it argues that a corporate social responsibility model, in addition to legal, social, and financial incentives, can alter incentives encouraging businesses to reduce misinformation on their platforms.

International Case Studies

This section seeks to provide context to the problem of misinformation as not just a domestic issue, but a global one. It utilizes case studies from Ukraine, France, and the US to learn what can be done to minimize the impact of misinformation, and, in some cases, disinformation from foreign governments like Russia. In the latter case, Russia leverages technology to advance its political goals. This section examines the relationship between misinformation and democracy, particularly concerning freedom of speech, press, access to information, election integrity, and national security measures. From this section, we can learn from the successes and missed opportunities of other countries to confront, measure, and minimize the negative impacts of misinformation.

In closing, by looking at the issue of misinformation through these three lenses, this report clarifies the problem and proposes practical recommendations for members of the public and private sectors, civil society, and academia. With these recommendations in place, we hope to progress toward concrete solutions to what has become a crisis challenging our most valued institutions.

An Introduction to “Fake News” and the Post-Fact World

Madelaine VanDerHeyden

On November 15, 2017, CNN International published a comprehensive investigative report about the horrific modern day Libyan slave trade, in which African migrants trying to reach Europe are caught by smugglers and sold as laborers for a little as US \$400.¹ In response, the world was instantly outraged: Violent protests erupted in Paris, and the African Union and the United Nations Security Council both issued strong condemnations.² Articles spread online with headlines urging the public to learn more and demand action, creating strong interest in the tragedy, as well as sparking larger discussions about the humanitarian concerns of migration.³

Yet not everyone reacted with this anger: Citing a tweet from US president Donald Trump on November 25 that called CNN International a “major source of (Fake) news,” Libyan television broadcaster Libya 218 questioned the report’s authenticity, releasing an article titled “Trump Says CNN Lies... What About the ‘Slavery’ Report in Libya?” that featured a photo of Trump next to one of unidentified black men, assumed African migrants.⁴ It raised the possibility that CNN published the report to advance “a political objective that is still hidden,” while a follow-up article doubted CNN’s credibility, dismissing the story as “likely wrong.”⁵

These lines of inquiry are concerning for several reasons, particularly because concentrating on both distracted attention from the pressing issue of modern slave labor. Furthermore, CNN’s use of video footage (which was either personally produced by CNN reporters or obtained elsewhere and subsequently verified), photography, and eyewitness reports, in addition to extensive fact-checking measures, would normally constitute an adequate source of truthful information. Still, some individuals saw this extensive evidence and doubted the report’s veracity, denying its content and urging others to question it.

Unfortunately, this attempt to undermine credible journalism is not an isolated incident. Threats toward journalists and the free press have dramatically increased in recent years, with Reporters Without Borders (RSF) noting that its global indicator of press freedom reached a record high in 2017, meaning the worldwide situation for the media is at its worst since RSF

began formally indexing press freedom in 2002.⁶ Across the world, powerful actors are labelling serious, accurate reporting as false out of personal and/or political motive: A senior Myanmar official dismissed the Rohingya Muslims—who have been targeted by the Myanmar government in what the US calls ethnic cleansing—as “fake news.”⁷ Syrian president Bashar al-Assad called an Amnesty International report on horrific Syrian prison deaths a result of the “fake news era.”⁸ Russia’s Foreign Ministry stamps articles it dislikes from reputable American outlets like the *New York Times* with a large red “FAKE.”⁹

This mislabeling of real news as “fake” creates chaos in the information ecosystem, throwing off the process through which reliable information can be deemed trustworthy. What have long been valued as traditional authoritative sources of facts and authentic reporting are now being invalidated as “fake news,” drawing attention away from important issues and inciting confusion among the public. Yet this is not the sole danger: As some, be it those in power or just the general public, continue to dismiss what is real and true, they also continue—directly or indirectly—to support what is false.

Despite the increased concern about false information and “fake news” in democracies today, misinformation is not a modern phenomenon. False information, in the form of lies, rumors, and hoaxes, has always crept into conversation. Yet the rapid acceleration of

“The good news is that everything is on the Internet. The bad news is that everything is on the Internet.”

Robert Wachbroit

technological development in the digital age has taken an unavoidable social problem and exaggerated it on a massive scale. In particular, the introduction of the worldwide public internet in 1990 not only presented the

world with a overwhelmingly different means through which to spread information, but also opened the floodgates for *any* type of information—true or false, good or bad—to spread as well.¹⁰ Furthermore, the development of click-based advertising models and news-filtering algorithms on social media have made digital misinformation production a virtual goldmine.¹¹ In the words of Robert Wachbroit in 2000: “The good news is that everything is on the Internet. The bad news is that everything is on the Internet.”¹²

On one hand, societies as a whole can look at digital misinformation just as they did prior to the internet: an inevitable part of human interaction, now just online. Yet if misinformation is an unavoidable part of information-sharing, then one can wonder why some are sounding the alarm today. Furthermore, one might ask why we should be concerned at all.

In the words of Francis Fukuyama, 2016 and its “highly unusual politics” introduced the world to the “post-fact” era, wherein traditional information authorities are challenged by dubious claims of questionable merit, and those false or misleading “facts” are seen as trustworthy.¹³ The aforementioned examples of individuals and institutions confronting verifiable information support this claim, giving evidence as to how veracity is no longer the norm.

Fukuyama is correct in identifying 2016 as a turning point in which Western democracies began to acknowledge the downsides of keeping a *laissez-faire* attitude toward misinformation. Since the explosion of the “fake news” discussion in the United States after the 2016 presidential election, France, the United Kingdom, Germany, and other countries have organized various task forces and units to fight against misinformation in their own borders.¹⁴

Yet in other parts of the world, particularly where authoritarian governments strictly regulate state-sponsored media, limit or eliminate the scope of the free press, and control the internet and general information flow, misinformation does not present itself as just a sensationalist, fabricated story on Facebook written by a teenager looking to create personal advertising revenue (a common trend seen in the United States).¹⁵ Nor are audiences just realizing there is a problem or that it is a serious one.

Instead, in many cases worldwide, misinformation is created, manipulated, and used deliberately for political gain. The usual suspects behind these disinformation campaigns are strongman regimes like Russia, which has been drawing heavy criticism for its extensive propaganda campaigns in the Ukraine and Syria to cover up its own involvement in war crimes.¹⁶ Furthermore, outside actors such as human rights advocates have been detailing this demise in information freedom since the early 2000s.¹⁷ So yes, while Fukuyama correctly explained the significance of 2016 in the United States, it should be taken with a grain of salt, along with the consideration of how others have been living in a “post-fact” era for years.

In either case, however, misinformation as benign false content and disinformation as weaponized fabrications both pose considerable threats to several aspects of society in the short and long terms. As will be discussed in the following chapters, “fake news” is no farce, nor should it be trivialized as such.¹⁸ In reality, misinformation has the potential to damage the democratic process, deprive individuals of their personal and civil liberties, and continue to support oppressive regimes throughout the world. When militarized, misclassified, or misunderstood, it has the capacity to do great harm, which affirms even more the importance of research such as that in this report, which seeks to explain and develop strategies to challenge misinformation comprehensively.

“Fake news” is no farce, nor should it be trivialized as such.

To commence this report, we will first illustrate how we frame the analysis of “fake news” by giving definitions of terms used in this text in the pages following this chapter. Next, we will explain the micro-psychology behind the demand for misinformation, including public (dis)trust in the mainstream media (Chapter 2), why users choose to consume misinformation (Chapter 3), how much of that consumption is influenced by individuals’ social spheres (Chapter 4), and then examples of extreme reactions to misinformation (Chapter 5), plus an evaluation of education’s role in promoting media literacy to assuage the impact of misinformation (Chapter 6). In a comprehensive look at current business practices, technological developments, and internet use trends, we will explain the extent of misinformation in the digital age, particularly on social media, and recommend possible solutions (Chapters 7 and 8). Finally, in case studies of Ukrainian responses to Russian disinformation (Chapter 9), French reactions to Russian hacking in its 2017 election (Chapter 10), and US government policies addressing foreign interference in its domestic affairs (Chapter 11), we will address the role of government in approaching misinformation. To conclude the report we offer comprehensive recommendations for businesses, governments, civil society and academia as to what they can do to address the concern of misinformation. While current research on this topic is relatively new and thus still developing, we recognize that our suggestions are not entirely all-encompassing; however, we firmly believe that even the smallest of steps can make a larger impact than general inaction, and

as current trends suggest, the misinformation movement is not slowing down—so it’s up to all of us to catch up.

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² Nour Youssef, “Sale of Migrants as Slaves in Libya Causes Outrage in Africa and Paris,” *The New York Times*, November 19, 2017, <https://www.nytimes.com/2017/11/19/world/africa/libya-migrants-slavery.html>; “Security Council Condemns Reported Slave Trade of Migrants in Libya,” *United Nations*, December 6, 2017, <http://www.un.org/apps/news/story.asp?NewsID=58242#.WnOTNWbMyfQ>.

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⁴ Donald J. Trump, Twitter post, November 25, 2017, 5:37 PM, <https://twitter.com/realdonaldtrump/status/934551607596986368?lang=en>; D. Parvaz, “Trump’s Attacks on CNN are Being Used to Question the Network’s Reporting on Libya’s Slave Markets,” *Think Progress*, November 28, 2017, <https://thinkprogress.org/trumps-media-attacks-could-protect-libyas-slave-markets-c7539cd8fa3e/>.

⁵ D. Parvaz, “Trump’s Attacks on CNN.”

⁶ “2017 Press Freedom Index- Ever Darker World Map,” *Reporters Without Borders*, accessed February 2, 2018, <https://rsf.org/en/2017-press-freedom-index-ever-darker-world-map>.

⁷ Hannah Beech, “‘No Such Thing as Rohingya’: Myanmar Erases a History,” *The New York Times*, December 2, 2017, <https://www.nytimes.com/2017/12/02/world/asia/myanmar-rohingya-denial-history.html>; Mark Landler, “Myanmar’s Crackdown on Rohingya is Ethnic Cleansing, Tillerson Says,” *The New York Times*, November 22, 2017, <https://www.nytimes.com/2017/11/22/us/politics/tillerson-myanmar-rohingya-ethnic-cleansing.html>.

⁸ Steven Erlanger, “‘Fake News,’ Trump’s Obsession, is Now a Cudgel for Strongmen,” *The New York Times*, December 12, 2017, <https://www.nytimes.com/2017/12/12/world/europe/trump-fake-news-dictators.html>.

⁹ Neil MacFarquhar, “With Big Red Stamp, Russia Singles Out What It Calls ‘Fake’ News,” *The New York Times*, February 22, 2017, https://www.nytimes.com/2017/02/22/world/europe/russia-fake-news-media-foreign-ministry-.html?_r=0.

¹⁰ Evan Andrews, “Who Invented the Internet?” *History*, December 18, 2013, <http://www.history.com/news/ask-history/who-invented-the-internet>.

¹¹ Isa Soares, “The Fake News Machine: Inside a Town Gearing Up for 2020,” *CNN Money*, accessed February 25, 2018, <http://money.cnn.com/interactive/media/the-macedonia-story/>.

¹² Robert Wachbroit, “Reliance and Reliability: The Problem of Information on the Internet,” *Philosophy and Public Policy Quarterly* 20, no. 4 (2000): 9, <https://journals.gmu.edu/PPPQ/article/view/345/273>.

¹³ Francis Fukuyama, “The Emergence of a Post-Fact World,” *Project Syndicate*, January 12, 2017, <https://www.project-syndicate.org/onpoint/the-emergence-of-a-post-fact-world-by-francis-fukuyama-2017-01>.

¹⁴ James McAuley, “France Weighs a Law to Rein in ‘Fake News,’ Raising Fears for Freedom of Speech,” *The Washington Post*, January 10, 2018, https://www.washingtonpost.com/world/europe/france-weighs-a-law-to-rein-in-fake-news-raising-fears-for-freedom-of-speech/2018/01/10/78256962-f558-11e7-9af7-a50bc3300042_story.html?utm_term=.d4dc95227973; Ali Breland, “UK to Form Unit to Fight ‘Fake News,’ Misinformation Campaigns,” *The Hill*, January 24, 2018, <http://thehill.com/policy/technology/370607-uk-to-form-unit-to-fight-fake-news-misinformation-campaigns>; Amol Rajan, “Germany Leads Fightback Against Fake News,” *BBC News*, February 16, 2017, <http://www.bbc.com/news/entertainment-arts-38991973>;

¹⁵ Samantha Subramanian, “Inside the Macedonian Fake-News Complex,” *WIRED*, February 15, 2017, <https://www.wired.com/2017/02/veles-macedonia-fake-news/>.

¹⁶ Steven Livingston, “Disinformation Campaigns Target Tech-Enabled Citizen Journalists,” *Brookings*, March 2, 2017, <https://www.brookings.edu/blog/techtank/2017/03/02/disinformation-campaigns-target-tech-enabled-citizen-journalists>.

¹⁷ Marya Snegovaya, *Stifling the Public Sphere: Media and Civil Society in Russia* (Washington, D.C.: National Endowment for Democracy, 2015): 2, <http://www.ned.org/wp-content/uploads/2015/10/Stifling-the-Public-Sphere-Media-Civil-Society-Russia-Forum-NED.pdf>.

¹⁸ Daniel Funke, “Should We Stop Saying ‘Fake News’?,” *Poynter*, December 14, 2017, <https://www.poynter.org/news/should-we-stop-saying-fake-news>.

Defining "Fake News"

WHY "FAKE" NEWS?

WHAT TO USE INSTEAD?

FOUR TYPES OF MISINFORMATION

OTHER RELEVANT TERMS

Why "Fake News"?

While the term "fake news" was originally used in reference to fabricated and false content that attempts to be seen as real, accurate, and trustworthy, it has since evolved into a label used by a subject toward verified information that is unsympathetic to them in attempts to undermine its merit. The two different definitions make it unreliable as an academic phrase.

Furthermore, as a word, when "fake news" is read literally to mean news (reports on current events) that is fake (false or counterfeit), the legitimacy of the word "news" can indirectly support the facade of authenticity of the inaccurate content. As a result, because actual "fake news" (in the former definition) is often based on entirely or partially fabricated situations, it is contradictory to suggest it is a *fake* report on a *real* event when indeed it is a *fake* report on a *fake* event.



Defining "Fake News"

What to Use Instead?

“Misinformation” simply means false or misleading informative statements, which can generally be applied to most content seen as “fake news.” “Disinformation,” which will be used more frequently in the latter half of the report, refers to misinformation that is deliberately used to advance a political gain by swaying public opinion.

Four Types of Misinformation

According to critical media professor Melissa Zimdars, “fake news” (i.e. misinformation) can refer to four things: completely false information, unverified reports that are somewhat related to the truth, clickbait & satire.

Other Relevant Terms

- **Clickbait**
Articles with cliffhanger-type headlines that lure readers in with hints of content that is exciting, preposterous, or unbelievable. Can also describe the type of sensationalist language used in these articles.
- **Propaganda**
Historically, content that is either misleading or totally false, and usually biased, that is spread widely via mass media in efforts to promote a political agenda.
- **Rumors**
Unconfirmed informative statements.
- **Hybrid War**
A nonmilitant strategy that involves manipulating information and information sources to inflict damage on an enemy’s infrastructure.
- **Conspiracy Theories**
Complex narratives that believe secret groups cause social and political disasters to push along their own agendas.
- **Hoax**
A fabricated event designed to deceive.

Institutional Trust and its Effect on Misinformation Consumption

Asal Yunusov

How the public considers which sources of news are most credible ultimately determines overall patterns of news consumption and preferences. While the majority of Americans cite story accuracy, balance, and clarity as the most important characteristics in determining trustworthiness, media skepticism and political cynicism also play a large role in this assessment.¹ Those who lack trust in traditional news media find alternative news outlets more credible than mainstream ones, while institutional trust is negatively correlated with conspiracy theory endorsement.² These findings present troubling implications for the United States, where trust in mainstream news media has reached record lows: In 1976, 72 percent of Americans trusted mass media compared to just 32 percent today.³ Thus, public perceptions of “fake news” and media biases may be stimulating consumer demand for misinformation and conspiracy theories online, particularly among those who distrust mainstream reporting.

To better understand the implications of trust for misinformation, this chapter will examine patterns of public trust across Finland, Brazil, and Greece, where confidence in traditional media is either highest or lowest according to a 2017 global survey.⁴ For each country, I will analyze levels of trust in institutional news, the types of dominant news sources, explanations for general confidence or cynicism, and efforts by the government or press to address misinformation. From there, I will determine which institutions are most trusted, and thus can most effectively counter the spread of false stories.

Finland: Institutional Trust and Effectiveness

In Finland, 62 percent of the population trusts institutional news media, the highest rate globally.⁵ Finnish-language news is a relatively small market dominated by a few trusted companies with little competition from international brands.⁶ Though limited, news media is not politically divided and journalists adhere to common standards of professional and objective reporting.⁷ Yle, Finland’s national public broadcasting company, operates programming on four

national television channels, six radio channels, and twenty regional radio programs, making Yle News the largest and most popular source of news among Finns.⁸ Digital newspapers have also gained popularity, including *Helsingin Sanomat* and *Ilta-Sanomat*, which are owned by the politically independent Sanoma media group and whose content reaches 97 percent of all Finns weekly.⁹ Social media plays a relatively minor role in news consumption, as only 35 percent of Finns use Facebook as a source for news.¹⁰

In October 2015, Finnish president Sauli Niinistö declared that false information was a serious threat to Finland and that every citizen is tasked with “defending the country.”¹¹ Government communication officials identified roughly 20 recent cases of disinformation operations from Russia meant to undermine public trust in the European Union and discourage Finland from joining NATO.¹² False stories alleging abuse against ethnic Russians by Finnish authorities have widely circulated in Russia and the Balkans, but have failed to gain traction in Finland.¹³ The most popular alternative Finnish-language media site is the extreme right-wing, nationalist *MV-lehti*, which publishes anti-immigrant, anti-European, and pro-Russian stories.¹⁴ While its founder and chief editor, Ilja Janitskin, has denied connections to the Kremlin, he is currently under investigation by Finnish police on 46 criminal charges, including money laundering, illegal threats, slander, and aggravated incitement against an ethnic group.¹⁵

To counter these false stories, promoting news literacy and trust has been the main component of Finland’s strategic defense strategy against foreign propaganda. Finland has one of the world’s best public education systems, which has implemented media literacy programs since the early 1970s.¹⁶ In 2013, the Ministry of Education and Culture established national guidelines for *mediakasvatus* (“media education”), such as teaching public school students to utilize news and apply critical thinking skills.¹⁷ Thus, behaviors and trust toward traditional media are developed from early childhood and adolescence. Yle, the Finnish Newspaper Association, private companies, governmental agencies, ministries, and NGOs all contribute to media literacy projects, and even participate in a national Media Literacy Week to promote education.¹⁸ Policymakers have also

Finland has one of the world’s best public education systems, which has implemented media literacy programs since the 1970s.

maintained a public policy of adhering to a strictly “Finnish narrative” to deflect foreign influence.¹⁹

Finland presents an ideal model for institutional trust, wherein political and news institutions are closely connected and mutually-reinforced in terms of public confidence. The legitimacy of the state enhances the credibility of Finland’s highly regulated news media industry, while news coverage advances the dominant political narrative. These close ties create a media landscape consistent with the views of the government and general public, leaving little room for influence from alternative or non-Finnish sources.

Brazil: News Versus Politics

The country with the second highest level of public confidence in media is Brazil, as 60 percent of the population reportedly trusts news institutions. Media ownership in Brazil is concentrated among several historically powerful elites that have monopolized television, radio, print, and online news. Television takes up the largest share of the market, as more than 97 percent of households in Brazil own a TV, while less than half are connected to the internet. The 24-hour television news channel GloboNews is consumed by 60 percent of Brazilians weekly, followed by Jornal do SBT reaching 36 percent of the population and BandNews reaching 35 percent. Still, social media and news sites run by legacy brands are widely popular among urban Brazilians with mobile services, as 91 percent of all internet users in the country access online platforms via smartphones. The two most popular social networking sites, Facebook and WhatsApp, are used by 57 percent and 46 percent of their users as a source for news, respectively.²⁰

Traditional news coverage in Brazil is homogenous and heavily influenced by conservative, anti-democratic media barons. Following the coup in 1962 that installed a right-wing military dictatorship, the implementation of the Brazilian Telecommunications Code of 1962 allowed the regime to distribute nearly 60 percent of television broadcasting licenses to its political allies who continue to operate major outlets today.²¹ In 2002, the center-left-wing Workers’ Party ascended to power with overwhelming support from poor, non-white Brazilians.

However, in 2015, a corruption scandal within President Dilma Rousseff's "Petista" government nicknamed "Operation Car Wash" (*Lava Jato*) led millions to protest on the streets of Brazil.²²

During the protests, large media outlets, in alliance with opposing parties, promoted non-stop coverage of the demonstrations and investigations. To undermine their political rivals and reconcile elites' interests with those of Brazil's lower classes, they portrayed protestors as populist heroes united against leftist corruption. In doing so, the media established itself as a critical power against a widely unpopular government: Only 10 percent of Brazilians trust the government, compared to 60 percent who trust the press.²³ Yet only 30 percent of Brazilians believe the media lacks undue political influence, suggesting that objectivity isn't the main criterion for their assessments of credibility.²⁴ Rather, news in Brazil functions as a democratic check on a government that is widely perceived as corrupt. By maintaining close ties to conservative judges and prosecutors, journalists and reporters were instrumental in exposing the Car Wash scandal that implicated nearly 100 politicians and businessmen in the financial scheme and led to the first arrest of a sitting senator in 30 years and the impeachment of President Rousseff in 2016.²⁵ Professor Raymond Fisman of Boston University describes these institutions as "islands of honesty" within Brazil's disgraced political landscape, helping to restore public trust in the system by cracking down on lawmakers that have long ruled with impunity.²⁶

Ahead of the 2018 presidential elections, 92 percent of Brazilians express some concern about the presence of misinformation online.²⁷ Due to the Brazilian media's monopoly over print and digital news, "fake news" sites have targeted the country's most popular app, WhatsApp, which is used by 120 million Brazilians.²⁸ In 2016, false stories about Operation Car Wash frequently outperformed real ones on the app in terms of engagement.²⁹ In January 2018, Facebook, which owns WhatsApp, announced its collaboration with the Brazilian fact-checking organization Aos Fatos to design a chatbot to take user inquiries about news stories online and direct them to reliable sources on its own site. However, while this technology might work for Facebook, a similar fact-checking program can't be created for WhatsApp's closed platform.³⁰

Unlike Finland, government intervention is not likely to improve Brazil's misinformation crisis due to low political trust. On January 9, 2018, Brazil's federal police, backed by the Superior Electoral Court, announced the formation of a task force designed to "identify and

punish authors of ‘fake news’ for or against candidates.”³¹ The Brazilian Congress also approved a law in 2017 that would fine internet users who publish disinformation under a false identity.³² However, 72 percent of Brazilians oppose any government regulation of the internet, citing concerns over censorship and press freedoms.³³

Public opposition to state influence over media leaves Brazilian news outlets as the most promising institution for countering the spread of false stories, as familiarity of sources is important for debunking misinformation.³⁴ More than 40 journalists have joined fact-checking initiatives in Brazil such as AOs Fatos, Agencia Lupa, and Truco.³⁵ UOL, an online news portal, partnered with AOs Fatos during the 2016 municipal elections to fact-check debates in real time. Sites like UOL Confere and *O Globo*’s “E isso mesmo?” (“Is that so?”) have also debunked local rumors and false stories, including fake government documents and reports.³⁶ However, these projects are mostly small-scale and concentrated on the internet, to which many Brazilians are not connected. Therefore, if dominant news media fails to implement similar fact-checking services, the majority of consumers will not receive corrected information, especially rural Brazilians who lack computers and mobile devices.

Brazil ultimately contradicts the Finnish model, as both countries lie on either side of the political confidence spectrum yet demonstrate similarly high rates of trust in news. Whereas the credibility of media in Finland is enhanced by state regulation of public broadcasting, Brazilians

Where the state has failed, consumers turn to news to fulfill the roles of a public institution.

consider mainstream news credible precisely because it is privately owned and operated.

Where the state has failed, consumers turn to news to fulfill the roles of a public institution,

namely public education and investigations of politicians. These findings demonstrate that trust in news institutions can exist despite general cynicism in other institutions when news is perceived to be politically independent from its subjects.

Greece: A “Triangle of Corruption”

Only 23 percent of Greeks trust institutional news media, the lowest rate in Europe. In 2009, the country experienced an economic crisis that caused widespread unemployment,

poverty, and falling incomes. The crisis devastated Greece's media market, leading to decreased viewership, ad revenues, and press circulation that forced many outlets to shut down. In 2017, Greece's oldest and largest commercial broadcaster MEGA ceased original production and ran primarily reruns to repay its overwhelming debts. Skai, Alpha, and ANT1 have assumed some of MEGA's viewership, and are consumed by roughly half of all Greeks. Television, radio, and print news are used by 66 percent, 30 percent, and 26 percent of Greeks respectively, while 95 percent receive their news from various websites and social media, with no single online platform dominating.³⁷

The financial crisis exposed the endemic corruption and mismanagement of the country's private broadcasting industry. Since the 1980s, national television licenses have been issued on an ad hoc basis in the interests of banks, private owners, and successive governments.³⁸ As a result, the decline in political confidence was accompanied by a decline in trust in news: In 2009, trust in television dropped from 40.3 percent to 19.6 percent.³⁹ Meanwhile, today, just 7 percent and 5 percent believe the news is free from undue political and business influence, respectively.⁴⁰ A 2017 study by the European Broadcasting Union revealed that the majority of Greeks consider journalists and news organizations partly responsible for the financial crisis.⁴¹ Media is considered to be one side in the "triangle of corruption" between politics, banks, and the press, earning state contracts in exchange for positive political coverage.⁴² Thus, low public trust in news is related to negative assessments of the media's business and political ties since the financial crisis.

Greece is the only country in Europe whose citizens trust social media for news more than television, radio, or newspapers.⁴³ Greeks' dependence on the internet and lack of credible reporting and fact-checking resources make the public vulnerable to conspiracy theory exposure and endorsement online. A 2014 poll indicated that 68.7 percent of Greeks believed a cure for cancer had been discovered and concealed from the public, while 58.7 percent believed the US government orchestrated the 9/11 attacks.⁴⁴ Another rumor circulated alleging Greece's government had been deliberately

Greece is the only country in Europe whose citizens trust social media for news more than television, radio, or newspapers.

sabotaging financial reforms and allowing the economy to falter to generate public support for a “Grexit.”⁴⁵

Furthermore, nearly 90 percent of all Greeks worry about distinguishing real and fake content online, but 8 percent oppose any sort of state regulation of the internet.⁴⁶ Like Brazil, public confidence in government is low, at just 13 percent.⁴⁷ Yet efforts to counter misinformation have come exclusively from the government. In a bid to control Greece’s unregulated broadcasting sector, prime minister Alexis Tsipras of the leftist Syriza party made a controversial decision in 2016 to auction off four television licenses, cutting the number of existing broadcasters in half and further limiting the country’s narrow media landscape.⁴⁸ Later, the Council of State declared the auction unconstitutional in bypassing the regulatory National Council for Radio and Television, forcing the government to forfeit the €246 million raised by the auction.⁴⁹ In January 2017, new allegations of politically-motivated censorship surfaced after Tsipras’ appointment of the former Syriza parliamentary representative and ally Vassilis Mouloupoulos as administrator of the Lambrakis Press Organization (DOL), one of Greece’s most prominent media groups.⁵⁰ Tsipras justified Mouloupoulos’ appointment as an effort to save the media group, now €99 million in debt, and its 600 employees.⁵¹ However, the DOL and its news outlets have criticized Tsipras and his party since his election in 2015, to which the prime minister responded with accusations of false reporting and financial misconduct.⁵²

Greece’s political climate is similar to that of Brazil, characterized by high corruption and cynicism. According to the Brazilian model, trust in news institutions in countries with low levels of political confidence can exist when news media functions independently. Yet the breakdown of the traditional media industry and its close ties to the state leave websites and social media as the only independent sources for news content.

Analysis

Public trust in an institution is positively correlated with its performance.⁵³ In Finland, characterized by a low corruption index and relatively high political trust, media performance is assessed in terms of its ability to report objectively and educate the public.⁵⁴ By these criteria, Finns consume news media owned and regulated by the state more than independent brands, as

general confidence in the government enhances the credibility of publicly broadcasted news. Brazil and Greece are both high in institutional corruption and low in political trust, and thus the public assesses the media's performance in terms of its insulation from government corruption and mismanagement. Brazilian news media is not free from undue political or financial influence, but its criticism of the government and dominant parties presents it as a legitimate institutional check on politics. Greeks instead view the press as one side of the national "triangle of corruption," that reinforces dominant political narratives and false information rather than debunks or criticizes them. Negative assessments of the media's performance in Greece are also motivated by the widespread belief in its misconduct and role in bringing about the 2009 financial crisis.

In addition to perceptions of political connections within the media industry, consumers assess the credibility of news sources based on their content. More specifically, sources that are deemed most trustworthy present news that reinforces individuals' political views. High public confidence in both the press and government in Finland allows the media to advance a dominant "Finnish narrative" with little skepticism from viewers, while Brazilians and Greeks trust and seek out content that presents an alternative national narrative to that of their governments. Thus, levels of trust in the press can demonstrate compatibility or inconsistencies between the dominant political narrative and dominant social narrative. Much like government institutions, news media must earn its credibility by serving the public's interests and providing coverage in line with their concerns.

Recommendations

"Fake news" is a problem across all countries with varying levels of trust. However, levels of trust ultimately determine which institutions can effectively correct both misinformation and disinformation. Countries with high political confidence and high trust in the press should consider government programs, such as public media literacy education, state regulations on national broadcasting stations, and the formation of police task forces to investigate and counter disinformation threats. In countries low in political confidence but with high trust in news, media outlets and journalists must be tasked with educating the public through fact-checking, accurate

news coverage, and presence on all news platforms to limit the market share and demand for misinformation. When distrust of the press and susceptibility to misinformation is concentrated on one side of the political spectrum, like in the US, mainstream news outlets must also provide more inclusive coverage. Lastly, in countries with low political confidence and low trust in press, and with heavy public reliance on the internet for news, online platforms and distributors should use technology to minimize the spread of disinformation while promoting legitimate content on news feeds.

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The Psychology of Consuming “Fake News” and Misinformation

Anna Kessler

People understand the world and make decisions based on the information that is currently available to them. When individuals are misinformed and misled by the information at hand, they become vulnerable to forming false beliefs. Having false beliefs can lead to making the wrong decisions, which can severely harm oneself and one’s family. Whether one notices it or not, human psychology plays a key role in ingesting the information and news chosen to be consumed each day. Not only does it affect what materials one will choose to consume, but it also influences how it will be interpreted and applied in the tasks of everyday life, including how to make decisions and view the world. First, this chapter will investigate the psychology of motivated reasoning and cognitive dissonance. Understanding these concepts will help guide an explanation as to why “fake news” and misinformation were so attractive during the 2016 US election. Second, this paper will describe the psychology behind the bias of decision making to help explain why people choose to believe certain pieces of information and news and not others. Finally, the paper will investigate the social media phenomenon of “echo chambers” and then offer suggestions for the general public on how to avoid ingesting misinformation and how to most efficiently correct others’ misinformation. By understanding these core points, one can form solutions on how to break mental models and stop false and misleading information from entering into one’s cognitive base of information, for it is this information that one uses to form decisions and beliefs later on.

The Effects of Motivated Reasoning and Cognitive Dissonance

Motivated reasoning is a justification strategy humans use to reduce cognitive dissonance. With motivating reasoning, humans tend to interpret information in a way that is consistent with previous beliefs and predispositions, as to not strain their brains with two different competing ideologies.¹ To ingest information that goes against one’s experience and ideologies takes more cognitive effort than interpreting something one already knows to be true.

This state of inconsistency within thoughts and beliefs is known as cognitive dissonance. By choosing to consume news that aligns with political or personal beliefs, one uses motivated reasoning to mitigate cognitive dissonance.² These concepts can explain why “fake news” and misinformation can be so attractive even when they lean so far from the truth.

To ingest information that goes against one’s experience and ideologies takes more cognitive effort that interpreting something one already knows to be true.

A Stanford University study revealed how this motivated reasoning was influential in the news consumption surrounding the highly controversial 2016 US presidential election. The results indicated that people viewed misinformation that sounded real and came from less trustworthy websites as more legitimate than real articles from websites they knew to be authentic and trustworthy but both went against the individual’s preexisting ideology.³ For example, someone who was pro-Clinton during the election was more likely to believe a fake anti-Trump article from BuzzFeed than a real Pro-Trump article from *The Guardian*. This example shows that people are more likely to believe something to be true if they already have similar beliefs supporting the claim, all of which is to not cause the strain of cognitive dissonance.⁴

The same Stanford study defined the quantity of misinformation that people were exposed to overall during the election. In these numbers, we can see if misinformation was persuasive enough to be pivotal in one of the most politicized elections the nation has seen. The study found that the average US adult read and remembered one or several “fake news” articles. The researchers created a 1,200 person post-election survey with a database of 156 election-related news stories, posted in the three months prior to the election, that were all fact-checked to be false. It should be noted that a majority of fake news sharing and fake articles were favorably tilted toward Donald Trump: There were 115 pro-Trump fake articles shared roughly 30 million times and 42 pro-Clinton fake articles shared 7.6 million times.⁵

Furthermore, by using research done by Spenkuch and Toniatti of Northwestern University on the persuasive effects of political advertising, they found that exposing voters to one additional television campaign advertisement changes the vote share (the percentage of total votes a party has secured in an election) by about 0.02 percent.⁶ Although there is no concrete

evidence to prove that exposure to misinformation changed voting decisions or not, this research offers a strong possibility that potentially, if a piece of misinformation was as persuasive as a television advertisement, the vote share could change. However, Trump's margin of victory was higher (2 percent)⁷ than what politicized articles were able to change (0.02 percent), which allows us to conclude that misinformed articles, even those strongly in favor of Trump, did not have a big enough effect on voting to directly cause his victory.

However, there are holes in this study that, if patched, could lead to different results. They did not take into account news articles that were seen on news feeds but not actually read, articles that were read but not remembered later during the survey, or the fact that a lot of misinformation was read by people who were already predisposed to vote a certain way because of motivated reasoning.⁸ These considerations could have had a significant impact on the results had they been included.

De-Biasing Social Media Chambers

Bias is something everyone carries and proves successful in explaining why misinformation can be so believable when one fails to check if it's from a reliable source. A study conducted by Lewandowsky et al. inspects the approach to misinformation at the individual level and what cognitive mechanisms make people so resistant to correcting misinformation. By understanding this logic, one can search for solutions with a more comprehensive approach. The study analyzes why people will believe certain things but not others, and offers techniques to aid in reducing bias and the negative impacts of misinformation.⁹

The researchers concluded that misinformation that is compatible with previous knowledge or bias, like an article on a Facebook page that supports the user's political party, increases the likelihood that the misleading information will be accepted as true, and decreases the chances that it can be successfully corrected later. People also tend to migrate toward information they already agree with because information that is not consistent with one's beliefs actually elicits negative feelings in the body. These negative feelings cause the information to be processed less thoroughly and fluently than information consistent with one's beliefs. Lewandowsky et al. found that in general, fluently processed information (i.e. consistent with

one's beliefs) feels more familiar, or "right," and is more likely to be accepted as true. In contrast, the lack of fluidity in processing information inconsistent with one's beliefs evokes the response that something doesn't "feel right" and cues closer inspection of the message, which takes extra time and effort.¹⁰

As a result, it is found that by challenging an individual's beliefs or correcting misinformation believed to be true, one does not necessarily change that person's beliefs. Attempts to correct someone's disbeliefs can actually backfire and further entrench people in

Any repetition of misinformation, even in an attempt to debunk it, can be harmful because of the familiarity and fluency biases in cognitive processing.

their initial beliefs, as the repetition of the incorrect fact, even when trying to disprove it, makes the information more familiar, and familiarity creates more trust. However, even when an individual believes the correction,

the misinformation may remain in the cognitive base, affecting later beliefs and decisions. The main point is that any repetition of misinformation, even in an attempt to debunk it, can be harmful because of the familiarity and fluency biases in cognitive processing: The more an individual hears a story or piece of information, regardless if it is true or false, the more familiar it becomes and thus the more likely the individual will believe it to be true.¹¹

Another cognitive speed-bump humans face while trying to distinguish truth from myth concerns their evaluations of the veracity of a source. Comparable to "innocent until proven guilty" standard in the legal system, the brain acts similarly when consuming information. One will believe all information received to be true unless concrete evidence suggests otherwise. Lewandowsky's report calls this a "guarantee of relevance," which suggests listeners always give sources the benefit of the doubt when it comes to trustworthiness.¹² Not believing something to be true is obviously possible, however it does require a high amount of attention and uncertainty, or a strong distrust at the time the message is received. To go beyond this nature of automatic acceptance requires the listener to have both the additional motivation to challenge the idea, as well as the cognitive resource, such as a stress-free and focused state of mind. Additionally, in the case that the topic is not important to the individual, or one is distracted by

other things on the mind at the time, misinformation is more likely to slip in as the brain is not prepared to provide the means needed to doubt the information.¹³

The Dangers of Social Media Echo Chambers

Social media has created personalized communities of this knowledge-consistent information and bias that people are exposed to daily. When people surround themselves on social media with friends holding the same ideas and beliefs, they are only reinforcing their own biases and creating what is known as an “echo chamber.”¹⁴ Facebook, for example, will suggest groups or events based on what users’ friends’ like and share. Users may be asked to join a page of like-minded individuals within the same political party, sharing only information consistent with their beliefs. At first glance, this doesn’t sound too harmful, but a recent study from the Proceedings of the National Academy of Sciences of the United States (PNAS) proves otherwise.¹⁵ PNAS researchers found that “active Facebook users were more likely to interact with a limited number of news sources,” and even more active communities were also more self-segregated and polarized.¹⁶ Polarization can be harmful to a society, according to David Blankenhorn, who states that,

The rise of American economic and social inequality in recent decades has corresponded with the rise of political polarization, and some current scholarship suggests that there are at least some reasons to believe that the two trends are causally related and mutually reinforcing. For example, political partisanship today is increasingly correlated with income levels, resulting in a steadily widening rich-poor divide between the two main parties. The contest between Republicans and Democrats is in some respects increasingly one between the economic interests of higher-income Americans and those of lower-income Americans.¹⁷

The internet has democratized access to information and removed the barriers of active information sharing, but it also comes with some unintended consequences. Instead of being exposed to new ideas and eye-opening viewpoints, many people now interact and consume information on social media within a virtually gated community created by the networks and their invisible corporate algorithms that group people together. Social media creates echo chambers of information, making it more difficult to find common ground with political

opponents. When political misinformation is reinforced within these gated communities, it leads to further unnecessary polarization.¹⁸

Still, polarization continues to increase, even with the knowledge of the harms it presents. The Pew Research Center indicates that the United States is at its most polarized point, as the

Democrats and Republicans More Ideologically Divided than in the Past
Distribution of Democrats and Republicans on a 10-item scale of political values

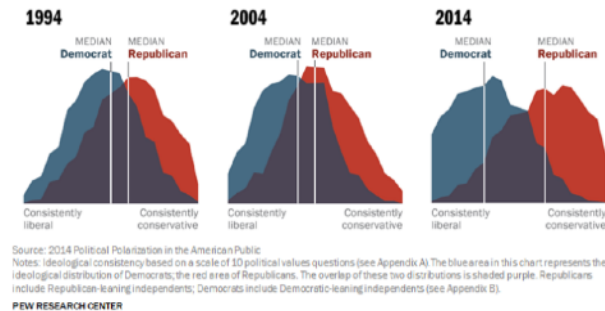


Figure 1: Political polarization among the American public has increased significantly since 1994, as Republican and Democrat ideologies have become more separated with time.

but from “shared group-level narratives.”²² This means that we rely less than we think on personal, rational evaluation, and more on social processes and the surrounding group environment, which social media has designed to be at our fingertips 24/7.²³

Personal Suggestions To Avoid Misinformation

With knowledge of the psychology behind why people believe certain information to be true or not true, the suggestions offered by Lewandowsky et al. aimed specifically at the average citizen to help individuals avoid being misled by misinformation and correct those with misinformed beliefs are sensible and effective. The first problem is that despite knowing something to be false, people will still rely on misinformation if other, more accurate information is not available. A solution and good practice to counter this pattern is to provide an alternative account or a new explanation to fill the space the misinformation once occupied. By repeating the new explanation (without repeating the myth), the retraction is strengthened. The second problem is the familiarity backfire effect of when further repeating the myth actually reinforces the myth to be true. To prevent this unintentional reinforcement, one can avoid repetition of the

gap between Republican and Democrat ideologies has steadily increased since 1994.¹⁹ (See Figure 2.)²⁰

American legal scholar and author Cass Sunstein explained how echo chambers are dangerous to a democracy because they reduce the “unplanned, unanticipated encounters central to democracy itself.”²¹

Research shows that much of our decision-making comes not from individual rationality

incorrect information and support the correct facts instead, as well as offer a disclaimer upfront that misleading information is coming if one does need to restate the myth. The third problem faced is the overkill backfire effect when simple myths are more cognitively attractive than complicated corrections. A simple and brief rebuttal to the myth will prove more successful in debunking misinformation, and having higher skepticism in the source of information will reduce its negative impacts. The final problem the brain faces is the worldview backfire effect. In this phenomenon, any evidence threatening one's existing world views strengthens their initial beliefs. To avoid this backfiring, one can frame the evidence in a worldview-affirming manner. To do this one must recognize the values of the audience and provide self-affirmation of the audience's personal values which will increase receptivity to evidence.²⁴

By understanding the brain's cognitive processes that occur in information evaluation, one is more prepared to avoid the harmful effects of misguided decision making caused by the consumption of misinformation. By training the brain to notice the backfiring, familiarity, and worldview effects, and by becoming conscious of biased behaviors in online echo chambers, misinformation will be less successful in seeping into the brain's knowledge base. With honest, unbiased, and factual information, citizens are more equipped to make the best decisions for their personal well-being and participate in democracy to the greatest extent.

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⁴ Hunt Allcott and Matthew Gentzkow, "Social Media and Fake News in the 2016 Election," *Journal of Economic Perspectives* 31, no. 2 (Spring 2017): 220-21, <https://doi.org/10.1257/jep.31.2.211>.

⁵ Allcott and Gentzkow, "Social Media and Fake News in the 2016 Election," 212 and 227.

⁶ Allcott and Gentzkow, "Social Media and Fake News in the 2016 Election," 232.

⁷ Tim Meko, Denise Lu, and Lazaro Gamio, "How Trump Won the Presidency With Razor-Thin Margins in Swing States," *The Washington Post*, November 11, 2016, <https://www.washingtonpost.com/graphics/politics/2016-election/swing-state-margins/>.

⁸ Allcott and Gentzkow, "Social Media and Fake News in the 2016 Election," 232.

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¹⁰ Lewandowsky et al., "Misinformation and Its Correction," 112.

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- ¹¹ Lewandowsky et al., "Misinformation and Its Correction," 113, 115, and 120.
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Individual Psychological Reactions to Misinformation in the Community

Akira Uchiyama

While earlier chapters have addressed the personal cognitive process that occurs during consumption of misinformation and how an individual comes to evaluate such information based on their prior beliefs and knowledge, how an individual processes such information in a social setting is comparatively different. In some cases, the individual thought process around deciding whether to accept or reject misinformation reflects a strong desire to maintain the opinion of the collective, which can be practiced via intentionally ignoring what the individual knows to be true or false, or simply choosing whatever the community believes if the individual is unsure.¹ More than 1.1 billion people use Facebook daily, during which individuals communicate with numerous amounts of people the instant they wish to express themselves, yet due to the echo chamber phenomenon mentioned in earlier chapters, individuals do not receive a wide variety of information in return.² This chapter will address an individual's response to misinformation when they consider the opinions of those around them; in doing so, I will explain the role of the collective truthfulness rating and its impact on the likelihood of an individual to share a misinformed story, the effects of echo chambers on the spread of misinformation, and selective exposure biases, rumor sharing impacts, to show that more often than not, an individual will adopt the collective opinion and therefore will potentially contribute to the dissemination of misinformation.

Staying Informed and the Collective Truthfulness Rating

Social media today offers users a communal platform used by thousands of others where they can share their opinions on a massive scale. However, when those opinions or ideas are misinformed or totally fabricated, it can become a significant issue in democratic contexts, such as elections, wherein individuals are expected to make informed decisions. As democratic institutions place a great emphasis on staying updated, a misinformed public can, among other negative outcomes, elect representatives who misrepresent their voters.³ Though the advent of

the internet has helped promote democratic values by allowing greater freedom of information, it also presents the possibility of undermining the very institutions it seeks to support due to the potential proliferation of misinformation. Though it can be argued “fake news” and misinformation have existed long before the internet was developed, the levels to which the average individual can consume (mis)information has exponentially grown.⁴

To comprehensively understand this issue, social media platforms, like Facebook and Twitter, must be viewed solely as the collective opinions of all their users. To understand how an individual may decide if an article is true or false depends entirely upon their personal collective truthfulness rating, which social scientists Li and Sakamoto define as an internal appraisal system that measures the community consensus on whether certain pieces of information are true.⁵ The result of the rating strictly depends upon the individual’s social setting, because while one social group may hold a strong collective opinion (such as, for example, advocating for stricter gun control) another group may not, and the individual’s reaction can change depending on the group around them.

The collective truthfulness rating has a large impact on a user’s decision-making process. Li and Sakamoto’s study found that individuals have a strong tendency to adopt collective truthfulness when deciding upon their own decisions. This logic can be applied specifically to how users interact on social media and is an important aspect of understanding why misinformation continues to spread. The study tested a subject’s willingness to follow collective opinion by presenting subjects with a total of 120 statements each round; 40 of which were accurate, 40 of which were dubious, and 40 of which were false. The researchers differentiated each round of tests by once informing participants of the collective opinion regarding statement veracity, once without informing them, and another informing the subjects of the inverse collective opinion which was opposite of the original one. The two researchers found that while past research consensus had indicated that people often go against collective opinion, “people [followed] the collective truthfulness rating for true, false, and debatable statements.” The researchers also indicated that people both pursued the real collective opinion and the invented, opposite collective opinion, even though the latter most likely went against what they were

expecting or wanting to hear.⁶ Simply put, individuals who participated in this test stuck with the collective opinion, even if they knew it to be false or didn't agree with it.

Additionally, the collective truthfulness rating can shed light on the question of a user's willingness to share an article, be it true or false. Users who were informed of the frequency of which the collective shared a post were likely to follow the same sharing patterns; for example, if the ratings were high, the users were inclined to share, while if the ratings were low, the individuals were less inclined.⁷ Furthermore, the subjects, when exposed to

This pattern further supports the argument that despite being informed otherwise about a certain topic, the general public will often agree with the collective opinion.

sharing patterns for the inverse collective opinion, were also more likely to go along with the collective and share the statements if the collective did so, despite individually doubting the information.⁸ This pattern further supports the argument that despite being informed otherwise about a certain topic, the general public will often agree with the collective opinion. In terms of social media use, these results mean that despite knowing something to be false, individuals can still be influenced to agree with and reshare misinformed content. Considering how misinformation can spread most rapidly on social media, this evidence provides one answer as to why individuals (knowingly or unknowingly) participate in the spread of misinformation.

Echo Chambers, Social Endorsements, and Challenging Opinions (or the Lack Thereof)

With the widespread availability of social media and the increasing number of people who use them, the internet allows every individual online to connect with one another, and the open exchange of information that occurs allows collective truthfulness values to reflect true facts. One would think that opposing arguments to a misinformed belief held by a minority group should overwhelmingly help prove the belief wrong, but social media echo chambers actually make this harder in many social circles. Individuals can choose their news sources on social media, effectively hiding those that do not interest them and promoting those that do. Though selective exposure to congenial sources is no new phenomenon, individuals now have the option

to select their news sources and filter out other ones at much greater levels. Unfortunately, individuals exhibit preferential treatment to news that supports their own personal beliefs as “Prospective opinion reinforcement is associated with a strongly significant increase in the likelihood of looking at a story.”⁹ Though people will not always avoid opinion-challenging information, the likelihood that an individual will select such information is lower than the likelihood for selecting opinion-reinforcing information. However, social endorsements (such as recommendations from friends and trusted sources) can significantly reduce this selective exposure, as “the mere presence of endorsements [reduces] partisan selectivity to levels indistinguishable from chance.”¹⁰ Unfortunately, this trend means that an individual is not likely to actively oppose opinion-challenging information if it has been recommended by a trusted source; as a result, their unwillingness to actively seek out correct information results in an increased likelihood for the individual to consume misinformation.

News Sources and Selective Exposure to Information

Research conducted by Clayton et al. examined an individual’s reception to news provided by certain networks, like CNN and Fox News, and evaluated a subject’s reception. The research found that when subjects were given their selection of materials, respondents who were given false information were much more likely to report that information was accurate compared to participants who were given true information.¹¹ What the scientific community had believed in terms of favorability for congenial sources was proven to be false: The study found the subjects would not show strong favoritism toward the source of their information, regardless of where it came from on the political spectrum, though they would prefer to read information from

Those who consumed large amounts of misinformation were found to be limited to only 10 percent of the general population.

congenial sources. The public perception of media outlets as “fake news” remains low, falsifying concerns of polarization in the American public. Statistically, conservatives were more like to read misinformation during

the 2016 presidential election, but both sides were exposed to “fake news,” with 40 percent of conservatives visiting at least one false story online, compared to 15 percent of liberals.¹²

However, those who consumed large amounts of misinformation were found to be limited to only 10 percent of the general population.¹³ Thus, it is clear that the common belief that widespread “fake news” affecting all individuals is not entirely true, and though the number of people exposed to misinformation may increase in the future, current trends show it does not reach the American population too greatly. Thus, Clayton et al. proved the perceived polarization has had no effect on one’s perception of misinformation.

Social groups focused on political discussions have been found to express stronger tunnel vision: Political discussion groups online have significantly less potential for deliberation when in comparison to groups whose primary purpose is not political.¹⁴ While politically motivated social groups and chat rooms only constitute approximately 10 percent of online discussion groups, political topics still make up 35 to 53 percent of conversations in other, specifically non-political online groups.¹⁵ Thus, political discussion appears to happen almost everywhere regardless of setting. It is in these irrelevant discussion groups where political deliberation happen more readily, as Wojcieszak and Mutz found that irrelevant forums (the leisure group) experience considerably more diverse discussions, as these groups bring together a wider variety of individuals in contrast to the homogenic political and religious groups.¹⁶ Due to the significantly decreased variety in political opinion within these political and religious online discussion groups, controversial opinions are rarely brought up and the selective exposure bias is greater, allowing rumors or misinformation to easily spread due to the lack of challenging information. The tunnel vision experienced in political discussion forums online contributes to the misinformation issue, as individuals who receive their news from these forums do not challenge their information enough to obtain an informed opinion.

Furthermore, as individuals are more inclined to agree with false information than truthful information if the collective does so first, motivating individuals to cross-reference newfound information with verifiable information is a significant challenge. Considering how the average user only spends a mere 37 seconds reading an article online,¹⁷ it is clear that individuals do not spend enough time double-checking or researching well enough into a topic to confirm the truthfulness of a story. Individuals are less inclined to double-check or verify information from trusted sources, such as friends or news outlets, and thus feel such news has

already been verified, helping promote the spreading of potential “fake news.” This pattern can snowball, particularly in the case of false rumors, which research shows can circulate for 14 hours on average before being resolved (as opposed to true rumors, which generally only spread for 2 hours before being confirmed or debunked),¹⁸ reflecting that not only do false rumors gain more traction more quickly, but they also do not face the same verification response from audiences. One reason to explain the increased popularity of information like false rumors is motivation to build and maintain social ties.¹⁹ When credible sources like news outlets or friends share (mis)information, the perceived legitimacy of the material increases and thus can raise the sharing likelihood of such information.²⁰ Such rumor sharing patterns often “attract attention, evoke emotion, incite involvement ... [and are] motivated by three broad psychological motivations—fact-finding, relationship enhancement, and self-enhancement,” all of which improve the social ties between the shared individuals.²¹ Misinformation spreads easily in this context, accelerated by social motivations and aggravated by echo chambers, both of which influence individuals to share false material.

Conclusion

While this chapter mainly addresses how external social influences can impact an individual’s personal evaluation of misinformation, in terms of addressing the “fake news” problem, the fact that people, despite knowing some information is false, purposefully believe it in order to appeal to community values is of greatest concern. The decision to adopt the collective judgment despite knowing it to be false allows misinformation to spread more easily, echo chambers to deepen and become more ingrained, and selective exposure to information to narrow even further, all resulting in further acceptance of misinformation. When an individual knowingly spreads misinformation, the “fake news” problem becomes more complex and difficult to resolve.

Social media echo chambers have resulted in greater ignorance, readers of particular partisan news networks do not actively seek out opinion-challenging information and thus fail to fact check their own news. False rumors on social media can take significantly longer to resolve than accurate ones, resulting in the continued spread of “fake news”, sometimes being shared

continuously despite evidence proving its falsehood. Rumor cascades will often share unconfirmed information within social media networks, whether true or false, and though a desire to strengthen or maintain social bonds remains the leading objective of spreading of rumors, it can result in the continued sharing of misinformation. All of this evidence confirms that whether or not people share misinformation knowingly or unknowingly, social influences have a huge impact on the spread of misinformation, which makes it an important aspect when addressing the “fake news” problem.

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⁶ Li and Sakamoto, "Social Impacts in Social Media," 282.

⁷ Li and Sakamoto, "Social Impacts in Social Media," 283.

⁸ Li and Sakamoto, "Social Impacts in Social Media," 284.

⁹ R. Kelly Garrett, "Echo Chambers Online?: Politically Motivated Selective Exposure Among Internet News Users," *Journal of Computer-Mediated Communication* 14, no. 2, (2009): 275, <https://doi.org/10.1111/j.1083-6101.2009.01440.x>.

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¹² Andrew Guess, Brendan Nyhan, and Jason Reifler, "Selective Exposure to Misinformation: Evidence from the Consumption of Fake News during the 2016 U.S. Presidential Campaign" (Unpublished paper, European Research Council, 2018): 4-5, <http://www.dartmouth.edu/~nyhan/fake-news-2016.pdf>.

¹³ Guess, Nyhan, and Reifler, "Selective Exposure to Misinformation," 6.

¹⁴ Magdalena E. Wojcieszak, Diana C. Mutz, "Online Groups and Political Discourse: Do Online Discussion Spaces Facilitate Exposure to Political Disagreement?," *Journal of Communication* 59, no. 1 (2009): 40, <https://doi.org/10.1111/j.1460-2466.2008.01403.x>.

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¹⁶ Wojcieszak and Mutz, "Online Groups and Political Discourse," 47.

¹⁷ Benjy Boxer, "Data From 10,000 Articles Prove that Content Marketing Really Does Work," *Forbes*, April 19, 2016 <https://www.forbes.com/sites/benjaminboxer/2016/04/19/data-from-10000-articles-shows-that-content-marketing-really-does-work/2/#>.

¹⁸ Zubiaga et al., "Analysing How People Orient to and Spread Rumours in Social Media by Looking at Conversation Threads," *PloS One*. 11, no. 3 (2016): 14, <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150989>.

¹⁹ Friggeri et al., “Rumor Cascades,” (Paper prepared for the Eighth International AAAI Conference on Weblogs and Social Media, Ann Arbor, MI, June 2-4, 2014): 101 and 109, <https://www.aaai.org/ocs/index.php/ICWSM/ICWSM14/paper/viewFile/8122/8110>.

²⁰ Li and Sakamoto, “Social Impacts in Social Media,” 279.

²¹ Nicholas DiFonzo and Prashant Bordia, *Rumor Psychology: Social and Organizational Approaches* (Washington, D.C.: American Psychological Association, 2007): Page 10, <http://dx.doi.org/10.1037/11503-000>.

What Happens When Individuals Take Misinformation Too Far?

Natalia Fandel

Previous chapters in this report have addressed the reasons why people reject mainstream news sources and believe misinformation. This chapter brings us closer to understanding the direct impact of false information on US politics by extending my colleagues' work to evaluate what drives people to act on news beyond the digital world. Of particular public interest are high-profile cases of direct, violent conflict, like Pizzagate, and skewed election results, such as those of the 2010 Massachusetts state senate special election.¹ This research has three primary intersecting aims and contributions. First, this chapter seeks to determine to what extent, if any, the “fake news” problem directly impacts the political process and culture of the US. In doing so, it will also contribute to understanding the scope of the “fake news” problem by distinguishing between abstract threats to democracy and possible concrete changes that could be applied to political proceedings, including the democratic process. Finally, the following will suggest a framework from which to approach further scholarly research around misinformation.

The problem of “fake news” is presumed to be its stifling effect on universal, informed participation in public debate, which is a key facet of democracy.² In order to address the toxicity of fabricated information, it is necessary to further examine its scope of impact beyond an abstract philosophy. It is crucial to find the distinguishing factors between misinformation consumers who respond by typing furiously at home and those who respond by getting out their ballots, picket signs, or even guns. Case studies of political upsets beyond the digital world due to misinformation, including the 2010 Massachusetts state senate special election, Pizzagate, and the 2016 US presidential election will be used as a sample set to determine the point at which misinformation directly affects the non-digital world.³ This moment is a key tipping point to consider as scholars continue to define the scope of the impact of misinformation because it addresses the constantly evolving relationship between the digital and non-digital lives of voters and media consumers. The cases below exemplify the the potential for misinformation to breed mistrust in a variety of spheres and to excite civic and social action, which all make a collective

impact. Beyond articulating why and how people act on misinformation, this report will also consider US laws around freedom of speech, internet use, and media distribution to evaluate whether any negative tangible impacts of misinformation can be quelled by enforcing current regulations, or if political and cultural shifts are necessary to solve the problem.⁴

#MASEN: 2010 Massachusetts State Senate Special Election

Metaxas and Mustafaraj expect “that all candidates and political parties will use social media sites to create enthusiasm in their troops, raise funds, and influence our perception of candidates (or our perception of their popularity),”⁵ but what happens when the source of these messages is actually a number of bots spreading misinformation about the contenders? Just days before the 2010 Massachusetts state senate special election, popularized on Twitter with #MASEN, nine new Twitter accounts created by an Iowa Republican group spammed voters by way of a “Twitter bomb”—a tactic used to raise attention to a message or cause in which a few (often fake) accounts target “similarly-minded” users with fake replies—with a focused message that reached at least 60,000 other profiles.⁶ The Twitter bomb overtook Google search results as well because real-time results were prioritized by most major search engines at the time.⁷ Ultimately, the Republican candidate won what was widely regarded as a secured Democratic seat by a fair margin of 5 percent.⁸ Twitter bombs were amplified in conservative echo chambers on social media,⁹ and may have excited pro-Republican and anti-Democratic voters to get out to the polls. While the tweets didn’t necessarily shift opinions, it is clear they fortified confirmation bias by appealing to existing beliefs and encouraged action by connecting with readers’ emotions and values (for full description of this phenomenon, see Chapter 3).

Research has been conducted regarding the digital reach of misinformation currents like the one that prompted MASEN.¹⁰ The next step is to discern the tangible effects of this single senate election on its district’s residents or its potential impact on the greater political system. Future research should examine the short- and long-term consequences of that election on political, economic, and social factors on local and national levels. What sort of domino effect did the election have on party politics, voter turnout, bill passage, job creation, or economic activity locally or more broadly? Did MASEN cause a dip in social capital, discouraging trust in

the media, government, or even neighbors? There are no other high-profile claims of election upsets due to the presence of misinformation, but is it safe to say that the Massachusetts state senate special election was an anomaly? MASEN was only widely publicized because it was a major party upset, and it is possible that there are more close calls yet to be discovered.

#Pizzagate: Comet Ping Pong Incident

A chilling reminder that individuals in the same system operate under vastly different pretenses, “The story of Pizzagate is about what is fake and what is real.”¹¹ It is a case of a most extreme reaction to misinformation that brings to light a host of more common reactions that would not likely be acknowledged alone. “Pizzagate” refers to a series of events that began with a rogue Twitter post on October 30, 2016, claiming that US government officials, including then-presidential candidate Hillary Rodham Clinton, were operating an international child sex trafficking ring out of a Washington, D.C., pizza restaurant called Comet Ping Pong.¹² The claim was amplified through a variety of online channels, still without evidence, incurring hundreds of thousands of views that contributed incrementally to a façade of legitimacy, before culminating in yet another residential gun scare.¹³

Along the way, Comet Ping Pong’s owners and neighbors were subjected to harassment and threats through countless phone calls and visits to their businesses by impassioned and uncertified citizen detectives who took it upon themselves to protect the children in this unproven sex trafficking ring. On November 22, 2016, the Pizzagate subreddit was removed by Reddit over concerns for restaurant patrons’ and neighbors’ privacy. These events all culminated on December 4, when a North Carolina father and former firefighter named Edgar Welch walked in the front door to Comet Ping Pong, fired his assault rifle, and fruitlessly searched the building for incriminating evidence before surrendering to police.¹⁴

While Welch’s involvement in Pizzagate is alarming and frightening, perhaps a more compelling element of the story is the sheer number of instances of harassment that Comet Ping Pong’s owners and neighbors experienced in such a short time. At the situation’s peak, the restaurant received 150 calls each day.¹⁵ Welch’s reaction is a dramatic statistical outlier—he was one of hundreds of thousands who came across the false story about Comet Ping Pong, yet the

only one to take such drastic action in response. In order to move away from abstract conceptualization of the problem of “fake news,” future research should look into the economic impact of these calls and customers. Did the defamation of signs place an undue cost on the owners of local businesses? Did on-site disturbances during business hours make customers reluctant to return?¹⁶ Short- and long-term psychosocial impacts of these events should also be considered. Were the owners’ children bullied in school? Were the families compelled to change their lifestyles or business practices? How did Pizzagate alter individuals’ trust in each other, media platforms, or law enforcement? Political and legal concerns should be addressed as well. Comet Ping Pong’s owners likely could have pursued a defamation lawsuit,¹⁷ but who would they have sued if the original post came from a fake Twitter account? Avenues for seeking legal justice in the US in response to misinformation can be daunting in their expense and uncertainty. Because rule of law is integral to the stability of democracy, it is imperative to ensure that the US legal system is able to adapt to the evolving information environment.

2016 US Presidential Election

While rumors of skewed results from the 2016 US presidential election circulate intermittently, academic research has remained largely silent on the topic until very recently. This year, a project uniting academics with intergovernmental organization funders discovered that throughout the 2016 presidential election cycle, misinformation websites, which “overwhelmingly” favored then-candidate Donald Trump, were largely consumed by pro-Trump voters.¹⁸ The most conservative 10 percent of US media consumers made up more than half of the visits to misinformation websites between October 7 and November 14, 2016, most of which reinforced their own political views. Guess, Nyhan, and Reifler argue that this subset of media users made up their own echo chamber.¹⁹ As such, it is unlikely that “fake news” directly changed the election outcome.²⁰

While disinformation likely didn’t directly impact the election results, it may have inflicted other consequences throughout the election cycle, as factual confusion can breed fear and mistrust, fomenting social and political divides. This again begs a larger question: What is the problem with “fake news”? McGonagle asserts that misinformation prohibits universal public

debate, but Guess, Nyhan, and Reifler found that media consumers with different political preferences rarely even see the same false content.²¹ If citizens on opposite sides of the political spectrum subscribe to vastly different news outlets and media sharing platforms, regardless of their consumption of false information, then how big of a role does misinformation really play in stifling debate? Furthermore, University of Washington researchers examining controversial public tweets between December 31, 2015, and October 5, 2016, found that targeted trolling accounts further manipulated existing political divides.²² Practically, this interference presents as antagonistic public diplomacy when unidentified, or unidentifiable, global actors attempt to influence the US democratic process and environment. To this end, academic and other task forces would do well to capture misinformation data during election cycles for scholars to use as needs arise. The principal goal should be to isolate political, economic, social, and other threats of misinformation.

Implications

What sets these cases apart from others that have elicited a public response, or even non-digital action? So far, this work has uncovered more questions than answers. Not only is it still unclear what drives individuals to act on misinformation, it is unclear what the real implications of their actions are. MASEN was a brilliantly desperate manipulation of voters' values and beliefs to excite civic engagement. Pizzagate was a chilling reminder of how passionate individual action can present consequently as collective action. The 2016 US presidential election controversy appears to be a sensationalized rumor that gestures to voters' deep mistrust in the democratic process. Given their varied implications, research must be broadened to ask what drives individuals to act on media beyond the digital world. Perhaps false information is not the driving cause of chaos sparked by media reports, but it clearly plays a key role in aggravating tensions based on social and political differences. All three cases discussed above correlate misinformation consumption, and the social reactions it drives, with the erosion of social capital. For this reason precisely, it is necessary to identify the perceived negative consequences of misinformation.

It is difficult to discern given the information presented above if these cases are typical or unusual responses to misinformation. All three allude to a caricature of a media consumer siloed by a multiverse of echo chambers, producing such a high degree of distrust in institutions (government, media, and law enforcement) and individuals that they are compelled to take matters into their own hands. To come closer to a conclusion, further research must be conducted. In response to this analysis, two main streams of research and data collection are

All three allude to a character of a media consumer siloed by a multiverse of echo chambers, producing such a high degree of distrust in institutions and individuals that they are compelled to take matters into their own hands.

recommended. First, a comprehensive survey of crimes and police reports relating back to misinformation should be conducted to find collective action consequences. Digging deeper, interviews with victims and perpetrators alike should evaluate their perception of social capital in the

communities they identify with, and the nation as a whole, compared to a national baseline and a baseline of victims and perpetrators of similar crimes in which misinformation was not involved. This will help identify motivations for acting on “fake news,” and potential legal and regulatory responses. Additionally, real-time data collection and analysis of media leading up to local elections should be operated regularly to see if, and through what channels, the spread of misinformation impacts election outcomes. Similarly, representatives whose victories were aided by fabricated stories should be followed throughout their term(s) to build data regarding the indirect, and long-term effects of misinformation.

Under current US law, it is difficult to apply any legal ramifications on the basis of misinformation unless it causes “substantial harm.”²³ Caution due in part to the First Amendment means that legislation is unlikely to change and new policies around “fake news” are unlikely to be implemented.²⁴ If existing legislation does little to address the needs of the digital age in which individuals without media badges can disseminate information on a large scale at will, then other solutions, such as those outlined above, will be necessary.

Conclusion

There is a significant dearth of research about non-digital action incited by misinformation. As such, a baseline from which to measure the impact of any solutions to the problem of “fake news” has yet to be established. The most urgent call for scholarly work must be to examine the scope of the impact of misinformation, not only abstractly in terms of its threat to democracy, but also concretely in considering the psychological, legal, and physical ramifications to voters and citizens. While the above cases are domestic incidents, further chapters will show that these concerns apply to global citizens, including those in non- or semi-democratic nations.

Anecdotal evidence of political, social, and economic rifts is present in each of the three case studies. All of the misinformation campaigns laid out above produced negative consequences for US voters and citizens, and should not be ignored. Their status as sensationalized vignettes should not automatically categorize them as anomalies, for how many one-off harmful incidents need to accumulate before malignantly fabricated stories are considered a threat? The impacts of false information come in all forms, so scholarly work must continue to define the consequential problems. All the while, researchers must continue asking whether issues arising around “fake news” are mislabeled symptoms of larger problems, perhaps tied to a devolution or major shift of social capital. A critically barren stretch of literature surrounds the relationship between the digital and non-digital lives of online media consumers. Future studies must account for long-term psychological research on the effects of misinformation consumption, but also for the rapidly changing nature of media use.

How many one-off harmful incidents need to accumulate before malignantly fabricated stories are considered a threat?

Current research finds that “fake news” leaves little to no discernible, short-term, tangible impacts on US politics. However, people are still up in arms, both figuratively and literally. This phenomenon suggests that false information production and consumption are symptoms of a larger issue, perhaps signaling the erosion of social capital. Emphasis should be placed on defining the problem of misinformation in order to look at the root causes of its production and

consumption. Additionally, we need to address the long-term psychosocial implications over immediately curbing misinformation's current reach. When work is done to eliminate the demand for misinformation and its negative consequences, then repeated bandage fixes for “fake news” and other subsequent problems won't be necessary.

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² Tarlach McGonagle, "'Fake News': False Fears or Real Concerns?," *Netherlands Quarterly of Human Rights* 35, no. 4 (2017): 204, doi:10.1177/0924051917738685.

³ Akpan, "The Very Real Consequences of Fake News Stories"; Andrew Guess, Brendan Nyhan, and Jason Reifler, "Selective Exposure to Misinformation: Evidence from the consumption of fake news during the 2016 U.S. presidential campaign" (Unpublished paper, European Research Council, 2018), <http://www.dartmouth.edu/~nyhan/fake-news-2016.pdf>.

⁴ Sheldon Burshtein, "The True Story on Fake News," *Intellectual Property Journal* 29, no. 3 (2017): 397-446, https://alliance-primo.hosted.exlibrisgroup.com/primo-explore/fulldisplay?docid=TN_proquest1934912990&context=PC&vid=UW&search_scope=all&tab=default_tab&lang=en_US..

⁵ Panagiotis T. Metaxas and Eni Mustafaraj, "Social Media and the Elections," *Science* 338, no. 6106 (October 2012): 472-73, doi:10.1126/science.1230456.

⁶ Metaxas and Mustafaraj, "Social Media and the Elections," 472; Panagiotis T. Metaxas and Eni Mustafaraj, "From Obscurity to Prominence in Minutes: Political Speech and Real-Time Search," (paper prepared for the Web Science Conference 2010, Raleigh, NC, April 26-27, 2010): 5, <http://cs.wellesley.edu/~pmetaxas/Metaxas-Obscurity-to-prominence.pdf>.

⁷ Metaxas and Mustafaraj, "Social Media and the Elections," 6.

⁸ Michael Cooper, "G.O.P. Senate Victory Stuns Democrats," *The New York Times*, January 19, 2010, <http://www.nytimes.com/2010/01/20/us/politics/20election.html>.

⁹ Metaxas and Mustafaraj, "From Obscurity to Prominence in Minutes," 1-2.

¹⁰ Metaxas and Mustafaraj, "Social Media and the Elections"; Leo G. Stewart, Ahmer Arif, and Kate Starbird, "Examining Trolls and Polarization with a Retweet Network," *Proceedings of WSDM Workshop on Misinformation and Misbehavior Mining on the Web (MIS2)* (2018), <https://faculty.washington.edu/kstarbi/examining-trolls-polarization.pdf>.

¹¹ Marc Fisher, John Woodrow Cox, and Peter Hermann, "Pizzagate: From Rumor, to Hashtag, to Gunfire," *The Washington Post*, December 6, 2016, https://www.washingtonpost.com/local/pizzagate-from-rumor-to-hashtag-to-gunfire-in-dc/2016/12/06/4c7def50-bbd4-11e6-94ac-3d324840106c_story.html?utm_term=.6740d15afcf.

¹² Fisher, Cox, and Hermann, "Pizzagate: From Rumor, to Hashtag, to Gunfire."

¹³ It is important to note here that one of the online channels can be traced back to a ring of Macedonian teenagers circling disinformation, which has larger implications in this report and in the greater scheme of the scope of the “fake news” problem.; Craig Silverman, "How The Bizarre Conspiracy Theory Behind ‘Pizzagate’ Was Spread," *BuzzFeed*, last updated December 5, 2016, https://www.buzzfeed.com/craigsilverman/fever-swamp-election?utm_term=.rq5W1V624K#.peVyjaqo8p.

¹⁴ Fisher, Cox, and Hermann, "Pizzagate: From Rumor, to Hashtag, to Gunfire."

¹⁵ Fisher, Cox, and Hermann, "Pizzagate: From Rumor, to Hashtag, to Gunfire."

¹⁶ Fisher, Cox, and Hermann, "Pizzagate: From Rumor, to Hashtag, to Gunfire."

¹⁷ Burshtein, "The True Story on Fake News," 413.

¹⁸ Guess, Nyhan, and Reifler, "Selective Exposure to Misinformation," 11.

¹⁹ Guess, Nyhan, and Reifler, "Selective Exposure to Misinformation," 11.

²⁰ Guess, Nyhan, and Reifler, "Selective Exposure to Misinformation," 12.

²¹ McGonagle, "'Fake News': False Fears or Real Concerns?," 204; Guess, Nyhan, and Reifler, "Selective Exposure to Misinformation," 5.

²² Stewart, Arif, and Starbird, "Examining Trolls and Polarization with a Retweet Network."

²³ Burshtein, "The True Story on Fake News," 418.

²⁴ Burshtein, "The True Story on Fake News," 411.

Education's Role in Solving the Contemporary "Fake News" Problem

Alison Takahashi

In discussing the prevalence of misinformation, a lack of critical thinking capacity stemming from insufficient education has been exposed as society comes to better understand what misinformation is and how it can be addressed. As people begin to question the influence of "fake news" on important decisions and divisions in their own countries, oftentimes others are blamed for their ability (or lack thereof) to discern what is true and what is not. Was this not a skill that everyone intrinsically learned on their own?

The purpose of this chapter is to discuss the issue of misinformation dissemination as it applies specifically to the US and explore how education should be utilized and emphasized to better equip the general public in approaching false news. First, this paper will highlight the specific skills media literacy provides for people and argue the importance of including critical thinking and media literacy in education because of its psychological long-term effects in comprehension and consumption of factually accurate media. Then, I will analyze and critique the current US education system and identify inconsistencies and flaws within the decentralized system. Lastly, this paper will broaden its context to address how education systems on the international level have combated misinformation, as well as identify possible remedies that education-based approaches would provide for this contemporary issue. As a whole, this chapter will argue that placing a higher emphasis on education and challenging beliefs both at a young age and during the transition to adulthood will reduce the impact that "fake news" currently holds.

Why Media Literacy is Successful and Important in Addressing Misinformation

Communities plagued by misperceptions and lacking adequate media literacy education programs are more vulnerable to being deceived by misinformation. The current education system and requirements put in place by organizations and state and local governments are not to blame necessarily for the spread of misinformation, but failing to expose students to different

ways of thinking in primary schooling does leave them unprepared to face false news. A society that is better educated as a whole, but particularly in media literacy, would in turn be much better equipped to provide relief to the current problem of “fake news.”

As cited in Renee Hobbs’ plan of action for media literacy, the benefits media literacy provides are as follows: “Digital and media literacy education activates independent thinking, authentic dialogue, collaboration, reflection, creativity, and social responsibility as applied to the practices of responding to, creating and sharing messages.”¹ These specific skills are critical for citizens participating in civic discords and conversations in the current politically polarized environment. According to a report on misperceptions by the European Research Council, “People with higher levels of knowledge may be better able to resist incongruent information and maintain alignment between their factual beliefs and predispositions.”² Thus, media literacy is powerful because it can help strengthen motivated reasoning and accuracy motivations, or the desire to find out if something is actually true, regardless of if it aligns with personal political beliefs.³ These intrinsically established motivations developed through media literacy also encourages individuals to counter-argue incongruent information, which steps beyond simply being “literate” by pushing readers to critically engage with content rather than just read it.⁴ An example of this is seen in a study by John Cook at the European Research Council, which found that individuals could reduce the impact of misinformation via information inoculation:

The misinformation had a sizable effect only if it was not combined with an inoculation ... In other words, an inoculation was successful in neutralizing the misinformation across all levels of free-market support, and removed the polarizing influence of the misinformation, with the inoculation group showing less polarization than even the control group.⁵

Inoculation is a method used in developing media literacy that exposes people to refuted versions of news prior to encountering actual misinformation, creating an effect similar to that of a vaccine, which allows the body to create antibodies to prevent the contraction of future viruses.⁶ This research shows the dynamic impact media literacy education can have in strengthening people’s critical analysis skills.

Media literacy can also help individuals determine the veracity of information before them, which directly relates to the concerns of this report. In another study, Khane and Bowyer conducted various experiments with different groups of people categorized by their political knowledge, political views, and experience with media literacy. Researchers found statistically significant results between students who were able to distinguish between inaccurate news and real news based on if they had previous experiences taking media literacy classes:

Participants who reported little media literacy education do not seem to make distinctions between the posts based on the type of argument employed. If anything they are more likely to rate the (objectively false) post with misinformation as accurate (0.6) than the evidence-based post (0.48). Conversely, those individuals who reported having the most media literacy learning experiences appear to make a clear distinction.⁷ (See Figure 3.8)

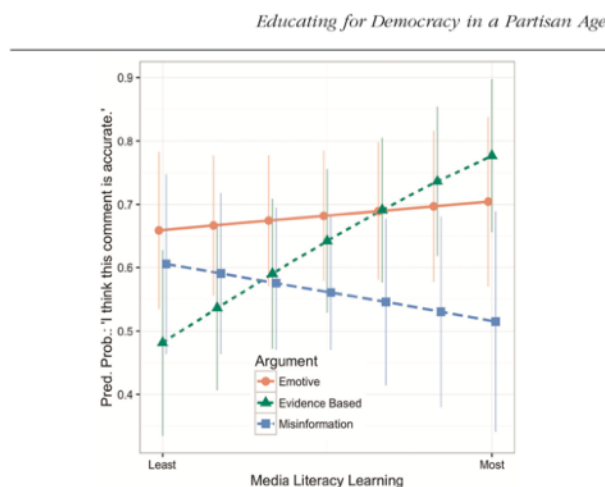


Figure 2: The impact of media literacy: Accuracy ratings showed clear differences between evidence-based material and misinformation amongst those with high levels of media literacy education (blue line).

curriculum, outcomes in the realm of cognition and affect are more feasible and likely to occur, and they are immensely important in their own right. Overall, if a student develops the ability to "deconstruct"—break down the components of and closely analyze—media messages, practices, processes, institutions, or influence, then media literacy has been effective and that student is becoming a "critical thinker" about the media.⁹

The results of this study support the idea that media literacy directly incentivizes people to search for and expose inaccuracies when evaluating information via television, newspapers, or on the internet. There are some dissenting opinions, but the potential benefits of media literacy education in the long run are undisputed. Specifically, Erica Scharrer argues that,

We can expect repeated media-literacy efforts to contribute to a diminished likelihood of negative effects from the media. But in the short term, and in response to participation in as few as only one media-literacy unit in the

Clearly, people benefit from media literacy because it empowers them to be analytical thinkers, effective communicators and active citizens who have the capacity to identify misinformation.

Deconstruction and Evaluation of Current Education Standards in the US

Because the US has a layered education system, wherein each state can outline their own set of standards based on what it believes is most important for its students to learn, there are inconsistencies in the emphasis of topics across the nation. The differences between federal, state, and local requirements highlight the importance of having independent organizations involved in curriculum development and supplementation to generate grassroots support for things like media literacy which do not have specific policies. The US has around a dozen organizations that were founded to promote and support initiatives for media literacy. Two of the largest, most notable groups, with more than 400 members each, are the Alliance for a Media Literate America (AMLA), founded in 2001, and the Center for Media Literacy (CML), founded in 1989.¹⁰ These organizations advocate for teaching media literacy skills through keynotes, workshops, providing lesson plans, and to develop more media literate students and adults in schools, afterschool programs, libraries, and the community. AMLA hosts both a comprehensive guide called the Center for Media Literacy MediaLit Kit, as well as best practices for implementation and the research behind their approach.¹¹ Overall, while there is a general consensus, across the nation in both independent parties and the US government, that integrating critical thinking and heightened analytical skills is important, the government is lacking in educational media literacy policy.

Presently, the US upholds standards of media literacy and critical thinking at the national level as one of the components of the Common Core Standards Initiative, which can be supplemented by other state and local level requirements. (Lower-level requirements can be adapted to fit local needs as long as they are meeting the national provisions.) Common Core is an educational initiative first implemented in 2009 whose purpose is to establish a consistent educational standard across all 50 states to ensure preparedness for 2- and 4-year colleges, as well as the workforce.¹² Naturally, one of the main components, the English and Arts Standards, cover general practices like “reading, writing, and speaking grounded in evidence from texts,

both literary and informational,” and “regular practice with complex texts and their academic language”¹³; however, the Common Core English and Arts standards fail to specifically emphasize the importance of interacting with technology and media. Instead, “research and

Common Core standards currently do not have methods in place to specifically strengthen media literacy.

media skills are blended into the Standards as a whole ... rather than treated in a separate section.”¹⁴ Therefore, while said skills are very beneficial, Common Core standards currently do not have methods or

requirements in place to specifically strengthen media literacy. By never explicitly stating the importance of recognizing accurate information within different media mediums through analysis, critical thinking, and reading comprehension, Common Core standards ultimately place students at a risk of both engaging and believing in misinformation in the long run.

Another key flaw in the Common Core Standards Initiative is that there is a lack of consistency on a national level because Common Core was never officially mandated by the government. Instead, it was rather highly encouraged and supported by former president Barack Obama and his administration. Thus, currently only 45 states officially approved and applied the new standards, with some resisting before finally agreeing to implementation, and five states (Alaska, Minnesota, Nebraska, Texas, and Virginia) choosing to forgo adopting Common Core entirely.¹⁵

In the states that did not adopt Common Core, media literacy is included differently for each state. For example, in Texas, media education is included generally and sporadically in the state education code (last adopted in 2007) under the English Literature Proficiency Standards: Students should learn to “listen to and derive meaning from a variety of media such as audio tape, video, DVD, and CD ROM to build and reinforce concept and language attainment” and “respond orally to information presented in a wide variety of print, electronic, audio, and visual media to build and reinforce concept and language attainment.”¹⁶ The standards that the state of Texas upholds for students is arguably not effective because of the reference to outdated types of media the students are expected to engage with (younger generations do not consume news or information through audio tapes, DVDs, or CDs anymore). As a result, media consumption

trends among younger generations of students pose another complex question regarding media literacy. As established in Chapter 2, the public always has some level of both distrust and disinterest in traditional media and various news sources, but this is especially true with younger generations. Generation “Z,” a subgroup of the population categorized as anyone born after the mid-1990s, does not consume the media in the same way as the adult population, or even millennials (the age group preceding Generation Z) for that matter. One 2011 study shows that many students do not care for the news or the way it is reported per se, but they *are* interested in the implications of certain news:

The public always has some level of both trust and distrust in traditional media, but this especially true with younger generations.

Teens indicated that the implications of the news were what they most wanted to understand ... Mainstream news media’s ‘objectivity’ was not something the teens found useful. George, 16, spoke sarcastically about the concept of objectivity, implying that reporters used it to appear unbiased while glossing over wrongdoings.¹⁷

Therefore, while Texas’ educational measures are comparable to current national standards, they also expose the fact that the federal education system is not consistent or all-encompassing when it comes to teaching students across state lines how to interact with and interpret controversial or polarizing media. Other states are coming to this conclusion as well: In as early as 2013, less than five years after Common Core launched, there were reports that many states were considering changing the standards or opting out completely: “Of the 46 states that originally adopted [Common Core], eight states have officially repealed or withdrawn, 21 states have finalized revisions or have revision processes underway, and 17 states have not yet made any changes.”¹⁸ This trend has only gotten worse as the current Trump administration has continued to voice opposition of the initiative.¹⁹ Thus, clearly not everyone in the US is receiving the same level of education in all subjects, particularly media literacy, a realization that delegitimizes national initiatives like Common Core.

Part of the problem facing educators and policy makers who wish to implement media literacy curriculum is that young people interact with media much differently. Despite this being

the case, it is still important to begin teaching students media literacy at the primary level, seeing how important and effective media literacy education is for young students. Research shows that the timing of media literacy education is essential: Developing methods of media literacy at a young age can better equip the population for determining what is fake and what is real later on. As Niemi and Junn write, “The value of civics and education although it accrues across a student’s lifetime, appear to be greatest when the student is in high school or even college.”²⁰ In an increasingly interconnected and media centric world, it is imperative that the government begin to adapt to include media literacy education in national standards, as it is clear that the current state of the education system is not sufficient.

Recommendations for the Future

Although the term “fake news” has been popularized more recently due to its use by president Trump and the last US presidential election, the problem has existed long before on an international level in the form of propaganda, conspiracy theories, and disinformation. Other international actors have implemented media literacy policies of their own that have seen great success in the past. Now this paper will identify possible and actionable solutions in addressing the issue within the context of the US: The three types of recommendations are centered around a change at the national level, with individual actors, and lastly at the institutional level.

Firstly, the United States must be clearer about what both legislators and educators want critical thinking about media to be in English and Literature standards nationwide. Currently there is very little consistency; with only a few cases of college professors and high school teachers who have devoted time in developing specific courses and teaching material. For the most part, media literacy is just a minor component of English and language arts standards that states can choose to implement with any method or even ignore if they wish. The US government should work on a nationwide initiative or government mandated program that effectively addresses media literacy in English classes and creates a new English Language standard for people acquiring an education in the US. This goal could be accomplished through policy. Chapter 2 discusses Finland, which holds the highest level in the world of overall trust in the news and media with 62 percent of public support.²¹ The Nordic country has a well-funded,

structured set of policies that delineates all that is expected of each citizen with regards to media literacy. Finns also use the term “media skills” instead of media literacy, because their standards go beyond simply being able to literally read the news or media.²² Countries like Finland could be used as examples to inspire new initiatives within the education sector to combat misinformation both domestically in the US and in other developed countries. This goal can also be accomplished in a similar fashion to the 2015 Every Student Succeeds Act (ESSA), which is in the beginning stages of replacing the 2001 No Child Left Behind Act (NCLBA). Both acts were created with the intention of ensuring that all students in the American education system would make it through primary schooling (Common Core is still in existence, and the NCLBA and ESSA were meant to supplement). While these acts were more focused on the very basic requirements that all students should meet, the method of implementation shows that nationwide initiatives and plans can be utilized and should be effectively implemented and enforced by the government.

Not all of the burden should be or can be placed on the government in creating new policy alone, however; some responsibility can be focused on librarians and teachers, who are already “moving beyond a focus on providing access to resources toward providing more interactive information services and information education.”²³ By implementing and utilizing free teaching resources by the AMLA and CML, individual actors can also make an impact in developing advanced media literacy in as many students as possible throughout their primary school education.

Lastly, misinformation can be further combatted at the institutional level. Some college institutions have taken it upon themselves to implement specific programs, which build upon the foundations that students have learned previously in their respective primary education. For example, the Common Language Project at the University of Washington provides media literacy and production workshops in order to facilitate extensive analysis and allow students to “more deeply understand how news values are culturally inflected.”²⁴ Jessica Partnow, the professor who runs these programs, explained that students “respond to the idea that our media are sanitizing our information for us” and emphasizes the importance of “wrestling with every side of the issue” when processing information in the media.²⁵ The US should provide more funding

for college institutions to host programs like this one, through each individual state. Continuing media literacy engagement at the collegiate level and sustaining comprehensive, challenging levels of critical thinking throughout allow for the intrinsic effects of media literacy to shine. With media literacy courses, students were seen to be more likely to call out false-evidence based news, thus, whether it be through government programs, individual actors or collegiate institutions, each of these options can productively effect change.

While this chapter focuses on the flaws of the current US education system, and goes in depth about the long-term benefits media literacy can provide, there are many different avenues of solutions to consider. As a whole, initiatives need to be pushed throughout the general public and sustained, practiced and re-challenged over time via government mandated programs at the national level, individual actors, and institutions. Each of these different sub-levels need to be advocating for upgraded media literacy policies, as not just one alone can attain certain results or completely eradicate the problem. The hope is that through furthering critical thinking skills and investing in educational initiatives, these investments will enable people to counter what our natural human psychology may make us vulnerable to in the long run.

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³ Flynn, Nyhan, and Reifler, “The Nature and Origins of Misperceptions,” 21.

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⁵ John Cook, Stephan Lewandowsky, and Ulrich K. H. Ecker, “Neutralizing Misinformation Through Inoculation: Exposing Misleading Argumentation Techniques Reduces Their Influence,” *PLoS ONE* 12, no. 5 (2017): 21-22, <https://doi.org/10.1371/journal.pone.0175799>.

⁶ Cook, Lewandowsky, and Ecker, “Neutralizing Misinformation Through Inoculation,” 21-22.

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- ¹⁶ State of Texas Department of Education, “Chapter 74. Curriculum Requirements: Subchapter A. Required Curriculum” in Texas Education Code, last adopted 2007, <http://ritter.tea.state.tx.us/rules/tac/chapter074/ch074a.html#74.4>.
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SECTION II

BUSINESS & TECHNOLOGY

IN THIS SECTION

- **Social Media & Information Technology: The Impacts of and Solutions to Misinformation** - Social media's role in spreading misinformation & how to use AI to confront it.
 - **Business and “Fake News”:** Combatting the Profit Incentive of Misinformation - How to disincentivize and limit the spread of misinformation through CSR.
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Social Media and Information Technology: The Impacts of and Solutions to Misinformation

Quinn Hainline and Adil Wahab

The digital age has seen a shift in many of the vital aspects of society due to the way information is spread. The initial shift from the industrial age to the digital revolution marked the increasing importance of a knowledge-based society created by the digital industry dictating the supply of products and services. As the world transitioned toward a more omniscient society, the demand for information skyrocketed. With this transition in society began the never-ending investment in information technology to meet the demand for efficiently spreading an increasing amount of information. The persistent mass investment in technology has continued to impact many aspects of our daily lives, as sharing opinions and spreading various kinds of news online has become quite easy. Now, we are at a point in human history where we have so much accessible information available that we often struggle to distinguish between what is factual versus falsified. The role of technology, particularly that of social media, in the dissemination of misinformation has been a double-edged sword, as it has amplified the amount of misinformation available, while also proving that it can be used to solve part of the issue at hand. This chapter will acknowledge why social media is of particular concern to both diagnosing and remedying the “fake news” epidemic, first through examining how technology has changed in recent years, what makes social media the perfect incubator for misinformation, why companies should move to address the problem, and finally how social media companies and other businesses involved can act to address the problem of digital misinformation.

The Current State of Tech

The past two decades have seen the rise of billion-dollar tech companies that have played a crucial part in establishing social media platforms where ordinary citizens can conveniently share many types of information with varying agendas. The nature of social media, which allows users to easily share various forms of information and only follow accounts of their choice, exposes individuals to the chance of only accessing information biased towards their own views.

The exposure to biased information ultimately leads to users sharing news without carefully checking the legitimacy of the source due to the initial bias established by the user (for a full explanation of this trend, see Chapters 3 and 4). The platforms' algorithms also only show users sources that are linked to what they have liked before. Consequently, keeping a user channeled to receiving information based on their data of preferences creates "echo chambers" where users only read and share information that they were already inclined to believe. On a psychological level, echo chambers build confirmation bias in users, which can create false world views that persist even if the "truths" are disproved by external sources (see Chapters 2 and 3).¹ With these algorithms in mind, it is clear why social networks make it a lot easier for information to go viral.

In recent years, big tech companies have been constantly looking for ways to improve the e-commerce experience through the integration of social media platforms and online marketing. This incorporation has played a pivotal role in the enduring growth of companies like Facebook, Amazon, and Google. The incentive to generate ad revenue has hampered the quality of information circulating around social media. Due to the mass amounts of personal data stored on social networking sites, these platforms are able to construct algorithms that allow marketing firms and ad agencies to show users ads fitted towards their interests and demographics. These algorithms are also able to slice and dice audiences and create messages that can personally resonate with users and cause strong reactions.² The implementation of algorithms geared towards manipulating information makes high-traffic websites highly susceptible to the spread of misinformation. While the majority of misinformation circulates around social media sites, disinformation with the agenda to mislead individuals for political or profitable gains are usually not directly posted on these sites. These news sources usually rely on clickbait where they use the platform to generate traffic to their sites, and typically monetize through Google Ads.³ Generally, Twitter has been a massive victim of the clickbait tactic due to the technology behind how the site generates revenue and gains internet traffic. The platform's emphasis on limiting a tweet to 280 characters contributes to millennials' short attention spans and the instant ability to share anything without much research or verification. Twitter is like a bullhorn that has been a catalyst for amplifying stories, ideas, and messages on a viral scale. The problem appears to be

around how users react to information that makes it easier for third-party sources of disinformation to circulate around the internet. Thus, a big step towards combating this issue of misinformation is about understanding the problem behind the dissemination of false information and about better scrutiny of posts before instant liking or posting and sharing.

Furthermore, the sheer amount of material available online, offered by infinite sources and delivered to multiple devices, can make for an information overload. The number of monthly active users on these social networks, which is already incredibly

The great number of individuals active on social media makes it an extremely powerful tool that can be exploited with the wrong intentions and the right financial support.

high, is expected to grow even more as technology becomes more accessible and cheaper. (For reference, in 2017, Facebook alone had 2.2 billion monthly active users.⁴) Hence, it is highly likely that social networks will continue to play a direct and indirect effect on the spread of (mis)information. Additionally, traditional news sources with dedicated staff and editors are now having to compete with websites and apps with thousands of freelance contributors who cover news from multiple angles, forcing them to be creative on social media to help drive traffic. The great number of individuals active on social media makes it an extremely powerful tool that can be exploited with the wrong intentions and the right financial support.

Qualifying the Problem with Social Media

Social media broadly refers to web-based platforms that allow users to create and share content, and engage with other users via social networking. While social media can be celebrated as a simpler, more accessible means for individuals to share information online and connect with others around the world, it can also pose a problem in terms of misinformation, as recent studies have shown misinformation is extremely popular and easily shared on social media.⁵ As it relates to this study of misinformation, there are several platforms that stand out as key contributors to the problem, particularly Facebook, Twitter, YouTube, and Reddit. These platforms are important to examine primarily because of their high levels of user engagement and their unique features that can help misinformation spread.

In terms of traffic—which is important to consider because it reflects the size of the potential audience of misinformation—the use of Facebook, Twitter, YouTube, and Reddit also reflects news consumption trends for a large part of the American public. In a 2016 survey, 62 percent of Americans reported they get news on social media.⁶ Furthermore, the study found 67 percent of US adults use Facebook, 44 percent of which get their news from the site.⁷ This finding was the highest number of engagement in any of the sites included in the study. Next, 16 percent of US adults use Twitter, with 9 percent using the site for news.⁸ This number was the highest ratio of users who get news from any of the surveyed sites.⁹ Comparably, YouTube and Reddit fall just behind Facebook and Twitter, with 48 percent of US adults using YouTube and 10 percent getting their news from it, and 4 percent using Reddit and 2 percent finding news on the site.¹⁰ These numbers reflect the popularity of social media in addition to their usefulness for users as sources for news. In addition to the level of engagement each platform receives, the intelligent design and intended use of each site come with vulnerabilities which can allow them to be infiltrated by “fake news” sites and misinformation.

Facebook, while a great tool for staying in touch with other users, is limited in informational scope because users interact primarily with people they already know. This design is an issue when it comes to misinformation because users are likely to share similar points of view with people they are friends with on Facebook, which therefore creates echo chambers in which users are exposed to limited and often biased points of view.¹¹ Second, users are more likely to be trusting of something a friend has shared, as they are evaluating their level of trust in the person, not the source.¹²

Twitter is set up to only host brief, easily digestible posts with 280-character limits, which can be helpful when used for its original purpose of posting information quickly and concisely, but negative in that there is little space for including evidence or justification for claims. However, the additional option for users to “favorite” or “retweet” any post, effectively sharing it with their followers, can amplify the dissemination of misinformation because, with the way Twitter is set up, tweets with more favorites and retweets are more likely to become trending topics and receive more views. Furthermore, the infiltration of bots in the Twittersphere, which researchers estimate make up 9 to 15 percent of all Twitter accounts, also make it difficult

to distinguish between tweets from an average Twitter user and a bot that was created with the intention of automatically broadcasting tweets to help spread information ranging from political propaganda to spam.¹³

On YouTube, fiction often outperforms reality, meaning the algorithms that YouTube uses to recommend videos to users tend to select more outlandish, clickbait-type videos rather than well-vetted and factual ones in attempts to promote more shares and views.¹⁴ Conspiracy theories, while not intentionally harmful like other forms of misinformation, are an example of the types of videos that YouTube recommends.¹⁵ Additionally, people do not usually distrust video as they see it as a concrete form of visual evidence.¹⁶ However, advancements in technology with artificial intelligence (AI) programs can manipulate videos to make incredibly realistic yet false ones; for example, researchers at the University of Washington have developed a program allowing them to alter an original video of former president Barack Obama into a false one with different words.¹⁷ Users who did not see the original video or know of the software manipulation could easily believe the second video to be authentic. Reddit is structured with a main page and a multitude of smaller, specialized forums, called subreddits, that users can subscribe to based on their interests. Again, this design can create echo chambers and instances where groupthink can become an issue due to the development of these like-minded bubbles.¹⁸

While these platforms differ in the sets of challenges they are up against, they all share a role in the dissemination of misinformation in the media today and are going to be key players in reducing and combating the problem. Therefore, not only is it important to push for these organizations to address and combat the problem of misinformation but also to understand the common incentives that will motivate them to take this kind of initiative.

Three Incentives for Action by Social Media Platforms

There are three main incentives for social media companies to take a more proactive approach to addressing the misinformation problem that plagues their platforms: legal action, user support, and profits. These platforms are all freely operating, private companies, so the legal threshold is high when it comes to regulating what they allow to circulate on their sites. There are several judicial claims under which misinformation can become a legal issue for social media

platforms, including defamation, false light, and intentional infliction of emotional distress.¹⁹ However, these are far more likely to be pursued against the source of the information (e.g. news organizations) than the social media platform on which the information was shared, making the aforementioned legal barriers a limited risk to the platforms themselves.

However, other forms of legislation exist that have a greater impact on the behavior of social media platforms. There is an existent Federal Communications Commission (FCC) regulation that was intended to prevent hoaxes from being broadcast over the radio airwaves, which is extremely narrow and has been noted to have rarely been enforced, however, offers a promising example if translated to social media platforms.²⁰ The regulation prohibits radio stations from transmitting false information under three circumstances: One, the station is aware that the information is false; two, the broadcast could cause foreseeable public harm; and three, the broadcast does indeed cause public harm.²¹ Were the FCC to apply these practices to policing misinformation on social media platform and the wider internet, it could provide an additional layer of accountability to companies.

Additionally, Section 230 of the Communications Decency Act is intended to protect social media sites from being blamed for the dissemination of misinformation; under this section, the source of false information could be sued, but the social media platform that propagated the information would not be held liable.²² However, recent backlash against this Section offers a promise for more accountability. In one case, a US family attempted to sue Twitter for providing terrorist propaganda material that supported the communication of ISIS members that led to the

For change to be made, the platforms themselves need to decide it is worth their time to make adjustments.

death of their family member.²³ Additionally, families of victims from the San Bernardino attack, the Pulse Nightclub shooting, and the November 2015 Paris attacks have filed similar lawsuits accusing Facebook and

Twitter for not taking more responsibility for spreading terrorist propaganda.²⁴ Essentially, for change to be made, and for the circulation of misinformation to begin to be corrected, the platforms themselves need to decide it is worth their time to make adjustments. In other words, it

is the financial incentive and consumer demand that are going to drive social media to start combating misinformation.

If the threat of legal action isn't persuasive enough, users of social media platforms are ultimately going to be the force that will drive the platforms to take action themselves. A site's success is measured by its user engagement; that fact is compounded by the fact that Facebook, Twitter, YouTube, and Reddit all make the majority of their profits on advertising.²⁵ These ads make more money the more times they are viewed (i.e. the more frequently users of each platform are engaging with the site). Facebook is particularly profitable due to its digital advertising and the wealth of data it can provide to advertisers to better sell their products.²⁶ Facebook sells anonymous data files to internet advertisers, so while the site protects individual user identities, the advertisers gain access to custom demographics allowing them to appeal to users with specific ages, religions, and political beliefs, among other details.²⁷ Twitter and YouTube also use similar algorithmic-based advertising that allows advertisers to hone in on target markets.²⁸ Reddit allows advertisers to buy ad-space in specific subreddit groups, in which case the only real divergence is that the format of the website itself does the job of algorithmic targeting.²⁹ The relevance of this ad-based commonality between all four sites is that they are all in a sense competing for their users' attention and therefore ad revenue. As a result, users who have lost faith in the company due to their mishandling of misinformation, as the aforementioned examples describe, are not only likely to stop their own personal use of the platforms, but the subsequent poor publicity could also lead to a general decrease in use, which would ultimately affect ad revenue.

Weighing Current Responses

Though they haven't solved the problem yet, major social media platforms are—to an extent—recognizing the major impact of misinformation on society and their company's reputation, and customer demand and financial incentives are already driving them to take action. Facebook, in particular, has been a leader in efforts to combat misinformation online, starting with a post by chairman and CEO Mark Zuckerberg on November 18, 2016, which responded to criticism that Facebook didn't do enough to address misinformation on its platform

during the 2016 US presidential election.³⁰ Zuckerberg explained that Facebook takes misinformation seriously, and then outlined the site's plan to tackle the problem, which included having stronger detection systems, easier reporting practices, third-party verification processes, warning labels, higher quality "related articles" selections, stricter advertising policies, and more opportunities for journalists to voice their concerns.³¹ Facebook's 2016 plan provides an extremely thorough framework for combating the problem; however, the follow-through has faced some criticism. Almost a year after Zuckerberg announced the initiative, others were accusing Facebook of undermining its own efforts to address misinformation by refusing to share raw data with fact-checkers outside of the company, primarily because of privacy concerns.³² Without the raw data, it is extremely hard for fact-checkers to do their jobs, and even harder to obtain any sort of metrics for success in Facebook's efforts against misinformation. Additionally, as time passes, new findings have shown Facebook's efforts aren't as successful as originally hoped. Primarily, the "disputed" label added to articles that were flagged by two or more fact-checking sites was found to actually increase engagement with the post rather than curb it.³³

Facebook is also in the initial phases of using machine learning techniques to control the dispersion of false news and information on its site. Most of Facebook's success with machine learning has been with image recognition. The company has successfully created an image recognition algorithm used to curb pornographic and violent content on its platform.³⁴ Otherwise, however, Facebook's machine learning attempts at countering misinformation have been inconclusive so far.

Twitter's approach has been more directly geared towards ensuring safe political discourse. It released a statement on January 19, 2018, updating users on Twitter's handling of the 2016 election. With the goal of "[advancing] public awareness of and engagement with the important issues" and "[providing] greater transparency," Twitter admitted to inadvertently participating in the spread of misinformation during the 2016 presidential election.³⁵ The post goes on to explain that users will be notified if they engaged with any sort of misinformation in regards to the 2016 election, in hopes that this information would increase awareness around false content and prevent future instances of misinformation dissemination. Twitter also pointed out in another blog regarding Russian interference that it is making systematic changes to its

algorithms in attempts to stop the proliferation of bots on the platform, but could not divulge the specifics of their efforts for cybersecurity concerns.³⁶

Twitter is also in the initial stages of combating false information, but it is more reliant on the cooperation of users to detect misinformation. It is currently working on a feature that would allow users to flag tweets that they find to be inaccurate or false.³⁷ The feature would be similar to how the platform currently allows users to report tweets that they might believe are spam, abusive, or harmful. However, Twitter is still doing research and development on how using the flagging option is going to successfully reduce the presence of misinformation and disinformation. On average, the site receives around 500 million tweets per day, and with that many tweets on a daily basis, the company will need an amalgamation of big data analytics and journalists to tackle the spread of misinformation on the site alone.³⁸ Controlling the flow of information and what is allowed to circulate around a highly user-based platform usually leads to heavy political criticism, as it may create political biases or hamper freedom of speech.

Following the mass shooting in Las Vegas in October 2017, YouTube received a tremendous amount of backlash after a video went viral claiming to confirm that multiple shooters were involved after authorities had already confirmed the opposite.³⁹ The video received 1.1 million views in 27 hours before it was taken down by YouTube, but the damage had already been done.⁴⁰ Further speculation around YouTube's verification process arose after YouTube started promoting more reliable sources, but denied to offer an explanation as to how it qualified these sources as authoritative. YouTube explained that "when it comes to news, [it has] thousands of news publishers that present a variety of viewpoints"⁴¹—as if explaining that it is very difficult, maybe even unrealistic, to regulate every piece of misinformation on the site. Nonetheless, it is working to change its algorithms and has stated an intention to accelerate the process.⁴²

Reddit administrators tend to be hands-off when it comes to regulating misinformation, usually leaving the judgment call to the on-site moderators. The only time the company will really step in is if personal information is being divulged, but otherwise, it does not do significant work to stop the spread of misinformation. It is consistently tweaking its algorithms, as seems to

be a pattern with all of these sites, but the primary goal in those instances is for changing what appears on the front page.

What Solutions Can Companies, Think Tanks, and AI Provide?

Majority of the progress in addressing and experimenting ways to stop the rapid spread of false information has come from companies and think-tanks focusing on niche aspects of the issue at hand. Fake News Challenge is one of the organizations that has started projects to utilize the latest technologies to combat false information around the web; specifically, it is working on using AI. Its first step is developing machine learning methods and natural language processing algorithms that can identify specific information as false or misleading by doing what they call “stance detection,” which analyzes what other news sources are saying about the particular story.⁴³ If the project is successfully able to combine those technologies, it will essentially be able to identify what might be misinformation and bucket it. The same technology could be applied to many other apps and websites where misinformation is prevalent. It would help prevent further dispersion of misinformation by stopping content from going viral if the software can quickly fact-check and debunk the post in a specified platform. Establishing a solid foundation for a type of AI that can speed up the mostly manual task of fact checking will play a vital role in shaping the way websites and apps monitor the transmission of false and misleading information.

Similarly to how grassroots organizations like Fake News Challenge are bringing together experts from various sectors to fight the spread of misinformation, start-up companies from multiple sectors are also doing the same. AdVerif.ai is a start-up company with a goal to eradicate phony content from the internet with its built-in AI software. AdVerif.ai’s software is built to detect fraudulent stories, nudity, malware, and a group of other types of controversial content.⁴⁴ As small-scale firms like this one continue to reinvent various technological tools to detect false information, they will also play a substantial part in pushing larger firms to use those same technologies and build on them to create powerful and accurate deep learning methods. Cybersecurity firms have also been prioritizing adding bots and “fake news”-spotting operations to their repertoire, methods that some have recently said actually look very similar to those used

in hacking.⁴⁵ Organizations of varying sizes are working on using the advancement of technology to combat different forms of misinformation, but how effectively can we ultimately rely on software and machine learning methods to crack down false and misleading content?

While the development of AI software and machine learning methods has been deemed beneficial for finding patterns in big data, they are not yet full-fledged reasoning machines that can detect complex misleading content. A major concern has been the AI software's inability to thoroughly fact-check news articles. For example, if an article consists of many granular claims, the AI software has to be able to extract and evaluate each of these claims individually. However, there is the possibility for some of the individual claims to be incorrect, but the overall conclusion to be true.⁴⁶ This discrepancy can make the algorithms used for the AI software susceptible to false content due to the nature of how some information creates controversy by mixing facts and lies. The current machine learning tools that organizations have at their disposal are excellent pattern-matchers and pattern-detectors, but they are not intelligent enough to read between the lines to detect complex biases and controversies.

Even if an effective and powerful system capable of beating back the tide of false content is developed, it's highly unlikely to be the final solution to the issue. With the advancement of AI to also disseminate false content, the state of the art of misinformation is likely to advance at a rapid speed.⁴⁷ AI systems already possess the ability to create fake text, as well as incredibly convincing images and video, as was demonstrated with the University of Washington's lip-syncing software. All this research proves the new heights false content can reach through technological advancement. A recent study predicted that by 2022, the majority of people in developed countries will see more false than true information on the web, and before that even happens, the creation of false information will likely outpace AI's ability to detect it.⁴⁸ A question for the future is then, of course, how might our ways of trusting digital information change. Given the particular nature of "fake news," we should move toward becoming more critical and analytical citizens while focusing on creating domain-specific or narrowly targeted tools. A basic option is to develop tools that quickly and effectively identify whether news headlines match

By 2022, the majority of people in developed countries will see more false than true information on the web.

article contents or flag seemingly dubious articles for further inspection by human fact-checkers.⁴⁹ Additionally, encouraging users to be curious about the information they come across, along with having an understanding of history and avoiding simplistic, slogan answers to complex subjects will all be vital for limiting the effects of misinformation. A fight against false information is not an issue that can be solved by technological tools alone. Machine learning tools are necessary, but human and institutional resources are equally important if society is to keep up with the pace at which misinformation is continuing to spread.

Conclusion

The rapid advancement of technology and social media in the past decade has partially played a role in the accumulation of the large pool of false information that is exposed to millions of individuals every day, but we are also now aware of the power of technology to make our lives better. So how can technology be used as a tool for combating this issue at hand? AI and machine learning are trending topics in the tech world right now, and many tech companies have been testing these technologies to improve the way information is spread and processed by algorithm software of varying platforms.⁵⁰ Machine learning techniques are tools used to detect patterns through specifications that can be supervised, unsupervised, or deep-learning methods. The current concept is focused on providing a large set of labeled input and output data, and then training the algorithms to detect the underlying patterns. The current wave of machine learning being implemented by computer science engineers works excellently for narrowly defined tasks in which the datasets are specified. In terms of combating false information circulating the internet, start-ups and multinational companies in various sectors are still in the very initial stages of developing a complex web of machine learning algorithms that can reliably detect false information. Additionally, social media platforms themselves have already decided combating misinformation is a worthy investment, as demonstrated by Facebook, Twitter, and Youtube, and Reddit's response to consumer demand to take action. While misinformation itself is not likely to disappear in the foreseeable future, as consumers of social media continue to desire reliable and easily accessible information via the platforms that rely on users' continued use of the sites, we

can expect that social media platforms and programmers will continue to strive towards innovative and effective means of combating misinformation in the age of technology.

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Business and “Fake News”: Combatting the Profit Incentive for Misinformation

Dominique Minter

The digital age presents unique opportunities and challenges for consumers: There is nearly unlimited potential for access to information and resources, but at the same time, these technologies expose users to new risks from which they may not know how to protect themselves. Misinformation and the incentive to misinform are as old as the human realization that misleading your peers can give you an extra edge in competitive scenarios. This tactic has been utilized in both politics and business, from conspiracy theories to propaganda to corporate fraud.¹ It is important to analyze the role of business in news, especially “fake” news, because of the unintentional power certain companies now hold in the realm of news and information. Historically, the real power of news providers has been in framing, as in the ability to present information in a way that will encourage readers to view an issue from the desired perspective. But if framing is influence, and influence is power, then the spread of the internet and rise of new media has signaled a massive power shift that cannot be ignored. Traditional news providers have, for the most part, been private companies in the United States. As such they are liable to the same kinds of concerns now as they were before the introduction of the internet, primarily bias and corruption.² But most Americans today are introduced to news stories through social media, so the companies who run them now have that power, whether they acknowledge it or not.³ Sites like Facebook, Twitter, YouTube, and Reddit are not themselves at fault for the spread of false information—only for profiting off of it. Solving “fake news” is about targeting the supply of it (from bloggers and “internet entrepreneurs”) and interrupting the demand for it (by targeting corporate advertising and platforms’ reputations) to break the cycle of misinformation dissemination and consumption. In short, we should be aware of this dynamic and the potential it has for good or ill in the future. This chapter will break down the profit motive behind the dissemination of misinformation at the producer level, discussing ad revenue as a method of disruption through corporate social responsibility (CSR), which can also be used to effect broader change within social media companies.

Supplying “Fake News”: Entrepreneurs and Ad Revenue

Like any market, the spread of misinformation can be understood in terms of supply and demand, where consumers create a demand for news and sensational stories, inspiring others to supply that demand if there are potential gains. This motivation is different from that of activists and paid political actors whose incentive is political because their actions are based more on ideology and influence than financial gain. As a result those motivations need to be addressed differently to have a real impact in decreasing the supply of fake articles.

Formal news producers are losing ground in the information industry, but it’s important to look at why they are trusted (or not) to find strategies for identifying misinformation. They are held accountable by other sources and both formal and informal fact-checkers, and centuries of compounding norms in the world of journalism mean that newspapers and reporters are socially obligated to maintain transparency in their sources and opinions.⁴ But television and print news production is slow, so consumers are increasingly turning to the internet for answers and information. This development has signaled a massive power shift regarding information and its source from the news industry to the thousands of individual bloggers on YouTube and elsewhere, because people want news the same way they want all information online—now—and a variety of psychological and historical factors are now driving them to new places to get it.⁵ Unlike formal media, these varied sources have less incentive to maintain rigorous fact-checking procedures, so intervention is necessary to drive change in the online community.

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So what’s in it for the bloggers? Simply put, it’s ad revenue, the same sort that newspapers did and still do survive on.⁶ MySpace was the first major platform to utilize ad revenue, and after it proved that the big numbers game worked, many major corporations started investing in online ads.⁷ This proven success created new demand for advertising; new platforms like Facebook and Twitter used this knowledge to expand and become core suppliers in this very profitable new economy. The use of “big data” is an important aspect of new advertising: Corporations and other buyers can target specific demographics to increase their success, and

platforms can make extra revenue from selling the information they've collected from users to the companies who are targeting them.⁸ All of these factors are important to remember when it comes to approaching deliberately misleading articles, which is a core concern of the “fake news” problem.

People search out articles, true or false, as a means of explaining the world around them. Why they do this, and why fake articles are often more enticing than real ones, is another topic altogether (see Chapters 3 and 4). But the draw still exists and there is a subset of creators out there who have recognized this demand, as well as the potential for ad revenues, as an advantageous opportunity. For this chapter, I will use the neutral term “internet entrepreneurs” for these creators because there isn't an agreed upon term for them yet and the people who use this strategy come from all sorts of occupations, which makes generalizing difficult. Additionally, it is important to distinguish between normal creators who make content for their own purposes (incidentally making ad profit), and these “entrepreneurs” who make contentious content simply for the sake of mass advertising revenues, with no other purpose involved.

Some platforms offer compensation via ad revenue to encourage content creation on their sites, with YouTube being the most notable for its accessibility and cooperation with content creators.⁹ Using YouTube can give creators a leg-up to fund other projects and increase traffic to their own sites, which might also employ the ad tactic through a third party ad-matcher. Many creators optimize clickbait tactics to bring attention and drive traffic to their content, which can then translate into increased ad revenue, making clickbait an attractive, reliable option for entrepreneurs.¹⁰ These clickbait articles can be easily identified by their misleading or deliberately flashy titles, like “NYPD Looking to Press Charges Against Bill Clinton for Underage Sex Ring.”¹¹ Often it was something more realistic, written with a sense of urgency or importance, like “BREAKING: ‘Tens of Thousands’ of Fraudulent Clinton Votes Found in Ohio Warehouse” (which was a real “article” circulating during the 2016 US presidential election).¹² A group of teenagers in Macedonia were outed in 2016 for utilizing this strategy to make ad revenue on news impersonation sites they created and then promoted via Facebook. The articles were “plagiarized from US political sites, given sensational clickbait headlines, and posted to conservative Facebook groups, often with purchased, US-based fake profiles.”¹³ It was extremely

effective, in the sense that they earned massive amounts of money and faced few long-term repercussions.¹⁴ Many entrepreneurs using this strategy learned to target supporters of then-candidate Donald Trump since they proved to be the most responsive social group, being less likely to follow up on false articles than their liberal counterparts.¹⁵ So through this progression it becomes clear how the alt-right exploded with conspiracy theories during the 2016 election and why those theories stuck, due to continuous reinforcement and sheer quantity of material. The timing was perfect between social media, online economy, and new social developments for “fake news” to explode as a political issue.

Paying for “Fake News”: Using CSR to Target Advertising Through Corporate Image

These fake articles are a major problem that needs to be dealt with, for the sake of ensuring open democracy and public trust in a shared set of facts and norms (for more, see Chapter 2). The truth crisis is real, and “fake news” is a real factor. Loss of trust in institutions is a result of increasingly common alternative media attacks, but it’s interesting that “for some institutions, the decline in trust is targeted less at the institution than at the information it provides.”¹⁶ These trends show that people don’t distrust institutions in response to some fault, but rather in response to excessive confusion due to the information overload in general.¹⁷ The key to deterring this chaos is attacking the motives of its creators: money, the profit incentive

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that drives them to abuse online ad revenue systems. Taking this step is surprisingly easy for major sites: For example, YouTube backtracked on its policies and overhauled the

monetization process “when it came to light that terrorist groups like Hezbollah were using YouTube to upload and monetize videos promoting terrorism.”¹⁸ The corporations that use these platforms for advertising are still held to their reputations through the principle of corporate social responsibility (CSR), the idea that corporations owe it to society to behave in a professional way and adhere to modern norms around language and interaction.¹⁹ When they found out, they started pulling their funding from YouTube because being associated with such

violent or controversial content would be terrible for their reputation and likely decrease profits. YouTube panicked and demonetized thousands of videos, catching many innocent creators in the wide net of “controversiality.”²⁰ The loss of profit hit small creators hard, who then started to turn to other sites like Patreon and Twitch to make up the difference.²¹ Although hasty, the new measures had a clear effect. This case is evidence of how ad-buying corporations can be targeted through these advertisements to indirectly force platforms (who are selling the advertising) to cooperate and crack down on dangerous and misleading content. It was consumers and platform users who brought this mistake out in the open and started the conversation, and to extend that strategy, consumer pressure could theoretically be used to pressure the platforms directly.

Moderating Misinformation: Social Media Platforms and Responsibility

If a corporation’s purpose is to create profit, then corporate interest is to cater to consumer preferences. Public opinion, another aspect of CSR, can be used to cause change in the social media platforms themselves as a way of moderating fake news from within. Platforms don’t want to lose users or investors, which means they can be targeted through that risk.

Some argue that part of CSR in the digital age includes social media networks taking on the obligation of assuaging the infiltration of misinformation on their platforms and reducing its negative effects. As the medium through which the earlier-mentioned internet entrepreneurs access content and gain support, Facebook, YouTube, and other platforms hold the power of framing, which means they can direct attention to more or less reputable sources if they choose to. However, platforms try to get around this claim by using the “free speech” argument—essentially that they can’t or shouldn’t monitor user-generated content on their sites because it could be seen as censorship.²² By passing the blame entirely onto irresponsible users (who are still profiting from using these sites for advertising, if nothing else), they are attempting to appear unbiased. But the fact still exists: With much of modern news being funneled through social media platforms, these companies have the power to frame information whether they admit it or not. Acknowledging this power forces Facebook, YouTube, and other platforms to adhere publicly to their principles and CSR or risk losing consumer or investor support. The proof is in their actions: Facebook is a good example of accountability, as it recently stepped up

and changed its filtering software to place higher emphasis on reputable articles than disreputable ones, the start of a solution to its infamous “filter bubbles.”²³ Platforms can’t control everything, and there are still weaknesses, such as third-party verification sites, used to evaluate the veracity of articles online, being accused of bias themselves.²⁴ But making it as difficult as possible for users to deliberately spread false or misleading content is a good place to start, and it’s possible that Facebook’s leadership will trigger changes in other platforms since now it’s been proven that change can be made.

Twitter has been slower to respond, targeting technological fixes as a way of ignoring the larger social problems.²⁵ Like many political figures, it made the fallacy of assuming that all motivations for fake news were political—thus assuming that getting rid of the Russian bots on Twitter would fix a large part of the problem. However, “non-automated content,” or content from real users, is the more salient concern currently because it’s harder to identify and trickier to deal with in the long run due to the growing isolation of extreme ideological communities online.²⁶ But ultimately, Twitter is still responding, which means it feels the pressure from users and supporters and could be receptive to further prodding.

Long-term, many researchers and field leaders are suggesting social change as a natural solution for the fact crisis.²⁷ To this end, social media companies should work on “creating a platform that encourages thoughtful discussion, deep reading, and less reliance on shallow engagement metrics.”²⁸ “Fake news” in terms of misleading information has been around for a long, long time, but new technologies can be used to deal with it in new ways to encourage broader public discourse and exchange ideas. Assuring net neutrality, or price-barrier-free access to the internet, is one necessary step to prevent a cost ceiling in information sharing, although it’s been a contentious topic lately with the recent Federal Communications Commission decision to repeal Obama-era protections.²⁹ Restoring protections to explicitly protect consumers’ rights to open source information is not a complete solution, but it could help keep the conversation open on real and “fake” news so anyone can participate.

Open access-internet will always come with the risk of scammers and “entrepreneurs” looking to make money off unknowing social media users. That is the risk, but those risks can be minimized through consumer action. To briefly return to corporate responsibility, it is important

to acknowledge that there is no such thing as an unbiased person, group, or organization. Social media platforms are not unbiased and will be forced to step up soon or face the negative consequences of denial. Misinformation is a real issue and their actions can have positive impacts, which can be encouraged through consumer behavior and specific financial targeting. People, and corporations comprised of people, are essentially rational and will tend to make decisions that are profitable for them. Making “fake news” less profitable is the key to short-term success in controlling it.

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² Soll, "The Long and Brutal History of Fake News."

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⁷ Anderson, Bell, and Shirky, "Post Industrial Journalism: Adapting to the Present," 7.

⁸ Anderson, Bell, and Shirky, "Post Industrial Journalism: Adapting to the Present," 10.

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¹³ Ben Algaze, "Technology Enables Fake News. Can It Help Stop It, Too?," *ExtremeTech*, August 21, 2017, <https://www.extremetech.com/computing/254286-technology-enables-fake-news-can-help-stop>.

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¹⁷ Kavanagh and Rich, *Truth Decay*, 35.

¹⁸ Kain, "YouTube Wants Content Creators To Appeal Demonetization, But It's Not Always That Easy."

¹⁹ Chun Ju Flora Hung-Baesecke, Yi-Ru Regina Chen, and Ben Boyd, "Corporate Social Responsibility, Media Source Preference, Trust, and Public Engagement: The Informed Public's Perspective," *Public Relations Review* 42, no. 4 (2016): 592, <https://doi-org.offcampus.lib.washington.edu/10.1016/j.pubrev.2016.03.015>.

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²¹ Kain, "YouTube Wants Content Creators To Appeal Demonetization, But It's Not Always That Easy."

²² Aarti Shahani, "Facebook Moves To Decide What Is Real News," *NPR*, January 19, 2018, <https://www.npr.org/sections/thetwo-way/2018/01/19/579285094/facebook-moves-to-decide-what-is-real-news>.

²³ Shahani, "Facebook Moves To Decide What Is Real News."

²⁴ Eugene and Ang, "Clickbait: Fake News And Role Of The State – Analysis."

²⁵ Nina Jankowicz, "Russian Trolls Are Only Part of the Problem," *The New York Times*, January 25, 2018, https://www.nytimes.com/2018/01/25/opinion/russian-trolls-fake-news.html?rref=collection%2Ftimestopic%2FTwitter&action&click&contentCollection=business&ion=stream&module=stream_unit&version=latest&contentPlacement=4&pgtype=collection.

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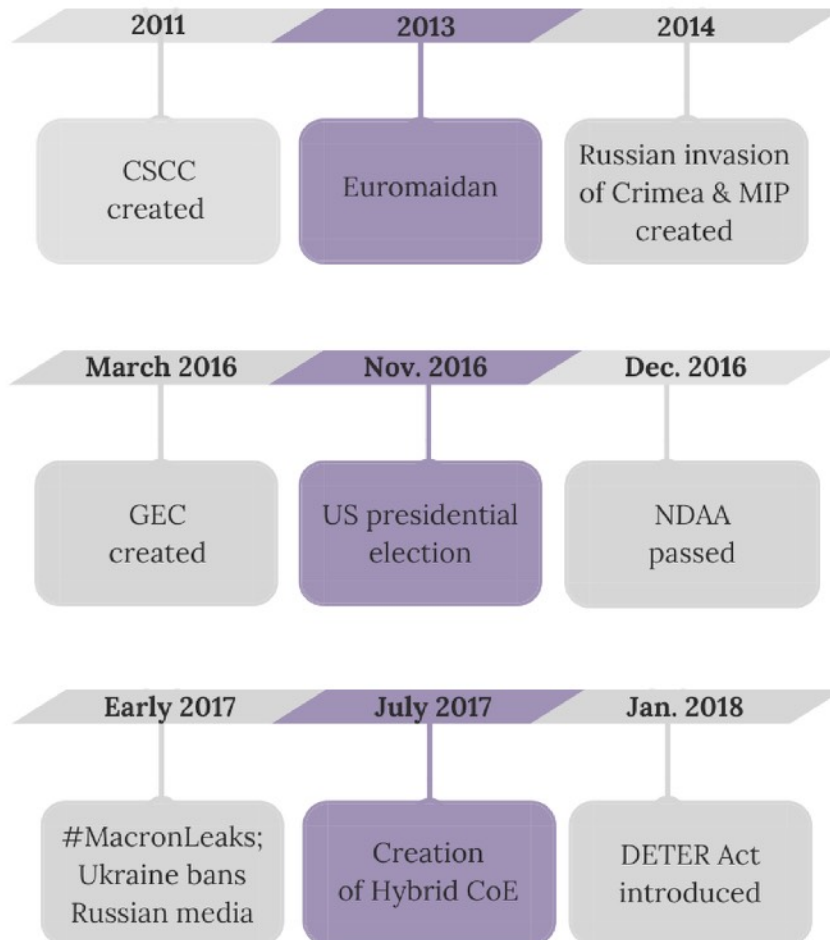


INTERNATIONAL CASE STUDIES & GOVERNANCE

IN THIS SECTION

We look at case studies from Ukraine, France, & the US to learn about strategies used to confront misinformation and how to avoid previous mistakes.

Timeline of Events:



Russian Disinformation: Lessons from Ukraine

Oleksandra Makushenko

It has not been long since politicians and civil society in the United States started publicly discussing “fake news” and Russia’s disinformation campaigns. However, Russian efforts have been visible in the EU, especially in Ukraine, since 2013. Since the beginning of the Ukrainian crisis, Russia has been actively developing and testing its “fake news” tactics in Ukraine and working to shatter people’s confidence in the free and independent press. Ukraine, in turn, has been forced to confront the propaganda being pumped in by responding to disinformation attacks accurately and promptly. This chapter identifies, analyzes, and evaluates the efficacy and democratic values of Ukraine’s efforts both on the national level and in civil society to combat the disinformation the Kremlin is spreading, and covers the period from the Euromaidan demonstrations in 2013 until the end of 2017.¹

Background on Russian Disinformation Campaigns

A large part of understanding Ukraine’s efforts against Russian disinformation threats involves acknowledging Russia’s motivations and tactics. Russia uses its propaganda activities in domestic and foreign media outlets to support its foreign policy goals, one of which is establishing dominance and weakening its opponents. Obtaining world power status again and retaining influence over post-Soviet countries are seen by Russia as two of its most important geopolitical goals.² Currently, it also sees NATO expansion as a primary threat to its national security and strives to build the *Russkiy Mir* (“Russian World”) to expand its own sphere of influence by emphasizing ethnic ties in post-Soviet states to create a Russian community.³

Furthermore, Russia’s information attacks around the world are not a new phenomenon, though the sophistication and intensity of its tactics have increased. In the USSR, the *dezinformatsiya* (“disinformation”) campaigns, also known as “active measures,” were used as a weapon in extensive operations to undermine the West, and, in the words of former KGB general Oleg Kalugin, to “drive wedges in the Western community alliances of all sorts, particularly

NATO, to sow discord among allies, to weaken the United States in the eyes of the people in Europe, Asia, Africa, [and] Latin America.”⁴

In the 20th century, Soviet authorities used to try convincing people that their propagandist stories were true; now, Moscow tosses conspiracy theories and disinformation into the chaotic mix of state-owned TV, social media, and conspiracy websites, using the idea of

Disinformation campaigns became nonmilitant tools of war used to create conflict within an enemy state and generate an environment of permanent unrest.

“plurality of truths” to feed the public disinformation, hoping to intensify the lack of confidence in mainstream media and to promote further confusion.⁵ Classic disinformation techniques are now being combined with conventional warfare in the

new “hybrid war,” as outlined in the Gerasimov Doctrine, an article written one year before the Crimean occupation and is seen as the most insightful articulation of Russia’s modern military strategy. The Doctrine lays out “a new theory of modern warfare—one that looks more like hacking an enemy’s society than attacking it head-on.”⁶ By blending tactics developed by the Soviets with strategic military thinking, Gerasimov declares, “The very ‘rules of war’ have changed,” arguing that nonmilitary means have surpassed traditional weapons in terms of power and efficacy.⁷ In this sense, disinformation campaigns became nonmilitant tools of war used to create conflict within an enemy state and generate an environment of permanent unrest.

Who Does Russia Target with Disinformation and How?

Russian targets of information influence can be roughly divided into three groups. The first is the audience of the conflicting party (for the purpose of this chapter that is Ukraine). Second is the domestic audience of Russia and that of its allied states. The final group is foreign audiences. Russia has targeted all three by using propaganda that demonstrates the fairness of its decisions and paints Russia in a positive image. For the campaigns aimed at foreign audiences, Russia generally does not invent new issues to debate, but instead exploits the existing vulnerabilities and weaknesses of its enemy. It often focuses on anti-Western sentiments rather than pro-Russian ones. Such issues include, but are not limited to, corruption, xenophobia, anti-

NATO and anti-EU sentiments, and ethnic and linguistic conflicts. The fact-checking organization StopFake has identified 18 topics that are regularly used in Russian disinformation campaigns, which range from describing Ukraine as a fascist state ruled by the Western-backed junta that was involved in a coup d'état, to claiming that Russia is not embroiled in the armed conflict in Eastern Ukraine.⁸ These topics are exploited across all three groups of targets and can be adapted to serve the Kremlin's needs.

In terms of method, Russia's main use of its media as a tool is well-known. Its worldwide media program has an annual budget of over US \$300 million, which almost matches that of the BBC World Service Group, one of the world's largest media companies.⁹ The network in place is broad and set to broadcast in 30 languages through versatile mediums: both pro-Russian and state-owned TV channels (RT, Rossiya Segodnya, Russia Beyond the Headlines, and Sputnik International), the use of social media trolls, support for far-right parties in Europe, propaganda websites, print media, and channels of public diplomacy (political allies and NGOs in former Soviet countries and EU member states), among others.¹⁰

Ukraine has arguably been at the forefront of Russian disinformation efforts and its guinea pig since 2013. Having dealt with the Russian information attacks for more than four years, Ukraine offers valuable lessons for the rest of the world. Ukraine's approaches can be divided into short-term and long-term measures, and those taken by the national government and civil society.

Government Recognition of Russian Disinformation Efforts As a Security Threat

It took a while for the Ukrainian authorities to respond to Kremlin propaganda. The beginning of Russian military aggression was synchronized with the unrest in Ukraine in late 2013. Russia used the unstable transition period in Ukraine to occupy Crimea in March 2014 and begin an armed conflict in Eastern Ukraine.¹¹ At first, the Ukrainian government was at a loss, but gradually it began resisting both the military advancements and propaganda coming from Russia.

It was crucial for the government to legally recognize Russian disinformation efforts as not only a threat to its freedom and democracy but also to its national and civil security. The

Ukrainian government created a separate ministry to fight disinformation and increased its legislative activities by passing several laws banning Russian media products and restricting the disinformation distribution channels. Aside from these laws, the National Doctrine on Informational Security was also amended to reflect the threat and classify disinformation efforts in the national security documents on February 25, 2017.¹² It officially recognizes the threat to national security posed by Russia's aggressive informational influence and its systematic nature against Ukraine, outlines Ukraine's interest and priorities in the information sphere, and the mechanisms for their implementation. Moreover, it argues for the need to fight propaganda in a way that does not limit the public's right to free access to information.¹³ It also outlines the institutions that are responsible for the realization of the Doctrine, which implies coordination and cooperation on the matter.

Counter-Propaganda And Creation of a New State Institution To Fight Disinformation

In December 2014, the Ukrainian Parliament established the Ministry of Information Policy (MIP) to resist information attacks against Ukraine and suppress Russian propaganda.¹⁴ Currently, it works with journalists, develops law within information policy fields, and carries out social campaigns to raise awareness about informational threats and media literacy. It also works towards strengthening the availability of Ukrainian media in the occupied territories, which some argue simply means spreading counter-propaganda and deters "illegal signals to Ukraine from the currently occupied territories, especially in the frontline regions."¹⁵ For example, the MIP constructed three TV towers to promote Ukrainian content to the East and is planning for more. It is the MIP's responsibility to implement the Doctrine and to provide information security, however, the fact that it does not belong to either defense or security sector raises questions of how effective it is without access to the crucial classified information. Currently, the ministry has 29 employees, a limited budget, and is seen by many as to have zero influence.¹⁶ When the MIP was established, the Ukrainian government was heavily criticized as it was seen as an attempt to attack freedom of speech in the country. Christian Mihr, executive director of Reporters Without Borders Germany, also argued that it was not the government's job

to control information, and “independent media and critical journalists should instead be encouraged.”¹⁷

Partial And Full State Bans on Russian Media Products

Prior to the Ukrainian ban on Russian media, the Russian disinformation campaign in Ukraine depended on a pre-existing network of Russian-speaking Ukrainians who already consumed Russian-produced content and news. Before the conflict, Russian narratives included topics of the unity of the “Russian world” and Ukraine and Russia as “one big nation.”¹⁸ After Euromaidan, most of the Russian TV content took an offensive stance toward Ukraine. For Ukraine, where TV is a primary source of information,¹⁹ combating Russian disinformation required breaking up such information monopolies. It could have been done in two ways: either through promoting existing Ukrainian content to counterbalance Russia’s influence or eliminating the channels through which Russian propaganda was spreading. Ukraine did both. MIP promoted Ukrainian content to the East and mandatory quotas for Ukrainian-language media on TV and radio were put in place. Initially, Ukrainian authorities banned 14 Russian state-owned and private TV channels that were participating in the propaganda of war and stirring up inter-ethnic hatred.²⁰ As of August 2017, 77 out of 82 Russian TV channels were banned due to violating Ukrainian legislation.²¹ As a result, only 6 percent of Ukrainians watched Russian TV news in 2016, compared to 27 percent two years earlier.²² Furthermore, there was a significant decrease in trust in Russian channels and studies have shown that none of the Russian propaganda narratives about armed conflict in eastern Ukraine or Euromaidan received significant support among Ukrainians.²³ Nevertheless, the Kremlin-sponsored narratives still have a large impact in eastern Ukraine due to the availability of the majority of Russian media online.

According to Russian Yarovaya law, all companies registered as information disseminators in Russia are required to provide their users’ personal data such as names, passport information, and IP addresses, among other details, to Russia’s Federal Security Service upon request and without a court order.²⁴ Such companies include Vkontakte (the Russian version of Facebook), Odnoklassniki, Yandex, and Mail.ru, all of which were extremely popular in Ukraine.

In 2017, almost 80 percent of Ukrainian internet users were signed up to Vkontakte, and Odnoklassniki and Yandex were the second most popular social network site and search engine, respectively.²⁵ As a result, Ukraine authorities believed that since the nation was in an active armed conflict with Russia, it was their duty to ban these websites and social media networks to resist the Kremlin's propaganda machine and prevent it from spying on the millions of Ukrainians who use these Russian-owned sites.²⁶ Public reaction to this order, which Ukrainian president Petro Poroshenko signed in May 2017, was mixed. The news was announced with little warning to prevent retaliatory Russian cyber attacks and came into effect within days. The decision was met with criticism for limiting free speech and access to information, and left businesses, which marketing was highly dependent on these social media, in disarray. Citizens were confused about why such measures were necessary because the Ukrainian government had done an outstandingly poor job of communicating the need for it. Nevertheless, Russian-owned social media decreased in popularity and usage just after a few month of the ban, and the public gradually switched to Instagram, Facebook, and Snapchat.²⁷

Civil and Social Myth-Busting And Challenging of Disinformation Narratives

While it took Ukrainian authorities a while to respond to the rising number of Russian disinformation campaigns, the civil society was prompt to act. Multiple myth-busting and fact-checking organizations that were created to counter Russian disinformation began functioning before the MIP was created. Some argue that organizations, such as StopFake and the Ukraine Crisis Media Centre (UCMC), “took over certain responsibilities and spheres of state work when the government was too weak or unready to perform them.”²⁸ These organizations, which have a profound understanding of the national discourse and are trusted among journalists, have become highly effective in debunking “fake news” and in their response to disinformation and propaganda. Additionally, there are currently more than a dozen organizations that actively work to resist Russian propaganda.²⁹

StopFake, which has already attracted a lot of attention in Western media, was created in May 2014 by Kyiv Mohyla Journalism School staff and students and is focused on analyzing, fact-checking and debunking narratives from all forms of Russian media.³⁰ StopFake monitors

Ukrainian, Russian, and European media and use the basic tools of fact-checking, such as analyzing data from open sources and checking the authenticity of photos and video; moreover, on its website, it provides an extensive toolkit for other journalists to employ in their work to produce better content.³¹ As of November 2017, the website has refuted about a thousand different stories using these simple methods.³²

The UCMC was launched in March 2014 and brings together professionals from public relations and international studies fields, creating the only non-profit platform for discussions involving activists, experts and civil servants in Ukraine. It also remains a trusted source of unbiased information on developments in Ukraine, delegates its experts to support reform of government communications, and runs a media center for communicating and explaining reforms occurring in Ukraine. Currently, around 11,000 journalists and experts receive press releases and newsletters from UCMC.³³

Promoting Media Literacy in the Public and Private Sectors

One of the most effective solutions for countering “fake news” is educating the public, civil servants, and journalists how to separate fact from fiction.³⁴ Nevertheless, this method is long-term, expensive, and requires serious commitment from both national government and civil society to be sustainable and to generate positive outcomes. Ukraine is one of the few post-Soviet countries where both the public and private sectors are taking steps towards improving media education. These steps, however, are not sufficiently coordinated and have almost no funding. The Ministry of Education has approved the course on media literacy for students of elementary, middle and high schools, and any school can choose to adopt it.³⁵ However, many schools and parents are not familiar with such option due to the poor communication. Some educators and journalists argue that a stand-alone media literacy class in schools is less effective than the development of critical thinking skills and “concept of media literacy as a cross-cutting line in traditional subjects.”³⁶

One of the most effective solutions for countering “fake news” is educating the public, civil servants, and journalists how to separate fact from fiction.

In the public sector, there is also a number of media literacy initiatives. In 2017, StopFake and the International Research & Exchanges Board (IREX) finished a pilot media literacy project in Ukraine called Learn to Discern.³⁷ It was the first time such a major campaign of mass media literacy training was held in Ukraine.³⁸ The goal was to provide Ukrainians with tools and skills to identify misinformation in their daily lives and the results were extremely promising. There was an observed 24 percent increase in participant's ability to identify real news versus false stories, a 22 percent increase in those who cross-reference the information they receive from news, and a 26 percent increase in personal confidence in their ability to analyze news. IREX believed that the campaign was successful primarily because it did not focus on choosing *what* to consume, but instead helped build skills for *how* to consume news, and the curriculum was flexible and relevant to people's everyday experiences.³⁹

Lessons from Ukraine to Consider and Avoid

After looking into Ukraine's experience with combating Russian disinformation, there are a number of lessons for other countries to consider and avoid. First, Ukraine showed that members of civil society, such as activists and NGOs, appear to be more creative, rapid, and effective in addressing disinformation and propaganda than the national government. So far in Ukraine, the most successful campaigns of uncovering Russian disinformation and raising domestic and international awareness about it are the ones initiated by the civil society.⁴⁰ However, there is not enough interest from the national government in public sector initiatives, which leads to unstable financial situations for most NGOs devoted to countering propaganda. Many of them are supported by their members or international foundations and foreign embassies, which makes the existence of some projects unsustainable and problematic.⁴¹ Therefore, cooperating with and delegating tasks to such organizations and ensuring their financial stability is an important part of counter-propaganda strategy. However, civil society efforts could be improved further if organizations address the lack of coordination between them that leads to duplication of efforts and makes their overall response weaker and more decentralized.⁴²

There are a number of initiatives by the national government in Ukraine that also proved to be effective, even though many of them are perceived as undemocratic. From experience, we know that limiting or banning public access to channels (both on the internet and TV) that spread disinformation and propaganda, as well as gather all kinds of users' personal data, effectively diminishes Russia's capabilities to conduct information attacks. Ukraine's move to eliminate these channels showed that it could decrease public exposure to toxic narratives and attempts of manipulation. It is worth noting that these measures could have a limited effect in countries with smaller Russian-speaking populations and countries where the infiltration by Russian media and pro-Russian narratives is limited.⁴³

The updated Ukrainian National Doctrine on Informational Security, which officially and legally recognizes the issue of disinformation attacks and outlines national interests in the informational sphere, could be an interesting precedent for Western countries, which tend to approach Russian disinformation in terms of freedom of expression and media pluralism, rather than national security.⁴⁴ Currently, the implementation of the doctrine in Ukraine is weaker than it could be, due to the lack of coordination between the state and the public. The MIP's performance could also be improved. Creating a separate state institution to fight disinformation was a reasonable attempt to coordinate information security efforts and protect its information security. However, for such institutions to be effective, they have to be properly staffed and communicate with public in a clear and engaging manner. Effective communication is also essential in justifying the ban on Russian disinformation channels. In Ukraine, the lack of such communication resulted in the continuation of public use of Russian-owned websites through VPN services, since the significance of the threat of disclosing their data to Russian authorities remains unclear to many Ukrainians.⁴⁵

Additionally, such government meddling is seen as detrimental to free speech, access to information, and media pluralism, and as a move toward a censored, authoritarian state by many human rights activists.⁴⁶ While resisting Russian disinformation, countries should be careful not to turn to authoritarian methods and should act carefully to balance upholding both security measures and democratic freedoms.⁴⁷ If not, they are at risk of replicating the Kremlin's own "information-war mythology," wherein it is easy for the government to pinpoint all domestic

problems as products of an “information war.”⁴⁸ In Ukraine, the claim of an information war can be used to go after press, which the government sees as unfavorable. For example, President Poroshenko called an editorial article on corruption and lack of reforms in Ukraine that was published in the *New York Times*, one of the most influential newspapers in the world, a part of Russia’s hybrid war.⁴⁹ There is a fine line between security-induced and authoritarian measures, and other countries should be cautious as to steer clear of the latter. Therefore, more focus should be put on bottom-up, grassroots strategies, such as the aforementioned efforts from activist and NGOs, and promoting media literacy and education, which, as the IREX campaign gives evidence to, can offer a positive, long-term approach to dealing with disinformation.

Conclusion

All things considered, Ukraine was one of the first countries to be affected by Russian disinformation techniques. Yet Ukrainian public and government responded immediately and decisively by recognizing the disinformation campaigns as a security threat, exposing Russian propaganda, and limiting the access to the channels through which it had been spreading. While many of the methods employed were quite effective, some were seen as worrisome and raised questions about how democratic and pluralistic such solutions were. Russia deployed many of the same techniques it used in Ukraine later in the United States. Timothy Snyder, in his recent book *On Tyranny: Twenty Lessons from the Twentieth Century*, argues:

When Russian media falsely claimed in 2014 that Ukrainian troops crucified a small boy, the Ukrainian response was rapid and effective (at least within Ukraine itself). When Russian media spread the story in 2016 that Hillary Clinton was ill because she mentioned an article on “decision fatigue” (which is not an illness) in an email, the story was spread by Americans. The Ukrainians won, and the Americans lost, in the sense that Russia failed to get the regime it wanted in its neighbor, but did see its preferred candidate triumph in the United States.⁵⁰

Certainly, all countries differ in the number and quality of resources they possess, as well as geographically, geopolitically, and economically, and Ukrainian experience cannot be taken at face value. Russia is challenging Europe and North America, and is actively contributing to widespread public chaos by doing so. If Western democracies do not quickly respond to this

challenge in solidarity, there might be sizable consequences to the security order. Nevertheless, the Ukrainian response could be effectively adapted by other countries, creating a more unified, global response to Russian disinformation at large.

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¹⁴ Gemma Porzgen, ed., *Facing Reality After Euromaidan: The Situation of Journalists And Media in Ukraine* (Berlin: Reporters Without Borders, June 2016): 39, https://rsf.org/sites/default/files/journalists_and_media_in_ukraine_-_rsf_2016.pdf.

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¹⁸ Kruk, *Analyzing the Ground Zero*, 13.

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#MacronLeaks: Responses to Inference in the 2017 French Election

Hannah Gaffney

This chapter will explore the spread of disinformation during the 2017 presidential election in France and potential legislative solutions to counter the technological interference. While major news organizations in France were perceived as largely dismissive toward the idea of Marine Le Pen's candidacy, many disenfranchised voters were fond of the populist's radical ideas pertaining to restrictive immigration and the disintegration of the European Union. Similarly to Hillary Clinton during the 2016 US presidential election, Emmanuel Macron was favored to take the presidency and faced online disinformation threats against his campaign, but unlike Clinton, he emerged victorious in the election.¹ To a great extent, lessons regarding the ways in which states can respond to digital threats can be derived by examining the events that unfolded throughout the 2017 election and France's subsequent response.

While highly controversial, France has taken a relatively direct approach in its attempt to confront disinformation and its potential impact on its democratic elections. President Macron's administration is currently working to introduce laws aimed at eradicating false stories during election season in order to combat any attempt at political destabilization by foreign-financed media organizations.² Particularly, the administration is proposing a requirement for news organizations to have clearer transparency labels that include an article's origin and funding source in order to help consumers more effectively distinguish between legitimate and unreliable sources. This solution presents a plethora of issues regarding governmental infringement on the free press, while worsening fears among those who are drawn to "fake news" due to their sense of alienation from the mainstream media.

The Age of Technology: Disinformation and the French Election

After weeks of televised debates and unprecedented international attention, a new dilemma was introduced to the already unusual French election season. Running as a member of the right-wing party National Front, Le Pen was set to face En Marche centrist Macron—

meaning that none of the country's mainstream political parties succeeded in sending their selected candidate to the final round. On May 5, 2017, two days prior to the final round of the election and only an hour before the end of official campaigning, emails from Macron and his team were released and quickly propagated online through the hashtag #MacronLeaks.³ Information obtained through the leaks claimed to contain damaging information regarding Macron's alleged offshore accounts in the Bahamas. Macron immediately responded by saying the disinformation was linked to Russian interests and may have begun on "alt-right forums in the US."⁴ Furthermore, Macron immediately disproved the validity of the leaks by saying the content was an "outrageous falsification" that included the production of fake documents and a "clumsy forgery" of his signature to give the appearance of tax evasion.⁵

Within hours, the mandatory prohibition of all campaign communications commenced, a typical ban observed for 44 hours before every French presidential and legislative election.⁶ Considering Macron's limited ability to retaliate against the attack, in addition to the questions regarding the legitimacy of the information raised by traditionally trusted news sources, the fast proliferation of the documents was rather remarkable: #MacronLeaks reached 47,000 tweets in just 3 hours and 30 minutes after the initial tweet using the hashtag was posted.⁷ Initially obtained through a series of phishing attacks, summaries of the nearly 9 gigabytes of falsified information claimed to have been stolen from Macron appeared to have been heavily promoted by individuals and bots associated with right-wing or pro-Russian operations.⁸ According to the Atlantic Council's Digital Forensic Research Lab, the 10 most active accounts to use the #MacronLeaks hashtag posted more than 1,300 tweets in three hours, indicating heavy bot activity.⁹ (See Figure 3.)¹⁰ The report further states,

[The] #MacronLeaks hashtag was initially launched in the US and was driven by a cluster of alt-right accounts and probable bots. It was then picked up by Le Pen supporters, and probable bots, and passed on to the French audience. WikiLeaks played a key role in publicizing the hashtag; the leading US amplifiers of #MacronLeaks were mentioned more than their French counterparts; but overall, French posts appear to have predominated.¹¹

It widely speculated that the spread of #MacronLeaks was minimized by the numerous predictions that Russia-backed leaks would occur as well as the French electoral commission's

warning that anyone publishing the documents would be criminally prosecuted.¹² Despite the high volume of tweets, the lack of media publicity about the leak and Twitter storm are thought to have lessened the impact on actual voting outcomes. Therefore, individuals inclined to discern the information as fact likely planned to vote Le Pen prior to the leaks while undecided voters remained skeptical about the validity of the documents—making the impact of #MacronLeaks on swing votes difficult to measure.

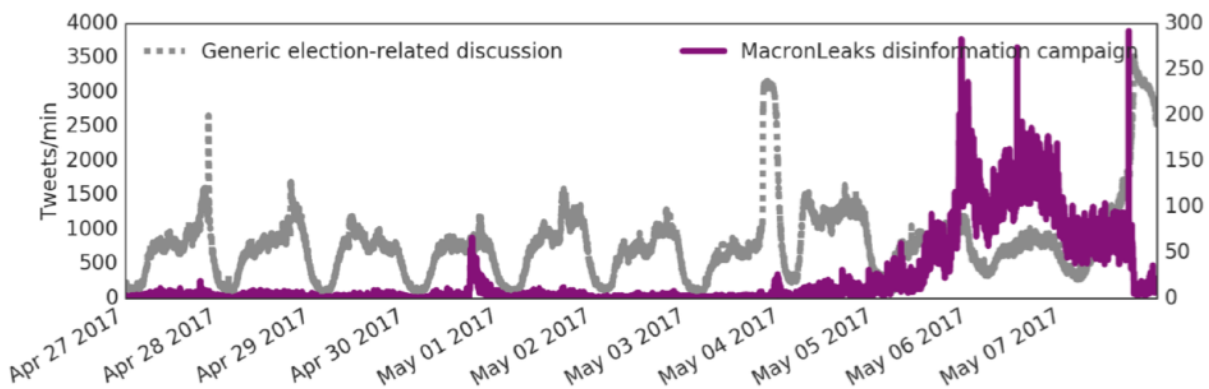


Figure 3: Timeline of the volume of tweets generated every minute during observation period (April 27, 2017, through May 7, 2017). The purple solid line shows the volume associated with #MacronLeaks, while the dashed grey line shows the volume of generic election-related discussion.

Comparison With the 2016 US Presidential Election

In contrast to the 2016 presidential election in the United States, the #MacronLeaks disinformation campaign failed to guide Le Pen, its preferred French candidate, to victory. Macron, who was preferred by the mainstream media as well as the public, ultimately prevailed, blocking the Russia-friendly candidate from obtaining the highest position in public office. When assessing the affect of disinformation on the election in the United States, the influence wielded by “fake news” must be analyzed separately considering the unexpected election of scandal-plagued Donald Trump over Clinton, the establishment candidate. Despite their different results, the disinformation strategies used bear a striking resemblance: According to researchers at the University of Southern California, “The presence of bots that existed during the 2016 U.S. Presidential election campaign period to support alt-right narratives, went dark after November 8, 2016, and came back into use in the run up days to the 2017 French presidential election.”¹³ After confirmed inference in the US election, intelligence agencies closely monitored the

situation in France. In a Senate's Armed Forces Committee hearing, National Security Agency Director Michael Rogers testified that the NSA had warned French cybersecurity of Russian hacking ahead of the election, saying to French officials, ““Look, we’re watching the Russians, we’re seeing them penetrate some of your infrastructure.””¹⁴ This statement indicates that the US was watching the election in France in order to find commonalities between the two instances of Russian interference.

Considering the same bots that actively supported the Trump campaign were employed against Macron, it is clear that Russia utilized technology to pose digital threats against rival democracies in order to yield its desired political outcome. While Macron and Clinton exhibited tough-on-Russia rhetoric throughout their respective campaigns, Le Pen and Trump were portrayed as more sympathetic to Putin’s regime. Thus, Russia’s motivations are clear: Leading Le Pen—who vowed to withdraw France from NATO and promised to hold a referendum about whether to do the same with the EU, effectively weakening Russia’s main military adversary and rival economic bloc—to victory would surely have given rise to Russian hegemony on the continent. Trump shared similar views in regards to his dubious commitment to funding NATO and his clear support of Brexit.¹⁵ Overall, Russia’s strategy aimed to destabilize a key pillar of democratic states—fair and free elections unaffected by the preferences of foreign states. Similarly to military threats, these breaches in cybersecurity with the intent to mislead the voting public should be addressed as a national security issue. While Russian meddling tended to favor the anti-establishment party in the US and France, it is clear that the solution to these disinformation campaigns should be atypical in its approach, being that Russia seeks to serve its own interest rather than actually support the party it assists.

Russia’s motivations are clear—leading Le Pen to victory would surely have given rise to Russian hegemony on the continent.

Combating the Threat: Current Status, Proposed Legislation, and Other Solutions

Democratic states such as France rely on defamation and libel laws to combat false publications. According to Article 11 of the country’s Declaration of Human and Civic Rights, it

is guaranteed that all citizens “May speak, write, print freely, except what is tantamount to the abuse of this liberty in the cases determined by law.”¹⁶ For example, on the final televised debate between the two candidates, Le Pen stated, “I hope we won't find out that you have an offshore account in the Bahamas. I hope so...” Macron swiftly replied, “No, Madame Le Pen, because that's defamation,” in addition to stating his willingness to prosecute those responsible for spreading further lies related to the matter.¹⁷ Still, the often lengthy and expensive process of using these laws to remove incorrect information is stagnant in comparison to the fast-paced news environment championed by social media sites such as Twitter and Facebook.¹⁸ While media blackouts help discourage the spread of disinformation in the immediate hours before a democratic election, individual social media accounts are not beholden to the same journalistic standards practiced by respected media organizations. Given the rise of personalized media accounts and their newfound popularity online, private individuals can use their digital presence to wield influence over the spread of emerging stories. Thus, there lacks consensus on what method best helps democracies manage this shift. The Macron administration is proposing to

Private individuals can use their digital presence to wield influence over the spread of emerging stories.

enact a cap on the amount of money allowed to fund content attempting to impact an election, allow the government to take emergency legal action to block false websites, require news sites to reveal who

owns them and the origin of their funding, and suspend and discredit media that aims to destabilize voting outcomes, especially if the platform is controlled or influenced by foreign powers, “in order to protect democracy.” To a great extent, this proposal is a direct response to what Macron refers to as “propaganda articulated by thousands of social media accounts.”¹⁹ This approach can be used to inform other democracies how to implement proactive measures that disincentivize disinformation throughout election cycles.

Supplementary to legislative action, non-governmental collaborative efforts should be considered a viable option. Establishing a diverse board composed of representatives from technology and social media corporations, free speech advocates, and policy experts would prove invaluable to France’s efforts against disinformation. Tasked with creating trust marks or a

certification system, the body could classify news sources in France according to their verification methods, financial transparency, and other criteria, which would help users better navigate information online. In tandem with government regulations seeking to curb foreign influences on democratic states, cooperation between these parties could work to initiate a societal shift away from disinformation. Rather than relying upon stringent regulations that cause anxiety to free press advocates and fuel fears of governmental overreach among vulnerable consumers, change makers in the realm of political policy, journalism, social media and technology could work to voluntarily change the fake news landscape.

The Democratic Dilemma: Solution Critiques and Global Application

Critics argue that the proposed legislation would be impossible to fully enforce and might lead to the accidental prosecution of legitimate posts by satirists or journalists. In addition, government regulations would inadvertently draw attention to stories and banned websites where right-wing movements are surging in popularity.²⁰ Dissenters worry that the law is authoritarian in nature and is designed to be abused by future administrations seeking re-election. According to French conservative senator Bruno Retailleau, “[In a] democracy, misinformation is better than state information . . . only authoritarian regimes claim to control the truth.” Still, this legislation is likely to pass in France—En Marche holds a sizable majority in the National Assembly and could pass the measure without opposition support.²¹ Prominent on the opposing side of the debate is RT Media, a Russian TV channel in France that claims it has been unfairly targeted by the proposed legislative changes.²² During a joint press conference that followed his first meeting with Russian president Vladimir Putin, Macron condemned RT Media for acting as “agents of influence and propaganda,” which he accused of spreading “falsehoods about me and my campaign.”²³ RT Media ironically defended its actions even though its own state sponsor has imprisoned journalists for operating under the traditional free press in Russia.²⁴ In an unprecedented age of anti-European Union sentiments, an intergovernmental organization of which France is a founding member, France must be careful not to overreach its governmental authority even if its solutions are intended to preserve its democratic institutions.

In closing, France is a key player in the fight against the spread of disinformation by foreign governments, as seen with the #MacronLeaks hack. Through enforcing greater media transparency measures, blocking offending sites and collaborating with non-governmental actors—particularly technology corporations and news organizations—it is clear democracies have a range of options when looking to combat manipulated information intended to mislead the public in order to achieve a predetermined political outcome. Considered to be proactive in its approach, France’s ideas should be evaluated as a progressive example, helpful in understanding the ways in which democracies have combatted digital threats and can do so in the future. While Macron may have crafted his policies based upon personal attacks, there is consensus that the issue of disinformation is one that requires immediate action in order to safeguard elections. Whether the response is the implementing governmental regulations or introducing subtle societal shifts based upon collaborative efforts between non-governmental parties, the ideas that have emerged from foreign interference in the French election are transferable to other settings.

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Assessing the US Response to Combat Disinformation

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Recently, state governments are acknowledging “fake news” as a more serious problem than ever before, which has spurred them to take immediate action. The US government is one such agency that has gone to great lengths to combat disinformation. This chapter serves to evaluate the countermeasures the US government has taken and what impact, or lack thereof, they have had against disinformation coming from foreign institutions, particularly extremist groups and, in recent years, Russia. Although this research is constantly evolving due to the frequent introduction of new intelligence and investigation results, I will assess the current information available at the time of the publication of this report. This description, which addresses efforts before and after the 2016 presidential election, will be followed by analysis of the US response and recommendations to improve the current situation.

Pre-2016 Efforts Against Digital Communication Threats: The Center for Strategic Counterterrorism Communications

While the public concern about disinformation in the US was amplified as a result of Russian interference in the 2016 US presidential election, the US government was already aware of the threat posed by weaponized digital communications from foreign institutions. Years prior, al-Qa'ida (al-Qaeda) had begun using media and communication systems to run recruitment campaigns across the globe.¹ In response, the Obama administration established the Center for Strategic Counterterrorism Communications (CSCC) via executive order in 2011.² This marked the first major step made by the US against disinformation, specifically terrorist propaganda movements.³ The primary purpose of the CSCC was to target online terrorism and violent extremism activities, specifically those of al-Qaeda. The CSCC launched media campaigns to combat terrorism recruitment efforts online and reacted to terrorists' use of the internet by countering extremist content with their own messages.⁴ Its efforts included creating Twitter accounts with anti-terrorist messages and videos with poor attempts of using humor targeted at

the younger generation.⁵ However, as there was no standard by which success could be measured, there was little evidence as to whether its efforts actually helped diminish al-Qaeda recruitment.⁶ With the rise of the Islamic state, commonly known as ISIS or ISIL, in the early 2010s, these efforts later focused less on al-Qaeda and more on ISIS. However, the center was equally as unsuccessful. The lack of substantial results may be due in part to the CSCC's limited online reach. For example, in 2014, the CSCC's Twitter account held 7,300 followers, while at one point there were 46,000 accounts that supported ISIS on Twitter.⁷ Furthermore, the CSCC faced criticism because many saw that by directly messaging and engaging with jihadists, the CSCC actually provided a platform for extremists to voice their arguments while also giving them a larger viewership than they ordinarily would have had.⁸ Ultimately, the CSCC didn't produce clear results and was unsurprisingly replaced.

Post-2016 to Present Efforts: The Global Engagement Center

After the dissolution of the CSCC, the Global Engagement Center (GEC) was established in March 2016 through another presidential executive order under President Obama.⁹ Upon establishment, the GEC's main role was to continue pursuing the original goals of the CSCC. It has sought to coordinate media-related activities toward foreign audiences to diminish the influence of terrorist organizations.¹⁰ It has also provided a platform for groups across the globe to speak out against propaganda from violent extremists. For example, the GEC launched an online radio station in East Africa for youth to speak out against this disinformation.¹¹ However, its focus has since changed, and the GEC is now pointedly aimed toward Russian propaganda.

Following concern of Russian disinformation campaigns in Europe, the GEC was reshaped and expanded by the Countering Foreign Propaganda and Disinformation Act, included in the 2017 National Defense Authorization Act, which was passed in December 2016.¹² One of the main goals of the act was to prioritize a government strategy to counter foreign propaganda and disinformation in the US.¹³ The act "initially sprang from a desire to help independent journalists and nongovernmental organizations in European nations such as Ukraine, Moldova and Serbia, which face a heavy tide of Russian propaganda," but was reframed to address disinformation efforts in the US after concerns arose about Russian meddling during the 2016

US presidential election.¹⁴ The US acknowledging Russia as a domestic threat sheds light on the government's changing priorities. This move increased the influence and resources of the GEC in order to address state actors, such as Russia and China, in addition to the violent extremists already addressed in the GEC's original objectives. It also defined the center's goal of countering foreign disinformation by "[advancing] fact-based narratives that support U.S. allies and interests."¹⁵ Finally, it identified the need to seek outside sources to identify methods used by foreign disinformation campaigns and to integrate outside and private sector expertise in response strategies.¹⁶ For example, the GEC has sent teams to Europe to learn how to more effectively counter hashtag campaigns and bots.¹⁷ This act emphasizes the US's acknowledgement of disinformation from foreign governments as an indisputable threat, potentially providing the center with increased funding and a more specific agenda. Still, information on whether these efforts have made any tangible, concrete impact has yet to be found or has not been released due to the center's recent creation.

Though we are unable to measure the GEC's success rate as of yet, recent reports about the center's management have already called its effectiveness into question. In an interview with

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Wired, a former GEC employee outlined some of the problems he faced when working there, including "administrative incompetence," "a lack of coherent policy priorities," and "the absence of subject matter expertise among President Trump's political appointees."¹⁸ He

also discussed issues with the current administration, such as the budget issues with secretary of state Rex Tillerson, the state department hiring freeze, and conflicting ideas on how to deal with Russia.¹⁹

Concerning the GEC's budget, Secretary Tillerson wouldn't accept money allocated for the GEC in fear of offending Russia at a time when Tillerson wanted to improve relations with the Kremlin.²⁰ (Notably, Russian-sponsored news outlets have compared the GEC to George Orwell's "Ministry of Truth.")²¹ Finally, only after reportedly being prodded by state department officials, Tillerson eventually agreed to accept the money in August 2017, but only \$60 million

of the \$80 million originally allotted.²² (The original \$80 million was to be divided 75-25 to address Russian propaganda and ISIS/ISIL recruitment, respectively.)²³ With the many problems the GEC faces, including Tillerson's resistance to obtaining proper funding, these developments call into question whether or not the GEC can effectively combat disinformation under the current administration. With the lack of urgency and attention on this problem, Tillerson has proven to be inadequate in his leadership. Additionally, Tillerson's interests in maintaining good relations with Russia, whose actions are now the primary concern of GEC operations, makes his leadership position in the GEC questionable. Only in the last few weeks has the GEC been able to move forward in its commitment to addressing Russian propaganda after being delayed by Tillerson's budget negotiations, thanks to a Department of Defense transfer that increased the GEC's budget by \$40 million²⁴—a move that will hopefully solve some bureaucratic issues, but whose ultimate effect is still unclear.

While the GEC focuses on Russian political propaganda as a whole, in order to specifically prevent foreign influence in future presidential elections, the Defending Elections from Threats by Establishing Redlines Act (DETER Act) was introduced to Congress in January 2018.²⁵ The bill would help streamline action against interference from foreign nations, as it requires the Trump administration to respond with a plan to prevent election interference within 90 days of the bill's enactment.²⁶ It would also expand upon sanctions if additional interference is committed by Russia, and bar countries from buying political advertisements or using social media to spread false information. If passed, the DETER Act may be a step in the right direction towards more effectively combating the spread of disinformation from foreign governments. A 90-day deadline would certainly spur the president (and by extension, the GEC) to react more quickly than they previously have, though the historical lack of organizational stability combined with a pressing deadline may produce less effective or quality results. Additionally, Toole and Fried, two experts on economic sanctions, called into question the effectiveness of the proposed sanctions, stating that the bill's sanctions would cause unintended economic consequences that would not be in the best interests of the US as it would negatively affect US investors' index funds because they would be frozen, in addition to US allies' important energy sources because they are provided by Russia.²⁷

The GEC is the main body designated to fight disinformation in the US, but unfortunately has proven itself ineffective as of late. It has been plagued by problems such as budget issues, mismanagement, and lack of urgency. Supplementary acts have tried to strengthen the GEC and have altered its direction, but the center is still relatively new and its efforts against Russian disinformation are not clear in terms of their achievements. Given the similarities between the CSCC and the GEC, if past failures are any indicators, we may see the same problems that resulted in the disbandment of the CSCC happen with the GEC.

2017 International Efforts:

The European Center of Excellence for Countering Hybrid Threats

In addition to addressing state-sponsored domestic propaganda, the US, in response to concerns raised by Russia's annexation of Crimea and the war in Ukraine and in collaboration with 11 other European governments, established the European Center of Excellence for Countering Hybrid Threats (also referred to as the Hybrid CoE) in July 2017 under NATO and EU operations.²⁸ The center's goal is "to research 'hybrid war'—the strategic use of diplomacy, politics, media, cyberspace and military to destabilize and undermine an opponent's government."²⁹ The center has been considered novel because it links transatlantic military alliances and the EU.³⁰

This collaborative effort between countries may provide legitimacy to the study as well as increase the speed of the research on hybrid war. Furthermore, with many countries working together, individual political bias or interest can be limited. Still, due to the young nature of the center, experts such as Jed Willard of the Franklin Delano Roosevelt Center for Global Engagement at Harvard University are not sure of how effective the center will be; but given the widespread unawareness of disinformation, both among the public and policymakers, any effort is useful.³¹ So while no definitive results have come out of the center as it is a recent development, US participation in the creation of the center validates its commitment to collaborating on an international level to combat disinformation. The role the US has as a global

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power also lends legitimacy to the center; however, while it is laudable that the US has joined this effort, Finland is actually the leader of the initiative, which allows the US to take more of a backseat role in the research and response. For the US to truly address Russian disinformation in a global partnership, it should form its own international collaboration, with itself at the forefront, to indicate that it is ready to be a leader in the fight against Russia's hybrid war.

Conclusion

The US needs to reevaluate its methods for combating disinformation. Past efforts have not shown any substantial results in the fight against disinformation, due largely in part to bureaucratic infighting in the state department and lack of direction in the GEC. While the Obama administration did create the CSCC and the GEC, the previous center closed down and the GEC was only a very recent development during the Obama administration that has yet to offer substantial results. To add more insult to injury, the current administration has only created unnecessary delays and problems and has yet to make significant strides to combat disinformation. The US is merely trying to catch up to a threat that started long before the 2016 election.³² Additionally, according to new intelligence reports, the foreign influences that beset the 2016 presidential election are still likely to affect future elections, should no major countermeasures be made.³³ If the US seeks to properly engage with this threat, the current administration should publicly and openly acknowledge the Russian hybrid threat through a national address to demonstrate to the public and the media that it is actively working on this issue. The currently-understaffed GEC could benefit from more support and a dependable budget. It may also benefit from an organizational restructuring that includes a split into two centers with unique goals: one to deal with terrorist propaganda, and one to deal with foreign government influences. To be able to promote their own interests, it is in the best interest of the US to create its own collaboration with other countries with similar stances to combat disinformation because of its role as a global leader and upholder of democracy. Shared resources and information could make a joint effort far more effective against these issues. However the US chooses to act, it is clear that current approaches have not worked and fundamental changes need to be made.

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Final Recommendations

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In line with the structure of the report, our recommendations are organized by sector and are designed to confront misinformation in a holistic manner. Some recommendations can be applied within one sector, but others must be implemented collaboratively across them.

Civil Society

- Individuals should not only be mindful of the presence of misinformation online, but should also practice healthy levels of caution when evaluating the trustworthiness of material by being aware of their own beliefs and biases.
- When seeking to correct others' misconceptions, individuals should practice a "less is more" approach by taking the following steps: inform others of correct information without repeating inaccuracies; offer disclaimers before repeating misinformation; and give short and brief rebuttals instead of complex corrections. These steps should all be taken without impugning the other person's deeply held beliefs.
- Academics and scholars should conduct research to track the spread of misinformation online to establish a record in cases where people act on misinformation offline, such as through voting or, in extreme cases, using violence.
- Individuals should hold businesses and governments accountable for contributing to the spread of misinformation or neglecting to remedy it. They can do so by supporting public initiatives and organizations that counter misinformation, boycotting social media platforms that contribute to the spread of misinformation, and advocating for the creation of media literacy programs.

Businesses and Technology Companies

- Social media companies need to strengthen their artificial intelligence programs by improving algorithms that can identify and filter out misinformation. Additionally, they

should invest in special evaluation teams to fact-check content and differentiate between news and various types of commentary, including editorials and satire.

- Social media and third-party advertising companies should redesign advertising models to disincentivize the production of misinformation for internet entrepreneurs and track the use of existing advertising and its revenue.
- All businesses that engage in online advertising should consider their corporate social responsibility models and how association with misinformation reflects poorly on their brand. They should monitor their enabling of misinformation by knowing where their advertising is being placed and who is benefiting from it.
- Think tanks and start-ups should continue to improve artificial intelligence and machine learning software that can be used to approach misinformation online.

Governments

- Governments must recognize the threats that misinformation, particularly disinformation, pose to both national security and democratic institutions and values.
- Policymakers should take measures to immediately address potentially harmful misinformation. Some options include restricting manipulative sources, capping the amount of money allowed to fund election-related media, or taking emergency legal action against those who spread misinformation.
- When creating public policy, lawmakers should also encourage input from social media representatives, free press advocates, and other experts.
- Media literacy programs should be developed for public education systems and implemented consistently across all ages and school districts. Curriculum focused on critical thinking skills should be incorporated into other relevant classes, rather than separate as a standalone course. These programs should be continuously updated to reflect trends in media consumption and technological development.
- Governments should also collaborate internationally to address foreign disinformation. The US in particular should spearhead such a project in order to immediately tackle

Russian disinformation and lend legitimacy to international efforts.

Finally, we would like to recognize that research and action around misinformation are all relatively recent, particularly in the US. These recommendations are not be-all, end-all answers. Our final recommendation encourages all actors in all fields to remain aware of ongoing developments in our understanding of these issues, and to be creative when addressing the complex problem of countering misinformation. As the threat will evolve with changing technologies, political agendas, and economic goals, responses must also proactively adapt to limit misinformation and preserve the institutions protecting our personal and social freedoms.

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